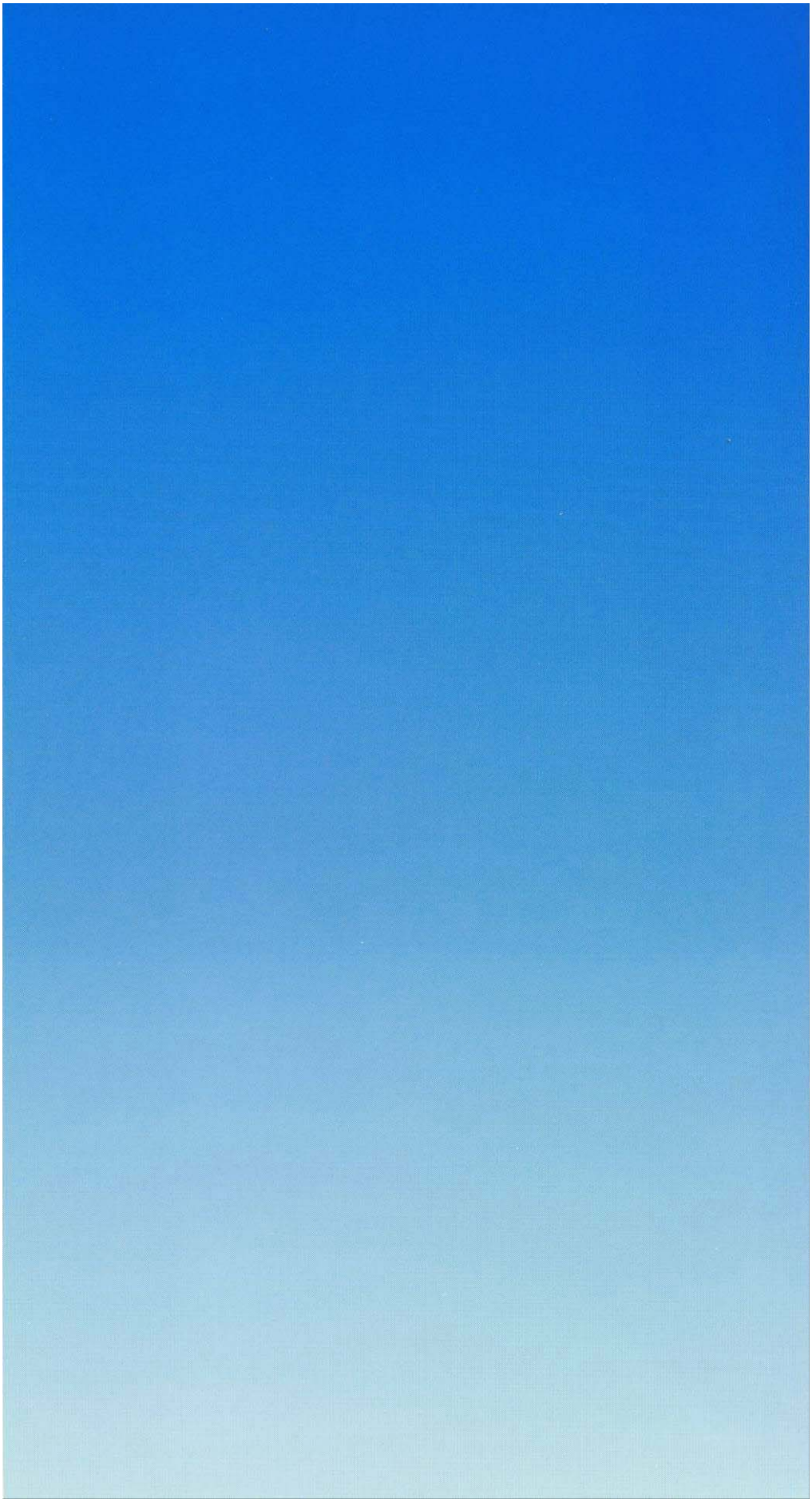

AIR SCIENCES INC.

DENVER • PORTLAND

Baseline Meteorological and Air Quality Data Report Resolution Copper Mining Project

July 1 – September 30, 2013

PREPARED FOR:
RESOLUTION COPPER
A MEMBER OF RIO TINTO GROUP

262-1
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1.0 INTRODUCTION

This report summarizes the meteorological, nitrogen dioxide (NO_2), sulfur dioxide (SO_2), ozone (O_3), and particulate matter (PM) data collected at the Resolution Copper Project near Superior, Arizona for the third quarter, July 1 – September 30, 2013. Monitoring was performed in accordance with the *Resolution Copper Mining Monitoring Plan, November 2011* (approved by the Pinal County Air Quality Control District [PCAQCD] on November 15, 2011).

Resolution Copper Mining LLC (RCML) has implemented a meteorological and air quality monitoring program to support several efforts during the pre-feasibility and other mine development phases: environmental assessments, impact analyses, and documents required by the National Environmental Policy Act (NEPA); meteorological and air quality data to be processed and used as input for AERMOD (American Meteorological Society/Environmental Protection Agency Regulatory Model) dispersion modeling; and air quality baseline data and AERMOD analyses to be used to support RCML's application to the PCAQCD for air permit(s).

1.1 Location

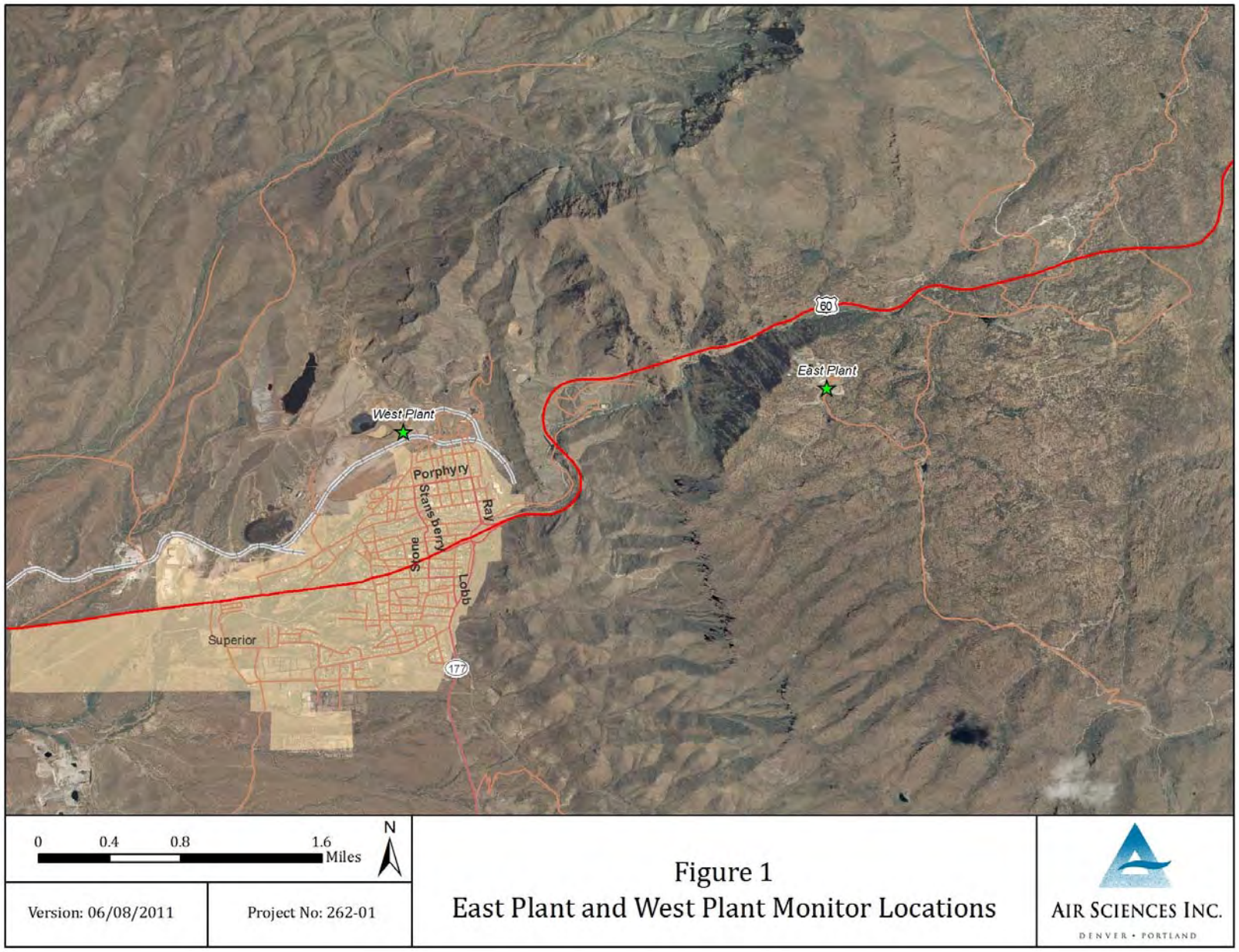
The Resolution Copper Project is located near Superior, Arizona. Currently there are two meteorological and air quality stations. The East Plant station is located at the main project site, east of Superior. The West Plant station is located at RCML's facilities directly north of Superior, Arizona. The topography ranges from hilly to mountainous.

The monitoring station locations are shown in Figure 1 and listed by coordinates in Table 1.

Table 1. Monitoring Station Locations

Station	Location	Latitude (Deg)	Longitude (Deg)	Elevation (ft)	Method of Determination
West Plant	01S12E35NWSE	33.2994	-111.1021	2,949	GPS
East Plant	01S13E32SWNW	33.3030	-111.0676	4,199	GPS

Figure 1. Resolution Monitoring Stations Locations



1.2 Monitoring Program Description

1.2.1 Meteorological Data

Meteorological sensors and air quality instrumentation at the East Plant and West Plant stations are mounted on 10-meter, open-lattice towers or housed in climate-controlled insulated shelters, and are listed by height, from ground level, in Table 2.

Table 2. Sensors and Heights

		Height (m)	West Plant	East Plant
AERMOD Meteorological Data	Horizontal wind speed (meters per second [m/s])	10	✓	✓
	Horizontal wind direction (degrees [°])	10	✓	✓
	Horizontal wind direction standard deviation (sigma theta)	10	✓	✓
	Air temperature (degrees Celsius [°C])	2	✓	✓
	Vertical temperature difference (ΔT, Delta T, [°C])	2,10	✓	✓
	Relative humidity (percent [%])	2	✓	✓
	Solar radiation (watts per square meter [W/m^2])	2	✓	✓
	Barometric pressure (millimeters of mercury [mmHg])	1	✓	✓
	Precipitation (inches [in])	Ground	✓	✓
Ambient Air Data	FEM* Particulate matter less than 10 microns (PM_{10})	2,3	✓	✓
	FEM* Particulate matter less than 2.5 microns ($PM_{2.5}$)	2,3	✓	✓
	Sulfur dioxide (SO_2)	3		✓
	Ozone (O_3)	3		✓
	Nitrogen dioxide (NO_2)	3		✓

*Federal Equivalent Method

The meteorological data are recorded by digital data acquisition systems equipped with broadband modems for data transfer. The meteorological parameters are sampled on-site at two-second intervals and are digitally processed into 15-minute averages. The 15-minute averages are transmitted to Air Sciences Inc. (Air Sciences) for quality assurance checks and are used as input for the calculation of one-hour averages.

Atmospheric stability is calculated using the Solar Radiation/Delta-T (SRDT) method (EPA-454/R-99-005, Table 6-7). Wind speed and solar radiation measurements are used for calculation of daytime atmospheric stability, and wind speed and delta temperature measurements are used for calculation of nighttime atmospheric stability.

Stability classes A, B, and C indicate the frequency of daytime low-speed winds, which are categorized as unstable or high-dispersion-potential winds with class A being the least stable. Stability classes E and F indicate the frequency of nighttime low-speed winds, which are categorized as stable or low-dispersion-potential winds with class E being the least stable. The D stability class is a mixture of daytime and nighttime winds, generally at higher speeds. This class is also referred to as neutral stability.

The frequency distribution of instantaneous winds by speed during each month of the quarter is collected at the monitoring stations. These winds can have a pronounced effect on the natural generation of airborne dust. The wind speed data are collected every two seconds and then binned based on wind speed classes to build a frequency distribution. The wind speed classes are:

- Wind speeds less than 5 meters per second (m/s) (11.2 miles per hour [mph])
- Wind speeds from 5 to 19 m/s, categorized in increments of 2 m/s
- Wind speeds greater than 19 m/s (42.5 mph)

The wind frequency distributions are compiled every eight hours and then converted to daily percentages. Appendix A contains the frequency distributions of winds by speed, direction, and stability. Appendix B includes monthly wind speed frequencies and instantaneous daily maximum wind speeds. Appendix C lists hourly meteorological data from July 1 through September 30, 2013.

Meteorological parameters are collected in support of air quality data. All meteorological sensors are audited and data undergo quality control procedures according to the guidelines outlined in the Quality Assurance Project Plan.

1.2.2 NO_2 Data

NO_2 is measured at the East Plant using the Teledyne T200 Chemiluminescence NO_2 Analyzer, which holds an Environmental Protection Agency (EPA) equivalency designation as a Reference Method (RFNA-1194-099). This instrument is designed to measure oxides of nitrogen (NO_X) (with nitrogen dioxide, NO_2, as an indicator) at trace levels in ambient air. The instrument is operated continuously to collect hourly NO, NO_2, and NO_X concentrations. Data are transferred via FTP script every hour to the Air Sciences server and made available to authorized persons via a data web-portal. Appendix E lists hourly NO_2 data for the East Plant from July 1 through September 30, 2013.

Zero/span checks are run every morning, typically beginning at 1 a.m., and these data are invalidated. Level 1 zeros and spans are conducted by the site operator every two weeks or as needed. Second-party audits, adjustments, and general maintenance on the NO_2 monitor are performed according to the guidelines outlined in the Quality Assurance Project Plan.

1.2.3 SO_2 Data

SO_2 is measured at the East Plant using the Teledyne T100 UV Fluorescence SO_2 Analyzer, which holds an EPA designation as an Automated Equivalent Method (EQSA-0495-100). The instrument is operated continuously to collect hourly SO_2 concentrations. Data are transferred via FTP script every hour to the Air Sciences server and made available to authorized persons via a data web-portal. Appendix E lists hourly SO_2 data for the East Plant from July 1 through September 30, 2013.

Zero/span checks are run every night, typically beginning at midnight, and these data are invalidated. Level 1 zeros and spans are conducted by the site operator every two weeks or as needed. Second-party

audits, adjustments, and general maintenance on the SO_2 monitor are performed according to the guidelines outlined in the Quality Assurance Project Plan.

1.2.4 O_3 Data

O_3 is measured at the East Plant using the Teledyne T400 UV Absorption O_3 Analyzer, which holds an EPA designation as an Automated Equivalent Method (EQOA-0992-087). The instrument is operated continuously to collect hourly O_3 concentrations. Data are transferred via FTP script every hour to the Air Sciences server and made available to authorized persons via a data web-portal. Appendix E lists hourly and rolling 8-hour average O_3 data for the East Plant from July 1 through September 30, 2013.

Zero/span checks are run every morning, typically beginning at 2 a.m., and these data are invalidated. Level 1 zeros and spans are conducted by the site operator every two weeks or as needed. Second-party audits, adjustments, and general maintenance on the O_3 monitor are performed according to the guidelines outlined in the Quality Assurance Project Plan.

1.2.5 PM Data

PM_{10} and $PM_{2.5}$ are measured at both the East Plant and West Plant using Met One Instruments' Beta Attenuation Monitors (BAM). At each site, one BAM is configured as a $PM_{2.5}$ Federal Equivalent Method (FEM), which holds the EPA designation (EQPM-0308-170), and the other BAM is configured as a PM_{10} FEM, which holds the EPA designation (EQPM-0798-122). The instruments are operated continuously to collect hourly $PM_{2.5}$ and PM_{10} concentrations. Data are transferred via FTP script every hour to the Air Sciences server and made available to authorized persons via a data web-portal. Appendix D lists hourly $PM_{2.5}$ and PM_{10} data from July 1 through September 30, 2013.

The accuracy of the monitor is assessed through monthly audits of the flow rate by using a certified flow transfer standard.

Second-party audits, adjustments, and general maintenance on the PM monitors are performed according to the guidelines outlined in the Quality Assurance Project Plan.

2.0 DATA RECOVERY RATES

Data recovery rates for all parameters are presented in Table 3. Meteorological data recoveries are calculated by dividing the amount of valid hourly averages by the available hourly periods in the quarter. Air quality and particulate data recoveries are calculated by dividing the amount of valid 24-hour averages (for PM_{10}, $PM_{2.5}$), valid 24-hour maximum value (for SO_2, NO_2), or valid daily rolling 8-hour maximum (O_3) values by the number of days in the quarter. Particulate and air quality 24-hour averages or maximums are valid if greater than 75 percent of the hourly readings are valid for that day (at least 18 out of 24 hours).

Table 3. Data Recovery Rates, East Plant and West Plant
July 1 – September 30, 2013
(percent)

	East Plant		West Plant		
Parameter*	**Recorded Observations**	**Recovery Rate**	**Recorded Observations**	**Recovery Rate**	**Minimum Required Recovery Rate**
Meteorological					
Wind speed (10 m)	2,203	99.8	2,207	99.9	90
Wind direction (10 m)	2,203	99.8	2,207	99.9	90
Temperature (2 m)	2,203	99.8	2,207	99.9	90
Delta temperature	2,203	99.8	2,207	99.9	90
Relative humidity	2,203	99.8	2,207	99.9	90
Barometric pressure	2,203	99.8	2,207	99.9	90
Precipitation	2,203	99.8	2,208	100	90
Solar radiation	2,203	99.8	2,207	99.9	90
NO_2	71	77.2	--	--	75
O_3	91	98.9	--	--	75
SO_2	91	98.9	--	--	75
PM_{10}	88	95.7	92	100	75
$PM_{2.5}$	91	98.9	89	96.7	75

*Meteorological parameters are observed hourly (2,208 hours in this period).
NO_2, O_3, SO_2, and PM parameters are observed every 24 hours (92 days in this period).

2.1 Data Loss

2.1.1 Meteorological Data Loss

2.1.1.1 East Plant

Meteorological data invalidated at the East Plant station for this quarter was due to a site calibration performed by Air Sciences on July 15 and 16, 2013.

2.1.1.2 West Plant

Meteorological data invalidated at the West Plant station for this quarter was due to a site calibration performed by Air Sciences on July 15, 2013.

2.1.2 NO_2 Data Loss

NO_2 24-hour maximum data were invalidated for July 16, 2013, due to an audit performed by Air Sciences, and from July 17, 2013 to July 21, 2013 due to the analyzer being taken out of service as a result of a part damaged during maintenance. Maintenance and a multi-point calibration were performed by Air Sciences on July 22, 2013 resulting in invalidated NO_2 24-hour maximum data. Data were also invalidated from July 2 through July 15, 2013, due to daily zero/span check results outside of accepted parameters.

Additional invalid hourly NO_2 data were due to daily zero/span checks, Level 1 zero/span checks, regularly scheduled maintenance, power outages, and internal instrument errors.

2.1.3 SO_2 Data Loss

SO_2 24-hour maximum data were invalidated for July 17, 2013, due to an audit, annual maintenance and a calibration performed by Air Sciences.

Additional invalid hourly SO_2 data were due to daily zero/span checks, Level 1 zero/span checks, regularly scheduled maintenance, power outages, and internal instrument errors.

2.1.4 O_3 Data Loss

O_3 rolling 8-hour maximum data were invalidated for July 17, 2013, due to an audit, annual maintenance and a calibration performed by Air Sciences.

Additional invalid hourly O_3 data were due to daily zero/span checks, Level 1 zero/span checks, regularly scheduled maintenance, power outages, and internal instrument errors.

2.1.5 PM Data Loss

2.1.5.1 East Plant

Three hours of PM_{10} data were invalidated on July 16, 2013, due to maintenance and a calibration performed by Air Sciences. From August 16 to August 19, 2013, 68 hours of PM_{10} data are missing due to the instrument being left in maintenance mode after the previous site check.

Four hours of $PM_{2.5}$ data were invalidated on July 16, 2013, due to maintenance and a calibration performed by Air Sciences.

Additional invalid hourly PM data at the East Plant were due to monthly flow verifications and regularly scheduled maintenance.

2.1.5.2 West Plant

Three hours of PM_{10} data were invalidated on July 15, 2013, due to maintenance and a calibration performed by Air Sciences.

Five hours of $PM_{2.5}$ data were invalidated on July 15, 2013, due to maintenance and a calibration performed by Air Sciences.

Additional invalid hourly PM data at the West Plant were due to monthly flow verifications and regularly scheduled maintenance.

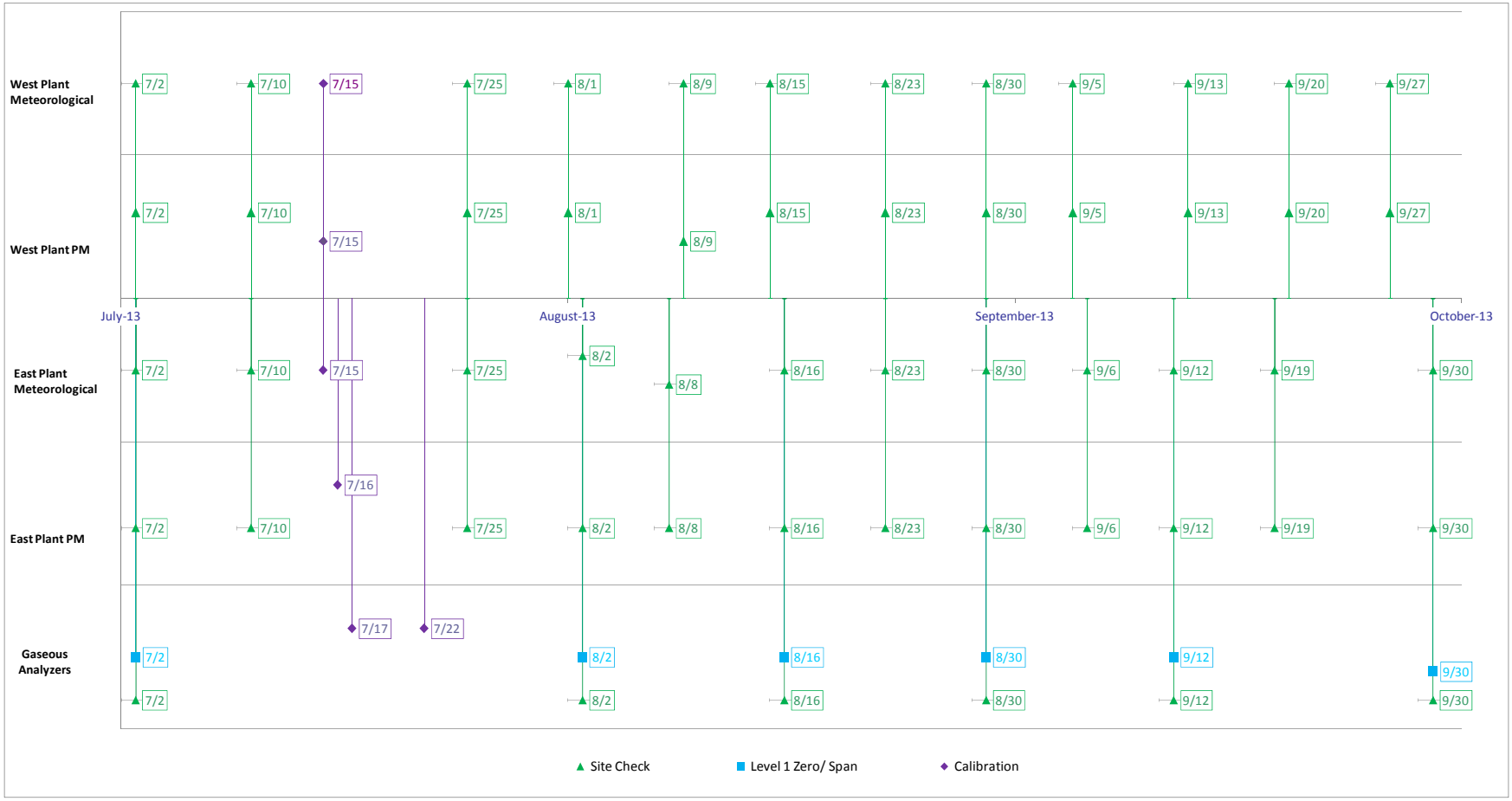
2.2 Quality Control

Quality assurance, equipment calibration, and audit procedures are conducted in accordance with the following documents:

- Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II: Ambient Air Quality Monitoring Program (EPA-454/B-13-003, May 2013)
- Quality Assurance Handbook for Air Pollution Measurement Systems, Volume IV: Meteorological Measurements (EPA-454/B-08-002, March 2008)
- Transfer Standards for the Calibration of Ambient Air Monitoring Analyzers for Ozone (EPA-454/B-10-001, November 2010)
- Code of Federal Regulations (40 CFR Parts 50 and 58)
- Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD) (EPA-450/4-87-007, May 1987)
- Meteorological Monitoring Guidance for Regulatory Modeling Applications (EPA-454/R-99-005, February 2000)

Audits and/or calibrations of meteorological instrumentation are required every six months. Audits and/or calibrations of the ambient air quality monitors and analyzers are required every three months. At the East and West Plant, Air Sciences performed calibrations of the meteorological instruments, particulate and air quality analyzers between July 15, and July 17, 2013. A calibration of the NO_x analyzer was performed on July 22, 2013 prior to the instrument being returned to service. Site checks on the meteorological sensors, particulate instruments, and gas analyzers continue to be conducted on a weekly basis. Copies of the audit/calibration report, flow verifications, and site check forms can be found in Appendices F-K.

Figure 2. Dates of Site Checks, Audits, and Calibrations
July 1- September 30, 2013



3.0 METEOROLOGICAL DATA SUMMARY AND DISCUSSION

3.1 Meteorological Data Summary

Meteorological data from the third quarter have been compiled and summarized in graphical and tabular form. A schematic of meteorology summary sheets is shown in Figure 3. Meteorological summary sheets (Figure 4 and Figure 5) are comprised of the following:

Wind Rose – Graphically depicts the percentage of winds that come from each of the 16 directions for the reported period. Wind speeds are divided into six subcategories ranging from less than 0.5 m/s (the measurement threshold of the instrument) to greater than 11.75 m/ s.

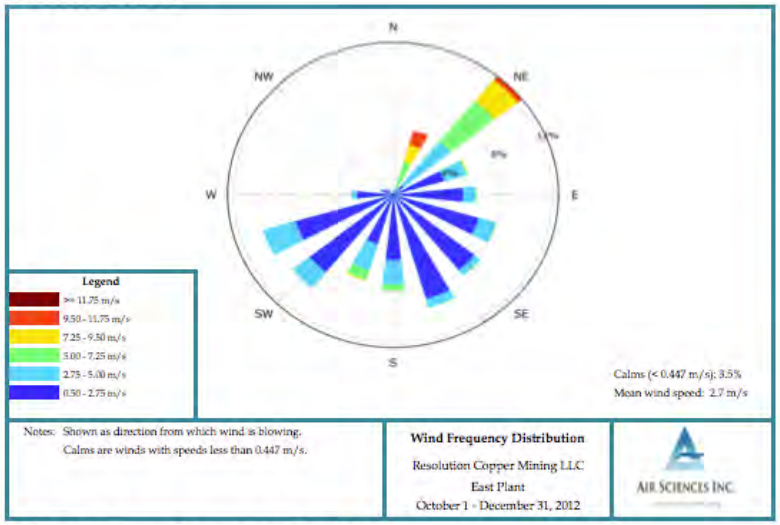
Wind Frequency Table – A two-part table. The left part of the Wind Frequency Table shows the percentage of occurrence of winds for each of the 16 directions that occur in each of the six Wind Speed Class Intervals. The right part shows the percentage of occurrence of winds for each of the 16 directions that occur in each of the six Stability Classes.

Meteorology Charts – Graphically summarize recorded hourly meteorological parameters by month. Chart types include stock-ticker charts (with high, low, and average hourly values for each month) and bar charts.

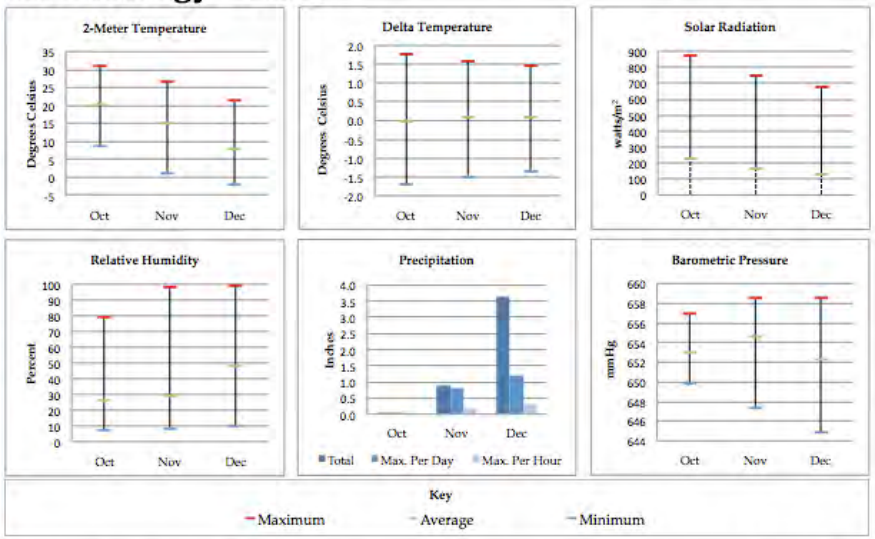
Instantaneous Wind Frequency and Maximum Chart – Graphically summarizes instantaneous (two-second) wind speeds as a percentage of occurrences for each of the nine wind speed intervals and the magnitude, date, and time of the maximum instantaneous wind speed for each month.

Figure 3. Example Schematic of Meteorological Data Sheets

Wind Rose



Meteorology Charts



Wind Frequency Tables

	Speed Class Intervals (m/s) (percent of occurrence)							Mean	Stability Class						
Direction	0.5 <1.5	1.5 <3	3 <5	5 <7	7 <10	>=10	All	Speed	A	B	C	D	E	F	All
N	0.2	0.2	0.0	0.0	0.0	0.0	0.5	1.9	0.0	0.1	0.1	0.1	0.0	0.2	0.5
NNE	0.0	0.2	0.5	1.8	2.1	0.9	5.5	7.4	0.0	0.2	0.6	4.7	0.0	0.1	5.6
NE	0.3	1.3	3.9	3.7	3.0	0.2	12.5	5.4	0.0	0.2	1.2	10.5	0.4	0.2	12.5
ENE	0.8	3.6	1.3	0.1	0.0	0.0	5.9	2.5	0.0	0.2	0.8	2.2	1.7	1.2	6.1
E	1.9	3.5	0.7	0.1	0.0	0.0	6.3	2.0	0.0	0.4	1.0	1.9	1.1	2.0	6.4
ESE	3.6	3.5	1.0	0.0	0.0	0.0	8.1	1.8	0.0	0.5	1.7	1.8	1.3	3.5	8.8
SE	6.0	2.0	0.4	0.0	0.0	0.0	8.4	1.3	0.0	0.5	0.4	0.8	1.0	6.6	9.3
SSE	7.3	1.7	0.5	0.0	0.0	0.0	9.6	1.2	0.0	0.3	0.5	1.0	0.5	8.0	10.2
S	3.6	1.9	1.7	0.5	0.0	0.0	7.8	2.2	0.1	0.4	1.5	2.0	0.4	3.8	8.3
SSW	1.4	3.4	1.7	0.8	0.1	0.0	7.3	2.8	0.0	1.0	1.5	3.1	0.7	1.0	7.3
SW	1.9	7.0	0.9	0.0	0.0	0.0	9.7	2.1	0.0	2.0	3.9	1.6	0.8	1.5	9.8
WSW	2.3	6.3	1.6	0.0	0.0	0.0	10.2	2.2	0.0	1.4	2.4	3.0	1.3	2.2	10.2
W	0.8	2.0	0.3	0.0	0.0	0.0	3.1	2.0	0.0	0.2	0.5	0.7	0.7	0.9	3.1
WNW	0.5	0.4	0.1	0.0	0.0	0.0	1.0	1.8	0.0	0.1	0.0	0.2	0.1	0.6	1.0
NW	0.2	0.5	0.0	0.0	0.0	0.0	0.7	1.7	0.0	0.1	0.0	0.0	0.2	0.2	0.7
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.1
All	31.0	37.5	14.5	7.2	5.3	1.0	96.5	2.7	0.2	7.7	16.1	33.6	10.2	32.2	100.0

Instantaneous Wind Frequency & Maximum Chart

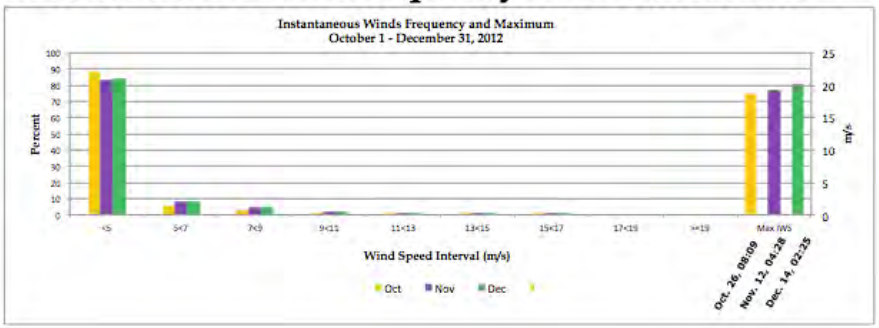
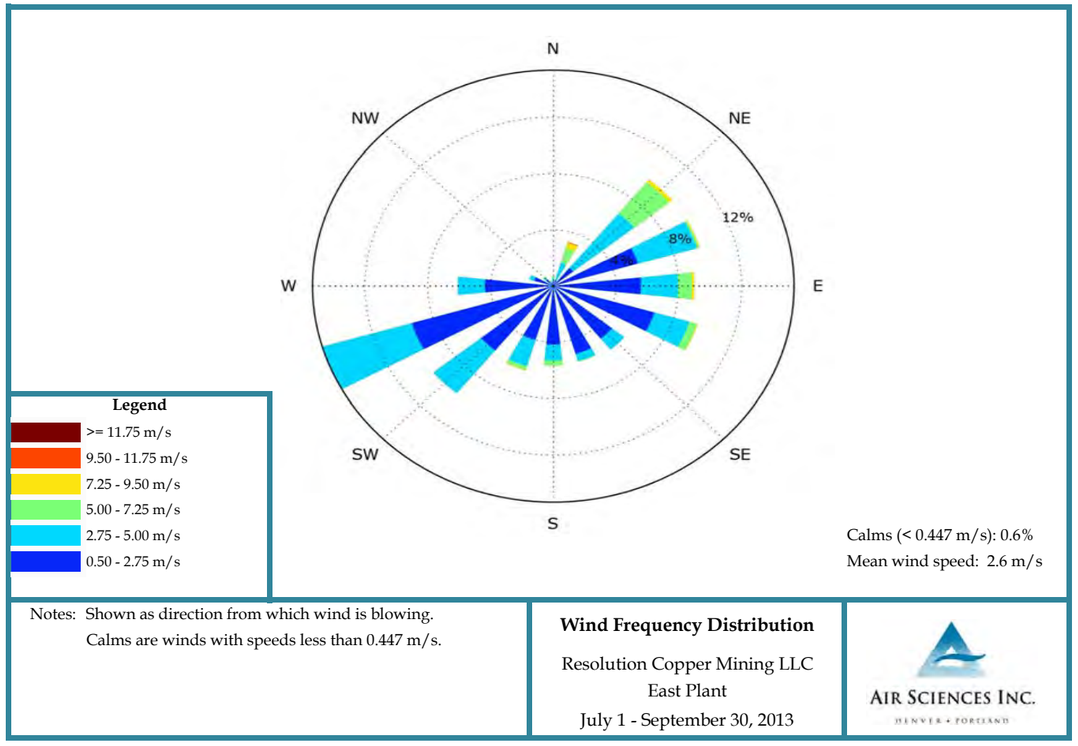


Figure 4: East Plant Meteorological Data Summary

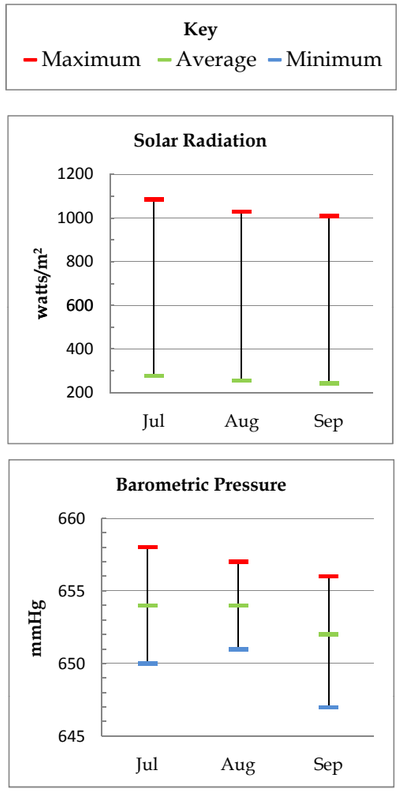
Meteorological Data: July 1 - September 30, 2013



	Speed Class Intervals (m/s) (percent of occurrence)							Mean
Direction	0.5 <1.5	1.5 <3	3 <5	5 <7	7 <10	>=10	All	Speed
N	0.1	0.3	0.2	0.1	0.0	0.0	0.7	3.1
NNE	0.2	0.3	1.2	1.0	0.5	0.0	3.3	4.9
NE	0.5	1.3	4.9	2.7	0.4	0.0	9.7	4.3
ENE	1.4	4.9	3.2	0.1	0.0	0.0	9.7	2.6
E	2.5	3.5	2.0	0.9	0.2	0.0	9.0	2.7
ESE	3.0	4.1	1.9	0.5	0.0	0.0	9.6	2.4
SE	2.9	2.2	0.7	0.0	0.0	0.0	5.8	1.7
SSE	4.0	1.1	0.5	0.0	0.0	0.0	5.6	1.4
S	2.8	1.8	0.8	0.4	0.0	0.0	5.7	2.1
SSW	1.0	3.6	1.4	0.3	0.0	0.0	6.3	2.6
SW	1.6	5.9	2.3	0.0	0.0	0.0	9.8	2.4
WSW	1.5	10.3	3.4	0.0	0.0	0.0	15.3	2.5
W	1.1	3.9	1.1	0.0	0.0	0.0	6.1	2.3
WNW	0.3	1.1	0.2	0.0	0.0	0.0	1.6	2.1
NW	0.3	0.4	0.1	0.0	0.0	0.0	0.8	2.3
NNW	0.1	0.2	0.0	0.0	0.0	0.0	0.4	2.6
All	23.3	44.8	24.0	6.1	1.2	0.0	99.4	2.6

Stability Class							
D	A	B	C	D	E	F	All
N	0.0	0.2	0.1	0.3	0.0	0.0	0.7
N	0.0	0.5	0.7	1.8	0.0	0.1	3.3
N	0.1	0.8	1.5	6.2	0.5	0.5	9.7
E	0.1	0.9	1.0	4.2	1.7	1.9	9.8
E	0.1	0.6	1.5	2.8	1.7	2.3	9.0
E	0.2	1.5	1.7	2.3	1.5	2.5	9.8
S	0.2	0.6	1.0	0.8	0.8	2.5	5.9
S	0.2	0.5	0.6	0.7	0.6	3.2	5.8
S	0.1	0.7	0.8	1.4	0.4	2.4	5.7
S	0.3	1.2	1.4	1.6	1.0	0.9	6.3
S	1.0	3.2	1.9	1.2	1.0	1.5	9.8
W	1.0	4.2	4.1	2.7	1.6	1.7	15.3
W	0.1	1.0	1.4	1.7	1.0	0.9	6.1
W	0.3	0.2	0.3	0.4	0.2	0.2	1.6
N	0.0	0.1	0.1	0.1	0.3	0.2	0.9
N	0.0	0.0	0.1	0.0	0.0	0.1	0.4
A	3.9	16.3	18.2	28.2	12.5	20.9	100.0

Hourly Statistics



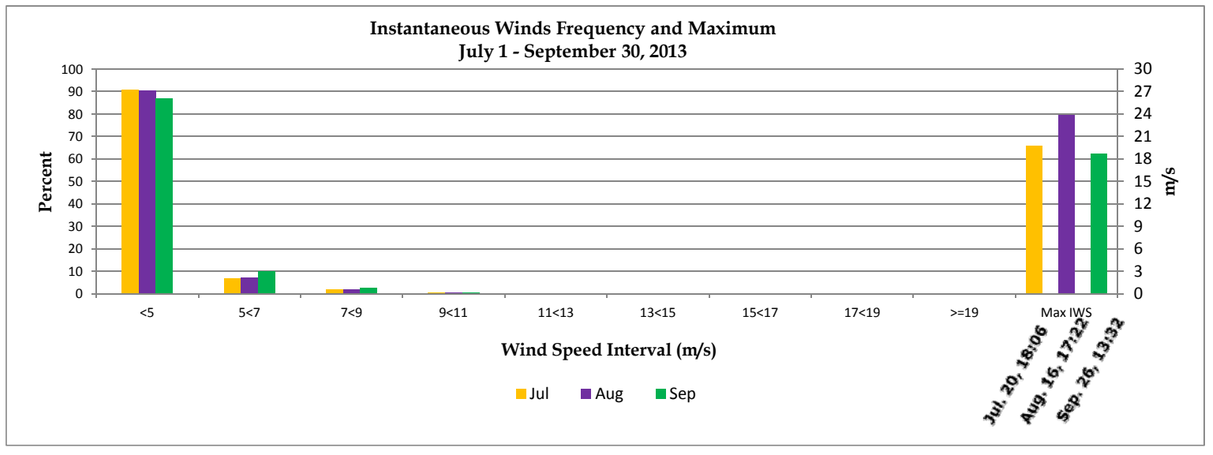
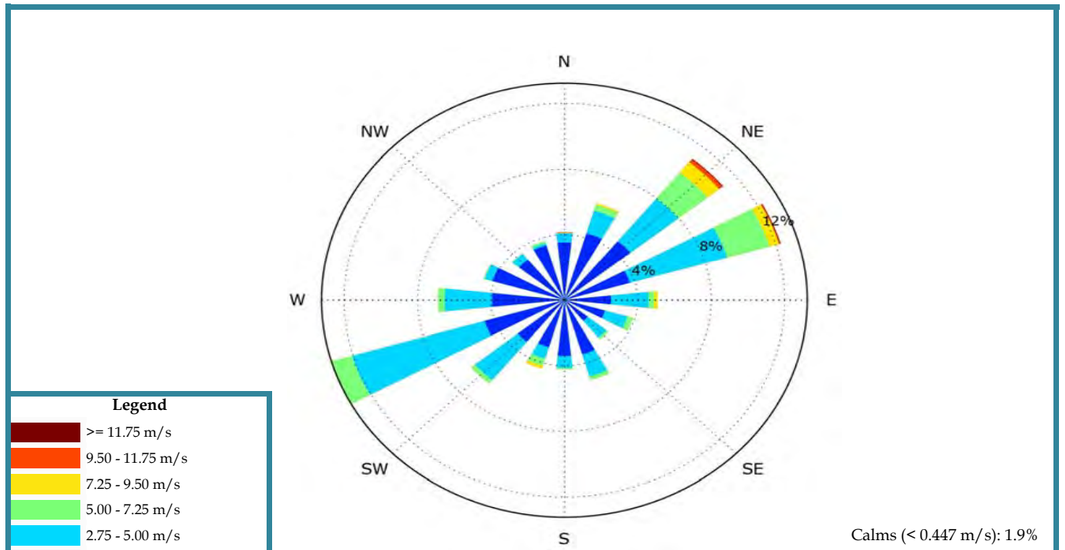


Figure 5: West Plant Meteorological Data Summary

Meteorological Data: July 1 - September 30, 2013



Notes: Shown as direction from which wind is blowing.
Calms are winds with speeds less than 0.447 m/s.

Wind Frequency Distribution

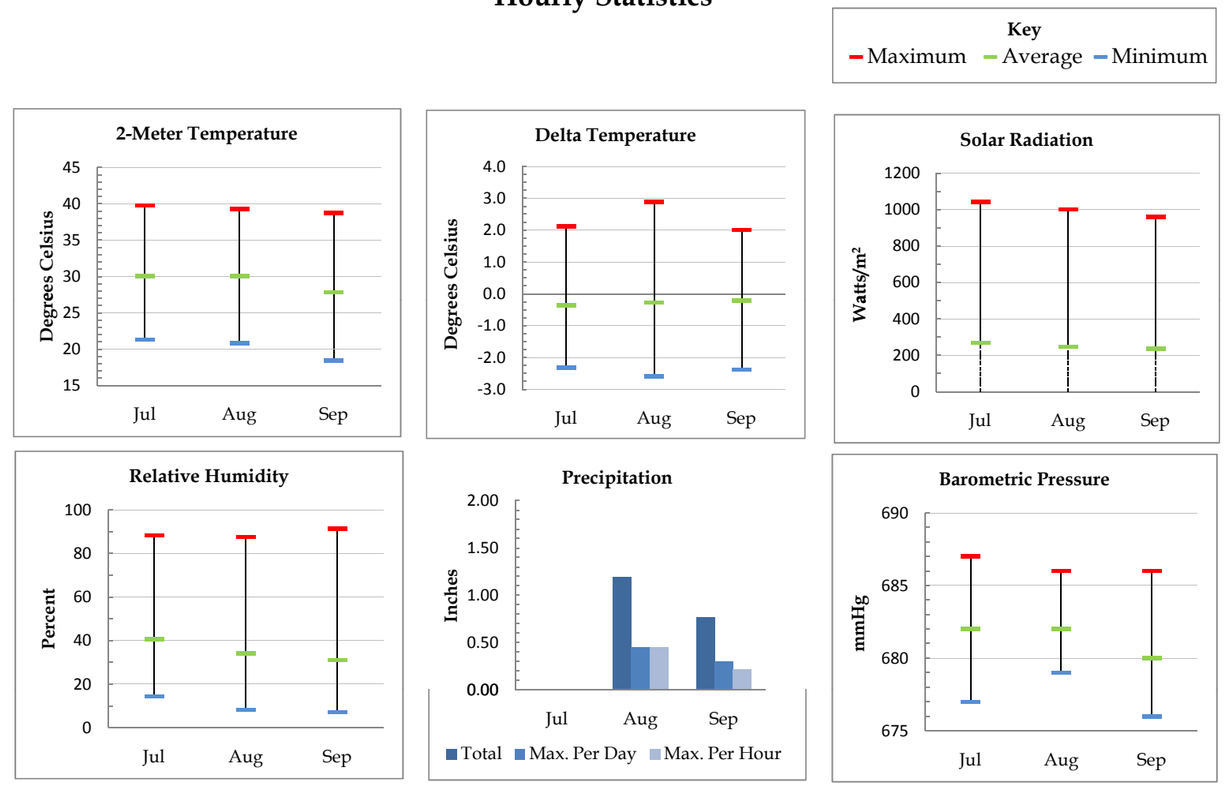
Resolution Copper Mining LLC
West Plant
July 1 - September 30, 2013

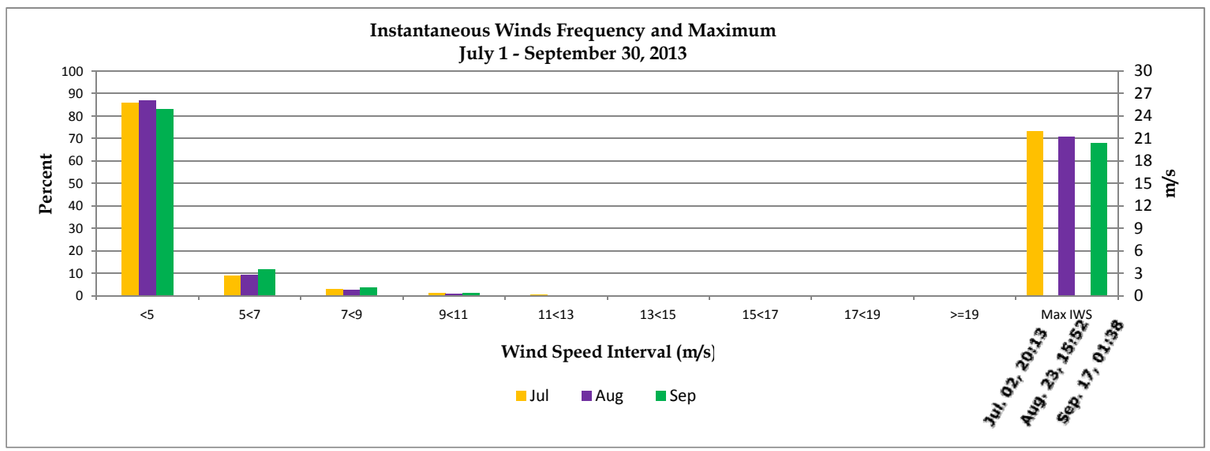
AIR SCIENCES INC.
DENVER • PORTLAND

Direction	Speed Class Intervals (m/s) (percent of occurrence) 0.5 <1.5	1.5 <3	3 <5	5 <7	7 <10	>=10	All	Mean Speed
N	2.6	1.0	0.5	0.0	0.0	0.0	4.2	1.7
NNE	2.7	1.7	1.3	0.3	0.1	0.0	6.2	2.3
NE	2.8	2.2	3.0	1.9	1.0	0.1	11.1	3.7
ENE	1.4	3.1	4.8	2.3	0.6	0.1	12.3	3.8
E	0.7	2.2	1.6	0.3	0.2	0.0	5.1	3.0
ESE	0.8	1.6	1.1	0.2	0.1	0.0	3.9	2.7
SE	0.7	1.2	1.0	0.1	0.0	0.0	3.1	2.6
SSE	1.4	2.3	1.1	0.2	0.0	0.0	5.1	2.3
S	1.2	2.5	0.5	0.1	0.0	0.0	4.2	2.1
SSW	1.0	2.3	0.5	0.5	0.2	0.0	4.3	2.6
SW	1.4	2.4	2.4	0.3	0.0	0.0	6.5	2.7
WSW	1.9	3.3	6.9	1.1	0.1	0.0	13.2	3.3
W	1.8	2.7	2.1	0.4	0.0	0.0	6.9	2.6
WNW	2.4	2.0	0.2	0.0	0.0	0.0	4.6	1.6
NW	2.4	0.9	0.4	0.0	0.0	0.0	3.7	1.5
NNW	2.9	0.7	0.1	0.1	0.0	0.0	3.8	1.4
All	28.0	31.8	27.6	8.0	2.4	0.2	98.1	2.8

Stability Class D	A	B	C	D	E	F	All
N	0.0	0.1	0.4	1.0	0.5	2.3	4.3
N	0.0	0.1	0.6	2.0	1.0	2.6	6.3
N	0.0	0.2	0.8	6.2	1.4	2.7	11.2
E	0.0	0.4	1.5	7.9	1.4	1.0	12.3
E	0.0	0.8	0.9	2.3	0.7	0.6	5.3
E	0.1	1.0	0.8	1.1	0.7	0.3	3.9
S	0.0	1.0	0.7	0.7	0.4	0.3	3.1
S	0.7	1.4	1.4	0.7	0.5	0.3	5.1
S	0.7	1.5	0.8	0.4	0.6	0.1	4.3
S	0.5	1.4	0.8	1.1	0.3	0.2	4.3
S	0.7	2.4	1.0	1.7	0.4	0.4	6.6
W	0.9	4.0	4.6	2.8	0.6	0.5	13.3
W	0.4	1.4	1.6	1.6	0.8	1.3	7.1
W	0.0	0.3	0.6	1.0	0.8	2.1	4.8
N	0.0	0.2	0.4	0.8	0.9	1.8	4.0
N	0.0	0.0	0.4	0.2	0.8	2.5	3.9
A	4.2	16.4	17.3	31.4	11.7	18.9	100.0

Hourly Statistics





3.2 Meteorological Data Discussion

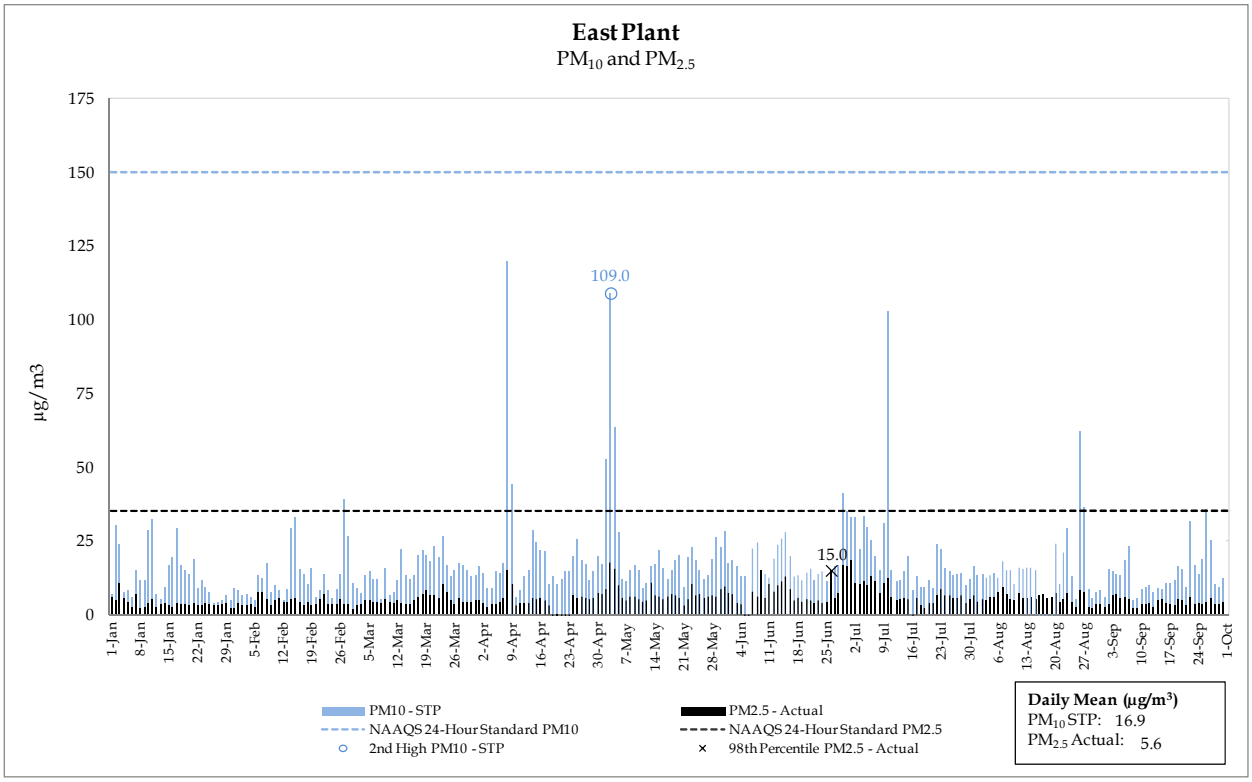
The meteorological data collected at the East and the West Plant sites for the third quarter of 2013 met all data recovery objectives.

4.0 PM DATA SUMMARY AND DISCUSSION

4.1 East Plant PM Data Summary

Figure 6 presents the PM_{10} and $PM_{2.5}$ data collected at the East Plant site for 2013 YTD, and compares the data to the PM_{10} and $PM_{2.5}$ NAAQS. The second-high 24-hour average for PM_{10}, and the 98th percentile for $PM_{2.5}$ are labeled. The daily mean value for PM_{10} and $PM_{2.5}$ are shown in the lower-right corner.

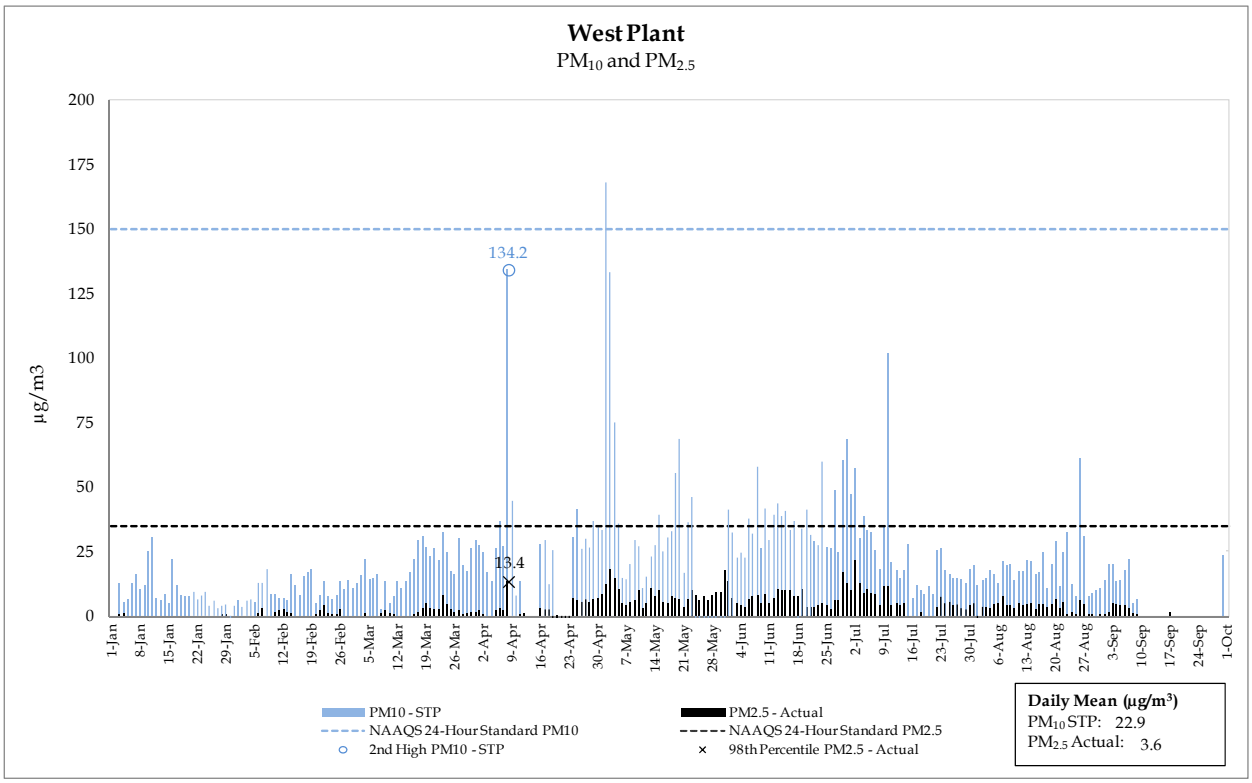
Figure 6. East Plant Particulate Data



4.2 West Plant PM Data Summary

Figure 7 presents the PM_{10} and $PM_{2.5}$ data collected at the West Plant site for 2013 YTD, and compares the data to the PM_{10} and $PM_{2.5}$ NAAQS. The second-high 24-hour average for PM_{10}, and the 98th percentile for $PM_{2.5}$ are labeled. The daily mean value for PM_{10} and $PM_{2.5}$ are shown in the lower-right corner.

Figure 7. West Plant Particulate Data



4.3 PM Data Discussion

4.3.1 PM_{10}

The National Ambient Air Quality Standard (NAAQS) for PM_{10} is 150 µg/m³ for a 24-hour average concentration. The standard is met when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than one (second-high value).

As shown in Figure 6 and Figure 7, the year-to-date (YTD) second-high PM_{10} concentrations recorded at the East and West Plants are 109.0 µg/m³ and 134.2 µg/m³, respectively. Both the East and West Plants' second-high values are below the NAAQS of 150 µg/m³.

Actual comparison to the NAAQS requires three calendar years of monitoring data, which have not been obtained at this time.

4.3.2 $PM_{2.5}$

The annual primary and secondary $PM_{2.5}$ standards are met when the annual arithmetic mean concentration is less than or equal to 12.0 $\mu g/m^3$. The 24-hour primary and secondary $PM_{2.5}$ standards are met when the 98th percentile 24-hour concentration is less than or equal to 35 $\mu g/m^3$.

As shown in Figure 6 and Figure 7, YTD arithmetic mean concentrations for the East and West Plants are 5.6 and 3.6 $\mu g/m^3$, respectively. Both the East and West Plants' arithmetic mean values are below the NAAQS of 12 $\mu g/m^3$.

Figure 6 and Figure 7 also show the 98th percentile concentrations at the East and West Plants, which were 15.0 and 13.4 $\mu g/m^3$, respectively. The 98th percentiles of both the East and West Plants' 24-hour concentrations are also below 35 $\mu g/m^3$.

Actual comparison to the NAAQS requires three calendar years of monitoring data, which have not been obtained at this time.

5.0 NO_2 DATA SUMMARY AND DISCUSSION

5.1 NO_2 Data Summary

Figure 8 and Figure 9 present the NO_2 maximum hourly concentrations for each calendar day, and hourly data collected at the East Plant site for 2013 YTD. Figure 8 shows the 98th percentile compared to the one-hour NO_2 standard. Figure 9 shows the mean hourly NO_2 concentration compared with the annual NO_2 standard.

Figure 8. NO_2 Maximum Hourly Concentration for Each Calendar Day (YTD)

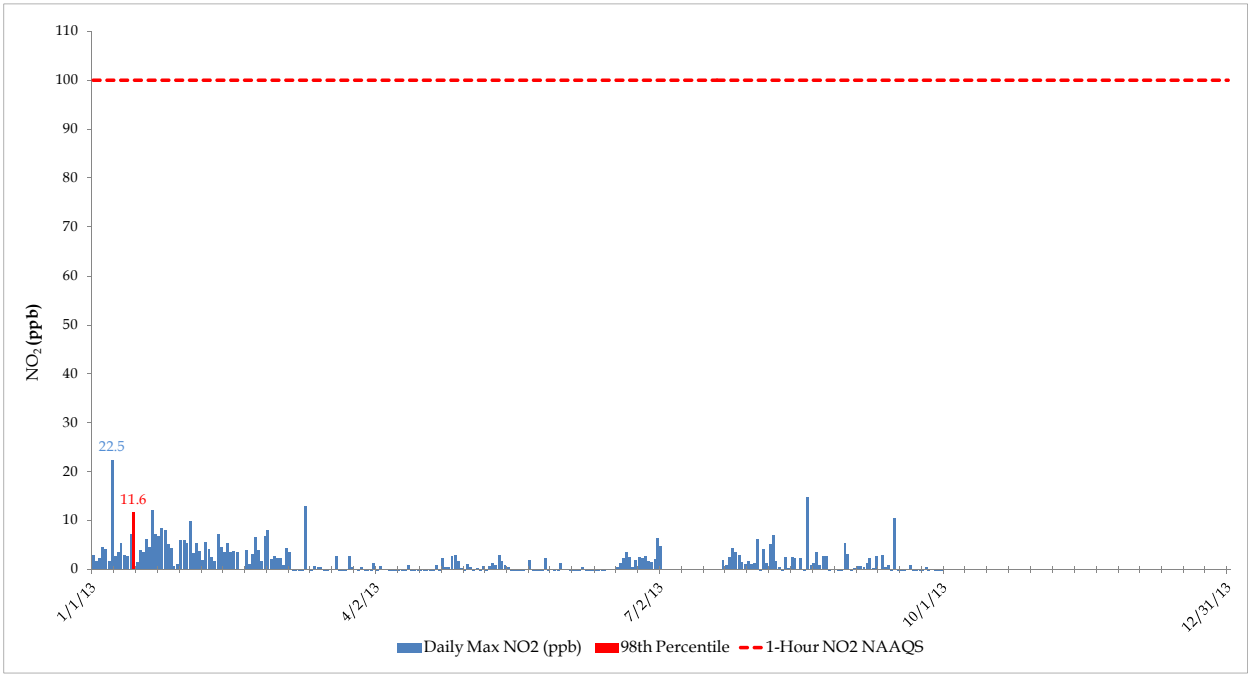
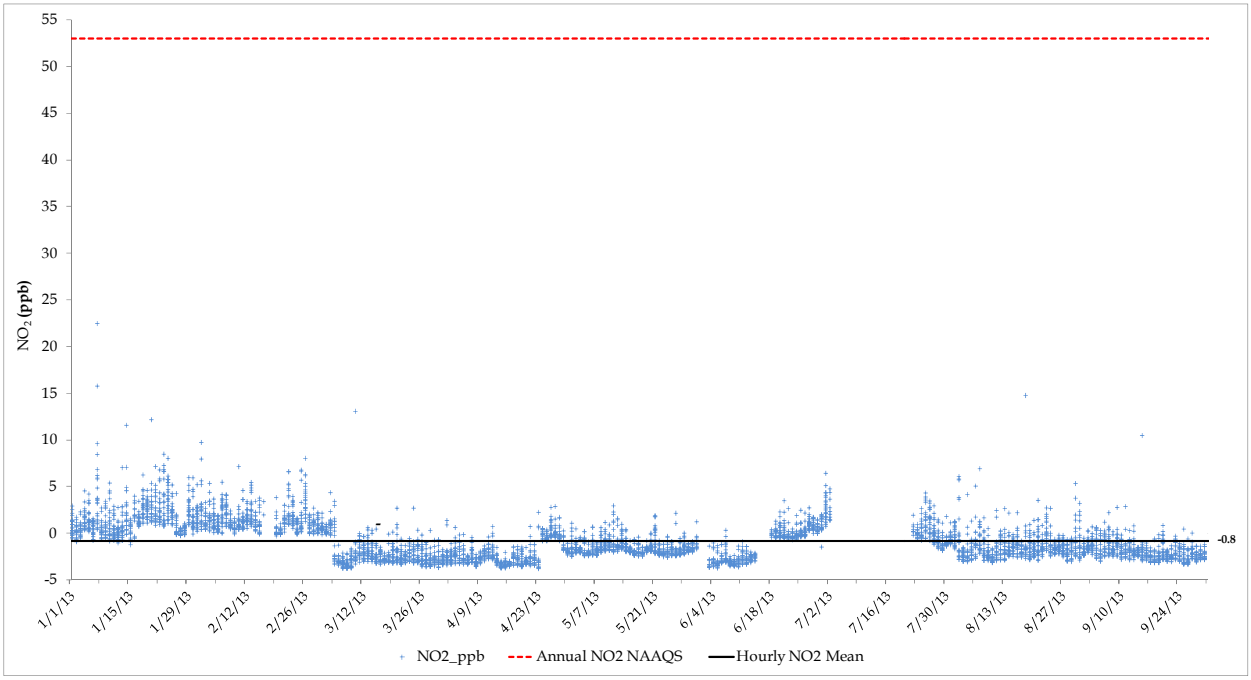


Figure 9. NO_2 Mean Hourly Concentrations (YTD)



5.2 NO_2 Data Discussion

The level of the annual NAAQS for oxides of nitrogen is 53 parts per billion (ppb), measured in the ambient air as NO_2. The annual NAAQS is met when the annual average concentration in a calendar year is less than or equal to 53 ppb.

The level of the 1-hour NAAQS for oxides of nitrogen is 100 ppb, measured in the ambient air as NO_2. The 1-hour NAAQS is met when the three-year average of the annual 98th percentile of the daily maximum 1-hour average concentration is less than or equal to 100 ppb.

As shown in Figure 8, the 98th percentile of the daily maximum 1-hour average NO_2 concentration for 2013 YTD is 11.6 ppb, which is less than the NAAQS 1-hour primary standard of 100. As shown in Figure 9, the 2013 YTD hourly NO_2 average is -0.5 ppb, which is below the annual NO_2 NAAQS of 53 ppb.

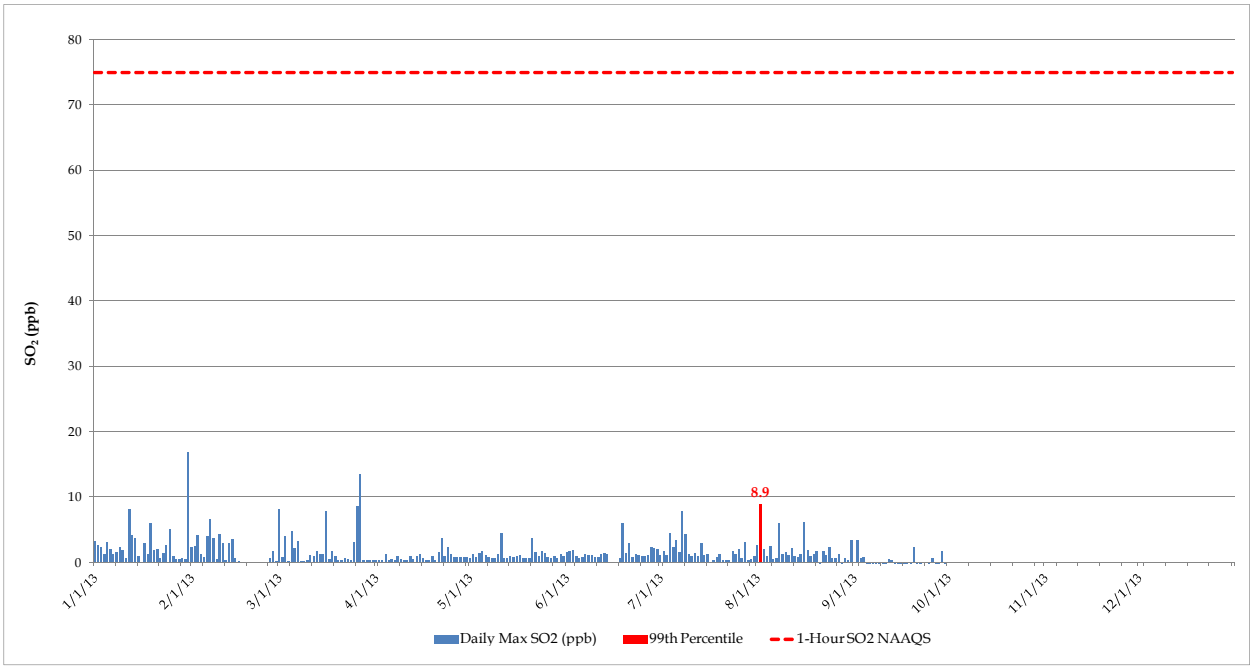
Actual comparison to the NAAQS requires three calendar years of monitoring data, which have not been obtained at this time.

6.0 SO_2 DATA SUMMARY AND DISCUSSION

6.1 SO_2 Data Summary

Figure 10 presents the maximum hourly SO_2 concentrations for each calendar day collected at the East Plant site for 2013 YTD, and it shows the 99th percentile (labeled) compared to the one-hour SO_2 standard.

Figure 10. SO_2 Maximum Hourly Concentration for Each Calendar Day (YTD)



6.2 SO_2 Data Discussion

The level of the primary 1-hour NAAQS for oxides of sulfur is 75 ppb measured in the ambient air as sulfur dioxide (SO_2). The 1-hour primary standard is met at an ambient air quality monitoring site when the three-year average of the annual (99th percentile) daily maximum 1-hour average concentrations is less than or equal to 75 ppb.

As shown in Figure 10, the 99th percentile 1-hour maximum concentration for 2013 YTD is 8.9 ppb, which is below the annual SO_2 NAAQS of 75 ppb.

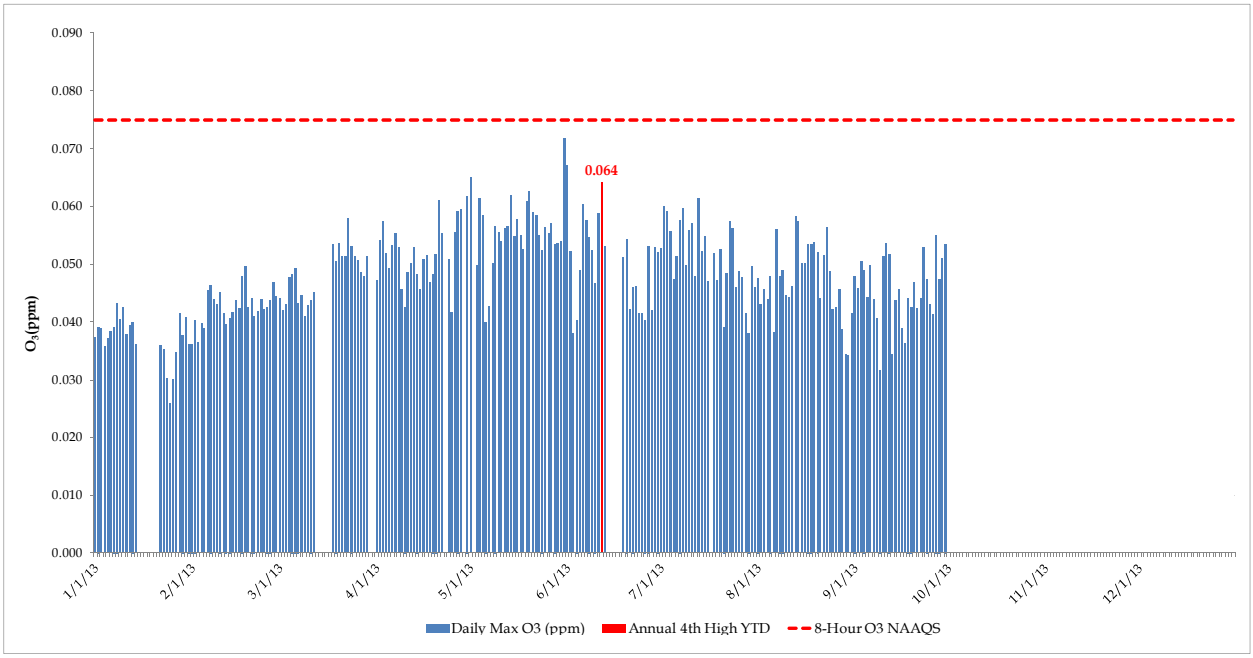
Actual comparison to the NAAQS requires three calendar years of monitoring data, which have not been obtained at this time.

7.0 O_3 DATA SUMMARY AND DISCUSSION

7.1 O_3 Data Summary

Figure 11 presents the daily rolling 8-hour maximum O_3 data collected at the East Plant site for 2013 YTD, and it shows the year-to-date first-highest rolling 8-hour average compared to the eight-hour O_3 standard.

Figure 11. O_3 Daily Rolling 8-Hour Maximum, 2013 (YTD)



7.2 O_3 Data Discussion

The level of the primary and secondary 8-hour NAAQS for ozone is 0.075 parts per million, daily maximum average. The 8-hour primary and secondary standard is met at an ambient air quality monitoring site when the three-year average of the annual fourth-highest daily maximum 8-hour average O_3 concentration is less than or equal to 0.075 ppm.

Figure 11 shows that the YTD averaged fourth-high maximum recorded at the East Plant for the third quarter of 2013 is 0.064 ppm. This concentration is below the NAAQS 8-hour O_3 standard of 0.075 ppm.

Parts of Pinal County and adjacent Maricopa County have been designated as non-attainment areas for 8-hour ozone by the Arizona Department of Environmental Quality (ADEQ).

Actual comparison to the NAAQS requires three calendar years of monitoring data, which have not been obtained at this time.

Appendix A: Frequency Distributions of Winds by Speed, Direction, and Stability

Frequency of Winds By Direction and Speed - 10m
Stability Class A
East Plant, Resolution
07/01/13 - 09/30/13
(percent of occurrence)

	Speed Class Intervals (m/s)							Mean
Direction	0.5 <1.5	1.5 <3	3 <5	5 <7	7 <10	>=10	All	Speed
N	0.0	1.1	0.0	0.0	0.0	0.0	1.1	2.6
NNE	0.0	1.1	0.0	0.0	0.0	0.0	1.1	2.4
NE	0.0	3.4	0.0	0.0	0.0	0.0	3.4	1.9
ENE	0.0	3.4	0.0	0.0	0.0	0.0	3.4	1.8
E	2.3	1.1	0.0	0.0	0.0	0.0	3.4	1.8
ESE	0.0	5.7	0.0	0.0	0.0	0.0	5.7	2.3
SE	0.0	4.6	0.0	0.0	0.0	0.0	4.6	2.0
SSE	0.0	4.6	0.0	0.0	0.0	0.0	4.6	2.2
S	0.0	2.3	0.0	0.0	0.0	0.0	2.3	2.5
SSW	0.0	8.0	0.0	0.0	0.0	0.0	8.0	2.6
SW	0.0	25.3	0.0	0.0	0.0	0.0	25.3	2.6
WSW	0.0	25.3	0.0	0.0	0.0	0.0	25.3	2.6
W	0.0	2.3	0.0	0.0	0.0	0.0	2.3	2.3
WNW	0.0	6.9	0.0	0.0	0.0	0.0	6.9	2.1
NW	1.1	0.0	0.0	0.0	0.0	0.0	1.1	1.5
NNW	0.0	1.1	0.0	0.0	0.0	0.0	1.1	2.1
All	3.4	96.6	0.0	0.0	0.0	0.0	100.0	2.4

Calms (< 0.447 m/s): 0.0%

Mean wind speed: 2.4 m/s

Percent Occurence for this Stability Class: 3.9%

Frequency of Winds By Direction and Speed - 10m
Stability Class B
East Plant, Resolution
07/01/13 - 09/30/13
(percent of occurrence)

	Speed Class Intervals (m/s)							Mean
Direction	0.5 <1.5	1.5 <3	3 <5	5 <7	7 <10	>=10	All	Speed
N	0.3	0.8	0.0	0.0	0.0	0.0	1.1	2.0
NNE	0.3	0.6	2.2	0.0	0.0	0.0	3.1	3.3
NE	0.3	1.1	3.4	0.3	0.0	0.0	5.0	3.8
ENE	1.1	2.8	1.4	0.0	0.0	0.0	5.3	2.4
E	0.3	0.8	2.8	0.0	0.0	0.0	3.9	3.5
ESE	0.8	3.1	5.3	0.0	0.0	0.0	9.2	3.1
SE	0.0	2.5	1.4	0.0	0.0	0.0	3.9	2.8
SSE	0.6	1.1	1.1	0.0	0.0	0.0	2.8	2.3
S	0.6	2.0	1.7	0.0	0.0	0.0	4.2	2.7
SSW	0.0	4.2	3.1	0.0	0.0	0.0	7.3	2.8
SW	0.3	10.6	8.9	0.0	0.0	0.0	19.8	2.9
WSW	0.6	17.0	8.4	0.0	0.0	0.0	26.0	2.7
W	0.6	4.7	1.1	0.0	0.0	0.0	6.4	2.5
WNW	0.3	0.8	0.0	0.0	0.0	0.0	1.1	1.6
NW	0.0	0.6	0.0	0.0	0.0	0.0	0.6	2.4
NNW	0.0	0.3	0.0	0.0	0.0	0.0	0.3	2.0
All	5.9	53.1	40.8	0.3	0.0	0.0	100.0	2.8

Calms (< 0.447 m/s): 0.0%

Mean wind speed: 2.8 m/s

Percent Occurence for this Stability Class: 16.3%

Frequency of Winds By Direction and Speed - 10m
Stability Class C
East Plant, Resolution
07/01/13 - 09/30/13
(percent of occurrence)

	Speed Class Intervals (m/s)							Mean
Direction	0.5 <1.5	1.5 <3	3 <5	5 <7	7 <10	>=10	All	Speed
N	0.3	0.0	0.5	0.0	0.0	0.0	0.8	3.2
NNE	0.0	0.5	2.8	0.8	0.0	0.0	4.0	4.2
NE	0.0	1.5	6.3	0.8	0.0	0.0	8.5	3.9
ENE	0.3	2.8	2.5	0.0	0.0	0.0	5.5	3.0
E	1.0	3.0	3.8	0.5	0.0	0.0	8.3	3.0
ESE	1.8	3.8	2.8	1.0	0.0	0.0	9.3	2.9
SE	1.3	1.5	2.5	0.0	0.0	0.0	5.3	2.7
SSE	1.0	1.5	0.8	0.0	0.0	0.0	3.3	2.3
S	0.3	2.3	1.3	0.5	0.0	0.0	4.3	3.3
SSW	0.3	4.8	2.3	0.3	0.0	0.0	7.5	2.9
SW	0.3	7.0	3.0	0.0	0.0	0.0	10.3	2.7
WSW	0.8	16.5	5.3	0.0	0.0	0.0	22.5	2.7
W	0.3	4.5	2.8	0.0	0.0	0.0	7.5	2.8
WNW	0.0	1.5	0.3	0.0	0.0	0.0	1.8	2.4
NW	0.0	0.0	0.5	0.0	0.0	0.0	0.5	3.8
NNW	0.0	0.5	0.3	0.0	0.0	0.0	0.8	3.3
All	7.3	51.5	37.3	3.8	0.0	0.0	99.8	3.0

Calms (< 0.447 m/s): 0.3%

Mean wind speed: 3.0 m/s

Percent Occurence for this Stability Class: 18.2%

Frequency of Winds By Direction and Speed - 10m
Stability Class D
East Plant, Resolution
07/01/13 - 09/30/13
(percent of occurrence)

Direction	Speed Class Intervals (m/s)							Mean
	0.5 <1.5	1.5 <3	3 <5	5 <7	7 <10	>=10	All	Speed
N	0.0	0.3	0.3	0.3	0.0	0.0	1.0	4.3
NNE	0.0	0.3	1.1	3.1	1.9	0.0	6.4	6.0
NE	0.5	0.8	10.9	8.7	1.1	0.0	22.0	4.8
ENE	1.1	4.8	8.4	0.5	0.2	0.0	15.0	3.2
E	1.0	2.7	2.7	2.6	0.6	0.0	9.6	3.9
ESE	1.4	3.9	1.6	1.1	0.2	0.0	8.2	2.9
SE	1.8	0.8	0.2	0.0	0.0	0.0	2.7	1.4
SSE	1.3	0.3	0.6	0.2	0.0	0.0	2.4	2.1
S	1.1	1.8	1.0	1.0	0.0	0.0	4.8	3.0
SSW	0.5	3.1	1.1	0.8	0.2	0.0	5.6	3.1
SW	0.3	3.1	1.0	0.0	0.0	0.0	4.3	2.5
WSW	0.5	5.5	3.7	0.0	0.0	0.0	9.6	2.8
W	0.5	4.2	1.4	0.0	0.0	0.0	6.1	2.6
WNW	0.0	0.6	0.6	0.0	0.0	0.0	1.3	2.8
NW	0.0	0.2	0.2	0.2	0.0	0.0	0.5	4.3
NNW	0.0	0.0	0.0	0.2	0.0	0.0	0.2	6.3
All	10.0	32.3	34.9	18.5	4.2	0.0	99.8	3.6

Calms (< 0.447 m/s): 0.2%

Mean wind speed: 3.6 m/s

Percent Occurence for this Stability Class: 28.2%

Frequency of Winds By Direction and Speed - 10m
Stability Class E
East Plant, Resolution
07/01/13 - 09/30/13
(percent of occurrence)

Direction	Speed Class Intervals (m/s)							Mean
	0.5 <1.5	1.5 <3	3 <5	5 <7	7 <10	>=10	All	Speed
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.4	0.0	0.0	0.0	0.4	4.0
NE	0.7	1.8	0.7	0.7	0.4	0.0	4.4	3.3
ENE	1.1	11.6	1.1	0.0	0.0	0.0	13.8	2.2
E	3.6	8.7	0.7	0.4	0.0	0.0	13.5	1.9
ESE	3.3	7.6	0.7	0.0	0.0	0.0	11.6	2.0
SE	2.9	3.6	0.0	0.0	0.0	0.0	6.5	1.7
SSE	4.4	0.7	0.0	0.0	0.0	0.0	5.1	1.1
S	1.8	1.5	0.0	0.0	0.0	0.0	3.3	1.4
SSW	1.5	5.5	1.1	0.0	0.0	0.0	8.0	2.0
SW	3.3	4.4	0.4	0.0	0.0	0.0	8.0	1.8
WSW	1.5	10.5	0.7	0.0	0.0	0.0	12.7	2.2
W	1.5	6.5	0.0	0.0	0.0	0.0	8.0	2.0
WNW	1.1	0.7	0.0	0.0	0.0	0.0	1.8	1.3
NW	1.1	1.1	0.0	0.0	0.0	0.0	2.2	1.4
NNW	0.4	0.0	0.0	0.0	0.0	0.0	0.4	1.3
All	28.0	64.4	5.8	1.1	0.4	0.0	99.6	2.0

Calms (< 0.447 m/s): 0.4%

Mean wind speed: 2.0 m/s

Percent Occurence for this Stability Class: 12.5%

Frequency of Winds By Direction and Speed - 10m
Stability Class F
East Plant, Resolution
07/01/13 - 09/30/13
(percent of occurrence)

Direction	Speed Class Intervals (m/s)							Mean
	0.5 <1.5	1.5 <3	3 <5	5 <7	7 <10	>=10	All	Speed
N	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.9
NNE	0.7	0.0	0.0	0.0	0.0	0.0	0.7	1.0
NE	1.1	1.1	0.0	0.0	0.0	0.0	2.2	1.5
ENE	3.5	5.0	0.0	0.0	0.0	0.0	8.5	1.4
E	6.7	4.3	0.0	0.0	0.0	0.0	11.1	1.4
ESE	8.5	3.0	0.0	0.0	0.0	0.0	11.5	1.2
SE	8.5	3.3	0.0	0.0	0.0	0.0	11.7	1.2
SSE	13.4	1.3	0.0	0.0	0.0	0.0	14.8	1.0
S	10.0	1.3	0.0	0.0	0.0	0.0	11.3	1.1
SSW	2.8	1.1	0.0	0.0	0.0	0.0	3.9	1.2
SW	5.0	2.2	0.0	0.0	0.0	0.0	7.2	1.3
WSW	4.8	3.5	0.0	0.0	0.0	0.0	8.2	1.4
W	3.3	0.9	0.0	0.0	0.0	0.0	4.1	1.2
WNW	0.4	0.7	0.0	0.0	0.0	0.0	1.1	1.5
NW	0.4	0.4	0.0	0.0	0.0	0.0	0.9	1.3
NNW	0.4	0.0	0.0	0.0	0.0	0.0	0.4	1.1
All	69.6	28.0	0.0	0.0	0.0	0.0	97.6	1.2

Calms (< 0.447 m/s): 2.4%

Mean wind speed: 1.2 m/s

Percent Occurence for this Stability Class: 20.9%

Frequency of Winds By Direction and Speed - 10m
Stability Class A
West Plant, Resolution
07/01/13 - 09/30/13
(percent of occurrence)

Direction	Speed Class Intervals (m/s)							Mean
	0.5 <1.5	1.5 <3	3 <5	5 <7	7 <10	>=10	All	Speed
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	1.1	0.0	0.0	0.0	0.0	1.1	1.6
ESE	1.1	1.1	0.0	0.0	0.0	0.0	2.2	1.5
SE	0.0	1.1	0.0	0.0	0.0	0.0	1.1	2.3
SSE	3.3	13.0	0.0	0.0	0.0	0.0	16.3	2.0
S	2.2	15.2	0.0	0.0	0.0	0.0	17.4	2.0
SSW	1.1	12.0	0.0	0.0	0.0	0.0	13.0	1.9
SW	2.2	15.2	0.0	0.0	0.0	0.0	17.4	2.2
WSW	4.3	16.3	0.0	0.0	0.0	0.0	20.7	2.1
W	0.0	8.7	0.0	0.0	0.0	0.0	8.7	2.2
WNW	0.0	1.1	0.0	0.0	0.0	0.0	1.1	2.0
NW	0.0	1.1	0.0	0.0	0.0	0.0	1.1	1.6
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
All	14.1	85.9	0.0	0.0	0.0	0.0	100.0	2.0

Calms (< 0.447 m/s): 0.0%

Mean wind speed: 2.0 m/s

Percent Occurence for this Stability Class: 4.2%

Frequency of Winds By Direction and Speed - 10m
Stability Class B
West Plant, Resolution
07/01/13 - 09/30/13
(percent of occurrence)

Direction	Speed Class Intervals (m/s)							Mean
	0.5 <1.5	1.5 <3	3 <5	5 <7	7 <10	>=10	All	Speed
N	0.3	0.3	0.3	0.0	0.0	0.0	0.8	2.8
NNE	0.0	0.8	0.0	0.0	0.0	0.0	0.8	2.4
NE	0.3	0.6	0.3	0.0	0.0	0.0	1.1	2.5
ENE	0.0	1.1	1.4	0.0	0.0	0.0	2.5	3.0
E	0.6	3.0	1.4	0.0	0.0	0.0	5.0	2.4
ESE	0.3	3.0	2.5	0.3	0.0	0.0	6.1	3.0
SE	0.6	2.8	2.8	0.0	0.0	0.0	6.1	2.9
SSE	2.2	3.0	3.3	0.0	0.0	0.0	8.5	2.5
S	2.5	6.1	0.8	0.0	0.0	0.0	9.4	2.1
SSW	2.5	4.4	1.7	0.0	0.0	0.0	8.5	2.2
SW	1.7	5.2	8.0	0.0	0.0	0.0	14.9	2.9
WSW	1.9	5.8	16.8	0.0	0.0	0.0	24.5	3.3
W	0.6	3.6	4.7	0.0	0.0	0.0	8.8	3.0
WNW	0.8	0.8	0.0	0.0	0.0	0.0	1.7	1.7
NW	0.3	0.8	0.0	0.0	0.0	0.0	1.1	2.0
NNW	0.0	0.3	0.0	0.0	0.0	0.0	0.3	2.7
All	14.3	41.6	43.8	0.3	0.0	0.0	100.0	2.8

Calms (< 0.447 m/s): 0.0%

Mean wind speed: 2.8 m/s

Percent Occurence for this Stability Class: 16.4%

Frequency of Winds By Direction and Speed - 10m
Stability Class C
West Plant, Resolution
07/01/13 - 09/30/13
(percent of occurrence)

	Speed Class Intervals (m/s)							Mean
Direction	0.5 <1.5	1.5 <3	3 <5	5 <7	7 <10	>=10	All	Speed
N	0.5	1.0	0.8	0.0	0.0	0.0	2.4	2.5
NNE	0.3	1.3	1.0	0.8	0.0	0.0	3.4	3.5
NE	0.3	1.6	2.9	0.0	0.0	0.0	4.7	3.4
ENE	0.5	3.9	3.9	0.5	0.0	0.0	8.9	3.2
E	0.3	2.1	2.6	0.0	0.0	0.0	5.0	3.2
ESE	1.3	1.8	1.0	0.5	0.0	0.0	4.7	2.6
SE	0.5	0.8	2.4	0.5	0.0	0.0	4.2	3.3
SSE	1.8	3.4	2.6	0.5	0.0	0.0	8.4	2.7
S	1.0	1.8	1.6	0.3	0.0	0.0	4.7	2.8
SSW	0.3	2.6	0.8	1.0	0.0	0.0	4.7	3.1
SW	0.8	1.8	2.9	0.3	0.0	0.0	5.8	3.0
WSW	2.1	4.5	16.2	3.7	0.0	0.0	26.4	3.7
W	0.5	3.4	4.7	0.5	0.0	0.0	9.2	3.4
WNW	0.0	2.9	0.5	0.0	0.0	0.0	3.4	2.6
NW	0.3	1.0	0.8	0.0	0.0	0.0	2.1	2.6
NNW	0.0	1.3	0.5	0.3	0.0	0.0	2.1	3.2
All	10.5	35.3	45.3	8.9	0.0	0.0	100.0	3.2

Calms (< 0.447 m/s): 0.0%

Mean wind speed: 3.2 m/s

Percent Occurence for this Stability Class: 17.3%

Frequency of Winds By Direction and Speed - 10m
Stability Class D
West Plant, Resolution
07/01/13 - 09/30/13
(percent of occurrence)

Direction	Speed Class Intervals (m/s)							Mean
	0.5 <1.5	1.5 <3	3 <5	5 <7	7 <10	>=10	All	Speed
N	1.0	0.7	1.2	0.1	0.1	0.0	3.2	2.8
NNE	1.2	0.9	3.3	0.6	0.4	0.0	6.3	3.6
NE	1.0	2.2	6.6	6.2	3.2	0.4	19.6	5.1
ENE	0.6	3.6	11.7	6.9	2.0	0.3	25.1	4.6
E	0.7	2.0	2.7	0.9	0.7	0.0	7.1	3.9
ESE	0.1	1.0	1.7	0.3	0.3	0.0	3.5	3.6
SE	0.7	0.9	0.4	0.1	0.0	0.0	2.2	2.4
SSE	0.6	0.9	0.4	0.4	0.0	0.0	2.3	2.7
S	0.3	0.7	0.1	0.1	0.0	0.0	1.3	2.5
SSW	0.9	1.2	0.1	0.9	0.6	0.0	3.6	3.8
SW	1.3	1.2	2.0	0.7	0.0	0.0	5.2	3.1
WSW	1.2	1.6	4.3	1.4	0.3	0.0	8.8	3.5
W	0.6	2.0	1.6	0.9	0.0	0.0	5.0	3.2
WNW	0.4	2.3	0.3	0.1	0.0	0.0	3.2	2.4
NW	0.7	0.7	0.9	0.1	0.0	0.0	2.4	2.5
NNW	0.1	0.3	0.0	0.3	0.0	0.0	0.7	3.3
All	11.4	22.0	37.5	20.2	7.6	0.7	99.4	4.0

Calms (< 0.447 m/s): 0.6%

Mean wind speed: 4.0 m/s

Percent Occurence for this Stability Class: 31.4%

Frequency of Winds By Direction and Speed - 10m
Stability Class E
West Plant, Resolution
07/01/13 - 09/30/13
(percent of occurrence)

Direction	Speed Class Intervals (m/s)							Mean
	0.5 <1.5	1.5 <3	3 <5	5 <7	7 <10	>=10	All	Speed
N	1.5	2.3	0.0	0.0	0.0	0.0	3.9	1.6
NNE	2.3	5.0	0.8	0.0	0.0	0.0	8.1	2.0
NE	2.3	5.8	3.1	0.0	0.4	0.0	11.6	2.5
ENE	3.5	6.6	1.9	0.4	0.0	0.0	12.4	2.2
E	0.0	4.6	0.8	0.0	0.0	0.0	5.4	2.3
ESE	2.3	3.5	0.0	0.0	0.0	0.0	5.8	1.6
SE	1.2	1.5	0.4	0.0	0.0	0.0	3.1	1.8
SSE	2.3	2.3	0.0	0.0	0.0	0.0	4.6	1.4
S	2.3	2.7	0.0	0.0	0.0	0.0	5.0	1.5
SSW	0.8	1.5	0.0	0.0	0.0	0.0	2.3	1.5
SW	1.9	1.2	0.0	0.0	0.0	0.0	3.1	1.5
WSW	1.9	3.1	0.0	0.0	0.0	0.0	5.0	1.6
W	3.1	3.5	0.0	0.0	0.0	0.0	6.6	1.5
WNW	3.9	2.7	0.0	0.0	0.0	0.0	6.6	1.3
NW	5.0	1.5	0.0	0.0	0.0	0.0	6.6	1.2
NNW	5.4	1.5	0.0	0.0	0.0	0.0	6.9	1.2
All	39.8	49.4	6.9	0.4	0.4	0.0	96.9	1.8

Calms (< 0.447 m/s): 3.1%

Mean wind speed: 1.8 m/s

Percent Occurence for this Stability Class: 11.7%

Frequency of Winds By Direction and Speed - 10m
Stability Class F
West Plant, Resolution
07/01/13 - 09/30/13
(percent of occurrence)

Direction	Speed Class Intervals (m/s)							Mean
	0.5 <1.5	1.5 <3	3 <5	5 <7	7 <10	>=10	All	Speed
N	10.3	1.2	0.0	0.0	0.0	0.0	11.5	1.0
NNE	10.8	2.4	0.0	0.0	0.0	0.0	13.2	1.1
NE	11.3	2.4	0.0	0.0	0.0	0.0	13.7	1.2
ENE	3.6	1.7	0.0	0.0	0.0	0.0	5.3	1.2
E	1.9	0.7	0.0	0.0	0.0	0.0	2.6	1.1
ESE	1.0	0.2	0.0	0.0	0.0	0.0	1.2	1.1
SE	1.0	0.5	0.0	0.0	0.0	0.0	1.4	1.3
SSE	1.0	0.5	0.0	0.0	0.0	0.0	1.4	1.1
S	0.7	0.0	0.0	0.0	0.0	0.0	0.7	0.9
SSW	0.7	0.2	0.0	0.0	0.0	0.0	1.0	1.0
SW	1.4	0.5	0.0	0.0	0.0	0.0	1.9	1.1
WSW	2.2	0.0	0.0	0.0	0.0	0.0	2.2	0.9
W	5.5	0.5	0.0	0.0	0.0	0.0	6.0	1.0
WNW	8.6	1.4	0.0	0.0	0.0	0.0	10.1	1.0
NW	7.7	0.5	0.0	0.0	0.0	0.0	8.2	0.9
NNW	11.5	0.7	0.0	0.0	0.0	0.0	12.2	0.9
All	79.1	13.4	0.0	0.0	0.0	0.0	92.6	1.0

Calms (< 0.447 m/s): 7.4%

Mean wind speed: 1.0 m/s

Percent Occurence for this Stability Class: 18.9%

Appendix B: Monthly Wind Speed Frequencies and Instantaneous Daily Maximum Wind Speeds

Average Frequency Distribution of Wind Speeds - 10m
Resolution - East Plant
Jul-13

	Wind Speed Interval (percent)									Max Gust	Time of
Day	<5	5 <7	7 <9	9 <11	11 <13	13 <15	15 <17	17 <19	>19	(m/s)	Gust
1	90.57	8.30	1.03	0.07	0.00	0.00	0.00	0.00	0.00	10.70	16:55
2	79.10	12.33	3.80	2.67	1.47	0.53	0.07	0.00	0.00	18.10	19:54
3	88.43	9.80	1.53	0.20	0.03	0.00	0.00	0.00	0.00	11.60	16:52
4	92.43	6.27	1.07	0.20	0.00	0.00	0.00	0.00	0.00	11.50	16:46
5	98.97	1.03	0.07	0.00	0.00	0.00	0.00	0.00	0.00	8.14	15:21
6	92.03	6.93	0.90	0.13	0.00	0.00	0.00	0.00	0.00	13.50	22:26
7	86.80	7.33	3.07	1.73	0.93	0.17	0.00	0.00	0.00	15.70	23:34
8	74.53	13.77	7.67	3.17	0.77	0.13	0.00	0.00	0.00	15.40	0:09
9	92.80	5.77	1.27	0.13	0.00	0.00	0.00	0.00	0.00	11.60	13:11
10	90.90	7.77	1.17	0.17	0.03	0.00	0.00	0.00	0.00	13.30	2:25
11	96.97	1.83	0.73	0.33	0.10	0.00	0.00	0.00	0.00	13.90	1:40
12	97.20	1.60	0.67	0.37	0.10	0.03	0.00	0.00	0.00	15.10	12:59
13	97.03	2.73	0.27	0.00	0.00	0.00	0.00	0.00	0.00	9.52	14:50
14	88.07	7.70	3.37	0.83	0.03	0.00	0.00	0.00	0.00	12.50	18:44
15	**	**	**	**	**	**	**	**	**	**	**
16	**	**	**	**	**	**	**	**	**	**	**
17	80.10	17.30	2.57	0.03	0.00	0.00	0.00	0.00	0.00	10.00	19:45
18	54.60	34.60	10.27	0.53	0.00	0.00	0.00	0.00	0.00	13.60	20:52
19	88.73	6.67	2.77	1.67	0.17	0.00	0.00	0.00	0.00	12.90	0:25
20	95.33	2.90	0.43	0.40	0.37	0.33	0.20	0.03	0.00	19.70	18:06
21	98.43	1.03	0.43	0.07	0.00	0.00	0.00	0.00	0.00	11.80	12:04
22	94.47	4.93	0.53	0.10	0.00	0.00	0.00	0.00	0.00	10.90	15:04
23	94.70	4.63	0.57	0.07	0.00	0.00	0.00	0.00	0.00	12.10	13:25
24	97.63	2.07	0.23	0.00	0.00	0.00	0.00	0.00	0.00	9.22	15:48
25	99.20	0.70	0.10	0.00	0.00	0.00	0.00	0.00	0.00	9.01	15:10
26	96.60	2.00	1.00	0.33	0.03	0.00	0.00	0.00	0.00	12.90	13:11
27	95.20	4.70	0.13	0.00	0.00	0.00	0.00	0.00	0.00	9.16	23:53
28	95.47	3.93	0.57	0.03	0.00	0.00	0.00	0.00	0.00	10.60	14:25
29	98.40	1.47	0.07	0.00	0.00	0.00	0.00	0.00	0.00	9.32	14:05
30	96.47	3.33	0.20	0.00	0.00	0.00	0.00	0.00	0.00	9.01	15:32
31	79.47	12.40	6.23	1.70	0.13	0.00	0.00	0.00	0.00	13.40	16:29
All	90.71	6.75	1.82	0.51	0.14	0.04	0.01	0.00	0.00	19.71	18:06

** Indicates Invalid Data

Average Frequency Distribution of Wind Speeds - 10m
Resolution - East Plant
Aug-13

	Wind Speed Interval (percent)									Max Gust	Time of
Day	<5	5 <7	7 <9	9 <11	11 <13	13 <15	15 <17	17 <19	>19	(m/s)	Gust
1	84.20	13.53	2.07	0.20	0.00	0.00	0.00	0.00	0.00	10.60	2:37
2	90.57	5.93	2.93	0.57	0.03	0.00	0.00	0.00	0.00	11.70	17:46
3	98.33	1.63	0.03	0.00	0.00	0.00	0.00	0.00	0.00	7.99	11:43
4	99.10	0.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.17	16:19
5	87.67	7.90	3.10	1.03	0.23	0.03	0.00	0.00	0.00	14.00	7:02
6	99.53	0.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.09	14:58
7	95.47	4.20	0.33	0.00	0.00	0.00	0.00	0.00	0.00	9.52	15:53
8	98.00	1.83	0.10	0.00	0.00	0.00	0.00	0.00	0.00	9.88	16:35
9	95.30	4.17	0.53	0.00	0.00	0.00	0.00	0.00	0.00	9.11	12:15
10	93.33	6.17	0.50	0.00	0.00	0.00	0.00	0.00	0.00	8.81	17:16
11	84.37	12.63	2.60	0.37	0.00	0.00	0.00	0.00	0.00	12.20	10:29
12	73.73	19.97	6.07	0.23	0.00	0.00	0.00	0.00	0.00	10.30	1:04
13	97.07	2.90	0.03	0.00	0.00	0.00	0.00	0.00	0.00	8.19	15:20
14	95.27	3.73	0.87	0.10	0.00	0.00	0.00	0.00	0.00	12.60	21:59
15	83.20	12.87	2.33	0.87	0.47	0.20	0.03	0.00	0.00	16.50	17:17
16	95.07	3.17	0.73	0.47	0.23	0.10	0.10	0.07	0.10	23.90	17:22
17	84.03	3.93	4.63	4.53	2.10	0.63	0.10	0.00	0.00	16.50	18:10
18	85.13	10.43	3.13	1.03	0.23	0.03	0.00	0.00	0.00	15.10	16:40
19	98.60	1.30	0.10	0.00	0.00	0.00	0.00	0.00	0.00	10.60	14:08
20	86.07	11.20	2.37	0.37	0.00	0.00	0.00	0.00	0.00	12.00	15:49
21	95.17	4.17	0.53	0.07	0.00	0.00	0.00	0.00	0.00	10.10	0:06
22	96.40	2.70	0.67	0.23	0.03	0.00	0.00	0.00	0.00	11.80	16:38
23	93.50	3.47	1.27	0.70	0.40	0.27	0.27	0.13	0.03	21.80	15:52
24	73.23	16.40	8.17	2.07	0.13	0.00	0.00	0.00	0.00	12.90	5:13
25	92.40	7.10	0.43	0.00	0.00	0.00	0.00	0.00	0.00	10.40	17:58
26	92.83	6.17	0.73	0.17	0.03	0.03	0.03	0.00	0.00	20.70	14:57
27	74.23	18.53	6.80	0.53	0.00	0.00	0.00	0.00	0.00	11.30	10:43
28	68.57	23.70	6.43	0.93	0.23	0.10	0.00	0.00	0.00	15.40	15:00
29	99.13	0.80	0.07	0.00	0.00	0.00	0.00	0.00	0.00	9.27	18:18
30	98.33	1.33	0.27	0.03	0.00	0.00	0.00	0.00	0.00	12.60	18:50
31	96.00	3.43	0.53	0.03	0.00	0.00	0.00	0.00	0.00	10.20	16:27
All	90.45	6.99	1.88	0.47	0.13	0.05	0.02	0.01	0.00	23.86	17:22

Average Frequency Distribution of Wind Speeds - 10m
Resolution - East Plant
Sep-13

	Wind Speed Interval (percent)									Max Gust	Time of
Day	<5	5 <7	7 <9	9 <11	11 <13	13 <15	15 <17	17 <19	>19	(m/s)	Gust
1	97.47	2.37	0.17	0.00	0.00	0.00	0.00	0.00	0.00	8.81	15:30
2	99.43	0.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.78	8:48
3	81.87	12.27	4.73	0.80	0.23	0.10	0.00	0.00	0.00	15.80	14:00
4	92.43	6.63	0.87	0.03	0.00	0.00	0.00	0.00	0.00	10.50	12:40
5	90.60	8.33	0.97	0.07	0.00	0.00	0.00	0.00	0.00	10.90	11:15
6	86.20	11.87	1.23	0.40	0.23	0.03	0.03	0.00	0.00	17.80	14:46
7	96.00	3.63	0.37	0.00	0.00	0.00	0.00	0.00	0.00	9.22	23:50
8	91.07	8.20	0.73	0.00	0.00	0.00	0.00	0.00	0.00	8.91	0:26
9	99.30	0.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.25	16:47
10	91.67	7.20	1.07	0.07	0.00	0.00	0.00	0.00	0.00	10.90	15:39
11	97.90	2.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	8.35	15:24
12	96.40	3.53	0.10	0.00	0.00	0.00	0.00	0.00	0.00	8.70	15:32
13	69.07	22.80	6.67	1.43	0.07	0.00	0.00	0.00	0.00	12.40	14:58
14	73.53	22.10	4.00	0.33	0.03	0.00	0.00	0.00	0.00	12.50	0:12
15	77.40	17.87	4.67	0.10	0.00	0.00	0.00	0.00	0.00	10.20	7:40
16	53.20	33.23	12.60	0.93	0.00	0.00	0.00	0.00	0.00	11.60	17:48
17	61.00	28.70	9.77	0.50	0.00	0.00	0.00	0.00	0.00	11.40	2:34
18	96.80	3.00	0.23	0.00	0.00	0.00	0.00	0.00	0.00	10.60	13:51
19	98.00	1.87	0.13	0.00	0.00	0.00	0.00	0.00	0.00	9.22	15:59
20	84.63	11.27	3.30	0.73	0.07	0.00	0.00	0.00	0.00	13.40	23:29
21	85.17	12.17	2.43	0.20	0.00	0.00	0.00	0.00	0.00	10.90	1:14
22	90.50	7.00	1.93	0.53	0.10	0.00	0.00	0.00	0.00	14.10	12:58
23	94.43	5.43	0.13	0.00	0.00	0.00	0.00	0.00	0.00	7.99	10:50
24	97.57	2.37	0.07	0.00	0.00	0.00	0.00	0.00	0.00	9.11	13:34
25	78.20	15.77	4.93	1.00	0.10	0.00	0.00	0.00	0.00	13.50	15:41
26	67.33	20.07	7.80	2.87	1.23	0.50	0.17	0.03	0.00	18.70	13:32
27	97.50	2.27	0.17	0.00	0.00	0.00	0.00	0.00	0.00	10.20	13:19
28	62.47	18.23	14.97	4.03	0.30	0.00	0.00	0.00	0.00	13.30	7:41
29	97.80	2.17	0.03	0.00	0.00	0.00	0.00	0.00	0.00	7.83	17:05
30	97.37	2.50	0.10	0.00	0.00	0.00	0.00	0.00	0.00	8.86	15:52
All	86.74	9.87	2.81	0.47	0.08	0.02	0.01	0.00	0.00	18.69	13:32

Average Frequency Distribution of Wind Speeds - 10m
Resolution - West Plant
Jul-13

	Wind Speed Interval (percent)									Max Gust	Time of
Day	<5	5 <7	7 <9	9 <11	11 <13	13 <15	15 <17	17 <19	>19	(m/s)	Gust
1	91.83	7.07	1.03	0.07	0.00	0.00	0.00	0.00	0.00	10.80	17:00
2	69.83	15.07	6.70	4.03	2.43	1.27	0.53	0.13	0.00	21.96	20:13
3	69.73	18.67	7.97	2.33	0.87	0.30	0.07	0.00	0.00	19.70	0:37
4	81.87	13.67	4.13	0.33	0.00	0.00	0.00	0.00	0.00	10.60	17:20
5	96.90	3.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.07	15:45
6	86.20	11.63	1.83	0.30	0.03	0.00	0.00	0.00	0.00	12.20	22:19
7	79.87	12.03	3.93	1.37	1.00	1.03	0.60	0.17	0.03	20.20	23:40
8	60.63	15.17	9.27	7.57	4.90	1.77	0.57	0.13	0.00	20.40	0:23
9	88.47	8.87	2.43	0.23	0.00	0.00	0.00	0.00	0.00	11.30	16:06
10	83.63	13.23	2.90	0.20	0.00	0.00	0.00	0.00	0.00	10.80	2:21
11	93.23	4.13	1.27	0.63	0.40	0.17	0.10	0.03	0.00	19.70	1:37
12	95.63	2.93	0.93	0.30	0.13	0.07	0.00	0.00	0.00	16.60	12:57
13	93.20	6.23	0.57	0.00	0.00	0.00	0.00	0.00	0.00	9.22	16:00
14	82.03	13.77	3.87	0.37	0.00	0.00	0.00	0.00	0.00	10.80	18:37
15	**	**	**	**	**	**	**	**	**	**	**
16	56.37	20.60	11.83	6.87	3.17	1.00	0.17	0.03	0.00	19.10	0:58
17	78.83	14.40	5.10	1.53	0.13	0.00	0.00	0.00	0.00	13.60	20:32
18	60.30	22.83	11.10	4.13	1.23	0.30	0.07	0.00	0.00	18.10	21:00
19	89.20	5.73	3.37	1.33	0.33	0.03	0.00	0.00	0.00	13.90	1:06
20	93.90	3.67	1.20	0.70	0.40	0.10	0.00	0.00	0.00	17.50	18:10
21	98.40	1.43	0.10	0.07	0.00	0.00	0.00	0.00	0.00	10.60	11:51
22	97.17	2.20	0.50	0.10	0.03	0.00	0.00	0.00	0.00	12.50	15:01
23	87.23	10.50	2.13	0.07	0.00	0.00	0.00	0.00	0.00	10.90	14:55
24	95.43	3.70	0.90	0.03	0.00	0.00	0.00	0.00	0.00	10.90	16:32
25	97.87	1.77	0.30	0.03	0.00	0.00	0.00	0.00	0.00	11.80	15:24
26	96.13	3.60	0.23	0.03	0.00	0.00	0.00	0.00	0.00	11.40	13:16
27	93.10	6.13	0.50	0.17	0.10	0.00	0.00	0.00	0.00	16.30	23:58
28	91.20	8.00	0.73	0.07	0.00	0.00	0.00	0.00	0.00	10.90	0:01
29	97.07	2.80	0.17	0.00	0.00	0.00	0.00	0.00	0.00	8.81	16:12
30	94.70	5.00	0.30	0.00	0.00	0.00	0.00	0.00	0.00	9.06	17:05
31	77.47	14.30	6.80	1.33	0.10	0.00	0.00	0.00	0.00	13.40	20:17
All	85.91	9.07	3.07	1.14	0.51	0.20	0.07	0.02	0.00	21.96	20:13

** Indicates Invalid Data

Average Frequency Distribution of Wind Speeds - 10m
Resolution - West Plant
Aug-13

	Wind Speed Interval (percent)									Max Gust	Time of
Day	<5	5 <7	7 <9	9 <11	11 <13	13 <15	15 <17	17 <19	>19	(m/s)	Gust
1	83.27	12.50	3.60	0.57	0.07	0.00	0.00	0.00	0.00	14.40	1:24
2	87.37	11.10	1.43	0.07	0.00	0.00	0.00	0.00	0.00	10.30	18:50
3	95.97	3.97	0.07	0.00	0.00	0.00	0.00	0.00	0.00	8.04	16:12
4	99.07	0.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.12	10:32
5	83.77	7.77	3.90	2.60	1.27	0.53	0.13	0.03	0.00	17.60	7:09
6	99.87	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.94	0:35
7	91.17	7.87	0.97	0.03	0.00	0.00	0.00	0.00	0.00	9.83	14:54
8	94.13	5.50	0.40	0.00	0.00	0.00	0.00	0.00	0.00	9.32	14:05
9	86.67	12.00	1.30	0.07	0.00	0.00	0.00	0.00	0.00	9.88	16:00
10	91.53	7.80	0.73	0.00	0.00	0.00	0.00	0.00	0.00	9.47	14:39
11	76.57	16.13	5.13	1.90	0.20	0.00	0.00	0.00	0.00	12.60	23:29
12	78.10	15.17	5.63	1.03	0.07	0.00	0.00	0.00	0.00	13.10	2:37
13	96.87	3.07	0.03	0.00	0.00	0.00	0.00	0.00	0.00	7.68	17:27
14	93.97	3.07	1.73	0.93	0.27	0.03	0.00	0.00	0.00	14.70	22:18
15	77.23	13.53	5.20	2.03	1.07	0.57	0.30	0.10	0.00	21.00	17:36
16	89.80	7.17	2.13	0.67	0.20	0.03	0.00	0.00	0.00	15.60	15:56
17	76.87	10.37	5.07	3.93	2.43	1.00	0.27	0.03	0.00	18.60	18:14
18	73.73	17.20	6.93	1.67	0.40	0.03	0.00	0.00	0.00	14.00	17:05
19	92.03	7.40	0.57	0.00	0.00	0.00	0.00	0.00	0.00	8.91	15:41
20	73.63	18.97	4.83	1.53	0.87	0.13	0.00	0.00	0.00	18.70	22:13
21	88.77	8.63	2.10	0.43	0.03	0.00	0.00	0.00	0.00	12.40	1:19
22	88.53	8.90	2.00	0.47	0.07	0.00	0.00	0.00	0.00	14.00	16:47
23	82.67	11.30	3.03	1.17	0.97	0.50	0.27	0.07	0.00	21.15	15:52
24	87.13	8.53	3.27	0.90	0.13	0.03	0.00	0.00	0.00	14.30	5:47
25	94.40	4.93	0.67	0.03	0.00	0.00	0.00	0.00	0.00	10.40	8:09
26	95.13	3.50	1.00	0.27	0.07	0.03	0.00	0.00	0.00	14.90	15:00
27	61.87	25.07	10.00	2.73	0.30	0.00	0.00	0.00	0.00	13.70	11:21
28	71.07	19.33	6.93	2.30	0.37	0.00	0.00	0.00	0.00	13.40	8:42
29	97.87	2.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.47	17:19
30	97.70	1.50	0.50	0.17	0.07	0.00	0.00	0.00	0.00	13.10	18:45
31	90.23	7.80	1.83	0.13	0.00	0.00	0.00	0.00	0.00	10.90	15:48
All	87.00	9.14	2.61	0.83	0.28	0.09	0.03	0.01	0.00	21.15	15:52

Average Frequency Distribution of Wind Speeds - 10m
Resolution - West Plant
Sep-13

	Wind Speed Interval (percent)									Max Gust	Time of
Day	<5	5 <7	7 <9	9 <11	11 <13	13 <15	15 <17	17 <19	>19	(m/s)	Gust
1	93.40	5.97	0.67	0.00	0.00	0.00	0.00	0.00	0.00	9.47	16:07
2	94.87	4.97	0.17	0.00	0.00	0.00	0.00	0.00	0.00	9.83	8:34
3	89.70	6.03	1.80	1.27	0.73	0.33	0.10	0.00	0.00	19.00	13:59
4	88.13	10.30	1.40	0.17	0.00	0.00	0.00	0.00	0.00	11.40	15:05
5	61.67	30.57	7.23	0.53	0.03	0.00	0.00	0.00	0.00	13.20	12:50
6	82.87	13.13	3.33	0.57	0.07	0.03	0.00	0.00	0.00	15.90	15:33
7	92.67	4.67	1.93	0.63	0.10	0.00	0.00	0.00	0.00	13.70	22:35
8	88.33	8.07	2.97	0.53	0.10	0.00	0.00	0.00	0.00	13.30	4:26
9	95.50	4.30	0.20	0.00	0.00	0.00	0.00	0.00	0.00	8.19	6:08
10	82.93	14.57	2.43	0.10	0.00	0.00	0.00	0.00	0.00	10.10	15:30
11	91.80	7.33	0.87	0.00	0.00	0.00	0.00	0.00	0.00	9.06	15:27
12	90.27	8.63	1.03	0.03	0.00	0.00	0.00	0.00	0.00	10.90	23:04
13	64.67	24.00	9.27	1.67	0.37	0.03	0.00	0.00	0.00	14.30	23:41
14	77.70	15.13	4.90	1.67	0.50	0.07	0.00	0.00	0.00	15.90	0:21
15	75.33	15.53	6.90	1.83	0.37	0.00	0.00	0.00	0.00	14.50	8:24
16	57.53	21.90	12.50	6.03	1.67	0.37	0.00	0.00	0.00	16.70	21:51
17	52.20	25.63	12.83	5.90	2.50	0.80	0.17	0.00	0.00	20.33	1:38
18	84.40	13.80	1.80	0.03	0.00	0.00	0.00	0.00	0.00	10.30	13:29
19	94.20	5.63	0.20	0.00	0.00	0.00	0.00	0.00	0.00	8.40	15:48
20	90.07	6.73	1.87	0.97	0.33	0.03	0.00	0.00	0.00	13.50	22:26
21	75.53	16.53	5.83	1.67	0.33	0.03	0.00	0.00	0.00	14.60	1:38
22	78.17	12.90	6.97	1.80	0.20	0.00	0.00	0.00	0.00	12.80	15:12
23	92.03	7.67	0.33	0.00	0.00	0.00	0.00	0.00	0.00	11.30	14:08
24	91.23	7.43	1.33	0.00	0.00	0.00	0.00	0.00	0.00	9.47	7:19
25	81.23	14.30	4.20	0.30	0.00	0.00	0.00	0.00	0.00	10.90	15:01
26	67.70	16.20	9.87	4.60	1.43	0.20	0.03	0.00	0.00	16.10	14:22
27	93.87	5.37	0.77	0.00	0.00	0.00	0.00	0.00	0.00	9.01	12:12
28	70.17	15.87	11.10	2.77	0.07	0.00	0.00	0.00	0.00	12.90	4:42
29	96.23	3.67	0.10	0.00	0.00	0.00	0.00	0.00	0.00	8.35	14:29
30	94.57	5.27	0.13	0.00	0.00	0.00	0.00	0.00	0.00	8.24	14:38
All	82.97	11.74	3.83	1.10	0.29	0.06	0.01	0.00	0.00	20.33	1:38

Appendix C: Meteorological Data – Hourly

SAROAD for Resolution, East_Plant
"Component, Channel: Table100, WS_ms_10m"
Month: Jul 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	2.2	1.0	1.4	0.9	1.2	1.3	2.3	4.9	4.5	3.6	3.1	2.6	2.7	3.0	3.6	2.8	3.8	4.4	2.9	1.4	0.8	0.7	0.7	1.5	2.4	4.9	0.7
2	2.3	4.4	7.8	7.8	4.9	3.5	1.8	2.5	1.3	1.6	2.3	2.7	2.6	2.7	2.8	3.1	3.6	2.9	2.1	3.8	7.1	5.2	3.7	4.5	3.6	7.8	1.3
3	4.0	3.7	2.5	1.5	3.8	4.9	3.3	2.5	3.4	3.8	2.2	2.7	2.9	3.2	2.9	3.2	3.9	2.8	4.1	3.2	2.5	3.7	3.1	2.3	3.2	4.9	1.5
4	1.2	0.8	0.7	1.3	0.5	0.8	2.2	2.5	2.6	3.0	2.6	2.9	3.4	3.0	3.3	3.3	3.6	3.3	3.3	2.7	2.3	1.7	1.8	0.9	2.2	3.6	0.5
5	1.6	1.2	1.7	1.8	1.9	2.1	0.9	2.0	2.1	1.7	0.8	1.0	1.6	1.6	3.1	2.8	1.9	2.1	2.2	0.7	0.6	0.7	0.9	0.7	1.6	3.1	0.6
6	0.7	0.8	0.6	0.7	0.9	1.0	0.8	1.0	2.7	2.8	2.8	3.2	2.9	3.1	3.6	3.1	3.2	2.8	2.9	4.7	3.9	2.6	3.5	2.5	2.4	4.7	0.6
7	3.6	3.3	2.1	2.5	2.2	1.9	2.6	1.7	2.4	2.1	1.8	2.6	2.7	2.8	2.8	3.4	2.8	2.9	2.8	2.9	2.2	3.3	6.2	9.4	3.1	9.4	1.7
8	9.0	8.2	5.5	3.3	3.5	3.5	3.4	5.4	6.2	3.3	1.2	1.6	2.5	3.3	3.2	3.0	3.8	4.7	4.1	3.2	3.7	3.5	2.9	2.6	4.0	9.0	1.2
9	2.2	1.4	1.1	1.3	1.2	1.2	1.9	1.4	1.7	2.2	2.7	2.9	2.5	3.8	3.6	3.4	3.0	2.2	3.7	4.5	1.5	1.8	2.1	2.1	2.3	4.5	1.1
10	2.4	3.5	4.7	2.5	2.4	1.6	3.0	4.2	3.5	2.8	3.4	3.0	2.6	3.2	3.7	3.3	3.4	3.1	2.4	1.9	2.9	1.1	1.1	1.3	2.8	4.7	1.1
11	2.3	5.4	1.6	1.0	0.6	1.4	1.8	1.7	0.9	2.1	2.1	2.3	2.6	2.4	2.4	2.4	2.3	1.9	1.8	1.4	1.2	1.1	1.6	0.9	1.9	5.4	0.6
12	0.7	0.7	0.5	0.7	0.2	1.5	0.6	2.4	3.6	2.3	1.6	2.1	2.8	4.5	1.3	1.1	1.7	3.0	3.1	1.7	1.0	0.9	1.2	1.6	1.7	4.5	0.2
13	1.8	1.7	1.4	1.2	1.0	1.4	1.0	2.3	2.5	1.6	2.2	2.5	2.5	3.1	3.4	2.4	2.8	2.5	3.4	2.0	2.2	2.3	2.1	1.3	2.1	3.4	1.0
14	1.0	0.9	1.1	0.7	1.2	1.1	1.2	2.5	2.2	1.8	3.1	3.1	3.4	3.8	3.6	2.7	3.3	2.7	6.1	6.2	2.7	1.7	1.2	2.9	2.5	6.2	0.7
15	5.4	3.8	3.0	2.1	1.4	1.6	1.0	0.6	1.5	2.1	2.4	2.3	2.1	2.7	--	--	--	--	3.8	2.6	1.9	1.3	7.0	5.1	2.7	7.0	0.6
16	4.8	4.8	6.0	5.3	3.6	3.8	5.0	5.1	4.9	--	5.1	4.9	4.9	3.6	2.4	2.6	3.2	3.3	5.9	6.2	4.4	3.2	1.6	1.6	4.2	6.2	1.6
17	2.5	3.8	2.5	3.1	2.3	3.4	2.8	3.7	4.9	5.3	3.9	3.1	2.1	1.8	2.3	2.2	2.0	3.3	4.4	5.3	5.0	5.3	5.0	4.6	3.5	5.3	1.8
18	4.2	3.9	4.6	4.9	4.6	4.7	5.3	6.7	6.2	6.3	4.9	3.1	3.0	3.4	4.8	5.6	4.7	4.8	5.5	5.3	5.8	4.5	3.5	4.9	4.8	6.7	3.0
19	8.5	5.0	3.5	3.2	3.0	3.3	4.3	4.2	3.8	3.0	2.1	2.0	1.6	1.8	2.0	2.2	2.3	2.2	1.9	3.4	2.7	1.2	1.9	1.8	3.0	8.5	1.2
20	1.0	1.3	1.2	1.2	1.2	1.1	1.1	3.4	3.1	2.1	2.4	2.8	2.8	2.6	2.2	3.3	3.6	3.4	6.3	1.9	1.5	0.7	1.3	1.0	2.2	6.3	0.7
21	1.6	0.7	1.5	1.1	0.8	1.6	1.2	1.6	1.6	2.0	2.3	2.5	3.4	2.3	3.6	2.1	1.4	1.5	2.4	2.5	1.0	1.5	1.4	0.5	1.8	3.6	0.5
22	1.1	1.3	1.8	1.7	1.9	0.9	0.6	1.7	2.2	2.4	2.4	2.7	2.2	3.3	2.9	4.5	3.9	4.5	2.8	1.5	0.8	1.0	0.8	1.5	2.1	4.5	0.6
23	2.0	1.8	2.9	3.0	1.4	1.0	1.7	1.1	2.8	3.3	3.3	2.8	3.1	2.8	3.5	3.4	3.0	2.7	2.5	2.3	2.4	1.6	0.8	1.3	2.3	3.5	0.8
24	2.0	1.3	0.7	1.4	1.4	1.3	1.0	1.0	1.0	2.4	2.3	2.9	1.9	3.1	2.6	3.7	3.4	1.7	1.0	1.9	1.8	1.9	0.9	1.1	1.8	3.7	0.7
25	1.3	1.7	1.0	1.2	1.0	1.2	2.4	1.3	1.2	2.0	2.1	2.2	1.8	2.1	2.8	2.3	1.0	0.7	0.5	0.7	0.8	0.5	1.0	0.7	1.4	2.8	0.5
26	0.7	1.7	1.7	0.9	0.5	0.6	0.6	0.8	1.0	1.5	2.4	2.2	3.2	5.6	2.2	1.3	1.3	1.4	1.4	1.2	2.0	1.8	1.7	1.4	1.6	5.6	0.5
27	1.9	1.5	1.0	1.0	1.3	1.9	1.6	2.1	3.5	4.0	4.4	3.8	2.6	2.7	2.7	3.2	3.4	1.6	1.3	1.4	0.8	0.5	1.1	1.6	2.1	4.4	0.5
28	2.9	1.3	1.3	0.9	0.3	0.5	0.5	0.4	1.2	2.0	2.1	2.8	2.4	2.9	3.7	2.9	3.0	2.4	1.9	0.9	0.8	2.6	2.5	2.9	1.9	3.7	0.3
29	2.9	2.7	1.8	2.1	2.7	1.8	0.9	1.5	2.9	2.3	2.4	2.4	2.6	2.5	2.6	2.7	2.3	2.3	1.6	2.2	0.9	0.8	0.7	0.8	2.0	2.9	0.7
30	1.2	2.0	2.0	2.3	1.9	0.7	0.5	0.9	2.4	3.3	3.2	3.3	2.8	2.9	3.0	3.0	2.6	2.8	3.0	2.5	2.5	2.4	3.2	3.2	2.4	3.3	0.5
31	1.4	1.1	1.2	1.2	1.1	1.0	1.0	1.1	2.5	3.5	3.2	2.8	3.5	3.6	3.2	3.1	4.5	4.4	3.7	5.9	7.4	7.6	5.5	4.2	3.2	7.6	1.0
Avg	2.6	2.5	2.3	2.0	1.8	1.9	1.9	2.4	2.8	2.7	2.7	2.7	2.7	3.0	3.0	2.9	3.0	2.8	3.1	2.8	2.5	2.2	2.3	2.4	2.5	--	--
Max	9.0	8.2	7.8	7.8	4.9	4.9	5.3	6.7	6.2	6.3	5.1	4.9	4.9	5.6	4.8	5.6	4.7	4.8	6.3	6.2	7.4	7.6	7.0	9.4	--	9.4	--
Min	0.7	0.7	0.5	0.7	0.2	0.5	0.5	0.4	0.9	1.5	0.8	1.0	1.6	1.6	1.3	1.1	1.0	0.7	0.5	0.7	0.6	0.5	0.7	0.5	--	--	0.2

-- Indicates Invalid Data

SAROAD for Resolution, East_Plant
"Component, Channel: Table100, WS_ms_10m"
Month: Aug 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	3.8	4.5	6.6	4.0	3.3	2.8	3.3	4.6	4.2	3.5	3.4	3.1	3.4	4.1	4.7	4.5	4.0	2.6	1.6	1.6	1.7	1.4	1.5	1.4	3.3	6.6	1.4
2	1.1	0.9	1.0	0.8	0.5	0.2	0.4	0.6	1.0	1.8	2.4	3.3	3.4	3.6	2.7	1.6	0.6	5.1	6.9	4.8	2.9	2.4	2.3	2.3	2.2	6.9	0.2
3	2.2	1.7	1.6	1.2	0.9	1.5	1.2	1.2	1.1	2.3	2.6	2.5	2.4	3.1	3.0	2.8	2.8	2.5	2.1	1.4	1.3	0.8	0.8	0.9	1.8	3.1	0.8
4	1.2	2.0	2.7	1.9	0.6	0.6	0.7	1.2	2.1	1.9	2.3	1.9	1.9	2.8	2.0	2.2	3.3	2.6	2.9	2.3	1.2	0.9	1.1	1.3	1.8	3.3	0.6
5	1.4	0.9	1.0	2.1	1.1	0.9	4.1	7.4	4.8	4.7	2.9	1.7	2.3	2.5	3.1	3.6	2.9	3.2	2.4	2.6	1.9	0.8	1.0	3.5	2.6	7.4	0.8
6	2.4	1.6	1.6	1.3	1.4	2.4	1.3	1.1	1.6	1.3	2.0	1.5	3.0	2.5	2.8	3.1	2.7	2.5	2.2	2.1	3.3	1.6	0.5	1.0	1.9	3.3	0.5
7	3.4	2.0	1.2	0.6	2.9	2.1	0.7	0.7	2.4	2.6	2.8	3.0	2.9	2.9	2.9	2.5	2.9	2.6	2.3	2.2	1.5	1.3	1.4	1.1	2.1	3.4	0.6
8	0.4	0.6	0.5	0.9	0.8	0.7	0.7	0.6	1.4	2.1	2.0	2.5	2.8	2.6	3.0	2.3	2.4	2.5	1.8	1.2	0.5	1.1	0.9	1.2	1.5	3.0	0.4
9	1.3	1.1	0.5	0.7	0.8	1.2	1.6	2.0	3.2	3.0	3.0	3.8	4.0	3.3	2.1	2.5	2.8	3.2	2.3	1.3	0.5	0.9	2.2	1.6	2.0	4.0	0.5
10	1.5	1.2	0.9	1.2	1.6	0.8	0.7	0.9	1.2	1.4	2.1	2.8	3.1	4.4	3.3	2.6	3.3	2.9	2.5	1.3	1.1	4.0	4.0	1.3	2.1	4.4	0.7
11	1.8	1.7	1.5	1.6	2.0	1.7	2.5	4.2	4.5	4.2	4.3	3.0	2.7	2.8	2.8	2.3	2.4	2.4	2.3	3.9	5.0	3.7	5.1	5.6	3.1	5.6	1.5
12	6.3	6.3	6.0	4.5	4.1	3.8	4.0	5.9	6.1	5.0	3.4	2.4	2.7	3.2	2.3	2.8	3.0	2.2	1.8	1.4	1.7	1.3	3.0	2.5	3.6	6.3	1.3
13	2.1	1.1	0.8	1.1	0.9	1.2	1.0	1.3	2.9	3.8	3.4	2.8	2.7	2.9	3.1	2.8	3.1	2.7	3.6	3.2	3.3	3.1	2.0	2.2	2.4	3.8	0.8
14	1.0	0.8	1.3	1.3	1.4	3.2	2.0	0.8	1.4	3.1	1.5	3.5	3.1	2.7	2.6	2.3	2.7	2.0	2.4	2.2	1.3	2.5	5.8	4.1	2.3	5.8	0.8
15	3.6	2.0	1.8	2.9	2.3	2.3	3.9	5.8	4.7	4.4	4.4	3.4	2.6	1.5	2.4	2.8	2.1	7.9	4.7	4.3	1.4	1.4	2.3	2.2	3.2	7.9	1.4
16	2.5	2.3	1.9	1.7	1.5	1.8	2.0	3.8	3.6	2.9	2.3	2.0	2.5	2.1	2.3	4.5	2.7	4.8	3.1	1.7	0.9	2.6	2.4	1.3	2.5	4.8	0.9
17	0.8	0.9	1.0	1.4	1.3	0.8	0.6	0.7	0.9	1.6	2.3	2.8	2.8	2.7	2.6	2.2	2.9	5.8	9.2	9.6	8.8	2.5	2.7	2.8	2.9	9.6	0.6
18	4.5	4.7	3.9	1.7	1.6	1.3	2.3	3.1	3.1	4.0	3.2	1.9	1.8	2.2	2.3	2.7	5.1	6.3	4.2	1.4	1.4	2.9	3.9	3.0	3.0	6.3	1.3
19	1.0	0.9	1.2	1.2	1.5	1.8	1.8	1.4	1.1	2.0	2.7	2.7	2.5	2.4	3.2	3.0	2.1	2.0	1.8	0.9	1.4	0.6	0.8	0.9	1.7	3.2	0.6
20	0.9	1.3	1.2	1.3	1.8	2.0	0.5	0.5	1.6	2.2	2.7	3.4	3.6	2.9	3.8	3.3	3.4	2.7	2.8	5.6	4.0	4.7	5.4	3.9	2.7	5.6	0.5
21	2.7	2.0	1.6	2.5	1.9	1.4	1.9	1.9	1.3	1.0	2.7	2.1	1.8	3.1	4.3	4.2	3.5	2.8	2.5	2.9	1.6	1.7	3.2	2.8	2.4	4.3	1.0
22	2.4	2.1	2.0	2.0	2.1	1.8	2.1	2.8	2.0	1.5	1.8	2.7	2.2	2.2	3.0	2.7	5.1	2.2	1.8	1.8	1.2	1.4	2.1	0.7	2.1	5.1	0.7
23	0.6	1.1	1.3	1.8	2.7	3.1	1.9	1.2	2.1	2.4	2.3	2.6	2.5	3.3	3.8	7.9	5.0	1.9	2.0	1.8	1.2	0.9	1.0	3.1	2.4	7.9	0.6
24	5.2	4.9	5.5	6.1	7.8	7.8	6.4	3.9	3.1	3.9	3.7	2.0	2.4	2.2	1.5	2.0	4.1	2.8	1.7	1.3	2.2	2.5	1.4	4.5	3.7	7.8	1.3
25	5.0	3.7	2.8	2.4	2.0	2.1	2.0	4.1	4.0	3.6	2.2	2.0	1.2	1.7	1.9	2.5	2.7	2.8	3.8	1.6	2.4	3.1	3.7	2.4	2.7	5.0	1.2
26	2.5	2.5	3.0	2.0	2.4	2.3	1.8	3.1	3.2	2.3	2.4	3.8	4.3	2.8	3.7	3.8	1.6	1.1	1.7	3.7	4.4	4.0	2.2	1.5	2.8	4.4	1.1
27	1.7	2.3	3.3	3.4	3.4	3.5	3.2	5.1	5.7	6.9	6.0	6.0	5.4	5.0	3.8	2.9	4.0	3.2	1.5	0.9	0.9	1.0	3.6	4.4	3.6	6.9	0.9
28	2.7	1.9	2.4	2.4	3.1	4.1	3.4	4.5	5.8	6.2	6.3	4.7	4.2	3.5	4.2	6.2	3.3	2.0	5.8	5.2	5.0	5.1	3.9	1.8	4.1	6.3	1.8
29	0.9	1.2	1.9	1.7	1.9	1.5	1.5	2.4	2.0	1.6	1.7	1.8	2.3	2.4	2.2	2.2	1.9	2.5	2.8	2.4	2.4	1.6	1.7	1.2	1.9	2.8	0.9
30	1.2	1.6	1.3	1.0	1.6	1.8	1.6	1.6	2.5	1.6	1.7	2.3	2.3	2.0	2.6	1.3	1.6	1.1	2.1	3.5	2.2	3.3	1.2	0.5	1.8	3.5	0.5
31	0.8	0.8	0.9	1.3	1.1	0.9	1.2	0.7	0.6	1.4	2.0	2.9	3.2	3.0	3.2	2.9	3.6	3.1	2.8	2.6	2.5	3.1	2.9	1.8	2.1	3.6	0.6
Avg	2.2	2.0	2.1	1.9	2.0	2.0	2.0	2.6	2.7	2.9	2.8	2.8	2.8	2.8	2.9	3.1	3.0	3.0	2.9	2.7	2.3	2.2	2.5	2.2	2.5	--	--
Max	6.3	6.3	6.6	6.1	7.8	7.8	6.4	7.4	6.1	6.9	6.3	6.0	5.4	5.0	4.7	7.9	5.1	7.9	9.2	9.6	8.8	5.1	5.8	5.6	--	9.6	--
Min	0.4	0.6	0.5	0.6	0.5	0.2	0.4	0.5	0.6	1.0	1.5	1.5	1.2	1.5	1.5	1.3	0.6	1.1	1.5	0.9	0.5	0.6	0.5	0.5	--	--	0.2

SAROAD for Resolution, East_Plant
"Component, Channel: Table100, WS_ms_10m"
Month: Sep 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	1.3	1.1	1.0	0.9	0.8	0.7	1.0	1.1	1.3	1.5	2.3	2.5	2.9	2.7	2.9	3.1	2.7	3.0	2.5	2.7	2.4	1.9	1.9	2.2	1.9	3.1	0.7
2	1.2	0.5	1.0	1.4	1.1	1.7	1.7	2.2	3.0	2.9	2.2	2.5	1.8	2.6	2.3	2.6	2.3	2.1	1.8	1.3	1.6	1.7	1.6	1.6	1.9	3.0	0.5
3	1.7	1.8	1.9	2.1	2.1	1.8	2.6	4.7	6.1	6.4	4.6	2.7	2.3	6.4	4.9	5.1	2.4	2.0	2.2	1.8	1.8	3.3	1.9	1.3	3.1	6.4	1.3
4	0.7	1.3	1.1	1.3	1.5	1.9	2.3	3.0	4.0	4.0	2.7	3.6	3.9	4.2	4.0	3.6	3.2	2.2	1.9	1.8	1.1	1.5	2.4	2.2	2.5	4.2	0.7
5	2.4	1.9	1.7	1.6	1.6	1.7	2.6	3.4	4.3	4.4	4.2	3.8	4.1	3.3	4.2	2.6	3.4	1.1	3.3	2.6	2.3	3.4	2.4	1.8	2.8	4.4	1.1
6	1.1	1.5	1.3	1.1	1.3	1.5	1.8	3.6	4.4	5.2	3.8	3.6	3.4	4.7	4.1	4.6	2.7	1.6	1.7	1.8	1.1	3.2	4.5	3.8	2.8	5.2	1.1
7	2.2	2.3	3.2	1.8	1.1	1.0	0.7	0.7	0.9	0.9	1.6	2.4	2.1	1.9	2.5	2.5	2.2	2.1	1.9	1.3	2.0	3.7	4.4	4.7	2.1	4.7	0.7
8	5.1	3.2	3.0	2.9	3.7	3.8	3.6	3.9	3.0	2.9	2.5	2.1	2.4	4.6	2.9	1.6	2.0	2.9	2.0	1.9	3.6	4.1	2.3	1.1	3.0	5.1	1.1
9	1.4	2.1	1.6	1.1	1.9	1.8	1.8	2.0	2.2	1.8	2.4	2.8	1.0	2.0	2.2	1.2	4.0	3.1	0.9	1.2	1.5	1.7	0.9	0.8	1.8	4.0	0.8
10	1.8	2.1	1.5	0.4	1.0	1.4	1.0	1.4	3.0	3.0	3.3	4.0	4.9	3.5	3.7	4.2	3.7	3.1	3.1	2.1	1.5	1.2	0.9	0.6	2.3	4.9	0.4
11	0.5	0.4	0.3	0.3	0.3	0.6	0.7	0.8	1.1	2.2	2.3	2.6	2.9	2.4	3.1	2.9	3.0	2.5	2.8	2.9	1.8	0.8	1.0	1.2	1.6	3.1	0.3
12	1.1	1.6	1.9	2.4	2.4	2.0	2.5	2.8	2.9	4.5	2.9	1.9	1.6	2.0	1.7	2.6	2.7	3.0	2.5	2.2	1.0	2.0	3.8	2.8	2.4	4.5	1.0
13	4.1	3.9	4.4	4.2	4.0	4.8	5.5	6.2	5.5	4.5	3.7	3.1	4.6	5.1	3.6	3.1	1.9	1.3	0.9	1.1	1.2	1.4	6.6	7.5	3.8	7.5	0.9
14	6.7	5.0	5.5	4.4	4.5	5.0	4.7	4.6	5.4	5.3	3.6	2.5	2.1	2.6	2.4	2.4	2.8	3.4	4.1	1.7	1.2	1.9	2.0	4.0	3.7	6.7	1.2
15	4.4	3.3	3.2	3.3	3.4	4.1	5.3	6.1	6.3	6.4	5.6	3.5	2.5	3.3	3.7	3.6	3.4	3.7	2.7	1.8	1.9	2.0	2.0	3.4	3.7	6.4	1.8
16	5.0	5.3	4.7	4.3	5.2	5.9	6.3	5.3	7.2	6.6	5.9	4.7	4.0	3.2	5.4	5.7	3.4	4.7	2.9	3.4	5.6	4.6	4.0	3.9	4.9	7.2	2.9
17	5.3	4.2	5.1	6.1	5.7	4.8	6.1	6.0	5.5	6.4	6.2	5.4	4.2	3.5	3.5	2.6	2.8	2.7	2.4	2.7	3.3	4.1	4.7	4.8	4.5	6.4	2.4
18	1.8	2.1	1.0	1.1	0.6	1.1	0.7	1.0	2.8	3.3	3.0	2.5	2.8	2.9	3.1	2.7	2.2	1.8	2.1	1.7	1.4	1.6	0.7	0.6	1.9	3.3	0.6
19	0.5	0.3	0.6	0.8	0.9	1.1	1.1	1.2	2.2	1.7	2.7	2.3	2.0	2.8	2.8	3.1	2.9	2.7	2.9	2.9	0.7	0.8	1.1	0.9	1.7	3.1	0.3
20	1.0	1.1	1.5	1.4	2.0	1.6	2.4	3.7	5.0	5.0	4.2	2.6	2.6	2.5	2.7	2.6	3.0	1.8	1.8	1.6	1.6	1.9	6.4	7.2	2.8	7.2	1.0
21	6.3	5.1	3.7	2.1	1.9	3.1	3.6	4.2	4.3	5.1	4.5	3.9	2.9	2.9	3.2	3.6	2.0	1.8	1.6	1.7	1.8	1.2	1.7	3.0	3.1	6.3	1.2
22	1.8	2.0	1.8	2.5	1.3	2.6	3.7	3.5	1.8	2.4	2.7	3.3	4.4	3.4	3.3	3.6	3.8	3.8	4.0	2.6	2.7	1.7	0.6	0.8	2.7	4.4	0.6
23	1.0	1.5	1.4	1.2	1.3	1.8	2.0	2.4	3.9	4.9	4.5	2.4	1.9	3.1	3.1	2.5	2.9	3.1	2.5	1.5	0.5	0.5	0.9	1.5	2.2	4.9	0.5
24	1.4	1.6	1.9	2.1	2.0	2.3	2.1	3.0	3.9	3.0	2.9	2.1	3.1	3.3	2.8	2.5	2.3	1.8	2.4	2.4	0.5	0.7	0.6	1.4	2.2	3.9	0.5
25	1.9	2.3	0.8	1.5	1.1	1.6	1.2	0.8	2.5	3.5	3.9	4.0	3.3	4.4	4.2	4.8	4.6	4.1	5.7	5.3	5.2	4.1	3.9	3.9	3.3	5.7	0.8
26	5.7	5.3	5.5	4.0	3.7	3.4	1.9	2.6	3.9	4.1	4.2	5.0	5.2	8.1	6.8	6.6	5.6	4.3	3.8	3.3	2.6	2.4	2.9	2.0	4.3	8.1	1.9
27	2.4	2.2	1.6	1.7	1.4	0.8	1.2	1.5	1.8	1.8	2.2	2.4	2.7	2.9	2.8	2.6	3.0	2.4	2.5	2.9	2.9	1.9	1.2	1.1	2.1	3.0	0.8
28	1.9	5.0	5.7	2.8	7.2	6.7	6.9	7.9	7.8	7.8	7.0	5.8	4.2	2.0	2.0	1.9	2.2	2.3	3.2	3.5	1.2	1.3	1.4	1.6	4.1	7.9	1.2
29	1.5	1.5	1.5	1.4	1.6	1.9	1.9	2.0	3.4	2.2	1.9	2.9	2.6	2.7	2.5	2.9	2.9	2.5	2.6	3.0	2.6	1.2	0.4	1.1	2.1	3.4	0.4
30	1.2	0.4	0.5	0.8	1.0	1.3	1.3	0.8	0.9	2.4	2.6	3.1	3.2	3.2	2.8	3.0	3.0	2.5	2.4	2.5	0.9	0.7	0.8	1.4	1.8	3.2	0.4
Avg	2.5	2.4	2.3	2.1	2.2	2.5	2.7	3.1	3.7	3.9	3.5	3.2	3.1	3.4	3.3	3.2	3.0	2.6	2.6	2.3	2.0	2.1	2.3	2.5	2.8	--	--
Max	6.7	5.3	5.7	6.1	7.2	6.7	6.9	7.9	7.8	7.8	7.0	5.8	5.2	8.1	6.8	6.6	5.6	4.7	5.7	5.3	5.6	4.6	6.6	7.5	--	8.1	--
Min	0.5	0.3	0.3	0.3	0.3	0.6	0.7	0.7	0.9	0.9	1.6	1.9	1.0	1.9	1.7	1.2	1.9	1.1	0.9	1.1	0.5	0.5	0.4	0.6	--	--	0.3

SAROAD for Resolution, East_Plant
"Component, Channel: Table100, WD_10m"
Month: Jul 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	230	88	81	78	116	134	71	38	27	33	49	227	206	232	221	247	311	319	264	35	162	167	178	107	125	319	27
2	61	68	100	88	81	78	69	38	72	78	275	249	244	213	219	223	267	249	244	274	52	82	60	69	83	275	38
3	78	57	78	93	62	43	54	73	97	122	139	180	222	230	257	243	258	242	263	280	278	277	286	253	217	286	43
4	107	209	156	169	34	63	174	207	218	227	255	230	234	236	238	238	224	282	268	280	277	317	294	221	234	317	34
5	133	254	218	228	204	231	203	195	263	223	135	146	190	281	256	208	203	210	213	235	147	170	49	58	204	281	49
6	113	127	110	92	136	119	142	163	258	252	242	232	209	234	229	226	280	250	294	33	29	44	219	57	190	294	29
7	65	61	127	129	128	117	108	96	67	58	252	255	230	222	242	237	224	183	195	170	216	119	54	36	149	255	36
8	34	28	41	57	72	60	59	36	32	26	53	285	216	273	227	233	256	345	84	71	86	69	58	93	46	345	26
9	109	15	190	154	102	98	220	176	207	254	248	225	221	229	229	230	231	215	256	255	270	295	236	236	222	295	15
10	209	190	216	253	253	248	243	253	253	246	231	226	227	241	239	237	222	235	194	202	197	315	75	209	230	315	75
11	195	116	204	133	168	231	238	221	256	247	245	246	240	255	234	230	118	189	185	178	205	230	301	91	212	301	91
12	156	193	146	245	195	224	106	104	95	102	142	254	236	254	120	232	249	230	253	272	105	103	165	168	182	272	95
13	170	159	159	168	171	162	160	238	251	240	242	246	236	246	238	244	277	229	255	245	248	251	255	242	225	277	159
14	95	97	112	148	151	167	67	95	114	221	251	234	230	223	225	226	219	233	0	29	67	126	158	81	155	251	0
15	27	51	103	84	146	168	137	88	201	256	239	221	231	264	--	--	--	--	246	260	314	55	34	58	164	314	27
16	66	74	85	74	72	47	43	39	38	--	31	33	34	60	96	118	116	84	40	39	57	48	79	76	63	118	31
17	61	74	75	57	74	67	56	55	57	43	103	123	94	51	70	339	84	33	33	36	41	37	39	41	58	339	33
18	59	58	45	45	46	52	44	37	38	32	61	104	149	12	96	117	89	106	107	89	89	77	76	42	69	149	12
19	29	35	36	40	68	69	43	37	40	42	10	134	159	203	337	192	208	243	270	240	219	83	105	157	72	337	10
20	105	82	105	236	35	208	156	255	253	238	250	238	224	200	260	252	260	272	346	77	317	165	83	93	222	346	35
21	73	262	229	251	101	90	89	86	109	147	151	209	248	259	254	291	263	284	241	251	322	242	251	60	230	322	60
22	173	221	248	245	249	235	120	236	252	250	253	248	248	257	251	233	256	251	250	257	231	236	111	267	239	267	111
23	250	238	247	254	242	255	257	238	251	249	249	238	244	253	268	264	254	244	264	258	261	252	150	223	248	268	150
24	268	35	182	61	104	235	217	268	292	253	239	230	215	220	220	266	137	78	104	118	113	253	169	222	207	292	35
25	222	227	185	94	90	39	81	108	15	252	259	283	11	348	208	199	128	126	160	185	153	111	196	128	154	348	11
26	146	243	269	176	176	176	83	201	258	262	249	261	96	38	52	255	255	355	351	43	115	87	93	94	171	355	38
27	93	189	129	145	116	86	91	98	94	84	24	17	8	277	190	106	155	239	234	256	307	136	114	93	116	307	8
28	125	122	124	126	104	151	137	102	108	113	113	205	193	216	200	280	238	240	227	47	141	194	210	214	162	280	47
29	219	209	193	199	211	210	163	215	213	237	247	233	282	291	278	262	259	235	206	271	10	158	169	153	224	291	10
30	221	259	240	250	244	75	148	187	263	248	243	236	233	242	243	250	249	241	275	261	257	261	266	251	244	275	75
31	255	271	273	168	173	162	177	196	247	256	257	250	252	249	258	225	177	130	105	46	31	30	39	66	218	273	30
Avg	122	123	149	139	125	132	119	137	245	237	238	230	224	249	233	236	228	238	245	268	194	133	121	114	198	--	--
Max	268	271	273	254	253	255	257	268	292	262	275	285	282	348	337	339	311	355	351	280	322	317	301	267	--	355	--
Min	27	15	36	40	34	39	43	36	15	26	10	17	8	12	52	106	84	33	0	29	10	30	34	36	--	--	0

-- Indicates Invalid Data

SAROAD for Resolution, East_Plant
"Component, Channel: Table100, WD_10m"
Month: Aug 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	52	47	41	51	66	64	56	41	44	83	93	95	127	152	152	125	106	109	123	115	66	66	69	97	84	152	41
2	76	72	163	178	70	110	82	88	144	231	201	212	208	196	207	201	197	34	30	39	77	73	95	87	125	231	30
3	105	145	158	144	157	161	148	104	59	248	240	230	287	231	235	259	248	285	243	235	197	244	184	185	204	287	59
4	245	248	251	239	227	170	123	60	96	176	205	208	246	262	269	248	260	256	254	266	16	131	145	139	220	269	16
5	153	285	221	255	199	154	107	109	78	89	99	27	272	215	229	217	247	256	263	264	268	221	169	207	211	285	27
6	200	213	209	175	214	247	230	239	260	263	249	275	247	250	245	250	248	257	259	252	250	244	123	161	235	275	123
7	207	258	162	117	268	19	187	149	239	247	248	238	248	246	245	229	240	209	264	245	266	270	271	171	234	271	19
8	166	155	156	261	172	139	115	100	108	229	231	232	234	237	257	180	186	191	103	275	138	176	175	163	181	275	100
9	154	169	171	168	141	128	93	70	83	107	125	136	169	195	152	227	203	215	188	285	129	178	224	235	163	285	70
10	188	241	239	239	230	148	165	122	78	117	125	200	215	73	118	254	263	227	263	131	111	30	34	91	168	263	30
11	85	62	68	58	71	69	57	78	82	52	82	102	167	119	178	246	272	247	269	120	100	83	45	34	84	272	34
12	30	33	37	40	44	46	46	41	36	34	50	151	121	174	202	265	222	217	38	212	260	188	248	261	58	265	30
13	262	240	147	141	145	152	151	101	339	253	249	246	258	251	247	260	239	249	249	246	251	246	260	255	235	339	101
14	118	140	155	149	172	245	272	112	92	271	278	255	257	249	237	246	251	234	263	252	174	112	115	84	207	278	84
15	80	65	66	53	64	54	42	33	39	54	18	24	52	91	193	242	281	57	58	49	95	132	92	95	62	281	18
16	103	106	96	109	93	83	71	46	43	95	103	104	306	72	169	261	257	351	58	133	140	198	240	275	98	351	43
17	143	249	99	175	171	158	110	142	156	135	246	253	261	254	192	263	279	326	24	23	56	65	28	6	172	326	6
18	42	44	46	120	133	136	111	86	55	38	62	110	72	178	253	256	159	111	96	108	240	217	215	219	116	256	38
19	215	77	101	124	109	110	123	133	106	279	255	243	243	232	226	230	251	268	258	283	287	251	232	159	214	287	77
20	178	173	176	156	84	76	42	131	209	256	238	221	231	215	239	206	207	206	189	199	150	68	41	38	181	256	38
21	108	94	130	109	100	126	92	67	105	106	296	284	261	253	252	260	248	237	234	253	266	74	50	72	152	296	50
22	64	73	103	114	118	124	108	81	65	82	228	136	228	272	232	214	170	8	282	186	127	224	185	265	148	282	8
23	96	160	174	116	112	110	132	124	48	268	262	258	253	247	313	91	7	179	119	103	90	121	115	92	127	313	7
24	114	102	83	55	38	36	38	45	91	106	108	124	123	127	196	184	126	99	100	91	116	242	348	42	94	348	36
25	33	44	64	76	62	54	60	41	40	33	63	112	162	282	258	244	28	72	88	93	66	65	40	64	59	282	28
26	67	68	74	85	65	81	92	61	43	54	77	100	113	120	111	221	175	144	224	260	251	248	312	220	103	312	43
27	91	56	62	69	67	53	57	43	66	92	106	105	109	115	136	139	82	31	118	113	79	83	113	107	87	139	31
28	83	69	51	80	54	65	52	67	101	96	81	103	98	131	127	10	39	107	95	91	89	95	94	155	85	155	10
29	331	64	52	71	53	76	62	52	104	159	226	251	239	236	253	252	255	214	195	224	208	207	46	99	181	331	46
30	103	94	122	108	84	77	121	87	66	57	127	244	289	57	125	173	267	190	230	265	290	252	254	70	126	290	57
31	159	153	148	140	146	101	81	71	67	178	243	240	239	245	247	235	251	290	317	275	279	295	304	303	231	317	67
Avg	114	105	118	119	110	102	94	83	76	112	181	193	222	208	213	230	235	225	218	213	153	171	120	126	146	--	--
Max	331	285	251	261	268	247	272	239	339	279	296	284	306	282	313	265	281	351	317	285	290	295	348	303	--	351	--
Min	30	33	37	40	38	19	38	33	36	33	18	24	52	57	111	10	7	8	24	23	16	30	28	6	--	--	6

SAROAD for Resolution, East_Plant
"Component, Channel: Table100, WD_10m"
Month: Sep 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	339	135	174	168	181	144	175	129	73	310	324	224	241	247	240	250	251	249	257	258	269	258	268	273	235	339	73
2	248	153	178	170	135	128	125	104	127	189	241	237	251	252	260	239	254	254	323	105	166	170	74	133	186	323	74
3	137	132	139	103	98	93	58	40	37	29	31	51	146	36	26	183	232	105	84	68	106	103	213	163	94	232	26
4	171	91	118	79	96	94	75	58	40	34	59	46	92	95	119	130	130	141	144	93	108	71	102	73	94	171	34
5	70	63	72	56	70	67	68	66	55	86	98	106	118	109	64	84	142	186	72	83	102	97	81	98	86	186	55
6	51	74	73	86	96	93	74	45	44	36	103	122	130	39	20	151	120	68	76	71	109	215	223	246	85	246	20
7	257	234	201	233	305	220	193	89	264	153	293	228	117	119	119	107	130	118	115	130	122	100	70	40	151	305	40
8	38	63	75	64	62	49	48	49	56	57	43	254	273	41	15	210	221	250	253	75	92	77	64	103	57	273	15
9	94	82	77	97	76	86	73	79	69	65	85	111	123	245	279	96	34	39	108	109	88	95	115	123	88	279	34
10	110	190	200	323	259	239	159	98	107	120	158	169	180	195	198	200	195	198	204	232	239	244	203	206	192	323	98
11	252	147	76	111	158	129	118	75	117	234	225	205	204	223	225	239	237	242	249	263	253	108	174	181	192	263	75
12	156	130	118	113	106	126	113	115	64	39	6	73	163	167	174	237	240	257	270	270	158	58	64	77	124	270	6
13	89	40	37	39	43	40	33	34	34	44	66	59	23	41	6	247	79	77	86	96	81	85	35	32	51	247	6
14	35	39	36	42	40	39	41	41	38	35	73	103	197	70	26	171	192	24	36	84	94	93	89	42	60	197	24
15	39	52	58	53	52	47	40	39	37	32	30	61	96	33	31	28	8	43	76	56	52	44	44	43	45	96	8
16	39	45	43	49	41	37	38	44	39	50	100	103	105	104	28	32	54	52	68	66	54	61	52	61	56	105	28
17	82	64	50	39	42	51	42	43	50	81	101	105	115	130	128	122	125	117	122	115	110	101	105	106	90	130	39
18	88	175	311	109	87	143	99	77	95	116	170	214	224	256	261	265	210	119	239	270	198	244	167	202	181	311	77
19	277	57	232	149	163	154	162	135	68	35	253	207	293	278	232	223	250	236	250	261	303	237	167	171	219	303	35
20	184	148	134	115	62	79	70	53	37	39	31	123	133	231	226	232	182	166	201	237	184	82	101	101	128	237	31
21	106	91	79	71	58	57	60	50	58	96	111	116	125	119	138	192	221	244	218	228	118	114	174	202	118	244	50
22	220	207	217	210	225	192	199	214	190	216	196	201	178	120	161	85	268	292	263	276	268	241	163	177	210	292	85
23	169	156	131	136	85	112	100	87	39	39	34	12	262	230	211	230	230	243	244	275	123	147	160	160	155	275	12
24	153	140	145	136	126	127	105	97	71	71	96	170	160	173	221	259	227	235	242	251	136	192	168	220	162	259	71
25	209	223	234	170	240	222	198	124	152	175	178	205	191	198	201	196	189	185	199	201	203	201	207	200	196	240	124
26	185	186	181	176	172	165	154	164	185	196	198	194	181	203	196	187	186	174	172	155	175	204	179	200	182	204	154
27	191	213	209	213	221	244	220	225	241	236	257	207	243	233	225	231	222	217	256	249	254	284	267	144	230	284	144
28	77	40	36	93	32	26	23	25	28	31	26	21	32	48	55	140	179	220	239	252	225	154	127	115	59	252	21
29	99	112	130	149	141	142	129	101	45	57	230	236	232	225	250	220	240	249	245	254	262	275	131	261	197	275	45
30	256	120	119	128	179	173	167	169	154	244	222	216	221	222	226	232	248	235	249	250	139	156	175	263	200	263	119
Avg	127	116	118	110	101	110	100	81	68	67	95	154	171	171	205	197	204	200	210	199	146	137	135	146	132	--	--
Max	339	234	311	323	305	244	220	225	264	310	324	254	293	278	279	265	268	292	323	276	303	284	268	273	--	339	--
Min	35	39	36	39	32	26	23	25	28	29	6	12	23	33	6	28	8	24	36	56	52	44	35	32	--	--	6

SAROAD for Resolution, East_Plant
"Component, Channel: Table100, DeltaTemp_C"
Month: Jul 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	0.03	0.09	0.08	0.26	0.30	0.30	0.02	-0.77	-1.26	-1.77	-1.93	-1.49	-1.50	-1.53	-1.51	-1.17	-0.38	0.10	-0.05	0.12	0.38	0.68	0.46	0.59	-0.41	0.68	-1.93
2	0.25	0.03	-0.10	-0.14	-0.08	-0.03	-0.23	-0.63	-1.17	-1.53	-1.10	-1.14	-1.40	-1.47	-1.46	-1.18	-0.95	-0.36	-0.19	-0.12	-0.24	-0.22	-0.11	-0.10	-0.57	0.25	-1.53
3	-0.03	-0.03	0.19	0.42	0.01	0.02	-0.21	-0.79	-1.00	-1.45	-1.39	-1.39	-1.45	-1.41	-1.27	-0.76	-0.79	-0.24	-0.12	-0.01	0.08	0.05	0.11	0.13	-0.47	0.42	-1.45
4	0.65	0.84	0.83	0.66	0.61	0.37	0.05	-0.40	-0.69	-0.93	-0.95	-1.23	-1.37	-1.44	-1.22	-0.90	-0.81	-0.62	-0.23	-0.06	0.01	0.20	0.11	0.13	-0.27	0.84	-1.44
5	0.07	0.08	0.21	0.20	0.21	0.07	-0.15	-0.25	-0.04	0.30	0.01	-0.09	-0.09	-0.52	-0.78	-0.43	-0.33	-0.22	-0.11	0.05	0.32	0.45	0.33	0.24	-0.02	0.45	-0.78
6	0.29	0.35	0.31	0.45	0.71	0.47	0.06	-0.33	-0.42	-0.67	-0.99	-1.23	-1.44	-1.36	-1.31	-1.13	-0.85	-0.63	-0.22	-0.03	0.14	0.06	0.28	0.57	-0.29	0.71	-1.44
7	0.39	0.41	0.50	0.48	0.39	0.29	0.01	-0.18	-0.61	-1.39	-1.14	-0.99	-1.29	-1.32	-1.33	-1.16	-0.90	-0.53	-0.20	-0.07	0.01	-0.01	-0.18	-0.12	-0.37	0.50	-1.39
8	-0.04	0.01	0.07	0.05	0.07	0.10	-0.09	-0.86	-1.40	-1.63	-1.05	-1.32	-1.48	-1.25	-1.26	-1.18	-0.93	-0.82	0.95	0.65	0.41	0.40	0.39	0.42	-0.41	0.95	-1.63
9	0.78	0.74	0.89	0.51	0.35	0.21	0.11	-0.10	-0.33	-0.50	-0.68	-0.80	-0.81	-1.00	-0.92	-0.80	-0.69	-0.15	0.04	0.00	0.16	0.25	0.10	0.02	-0.11	0.89	-1.00
10	0.09	0.07	-0.03	-0.08	-0.07	-0.04	-0.15	-0.27	-0.42	-0.65	-0.96	-1.14	-1.17	-1.16	-1.05	-0.85	-0.78	-0.39	-0.18	-0.05	-0.05	0.01	0.04	0.04	-0.38	0.09	-1.17
11	-0.01	-0.14	0.55	0.29	0.30	0.37	0.04	-0.14	-0.28	-0.54	-0.66	-0.81	-0.60	-0.75	-0.91	-0.58	-0.35	-0.25	-0.12	0.00	0.07	0.12	0.14	0.35	-0.16	0.55	-0.91
12	0.37	0.32	0.44	0.78	0.84	0.37	0.13	-0.38	-0.67	-0.58	-0.67	-0.18	-0.40	-0.20	-0.38	-0.72	-0.89	-0.67	-0.29	0.02	0.31	0.37	0.54	0.45	-0.05	0.84	-0.89
13	0.51	0.45	0.64	0.55	0.81	0.85	0.00	-0.24	-0.42	-0.74	-0.90	-0.94	-1.16	-1.05	-0.99	-0.60	-0.75	-0.48	-0.19	-0.04	0.02	0.04	0.08	0.16	-0.18	0.85	-1.16
14	0.30	0.24	0.50	0.67	0.53	0.39	-0.20	-0.57	-0.83	-0.84	-0.75	-1.15	-1.17	-1.28	-1.25	-1.07	-0.91	-0.83	-0.51	-0.25	-0.09	0.05	0.18	0.07	-0.37	0.67	-1.28
15	0.09	0.11	0.05	0.07	0.22	0.31	-0.02	-0.36	-0.65	-0.59	-0.84	-1.23	-1.32	-1.20	--	--	--	--	-0.08	0.22	0.25	0.44	0.21	0.14	-0.21	0.44	-1.32
16	0.14	0.12	0.03	0.00	0.01	0.04	-0.19	-0.24	-0.43	--	-1.55	-1.48	-0.74	-1.55	-0.85	-0.48	-0.55	-0.25	-0.11	-0.08	-0.10	0.05	0.19	0.15	-0.34	0.19	-1.55
17	0.06	0.05	0.21	0.28	0.24	0.19	-0.15	-0.79	-0.98	-1.42	-1.37	-1.56	-1.76	-1.27	-1.63	-0.65	-0.38	-0.27	-0.12	-0.03	0.02	0.04	0.03	0.08	-0.47	0.28	-1.76
18	0.11	0.06	0.03	0.07	0.09	0.02	-0.21	-0.63	-1.14	-1.57	-1.67	-1.43	-1.27	-1.07	-1.00	-1.13	-1.02	-0.57	-0.26	-0.09	-0.06	0.35	0.38	0.27	-0.49	0.38	-1.67
19	0.15	0.16	0.13	0.14	0.11	0.07	-0.01	-0.31	-1.03	-1.58	-1.43	-1.24	-0.97	-0.88	-1.41	-1.29	-0.57	-0.27	-0.14	-0.09	-0.15	0.23	0.10	0.16	-0.42	0.23	-1.58
20	0.11	0.03	0.00	0.18	0.28	0.40	-0.04	-0.22	-0.41	-0.77	-0.90	-1.13	-0.65	0.20	-0.40	-0.70	-0.68	-0.43	-0.04	0.15	0.20	0.29	0.11	0.13	-0.18	0.40	-1.13
21	0.18	0.26	0.13	0.03	0.05	-0.01	-0.12	-0.30	-0.44	-0.59	-0.70	-0.63	-0.23	-0.24	-0.37	-0.30	-0.32	-0.52	-0.28	-0.05	0.23	0.28	0.11	0.34	-0.15	0.34	-0.70
22	0.33	0.23	0.08	0.07	0.10	0.18	0.11	-0.30	-0.42	-0.57	-0.64	-0.68	-0.73	-1.06	-0.67	-0.68	-0.50	-0.38	-0.20	-0.03	0.14	0.27	0.42	0.50	-0.19	0.50	-1.06
23	0.21	0.26	0.07	0.03	0.07	0.12	0.03	-0.23	-0.30	-0.51	-0.69	-0.94	-0.98	-0.98	-0.81	-0.82	-0.72	-0.58	-0.28	-0.03	0.01	0.08	0.21	0.39	-0.27	0.39	-0.98
24	0.06	0.34	0.38	0.26	0.28	0.46	0.58	-0.06	-0.46	-0.55	-0.77	-0.69	-0.97	-1.14	-1.07	-0.64	-0.84	-0.69	-0.32	-0.12	-0.11	0.19	0.16	0.08	-0.24	0.58	-1.14
25	0.02	0.01	0.00	0.03	-0.03	0.08	-0.14	-0.56	-0.98	-0.63	-0.53	-0.15	-0.46	-1.37	-0.42	0.06	0.05	0.05	0.26	0.32	0.23	0.21	0.34	0.38	-0.14	0.38	-1.37
26	0.29	0.26	0.12	0.22	0.42	0.41	0.14	-0.10	-0.21	-0.47	-0.55	-0.65	-1.11	-1.02	-0.68	-0.58	-0.42	-0.57	-0.18	0.10	-0.05	0.08	0.12	0.19	-0.18	0.42	-1.11
27	0.04	0.00	0.13	0.19	0.13	0.18	-0.04	-0.54	-0.86	-1.34	-2.00	-2.20	-1.87	-1.43	-1.67	-0.97	-0.80	-0.59	-0.30	-0.03	0.06	0.39	0.38	0.29	-0.54	0.39	-2.20
28	0.36	0.32	0.37	0.48	0.68	0.52	0.35	-0.20	-0.62	-0.97	-1.30	-1.08	-1.27	-1.33	-1.28	-1.13	-0.93	-0.50	-0.21	0.13	0.19	0.18	0.06	0.17	-0.29	0.68	-1.33
29	0.29	0.45	0.67	0.52	0.39	0.61	0.55	-0.20	-0.60	-0.86	-1.10	-1.35	-1.24	-1.48	-1.37	-1.18	-1.11	-0.68	-0.25	0.01	0.33	0.50	0.61	1.00	-0.23	1.00	-1.48
30	0.78	0.29	0.32	0.25	0.37	0.85	0.44	-0.25	-0.34	-0.60	-0.78	-1.07	-1.23	-1.16	-1.23	-1.08	-0.87	-0.57	-0.22	0.00	0.05	0.07	0.04	0.08	-0.24	0.85	-1.23
31	0.26	0.44	0.52	0.69	0.47	0.44	0.53	0.00	-0.51	-0.48	-0.45	-0.50	-0.78	-0.94	-1.02	-1.08	-1.00	-0.69	-0.36	-0.19	-0.14	-0.15	-0.10	-0.01	-0.21	0.69	-1.08
Avg	0.23	0.22	0.27	0.28	0.29	0.28	0.04	-0.36	-0.64	-0.88	-0.98	-1.03	-1.06	-1.09	-1.05	-0.84	-0.70	-0.45	-0.14	0.01	0.08	0.19	0.19	0.24	-0.29	--	--
Max	0.78	0.84	0.89	0.78	0.84	0.85	0.58	0.00	-0.04	0.30	0.01	-0.09	-0.09	0.20	-0.37	0.06	0.05	0.10	0.95	0.65	0.41	0.68	0.61	1.00	--	1.00	--
Min	-0.04	-0.14	-0.10	-0.14	-0.08	-0.04	-0.23	-0.86	-1.40	-1.77	-2.00	-2.20	-1.87	-1.55	-1.67	-1.29	-1.11	-0.83	-0.51	-0.25	-0.24	-0.22	-0.18	-0.12	--	--	-2.20

-- Indicates Invalid Data

SAROAD for Resolution, East_Plant
"Component, Channel: Table100, DeltaTemp_C"
Month: Aug 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	-0.01	-0.07	-0.03	0.01	0.02	0.05	-0.17	-0.44	-0.97	-0.87	-1.41	-0.79	-0.89	-0.85	-0.84	-0.73	-0.59	-0.33	-0.20	-0.07	0.02	0.10	0.11	0.14	-0.37	0.14	-1.41
2	0.14	0.16	0.28	0.39	0.25	0.18	0.12	-0.16	-0.65	-0.76	-0.89	-1.10	-1.16	-1.00	-0.62	-0.35	-0.20	-0.40	-0.31	-0.07	-0.02	0.03	-0.04	0.03	-0.26	0.39	-1.16
3	0.09	0.19	0.38	0.37	0.48	0.38	0.05	-0.34	-0.74	-0.56	-0.89	-1.19	-1.28	-1.46	-1.37	-1.20	-0.89	-0.63	-0.12	0.03	0.12	0.16	0.37	0.44	-0.32	0.48	-1.46
4	0.30	0.06	0.03	0.05	0.27	0.39	0.44	-0.13	-0.37	-0.95	-0.98	-0.71	-0.47	-0.81	-0.61	-0.60	-0.68	-0.66	-0.24	0.00	0.38	0.46	0.38	0.46	-0.17	0.46	-0.98
5	0.66	0.73	0.64	0.19	0.48	0.46	0.03	-0.20	-0.34	-0.41	-0.61	-0.73	-0.60	-1.20	-1.09	-1.20	-0.88	-0.47	-0.17	-0.04	0.02	0.22	0.27	-0.04	-0.18	0.73	-1.20
6	-0.07	0.05	0.20	0.08	0.02	0.06	0.00	-0.08	-0.13	-0.12	-0.17	-0.03	-0.28	-0.41	-0.52	-0.27	-0.26	-0.22	-0.12	0.05	0.00	0.03	0.39	0.44	-0.06	0.44	-0.52
7	0.09	-0.03	0.06	0.18	0.15	0.16	0.35	-0.14	-0.41	-0.66	-0.66	-0.94	-0.95	-1.01	-1.05	-1.01	-0.73	-0.52	-0.16	0.03	0.14	0.22	0.30	0.70	-0.25	0.70	-1.05
8	0.92	0.90	1.02	1.07	1.01	0.78	0.67	-0.34	-0.77	-0.70	-0.96	-1.27	-1.27	-1.13	-1.28	-1.08	-0.86	-0.51	-0.09	0.24	0.85	0.64	0.61	0.62	-0.04	1.07	-1.28
9	0.80	0.72	1.09	1.16	0.98	1.11	0.10	-0.47	-0.85	-1.12	-1.47	-1.56	-1.60	-1.36	-0.82	-1.24	-0.92	-0.52	-0.12	0.13	0.43	0.47	0.32	0.20	-0.19	1.16	-1.60
10	0.41	0.85	1.01	0.54	0.97	0.89	0.73	0.28	-0.52	-0.79	-1.15	-1.20	-1.60	-1.57	-1.42	-1.16	-0.79	-0.50	-0.12	0.23	0.32	0.23	0.22	0.27	-0.16	1.01	-1.60
11	0.32	0.41	0.40	0.48	0.32	0.21	-0.13	-0.48	-0.77	-1.52	-1.76	-1.71	-1.68	-1.66	-1.44	-1.23	-0.89	-0.63	-0.21	-0.09	-0.06	0.03	0.04	0.11	-0.50	0.48	-1.76
12	0.12	0.12	0.11	0.13	0.12	0.10	-0.12	-0.65	-1.13	-1.62	-1.97	-1.53	-1.72	-1.14	-1.17	-1.32	-0.85	-0.52	-0.20	0.13	0.13	0.46	0.18	0.18	-0.51	0.46	-1.97
13	0.25	0.97	0.88	0.94	1.36	0.89	0.68	-0.16	-0.70	-0.49	-0.72	-1.04	-1.03	-1.13	-1.10	-1.15	-0.89	-0.40	-0.08	0.05	0.08	0.17	0.29	0.35	-0.08	1.36	-1.15
14	0.78	0.82	0.78	0.81	1.17	0.34	-0.02	-0.04	-0.42	-0.44	-0.61	-0.66	-0.78	-1.01	-0.83	-0.75	-0.44	-0.25	-0.03	0.04	0.35	0.30	-0.02	-0.02	-0.04	1.17	-1.01
15	0.07	0.30	0.13	0.04	0.08	0.11	-0.03	-0.44	-1.20	-1.46	-1.92	-2.12	-1.74	-1.34	-1.26	-1.27	-0.81	0.16	0.81	0.71	0.62	0.80	0.46	0.38	-0.37	0.81	-2.12
16	0.38	0.54	0.52	0.42	0.62	0.67	0.32	-0.36	-0.92	-1.22	-1.24	-1.49	-0.85	-1.78	-1.44	-0.45	-0.55	-0.11	0.19	0.29	0.54	0.53	0.25	0.23	-0.21	0.67	-1.78
17	0.76	0.67	0.62	0.92	0.74	0.66	0.24	0.03	-0.58	-0.97	-0.89	-0.89	-1.10	-1.18	-1.34	-0.88	-0.63	-0.57	-0.05	0.22	0.10	0.94	1.05	0.86	-0.05	1.05	-1.34
18	0.53	0.26	0.26	0.59	0.75	0.83	0.42	0.04	-0.24	-1.06	-1.52	-1.35	-1.35	-1.48	-1.31	-0.93	-0.85	-0.33	-0.05	0.28	0.32	0.15	0.04	0.08	-0.25	0.83	-1.52
19	0.12	0.29	0.32	0.36	0.34	0.24	0.01	-0.05	-0.50	-0.56	-0.53	-0.99	-1.05	-1.35	-1.36	-1.04	-0.46	-0.30	-0.06	0.16	0.24	1.13	0.77	0.66	-0.15	1.13	-1.36
20	0.79	0.91	0.74	0.82	0.58	0.51	0.35	-0.09	-0.69	-0.56	-0.84	-1.38	-1.22	-1.20	-1.32	-1.05	-0.79	-0.53	-0.13	-0.18	-0.17	-0.15	0.17	0.18	-0.22	0.91	-1.38
21	0.54	0.40	0.24	0.07	0.01	0.04	-0.08	-0.08	-0.27	-0.11	-0.03	-0.45	-0.56	-0.48	-0.75	-0.78	-0.76	-0.61	-0.19	-0.03	0.10	0.14	0.14	0.07	-0.14	0.54	-0.78
22	0.11	0.13	0.19	0.09	0.16	0.26	-0.14	-0.54	-1.06	-1.15	-1.07	-1.73	-1.11	-1.40	-0.84	-1.23	0.08	1.01	0.57	0.93	0.44	0.45	0.24	0.31	-0.22	1.01	-1.73
23	0.60	0.64	0.66	0.54	0.40	0.34	0.25	-0.26	-0.48	-0.66	-0.59	-0.67	-0.80	-0.72	-0.26	-0.47	1.11	0.17	0.73	0.47	0.55	0.83	0.72	0.33	0.14	1.11	-0.80
24	0.16	0.10	0.06	0.05	0.14	0.10	-0.12	-0.47	-0.69	-0.86	-1.14	-1.29	-1.33	-1.04	-1.24	-0.96	-0.74	-0.28	-0.13	-0.05	0.04	-0.01	0.01	-0.05	-0.41	0.16	-1.33
25	-0.09	-0.08	-0.02	0.10	0.18	0.22	0.15	-0.07	-0.55	-0.94	-0.87	-0.81	-0.70	-0.81	-1.03	-1.08	-0.98	-0.08	0.17	0.15	0.33	0.17	0.21	0.17	-0.26	0.33	-1.08
26	0.14	0.12	0.16	0.28	0.18	0.29	0.20	-0.27	-0.15	-0.37	-0.82	-0.94	-1.16	-1.16	-0.94	0.64	0.26	0.08	0.25	0.13	0.01	0.01	0.13	0.42	-0.11	0.64	-1.16
27	0.47	0.21	0.23	0.24	0.27	0.35	0.19	-0.19	-0.40	-0.54	-0.84	-0.98	-1.13	-1.20	-1.22	-1.15	-0.85	-0.17	1.05	0.94	0.51	0.86	0.99	0.43	-0.08	1.05	-1.22
28	0.63	0.44	0.37	0.35	0.31	0.25	0.12	-0.24	-0.54	-0.83	-0.47	-0.51	-1.03	-1.49	-1.23	-0.83	-0.28	-0.12	0.01	0.02	0.00	0.02	0.04	0.17	-0.20	0.63	-1.49
29	0.20	0.24	0.20	0.15	0.20	0.14	0.12	-0.50	-0.86	-0.68	-0.37	-0.64	-0.62	-0.93	-0.80	-0.94	-0.73	-0.23	-0.16	-0.07	-0.03	0.01	0.04	0.02	-0.26	0.24	-0.94
30	-0.08	-0.05	-0.11	-0.07	-0.08	-0.05	-0.14	-0.32	-0.82	-1.00	-1.09	-1.09	-0.86	-0.58	-0.62	-0.79	-0.28	-0.18	-0.07	-0.14	-0.02	-0.07	0.00	0.05	-0.35	0.05	-1.09
31	0.13	0.16	0.12	0.06	0.09	0.07	-0.13	-0.18	-0.40	-0.57	-0.67	-0.75	-0.90	-1.15	-0.94	-0.83	-0.70	-0.36	-0.10	-0.01	0.02	0.05	0.08	0.13	-0.28	0.16	-1.15
Avg	0.33	0.36	0.37	0.37	0.41	0.36	0.14	-0.24	-0.62	-0.79	-0.94	-1.05	-1.06	-1.13	-1.03	-0.88	-0.58	-0.29	0.02	0.14	0.21	0.30	0.28	0.27	-0.21	--	--
Max	0.92	0.97	1.09	1.16	1.36	1.11	0.73	0.28	-0.13	-0.11	-0.03	-0.03	-0.28	-0.41	-0.26	0.64	1.11	1.01	1.05	0.94	0.85	1.13	1.05	0.86	--	1.36	--
Min	-0.09	-0.08	-0.11	-0.07	-0.08	-0.05	-0.17	-0.65	-1.20	-1.62	-1.97	-2.12	-1.74	-1.78	-1.44	-1.32	-0.98	-0.66	-0.31	-0.18	-0.17	-0.15	-0.04	-0.05	--	--	-2.12

SAROAD for Resolution, East_Plant
"Component, Channel: Table100, DeltaTemp_C"
Month: Sep 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	0.46	0.51	0.31	0.35	0.56	0.50	0.28	-0.46	-0.78	-0.86	-1.22	-1.30	-1.32	-1.25	-1.12	-0.90	-0.75	-0.46	-0.09	0.00	0.02	0.08	0.09	0.08	-0.30	0.56	-1.32
2	0.37	0.65	0.67	0.70	0.75	0.48	0.11	-0.37	-0.55	-0.75	-0.94	-1.00	-1.26	-1.13	-0.89	-0.50	-0.53	-0.30	0.03	0.35	0.49	0.55	0.36	0.38	-0.10	0.75	-1.26
3	0.41	0.30	0.42	0.37	0.23	0.37	0.27	-0.40	-0.85	-1.21	-1.72	-1.82	-1.73	-1.05	0.72	0.32	0.20	0.14	0.27	0.41	0.37	0.19	0.49	0.48	-0.12	0.72	-1.82
4	0.70	0.53	0.67	0.63	0.43	0.45	0.24	-0.22	-0.46	-1.27	-1.44	-1.65	-1.31	-1.29	-1.22	-1.11	-0.72	-0.41	0.12	0.35	0.25	0.39	0.53	0.58	-0.22	0.70	-1.65
5	0.70	0.93	0.69	0.68	0.64	0.68	0.40	-0.22	-0.78	-0.94	-1.23	-1.22	-1.31	-1.22	-1.25	-1.24	-0.48	-0.33	-0.05	0.09	0.24	0.23	0.29	0.34	-0.18	0.93	-1.31
6	0.48	0.42	0.48	0.68	0.63	0.49	0.39	-0.30	-0.80	-1.05	-1.47	-1.49	-1.68	-1.91	0.03	1.24	0.56	-0.14	0.36	0.37	0.56	0.61	0.20	0.02	-0.06	1.24	-1.91
7	0.12	0.10	0.13	0.04	0.14	0.10	0.05	-0.12	-0.12	-0.35	-0.59	-0.38	-0.47	-0.62	-0.54	-0.74	-0.68	-0.42	-0.11	-0.04	0.02	-0.03	0.00	-0.06	-0.19	0.14	-0.74
8	-0.03	-0.04	0.00	0.07	0.01	0.08	0.10	-0.16	-0.29	-0.24	-0.46	-0.54	-0.60	-1.00	-1.25	-0.51	-0.39	-0.19	-0.09	-0.04	-0.02	-0.06	-0.02	-0.01	-0.24	0.10	-1.25
9	-0.04	-0.04	-0.01	0.03	0.03	0.06	0.03	0.05	-0.03	-0.07	-0.17	-0.25	-0.23	-0.23	-0.27	-0.45	-0.95	-0.63	-0.03	0.11	0.16	0.20	0.40	0.38	-0.08	0.40	-0.95
10	0.16	0.07	0.06	0.16	0.18	0.05	0.09	-0.42	-0.67	-0.91	-0.92	-1.30	-0.92	-0.61	-0.66	-0.59	-0.49	-0.14	-0.02	0.02	0.04	0.13	0.26	0.17	-0.26	0.26	-1.30
11	0.22	0.56	0.31	0.27	0.52	0.68	0.24	-0.47	-0.66	-0.63	-0.93	-1.20	-1.44	-1.25	-1.14	-0.98	-0.75	-0.40	-0.04	0.01	0.09	0.42	0.70	0.59	-0.22	0.70	-1.44
12	0.74	0.50	0.43	0.26	0.26	0.55	0.10	-0.42	-0.79	-1.38	-1.55	-1.20	-1.07	-1.25	-0.87	-0.98	-0.67	-0.31	0.04	0.10	0.36	0.73	0.15	0.26	-0.25	0.74	-1.55
13	0.14	0.19	0.18	0.18	0.17	0.17	0.02	-0.50	-0.93	-1.35	-1.60	-1.55	-0.82	-0.59	0.14	0.64	-0.29	-0.25	0.73	0.63	0.61	0.52	0.38	0.30	-0.12	0.73	-1.60
14	0.29	0.33	0.28	0.21	0.22	0.22	0.13	-0.09	-0.74	-0.85	-1.25	-1.30	-1.51	-1.42	-1.68	-1.20	-0.91	-0.71	-0.16	0.11	0.33	0.23	0.32	0.26	-0.37	0.33	-1.68
15	0.24	0.15	0.15	0.18	0.20	0.19	0.06	-0.44	-0.88	-1.25	-1.63	-1.65	-1.60	-1.21	-0.98	-1.26	-1.13	-0.50	0.13	0.35	0.51	0.60	0.60	0.44	-0.36	0.60	-1.65
16	0.28	0.22	0.26	0.27	0.24	0.22	0.08	-0.36	-0.78	-1.07	-1.12	-1.35	-1.55	-1.53	-1.75	-0.86	-0.90	-0.57	0.12	0.13	0.11	0.12	0.21	0.20	-0.39	0.28	-1.75
17	0.15	0.13	0.17	0.19	0.18	0.09	0.01	-0.46	-0.44	-0.91	-1.08	-1.34	-1.46	-1.50	-1.17	-1.17	-0.67	-0.20	0.13	0.21	0.10	0.13	0.05	0.05	-0.37	0.21	-1.50
18	0.15	0.31	0.38	0.66	0.65	1.10	0.86	-0.33	-0.85	-1.10	-1.18	-1.07	-1.30	-1.11	-1.05	-0.91	-0.63	-0.22	0.09	0.16	0.25	0.16	0.59	0.70	-0.15	1.10	-1.30
19	0.90	0.75	1.44	0.97	0.88	0.81	0.77	-0.10	-0.84	-1.13	-0.68	-1.22	-1.14	-1.18	-1.15	-0.99	-0.66	-0.28	0.01	0.05	0.32	0.72	1.15	0.89	0.01	1.44	-1.22
20	1.11	0.98	0.87	0.61	0.62	0.54	0.32	-0.34	-0.99	-1.39	-1.76	-1.75	-1.60	-1.05	-1.25	-1.12	-1.00	-0.36	0.05	0.17	0.40	0.31	-0.01	-0.02	-0.28	1.11	-1.76
21	0.00	0.04	0.11	0.16	0.25	0.13	0.01	-0.56	-0.91	-1.05	-1.38	-1.53	-1.69	-1.47	-1.22	-1.14	-0.57	-0.39	0.02	0.02	0.04	0.11	0.26	0.34	-0.43	0.34	-1.69
22	0.22	0.28	0.19	0.22	0.18	0.25	0.17	-0.10	0.23	0.09	-0.23	-0.44	-0.48	-0.45	-0.69	-0.62	-0.44	-0.17	0.02	0.10	0.11	0.34	0.92	0.89	0.02	0.92	-0.69
23	0.67	0.79	0.72	0.70	0.47	0.64	0.26	-0.30	-0.85	-1.27	-1.67	-1.57	-1.34	-1.25	-1.15	-0.91	-0.63	-0.21	0.07	0.34	0.61	0.91	0.96	1.26	-0.12	1.26	-1.67
24	1.11	0.63	0.94	0.68	0.58	0.63	0.30	-0.25	-0.70	-1.32	-1.40	-1.28	-1.47	-1.47	-1.38	-0.98	-0.74	-0.21	0.07	0.23	0.73	0.98	0.88	1.20	-0.09	1.20	-1.47
25	1.27	0.81	0.69	0.73	0.74	0.64	0.69	-0.12	-0.66	-0.98	-1.24	-1.16	-1.13	-1.13	-0.99	-0.88	-0.50	-0.11	0.11	0.12	0.14	0.13	0.17	0.29	-0.10	1.27	-1.24
26	0.23	0.25	0.28	0.39	0.48	0.56	1.00	0.11	-0.50	-0.86	-1.08	-1.08	-1.11	-0.96	-0.74	-0.59	-0.40	-0.18	-0.02	0.04	0.01	-0.03	-0.06	-0.01	-0.18	1.00	-1.11
27	-0.05	-0.06	-0.02	-0.02	0.09	0.04	0.01	-0.13	-0.29	-0.54	-0.89	-0.98	-1.02	-1.12	-1.15	-1.04	-0.75	-0.23	0.03	0.06	0.07	0.22	0.62	0.76	-0.27	0.76	-1.15
28	0.42	0.44	0.41	0.33	0.39	0.35	0.24	-0.24	-0.72	-1.23	-1.51	-1.81	-1.82	-1.69	-1.60	-1.19	-0.82	-0.25	0.07	0.09	0.62	0.73	0.71	0.70	-0.31	0.73	-1.82
29	0.66	0.53	0.65	0.71	0.81	0.65	0.38	-0.24	-0.89	-1.39	-1.13	-1.09	-1.19	-1.12	-1.13	-1.03	-0.59	-0.20	0.03	0.06	0.11	0.61	0.66	0.86	-0.14	0.86	-1.39
30	1.01	1.24	0.79	0.67	0.91	0.73	0.73	0.14	-0.41	-0.52	-0.98	-1.10	-1.26	-1.20	-1.05	-0.95	-0.58	-0.14	0.08	0.15	0.63	0.76	1.02	0.66	0.05	1.24	-1.26
Avg	0.44	0.42	0.42	0.40	0.41	0.42	0.28	-0.26	-0.63	-0.93	-1.15	-1.22	-1.23	-1.14	-0.95	-0.76	-0.60	-0.29	0.07	0.16	0.28	0.37	0.43	0.43	-0.19	--	--
Max	1.27	1.24	1.44	0.97	0.91	1.10	1.00	0.14	0.23	0.09	-0.17	-0.25	-0.23	-0.23	0.72	1.24	0.56	0.14	0.73	0.63	0.73	0.98	1.15	1.26	--	1.44	--
Min	-0.05	-0.06	-0.02	-0.02	0.01	0.04	0.01	-0.56	-0.99	-1.39	-1.76	-1.82	-1.82	-1.91	-1.75	-1.26	-1.13	-0.71	-0.16	-0.04	-0.02	-0.06	-0.06	-0.06	--	--	-1.91

SAROAD for Resolution, East_Plant
"Component, Channel: Table100, Temp_2m_C"
Month: Jul 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	26.0	25.5	25.3	25.5	25.2	25.0	26.3	28.3	30.2	32.0	33.3	33.9	34.8	35.5	36.0	35.6	33.6	32.3	33.0	31.7	30.7	29.7	28.9	27.9	30.3	36.0	25.0
2	27.5	28.0	25.8	22.8	21.9	21.9	22.5	23.8	26.3	28.2	28.7	29.7	30.8	31.9	32.6	32.6	32.1	30.9	30.5	29.9	25.3	23.7	22.3	21.9	27.2	32.6	21.9
3	21.9	21.0	21.8	22.5	21.1	20.9	22.0	25.0	27.7	29.1	30.2	31.5	32.6	33.5	33.8	33.3	33.9	32.7	32.4	31.9	31.6	31.6	31.5	30.6	28.5	33.9	20.9
4	28.7	27.9	26.8	26.9	25.5	24.9	25.9	26.4	27.0	28.1	28.8	29.9	31.1	32.4	32.9	32.6	32.6	32.5	31.7	31.3	30.9	30.6	30.7	29.9	29.4	32.9	24.9
5	28.4	27.6	27.1	27.0	26.5	26.1	26.1	26.2	25.8	23.6	23.4	25.0	25.6	27.5	29.8	30.4	29.9	29.8	28.9	27.9	27.0	26.4	25.3	25.4	27.0	30.4	23.4
6	25.3	25.1	24.3	23.6	23.3	22.7	24.3	26.1	27.1	28.2	30.1	31.5	32.6	33.1	33.6	33.6	33.4	33.2	32.3	30.9	30.0	29.8	27.4	24.9	28.6	33.6	22.7
7	26.0	26.1	25.3	24.9	24.8	24.7	25.5	26.9	28.9	31.6	33.1	33.6	35.0	35.4	36.1	36.1	35.9	35.1	34.1	33.4	32.3	31.3	28.5	26.9	30.5	36.1	24.7
8	27.0	26.8	26.1	25.9	25.1	24.5	25.3	27.5	29.3	30.9	31.7	33.2	34.6	35.0	35.4	35.8	35.6	33.6	23.5	23.3	23.1	23.9	25.0	25.6	28.7	35.8	23.1
9	25.6	26.0	25.9	24.9	24.7	24.2	24.6	24.4	24.6	25.5	27.0	28.5	29.4	30.1	30.3	30.7	30.8	29.4	29.2	29.2	28.9	28.9	28.6	27.0	27.4	30.8	24.2
10	26.5	26.0	24.4	22.1	21.1	21.1	21.5	22.1	23.4	25.0	27.0	28.7	29.7	30.2	30.6	30.7	30.7	29.9	29.4	28.8	27.5	26.3	25.2	25.1	26.4	30.7	21.1
11	24.8	21.8	19.7	19.9	20.3	21.3	21.3	20.6	21.4	22.5	23.6	25.0	25.2	26.1	27.5	27.7	27.0	26.4	26.0	25.6	25.1	24.9	24.7	23.4	23.8	27.7	19.7
12	23.0	22.8	22.4	23.2	22.6	22.2	21.5	23.2	24.0	24.3	25.5	24.9	25.5	21.6	23.2	26.9	28.5	27.6	25.9	25.1	23.8	23.3	22.9	23.0	24.0	28.5	21.5
13	22.7	22.5	22.4	21.8	22.2	21.2	22.8	24.5	24.8	26.0	27.9	29.0	30.2	31.0	31.7	31.1	31.8	31.3	30.6	30.1	29.7	29.1	28.9	28.2	27.1	31.8	21.2
14	26.8	26.5	25.3	25.3	24.3	24.7	24.4	26.0	27.2	28.8	29.6	31.3	32.1	32.8	33.4	33.5	33.5	33.4	30.9	28.6	27.9	27.4	27.4	26.4	28.6	33.5	24.3
15	26.0	25.9	24.8	24.1	23.6	23.5	24.8	26.2	27.9	28.3	29.5	31.1	32.2	32.7	--	--	--	--	30.5	28.2	29.1	28.0	25.2	20.6	27.1	32.7	20.6
16	19.6	19.6	19.5	19.4	19.3	19.4	19.8	20.2	21.0	--	21.3	23.0	23.0	25.8	26.1	25.8	25.9	25.5	24.9	23.9	22.6	22.1	20.8	20.7	22.1	26.1	19.3
17	20.5	20.0	20.3	21.0	20.6	20.3	21.7	24.4	26.0	27.0	28.4	29.1	30.3	30.3	31.1	30.4	29.9	28.8	28.1	26.9	24.6	24.2	24.5	24.2	25.5	31.1	20.0
18	23.5	22.6	22.1	21.5	21.0	21.1	22.0	23.3	24.9	26.7	28.5	29.0	29.4	29.8	30.1	30.6	30.7	29.9	29.1	28.1	27.0	21.9	21.2	21.7	25.7	30.7	21.0
19	22.1	22.2	22.3	22.1	21.7	21.3	21.3	22.2	24.5	26.7	27.4	28.0	28.3	28.8	30.2	31.1	30.2	29.9	29.6	28.5	25.2	23.7	22.9	22.7	25.5	31.1	21.3
20	22.8	21.8	21.7	21.9	21.2	21.1	21.3	21.9	22.6	24.0	25.7	27.4	27.2	24.4	26.2	28.0	28.9	28.9	20.3	20.0	20.7	21.0	20.6	20.8	23.3	28.9	20.0
21	20.3	20.4	20.3	20.3	20.1	20.0	20.4	21.1	21.7	22.8	23.5	23.4	19.5	21.1	21.1	21.9	23.1	24.1	23.2	22.3	22.0	21.9	21.4	21.5	21.5	24.1	19.5
22	20.6	21.1	20.7	20.0	20.0	19.8	19.8	21.7	21.8	22.6	23.4	24.4	25.3	26.5	26.7	23.7	23.5	23.8	23.6	23.2	23.3	23.2	22.4	23.4	22.7	26.7	19.8
23	23.0	22.6	22.0	21.8	21.4	21.4	21.8	22.5	23.4	24.3	25.4	26.8	27.6	28.3	28.3	29.0	29.3	29.3	28.8	27.9	27.4	26.9	25.7	25.4	25.4	29.3	21.4
24	26.1	24.7	23.6	23.7	23.1	23.4	23.3	24.6	26.0	26.7	27.6	27.9	29.2	30.1	30.5	30.1	27.7	26.8	27.6	27.7	26.5	26.3	25.8	25.7	26.4	30.5	23.1
25	25.4	24.9	24.4	23.7	23.2	23.8	23.5	24.4	26.2	25.8	26.2	26.0	25.6	29.0	28.3	23.6	22.7	23.5	24.1	24.2	23.9	23.8	23.7	23.0	24.7	29.0	22.7
26	22.9	23.7	23.7	22.9	22.4	22.1	22.7	23.6	23.6	24.7	26.0	26.7	27.6	25.4	26.9	27.7	27.6	28.0	27.7	26.5	25.2	24.4	24.0	23.4	25.0	28.0	22.1
27	22.6	22.7	22.5	22.2	22.5	22.3	22.5	24.1	25.3	26.7	27.9	29.2	30.0	30.4	31.1	29.5	28.5	29.2	29.3	28.6	28.1	27.1	25.9	25.1	26.4	31.1	22.2
28	23.4	22.7	23.4	22.7	22.4	22.2	22.4	23.5	25.4	27.1	28.4	28.8	30.2	31.2	31.7	31.9	31.9	31.4	30.9	30.1	29.1	29.0	28.2	27.4	27.3	31.9	22.2
29	27.0	26.2	25.1	24.7	24.5	23.8	23.0	24.9	25.9	27.2	28.2	29.4	30.1	31.1	31.5	31.7	31.8	31.3	30.6	29.8	28.5	27.1	26.1	25.6	27.7	31.8	23.0
30	26.3	27.3	26.6	26.1	25.6	23.4	24.4	26.8	27.6	28.2	29.3	30.7	31.9	32.5	33.1	33.4	33.2	32.6	31.8	30.8	30.1	29.8	29.6	29.2	29.2	33.4	23.4
31	28.6	27.9	27.4	25.8	26.2	26.2	26.2	27.1	28.6	28.9	29.5	30.0	31.1	32.3	33.2	33.6	32.8	31.0	30.3	28.6	27.5	26.3	25.9	25.9	28.8	33.6	25.8
Avg	24.5	24.2	23.6	23.2	22.8	22.6	23.1	24.3	25.5	26.7	27.6	28.6	29.3	29.9	30.4	30.4	30.2	29.7	28.7	27.8	26.9	26.3	25.5	24.9	26.5	--	--
Max	28.7	28.0	27.4	27.0	26.5	26.2	26.3	28.3	30.2	32.0	33.3	33.9	35.0	35.5	36.1	36.1	35.9	35.1	34.1	33.4	32.3	31.6	31.5	30.6	--	36.1	--
Min	19.6	19.6	19.5	19.4	19.3	19.4	19.8	20.2	21.0	22.5	21.3	23.0	19.5	21.1	21.1	21.9	22.7	23.5	20.3	20.0	20.7	21.0	20.6	20.6	--	--	19.3

-- Indicates Invalid Data

SAROAD for Resolution, East_Plant
"Component, Channel: Table100, Temp_2m_C"
Month: Aug 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	26.1	25.3	24.8	24.0	23.9	23.9	23.9	25.0	26.5	27.7	29.6	29.2	29.6	29.1	28.2	27.9	27.4	27.3	27.5	26.8	26.1	26.2	26.2	26.3	26.6	29.6	23.9
2	26.0	25.6	25.2	24.9	23.8	23.8	24.0	24.4	26.3	28.1	28.6	29.2	29.5	28.9	28.5	28.3	28.1	27.0	24.5	24.6	24.4	24.2	23.7	23.1	26.0	29.5	23.1
3	22.6	22.3	22.3	21.8	21.5	21.0	21.6	23.8	26.4	27.7	28.9	30.4	31.2	31.9	32.4	32.6	32.4	31.9	30.8	30.0	29.6	29.5	28.8	27.8	27.5	32.6	21.0
4	27.9	28.1	27.7	27.4	26.7	25.6	24.8	25.1	26.1	28.5	29.2	28.9	28.7	29.2	29.4	29.7	30.2	30.7	29.9	29.3	28.6	27.2	26.2	25.6	27.9	30.7	24.8
5	25.7	26.4	26.4	26.4	25.1	24.3	23.4	21.9	20.4	19.8	21.1	24.4	25.8	27.7	28.3	28.4	28.5	28.1	27.7	27.1	26.8	25.8	25.3	24.5	25.4	28.5	19.8
6	23.5	22.1	21.3	20.9	21.0	19.7	18.6	18.5	18.4	18.5	18.3	18.7	18.8	19.7	21.4	21.5	22.2	22.2	21.5	20.9	20.4	19.7	19.6	20.5	20.3	23.5	18.3
7	19.8	19.1	18.9	18.7	19.3	18.9	19.2	20.9	22.5	23.1	24.0	25.4	26.2	27.1	27.8	28.5	28.1	28.0	27.4	26.7	26.4	26.3	26.2	23.9	23.8	28.5	18.7
8	23.7	22.9	22.4	23.6	21.8	21.0	21.2	23.6	26.5	27.7	28.6	29.8	30.4	30.6	31.2	31.4	31.3	30.9	29.8	28.8	26.9	25.4	25.3	24.5	26.6	31.4	21.0
9	24.2	24.8	24.2	22.7	22.7	21.2	21.7	24.9	27.9	29.3	31.2	32.3	32.7	32.9	32.2	33.6	33.1	32.5	31.5	30.6	29.3	28.1	27.9	27.2	28.3	33.6	21.2
10	26.3	25.6	24.9	25.0	23.8	21.9	22.3	22.5	25.8	28.0	29.6	30.2	31.5	32.1	32.6	32.3	31.7	31.1	30.2	29.3	28.5	27.1	25.4	24.1	27.6	32.6	21.9
11	23.4	22.6	22.2	22.1	21.5	21.4	22.3	24.4	25.5	27.9	29.1	30.0	31.0	31.8	32.1	32.3	32.0	31.8	30.7	29.0	27.1	26.3	24.6	24.2	26.9	32.3	21.4
12	24.1	23.8	23.2	22.7	22.5	22.4	22.7	24.4	26.6	29.2	31.0	32.0	33.3	32.6	32.7	34.0	33.2	32.6	32.1	31.3	30.7	28.5	28.6	28.1	28.4	34.0	22.4
13	27.8	26.7	25.0	24.1	23.6	23.2	23.2	25.4	27.7	27.8	29.3	31.0	31.6	32.4	33.1	33.5	33.4	32.5	31.3	30.6	29.9	29.1	28.5	28.5	28.7	33.5	23.2
14	26.6	25.9	25.2	25.5	25.3	26.5	26.6	27.0	28.5	27.7	28.9	29.7	32.1	33.3	33.6	33.7	33.3	33.0	32.4	31.9	30.8	29.7	27.9	26.4	29.2	33.7	25.2
15	25.6	24.9	23.5	23.1	23.3	23.2	23.6	24.6	27.0	29.3	31.0	32.3	33.0	33.4	34.0	34.5	33.9	27.4	26.0	26.7	27.5	27.3	26.1	25.9	27.8	34.5	23.1
16	25.4	24.8	24.6	24.0	24.2	24.1	25.0	27.5	29.9	31.9	32.8	33.9	33.5	35.4	35.9	33.2	33.6	32.9	31.7	29.4	27.8	28.1	27.5	27.8	29.4	35.9	24.0
17	26.6	27.4	26.9	25.5	25.4	25.2	24.5	25.2	28.9	31.2	31.8	32.6	34.1	35.1	35.9	35.4	35.0	33.9	28.0	26.3	26.0	23.1	22.7	22.8	28.7	35.9	22.7
18	22.1	22.2	22.4	22.9	23.8	23.5	23.3	24.2	25.6	28.5	31.5	32.9	33.8	34.7	35.1	34.6	32.6	29.7	29.5	28.6	28.8	28.2	27.1	26.9	28.0	35.1	22.1
19	26.5	25.3	24.8	24.7	24.6	24.7	25.3	26.2	27.9	28.6	29.3	31.1	32.5	33.6	34.3	33.9	32.6	32.5	32.0	31.5	31.0	29.3	28.3	27.7	29.1	34.3	24.6
20	27.1	26.5	26.7	25.9	24.9	24.4	24.7	25.7	27.8	28.5	30.0	32.0	33.0	33.9	34.5	34.5	34.1	33.7	32.5	28.4	27.0	25.3	22.2	24.2	28.6	34.5	22.2
21	21.5	22.8	23.7	23.3	22.2	22.0	22.1	23.3	24.6	25.2	25.2	25.9	27.0	27.3	28.6	29.2	29.5	29.5	28.6	27.7	27.0	25.5	25.2	24.4	25.5	29.5	21.5
22	24.2	23.2	22.8	22.8	22.5	22.4	22.7	25.0	27.1	28.8	29.6	31.4	31.3	32.3	31.4	32.6	28.4	25.0	25.4	24.9	24.5	25.0	24.2	23.5	26.3	32.6	22.4
23	22.4	22.0	21.5	21.4	21.9	22.1	21.6	23.4	25.6	27.0	28.4	29.3	30.7	30.8	28.9	26.1	21.5	25.7	25.4	23.5	23.6	23.9	23.7	22.7	24.7	30.8	21.4
24	22.2	21.3	20.6	19.8	19.5	19.1	19.4	21.8	23.8	24.0	24.8	26.4	27.4	27.5	28.5	28.8	27.0	25.6	25.4	25.0	24.5	23.4	23.0	22.4	23.8	28.8	19.1
25	21.1	20.8	20.7	20.3	19.4	19.4	19.7	20.0	21.3	22.9	24.1	25.1	25.8	26.6	27.8	28.5	28.3	26.6	21.5	21.4	21.5	21.1	21.6	21.8	22.8	28.5	19.4
26	22.0	21.7	21.4	20.9	21.5	21.5	20.9	23.1	23.7	24.5	26.6	28.3	30.0	30.7	30.8	24.3	25.0	26.6	26.9	25.6	24.2	23.8	22.7	22.6	24.5	30.8	20.9
27	22.5	22.9	22.8	22.4	22.2	22.7	23.2	24.9	27.1	28.6	29.9	30.9	31.8	32.4	32.8	33.1	32.8	30.9	29.1	28.3	28.2	26.9	27.1	26.9	27.5	33.1	22.2
28	25.7	24.7	24.3	23.7	23.8	23.6	24.1	26.2	27.5	28.5	28.4	29.1	30.0	31.8	31.3	27.1	27.4	26.8	28.4	27.2	26.4	25.9	25.3	24.1	26.7	31.8	23.6
29	22.4	21.7	21.4	21.0	20.7	20.7	21.1	22.6	24.4	24.7	24.0	24.9	25.0	24.9	25.5	26.6	27.1	25.9	25.1	24.3	24.0	23.9	22.4	21.5	23.6	27.1	20.7
30	21.3	20.9	20.7	20.6	20.5	20.5	20.4	21.8	23.5	25.1	26.4	27.2	27.1	25.5	25.3	26.9	26.2	26.0	25.0	20.9	23.1	22.6	22.6	22.2	23.4	27.2	20.4
31	22.3	22.1	21.7	21.4	21.4	21.0	21.0	21.5	22.5	23.9	24.6	25.5	26.9	28.1	28.3	28.5	29.1	28.5	27.4	26.6	26.3	26.4	26.4	26.0	24.9	29.1	21.0
Avg	24.2	23.8	23.4	23.0	22.7	22.4	22.5	23.8	25.6	26.8	27.9	29.0	29.8	30.4	30.7	30.5	30.0	29.2	28.2	27.2	26.7	25.9	25.2	24.8	26.4	--	--
Max	27.9	28.1	27.7	27.4	26.7	26.5	26.6	27.5	29.9	31.9	32.8	33.9	34.1	35.4	35.9	35.4	35.0	33.9	32.5	31.9	31.0	29.7	28.8	28.5	--	35.9	--
Min	19.8	19.1	18.9	18.7	19.3	18.9	18.6	18.5	18.4	18.5	18.3	18.7	18.8	19.7	21.4	21.5	21.5	22.2	21.5	20.9	20.4	19.7	19.6	20.5	--	--	18.3

SAROAD for Resolution, East_Plant
"Component, Channel: Table100, Temp_2m_C"
Month: Sep 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	25.3	23.2	22.6	22.3	22.2	21.8	22.2	23.8	26.6	27.9	28.8	29.7	30.2	30.9	31.0	31.1	30.9	30.3	29.5	28.9	28.5	28.1	27.9	27.7	27.1	31.1	21.8
2	26.9	25.2	24.7	24.2	24.2	23.7	23.7	25.7	26.5	26.6	27.3	28.4	30.0	30.9	31.2	30.1	29.7	29.5	28.5	26.9	25.8	25.2	25.6	25.5	26.9	31.2	23.7
3	24.9	24.2	23.8	24.3	23.3	23.3	24.5	26.3	27.6	29.2	31.6	33.0	33.9	31.6	26.9	28.1	28.1	27.0	26.5	27.1	27.1	26.3	26.1	25.4	27.1	33.9	23.3
4	25.0	24.1	22.8	22.8	23.2	23.4	24.4	25.6	26.5	29.0	31.0	32.3	33.0	33.7	34.0	34.4	33.7	33.2	31.9	30.5	28.7	28.3	28.4	27.5	28.6	34.4	22.8
5	26.8	26.3	24.9	25.1	24.5	24.4	24.7	26.1	28.7	30.5	31.8	32.4	33.2	33.5	33.4	33.7	32.3	31.8	31.4	30.5	30.1	29.5	28.4	28.2	29.3	33.7	24.4
6	27.4	26.5	26.0	25.1	25.0	24.6	25.1	27.4	29.2	30.3	32.2	32.9	33.8	34.2	30.8	26.0	25.8	27.2	27.2	26.3	26.5	26.7	24.7	22.9	27.7	34.2	22.9
7	23.0	22.8	21.9	21.1	20.9	20.8	20.9	21.1	21.5	23.1	24.8	24.0	23.5	24.0	25.1	25.5	25.8	25.7	24.7	24.2	23.7	22.9	22.5	20.5	23.1	25.8	20.5
8	19.8	20.1	20.3	20.5	19.9	19.4	19.3	19.4	20.5	20.1	20.1	21.5	21.2	23.6	24.8	24.6	24.1	23.0	22.5	22.3	21.8	21.1	20.7	19.9	21.3	24.8	19.3
9	19.2	19.1	19.2	19.3	19.1	18.5	17.9	18.3	18.4	18.6	18.6	18.4	18.6	18.3	18.8	20.3	21.2	20.4	19.5	19.0	18.2	17.9	18.6	18.5	18.9	21.2	17.9
10	18.9	18.7	18.0	17.6	17.3	17.2	16.8	17.9	19.7	21.1	21.7	23.1	23.2	22.9	23.3	23.4	23.2	22.5	21.8	20.4	19.8	19.6	19.6	19.5	20.3	23.4	16.8
11	19.2	17.9	17.7	17.3	17.3	16.9	17.3	18.8	20.9	21.5	22.8	24.3	25.7	25.8	26.3	26.5	26.1	25.4	24.3	23.7	23.1	21.3	20.8	20.3	21.7	26.5	16.9
12	19.8	19.2	19.5	18.9	18.3	18.1	18.4	20.6	23.9	25.5	26.7	27.5	28.1	28.8	28.9	29.6	29.2	28.4	27.4	26.8	25.1	23.6	23.7	22.8	24.1	29.6	18.1
13	23.0	21.9	21.8	21.3	21.0	20.8	20.9	22.4	24.4	26.2	27.5	28.0	27.1	26.9	26.2	21.7	23.0	24.4	24.4	24.0	24.1	23.3	22.6	22.1	23.7	28.0	20.8
14	21.8	21.4	20.9	20.8	20.4	20.2	20.4	21.1	23.2	24.4	26.8	28.0	29.2	29.6	30.5	30.6	30.1	28.8	26.3	24.9	24.8	23.9	23.6	23.7	24.8	30.6	20.2
15	22.5	21.7	21.0	20.7	20.7	20.6	20.6	21.8	23.4	25.2	27.2	29.2	30.4	30.1	30.2	31.0	31.2	30.3	28.6	26.9	26.6	26.4	26.4	25.5	25.8	31.2	20.6
16	24.7	23.9	23.6	23.2	22.7	22.5	22.5	24.1	25.6	27.3	28.7	29.8	30.7	31.6	31.8	30.7	31.5	30.8	27.7	27.2	26.1	25.3	24.5	24.1	26.7	31.8	22.5
17	24.7	23.7	23.1	22.6	22.6	22.0	22.1	23.6	24.8	27.0	28.3	29.6	30.7	31.5	31.3	32.0	31.3	30.6	29.7	28.8	28.5	28.3	28.2	27.8	27.2	32.0	22.0
18	27.0	26.3	25.5	23.8	23.4	22.8	21.9	24.3	26.6	28.1	29.4	30.2	31.1	31.2	31.2	31.1	30.8	30.0	28.9	28.0	27.4	26.6	25.0	24.4	27.3	31.2	21.9
19	23.8	23.1	23.2	22.3	21.8	21.9	21.8	22.9	26.6	28.4	28.4	30.0	30.3	30.9	31.2	31.1	30.4	29.4	28.2	27.6	26.8	25.3	24.2	24.3	26.4	31.2	21.8
20	24.0	23.8	22.9	22.7	22.7	22.2	22.7	24.1	26.1	28.0	29.9	31.1	31.8	31.2	31.8	32.0	31.5	30.3	29.4	28.5	27.4	26.3	25.5	24.4	27.1	32.0	22.2
21	23.6	23.1	22.4	20.8	19.8	19.6	19.7	21.4	23.9	25.6	26.9	28.2	29.1	29.5	29.8	29.8	29.1	28.9	27.8	27.3	26.2	25.8	25.7	25.4	25.4	29.8	19.6
22	25.0	24.2	23.5	22.1	21.6	21.2	21.1	21.4	19.7	19.5	20.5	21.7	23.2	23.6	24.2	23.7	22.8	22.0	21.1	20.5	19.9	18.6	17.6	16.5	21.5	25.0	16.5
23	16.2	16.0	14.7	14.1	14.2	13.9	14.0	16.5	20.2	22.3	23.6	24.6	25.6	26.2	26.6	26.7	26.1	24.8	23.6	22.8	21.4	20.4	20.7	19.3	20.6	26.7	13.9
24	19.1	18.9	18.7	18.3	18.2	18.0	17.9	20.0	22.8	25.4	26.7	27.6	28.4	28.9	29.5	29.2	28.9	27.5	26.3	25.5	24.0	23.3	21.8	22.6	23.6	29.5	17.9
25	22.4	22.0	21.8	20.0	20.1	19.8	18.6	19.7	22.1	23.5	24.7	25.6	26.6	26.9	27.3	27.5	27.2	26.4	25.4	24.4	23.4	22.1	21.1	20.4	23.3	27.5	18.6
26	20.2	20.1	20.1	20.0	19.9	19.4	18.0	19.9	21.7	23.0	24.3	25.4	26.4	26.6	26.6	26.6	26.0	25.2	24.1	23.1	21.7	20.7	19.9	19.1	22.4	26.6	18.0
27	18.5	17.8	17.3	16.7	16.1	16.2	16.0	15.8	15.9	16.8	18.3	18.9	19.4	20.2	20.7	20.8	20.4	19.7	18.8	18.2	17.9	17.9	17.2	14.6	17.9	20.8	14.6
28	15.1	15.9	15.9	13.7	15.5	15.3	15.3	16.6	17.9	19.4	21.1	22.6	23.7	24.7	25.4	25.5	25.2	24.1	22.4	21.4	19.9	18.4	18.1	19.0	19.7	25.5	13.7
29	19.1	18.2	17.1	17.1	16.7	15.7	15.3	18.4	22.0	24.1	24.9	25.3	25.8	26.2	26.3	26.4	25.9	24.9	23.5	22.6	22.2	21.3	20.0	20.6	21.7	26.4	15.3
30	20.2	18.6	18.2	17.6	16.8	17.0	16.7	18.4	22.0	23.2	24.3	24.9	25.8	26.2	26.6	26.3	25.6	24.6	23.4	22.7	21.5	19.9	19.1	21.3	21.7	26.6	16.7
Avg	22.2	21.6	21.1	20.5	20.3	20.0	20.0	21.5	23.3	24.7	26.0	26.9	27.7	28.0	28.1	27.9	27.6	26.9	25.8	25.0	24.3	23.5	22.9	22.5	24.1	--	--
Max	27.4	26.5	26.0	25.1	25.0	24.6	25.1	27.4	29.2	30.5	32.2	33.0	33.9	34.2	34.0	34.4	33.7	33.2	31.9	30.5	30.1	29.5	28.4	28.2	--	34.4	--
Min	15.1	15.9	14.7	13.7	14.2	13.9	14.0	15.8	15.9	16.8	18.3	18.4	18.6	18.3	18.8	20.3	20.4	19.7	18.8	18.2	17.9	17.9	17.2	14.6	--	--	13.7

SAROAD for Resolution, East_Plant
"Component, Channel: Table100, SR_Wm2_2m"
Month: Jul 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	0	0	0	0	0	16	153	369	581	761	892	959	989	956	894	692	95	21	43	7	0	0	0	0	309	989	0
2	0	0	0	0	0	14	120	247	529	786	916	990	1004	962	867	723	524	144	54	2	0	0	0	0	328	1004	0
3	0	0	0	0	0	14	137	388	586	774	904	982	1002	961	818	564	523	81	47	6	0	0	0	0	324	1002	0
4	0	0	0	0	0	21	157	370	584	766	902	980	995	947	836	632	522	341	102	10	0	0	0	0	340	995	0
5	0	0	0	0	0	14	114	133	58	58	120	153	159	670	768	289	223	174	60	6	0	0	0	0	125	768	0
6	0	0	0	0	0	17	160	310	592	771	901	976	995	953	861	646	524	290	60	12	0	0	0	0	336	995	0
7	0	0	0	0	0	17	110	179	356	770	908	982	977	881	878	726	555	275	75	6	0	0	0	0	321	982	0
8	0	0	0	0	0	8	110	383	627	648	583	854	1043	962	769	756	603	268	6	3	0	0	0	0	318	1043	0
9	0	0	0	0	0	8	76	153	352	574	933	769	749	963	857	718	449	25	6	3	0	0	0	0	276	963	0
10	0	0	0	0	0	11	145	389	564	760	898	928	994	951	861	682	494	230	78	2	0	0	0	0	333	994	0
11	0	0	1	1	1	10	47	90	240	590	605	813	468	765	757	429	236	112	65	9	0	0	0	0	218	813	0
12	0	0	0	0	0	6	64	275	463	311	419	269	405	100	265	615	545	334	117	7	0	0	0	0	175	615	0
13	0	0	0	0	0	18	166	382	598	779	923	995	1011	967	858	395	453	317	70	6	0	0	0	0	331	1011	0
14	0	0	0	0	0	13	142	376	590	767	900	980	1007	1021	897	690	614	423	101	14	0	0	0	0	356	1021	0
15	0	0	0	0	0	19	114	289	585	598	812	861	1086	769	--	--	--	--	28	2	0	0	0	0	258	1086	0
16	0	1	1	0	0	16	140	151	246	--	410	358	287	819	354	214	249	83	22	2	0	0	0	0	146	819	0
17	0	0	0	0	0	6	195	472	633	782	909	1001	896	724	633	282	72	72	31	2	0	0	0	0	280	1001	0
18	0	0	0	0	0	17	135	367	614	798	924	914	642	466	623	754	572	322	110	6	0	0	1	0	303	924	0
19	0	0	0	0	0	6	62	177	518	822	787	732	511	474	667	719	205	129	55	7	0	0	0	0	245	822	0
20	0	0	0	0	0	10	134	388	597	768	904	1026	483	138	625	712	559	254	0	0	0	0	0	0	275	1026	0
21	0	0	0	0	0	3	69	186	265	394	429	400	114	230	385	215	265	296	111	6	0	0	0	0	140	429	0
22	0	0	0	0	0	5	117	415	558	650	730	651	700	1038	514	462	374	226	61	4	0	0	0	0	271	1038	0
23	0	0	0	0	0	5	101	317	577	760	900	980	981	891	778	693	520	307	104	8	0	0	0	0	330	981	0
24	0	0	0	0	0	4	56	186	337	678	687	566	637	881	737	456	432	241	86	11	0	0	0	0	250	881	0
25	0	0	0	0	0	4	84	339	568	580	407	256	633	966	172	10	39	51	37	5	0	0	0	0	173	966	0
26	0	0	0	0	0	6	85	136	248	566	738	792	698	386	273	321	297	191	79	6	0	0	0	0	201	792	0
27	0	0	0	0	0	5	86	335	574	708	880	980	988	925	925	335	278	263	117	11	0	0	0	0	309	988	0
28	0	0	0	0	0	8	98	212	469	684	826	847	977	954	858	710	511	267	84	2	0	0	0	0	313	977	0
29	0	0	0	0	0	4	110	353	593	777	911	993	1011	968	862	713	521	308	90	2	0	0	0	0	342	1011	0
30	0	0	0	0	0	6	152	354	589	775	906	985	999	957	853	705	512	299	88	2	0	0	0	0	341	999	0
31	0	0	0	0	0	2	67	264	627	756	549	470	878	966	849	706	435	251	70	3	0	0	0	0	287	966	0
Avg	0	0	0	0	0	10	113	290	494	674	758	788	784	794	710	552	407	220	66	5	0	0	0	0	276	--	--
Max	0	1	1	1	1	21	195	472	633	822	933	1026	1086	1038	925	756	614	423	117	14	0	0	1	0	--	1086	--
Min	0	0	0	0	0	2	47	90	58	58	120	153	114	100	172	10	39	21	0	0	0	0	0	0	--	--	0

-- Indicates Invalid Data

SAROAD for Resolution, East_Plant
"Component, Channel: Table100, SR_Wm2_2m"
Month: Aug 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	0	0	0	0	0	6	101	189	409	516	746	302	411	391	415	306	271	118	48	4	0	0	0	0	176	746	0
2	0	0	0	0	0	4	54	117	541	706	581	703	759	367	275	112	56	79	53	3	0	0	0	0	184	759	0
3	0	0	0	0	0	4	115	233	524	757	891	968	989	949	847	699	415	274	42	5	0	0	0	0	321	989	0
4	0	0	0	0	0	3	30	110	224	683	668	453	271	558	417	372	529	310	83	3	0	0	0	0	196	683	0
5	0	0	0	0	0	1	30	62	132	197	275	273	345	829	665	700	502	256	57	1	0	0	0	0	180	829	0
6	0	0	0	0	0	0	15	51	68	95	147	131	427	491	541	281	231	175	60	1	0	0	0	0	113	541	0
7	0	0	0	0	0	4	54	288	564	753	894	975	975	962	851	694	496	281	69	1	0	0	0	0	327	975	0
8	0	0	0	0	0	2	128	355	580	769	907	993	1013	981	862	709	514	292	68	1	0	0	0	0	341	1013	0
9	0	0	0	0	0	2	137	364	589	778	912	994	1016	874	390	696	522	277	72	1	0	0	0	0	318	1016	0
10	0	0	0	0	0	4	50	175	393	565	724	771	999	1006	856	702	501	281	63	0	0	0	0	0	295	1006	0
11	0	0	0	0	0	2	126	327	533	730	879	947	1002	883	764	733	357	289	65	1	0	0	0	0	318	1002	0
12	0	0	0	0	0	1	112	351	569	711	891	969	950	582	730	702	492	233	88	1	0	0	0	0	308	969	0
13	0	0	0	0	0	1	71	303	549	761	869	981	995	968	859	695	539	191	49	1	0	0	0	0	326	995	0
14	0	0	0	0	0	2	131	92	324	262	562	888	770	796	519	489	278	147	34	1	0	0	0	0	221	888	0
15	0	0	0	0	0	2	58	243	561	734	850	935	793	698	667	635	279	210	106	5	0	0	0	0	282	935	0
16	0	0	0	0	0	1	112	332	551	739	875	957	479	944	801	157	414	226	65	1	0	0	0	0	277	957	0
17	0	0	0	0	0	0	53	270	543	712	870	953	991	907	822	579	386	256	24	1	0	2	0	0	307	991	0
18	0	0	0	0	0	0	48	183	264	691	872	951	965	947	863	573	372	115	31	0	0	0	0	0	286	965	0
19	0	0	0	0	0	0	65	122	388	476	786	944	979	929	801	538	268	145	46	0	0	0	0	0	270	979	0
20	0	0	0	0	0	0	56	234	552	743	870	953	987	992	883	677	507	258	23	0	0	0	0	0	322	992	0
21	0	0	0	0	0	0	34	75	144	84	192	385	475	467	803	653	465	241	39	0	0	0	0	0	169	803	0
22	0	0	0	0	0	1	106	327	482	716	772	940	693	850	535	711	160	19	7	0	0	0	0	0	263	940	0
23	0	0	0	0	0	0	69	299	529	709	850	836	744	638	450	222	161	275	46	0	0	0	0	0	243	850	0
24	0	0	0	0	0	0	89	322	523	674	873	962	886	626	832	518	292	67	4	0	0	0	0	0	278	962	0
25	0	0	0	0	0	0	26	108	310	421	454	450	484	710	888	662	328	36	3	1	3	0	0	0	204	888	0
26	0	0	0	0	0	0	33	272	158	296	606	910	995	922	596	89	109	127	37	0	0	0	0	0	215	995	0
27	0	0	0	0	0	0	83	310	529	725	863	946	989	925	837	677	466	84	32	0	0	0	0	0	311	989	0
28	0	0	0	0	0	0	85	315	567	771	378	411	835	1010	640	438	149	76	29	0	0	0	0	0	238	1010	0
29	0	0	0	0	0	0	27	275	461	390	261	557	510	609	535	601	322	66	28	0	0	0	0	0	193	609	0
30	0	0	0	0	0	0	30	190	469	578	870	1029	362	159	309	370	138	69	13	0	0	0	0	0	191	1029	0
31	0	0	0	0	0	1	46	77	191	411	659	691	995	930	813	608	514	147	26	0	0	0	0	0	255	995	0
Avg	0	0	0	0	0	1	70	225	426	586	705	779	777	771	680	535	356	181	46	1	0	0	0	0	256	--	--
Max	0	0	0	0	0	6	137	364	589	778	912	1029	1016	1010	888	733	539	310	106	5	3	2	0	0	--	1029	--
Min	0	0	0	0	0	0	15	51	68	84	147	131	271	159	275	89	56	19	3	0	0	0	0	0	--	--	0

SAROAD for Resolution, East_Plant
"Component, Channel: Table100, SR_Wm2_2m"
Month: Sep 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	0	0	0	0	0	0	86	305	525	714	873	996	991	889	801	624	412	194	23	0	0	0	0	0	310	996	0
2	0	0	0	0	0	0	89	271	392	525	837	874	829	742	469	290	324	114	19	0	0	0	0	0	241	874	0
3	0	0	0	0	0	0	75	292	514	705	840	914	991	364	236	49	55	49	13	0	0	0	0	0	212	991	0
4	0	0	0	0	0	0	76	267	333	710	842	839	946	784	713	616	393	182	23	0	0	0	0	0	280	946	0
5	0	0	0	0	0	0	38	291	524	715	855	713	817	669	641	567	158	137	27	0	0	0	0	0	256	855	0
6	0	0	0	0	0	0	70	285	520	565	840	927	1010	798	165	51	75	211	28	0	0	0	0	0	231	1010	0
7	0	0	0	0	0	0	16	78	170	301	470	270	328	398	322	469	318	196	28	0	0	0	0	0	140	470	0
8	0	0	0	0	0	0	16	103	149	146	272	486	434	434	540	330	175	68	5	0	0	0	0	0	132	540	0
9	0	0	0	0	0	0	6	41	94	113	145	198	135	251	241	347	362	167	10	0	0	0	0	0	88	362	0
10	0	0	0	0	0	0	50	284	511	644	681	903	573	495	557	380	314	66	7	0	0	0	0	0	228	903	0
11	0	0	0	0	0	0	66	288	510	704	849	936	985	782	793	598	383	155	6	0	0	0	0	0	294	985	0
12	0	0	0	0	0	0	68	292	518	711	842	670	731	683	512	603	370	151	5	0	0	0	0	0	256	842	0
13	0	0	0	0	0	0	63	286	506	677	863	663	249	255	69	31	408	149	6	0	0	0	0	0	176	863	0
14	0	0	0	0	0	0	39	162	481	536	846	909	963	618	811	532	404	156	20	0	0	0	0	0	270	963	0
15	0	0	0	0	0	0	60	279	504	696	835	906	963	387	368	464	369	161	5	0	0	0	0	0	250	963	0
16	0	0	0	0	0	0	57	272	495	685	825	898	911	790	703	346	375	165	8	0	0	0	0	0	272	911	0
17	0	0	0	0	0	0	58	297	276	704	831	900	884	862	523	584	243	88	3	0	0	0	0	0	260	900	0
18	0	0	0	0	0	0	55	272	507	701	749	870	924	862	734	560	346	117	2	0	0	0	0	0	279	924	0
19	0	0	0	0	0	0	53	274	497	687	829	901	901	847	724	552	338	113	2	0	0	0	0	0	280	901	0
20	0	0	0	0	0	0	49	250	497	689	786	872	916	684	737	607	364	107	3	0	0	0	0	0	273	916	0
21	0	0	0	0	0	0	50	264	485	678	813	884	893	649	574	524	209	134	3	0	0	0	0	0	257	893	0
22	0	0	0	0	0	0	35	162	105	218	355	452	539	462	688	511	313	99	3	0	0	0	0	0	164	688	0
23	0	0	0	0	0	0	54	288	521	717	856	930	931	868	736	553	333	99	1	0	0	0	0	0	287	931	0
24	0	0	0	0	0	0	50	280	511	699	834	903	908	845	715	536	318	88	1	0	0	0	0	0	279	908	0
25	0	0	0	0	0	0	46	265	498	699	841	914	916	854	720	539	321	89	1	0	0	0	0	0	279	916	0
26	0	0	0	0	0	0	48	273	504	696	829	902	877	846	568	460	255	97	2	0	0	0	0	0	265	902	0
27	0	0	0	0	0	0	27	76	194	519	691	587	753	840	712	530	308	80	1	0	0	0	0	0	222	840	0
28	0	0	0	0	0	0	46	277	508	703	841	913	910	839	703	519	301	74	0	0	0	0	0	0	276	913	0
29	0	0	0	0	0	0	40	258	487	676	812	890	890	824	694	514	296	71	0	0	0	0	0	0	269	890	0
30	0	0	0	0	0	0	41	264	493	692	830	902	902	836	702	517	296	68	0	0	0	0	0	0	273	902	0
Avg	0	0	0	0	0	0	51	243	428	607	754	797	800	682	582	460	305	121	9	0	0	0	0	0	243	--	--
Max	0	0	0	0	0	0	89	305	525	717	873	996	1010	889	811	624	412	211	28	0	0	0	0	0	--	1010	--
Min	0	0	0	0	0	0	6	41	94	113	145	198	135	251	69	31	55	49	0	0	0	0	0	0	--	--	0

SAROAD for Resolution, East_Plant
"Component, Channel: Table100, RH_Percent"
Month: Jul 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	40	42	43	41	41	40	35	32	28	24	22	20	18	17	17	17	20	20	20	22	23	26	27	30	28	43	17
2	32	31	42	56	59	55	50	48	36	32	29	27	26	25	23	23	24	28	30	31	39	46	51	53	37	59	23
3	51	56	49	44	52	54	49	38	30	27	25	23	21	20	19	20	19	20	20	22	22	22	22	23	31	56	19
4	26	27	30	30	32	34	35	36	35	33	31	29	27	24	22	21	22	23	24	25	26	26	26	27	28	36	21
5	32	34	34	35	37	39	39	40	44	59	64	54	51	40	30	27	28	26	36	41	44	45	51	51	41	64	26
6	52	52	55	58	59	61	53	43	38	36	32	29	27	25	25	24	24	24	25	28	29	30	42	57	39	61	24
7	43	39	41	42	42	41	39	37	32	26	22	21	19	19	17	17	17	19	20	22	25	27	36	40	29	43	17
8	37	36	39	39	42	44	41	37	35	30	26	23	21	21	21	20	19	24	70	72	68	62	52	49	39	72	19
9	51	48	49	54	55	60	57	60	60	55	49	43	38	40	39	37	36	39	39	38	40	41	42	50	47	60	36
10	52	53	59	70	76	76	73	69	62	55	49	43	40	38	37	36	36	37	39	40	47	54	60	59	52	76	36
11	60	78	84	86	80	76	77	84	79	74	72	63	63	58	52	48	53	56	56	58	59	58	60	66	67	86	48
12	68	67	69	61	64	65	68	64	65	61	56	61	59	73	61	37	30	39	51	57	60	59	59	57	59	73	30
13	56	58	59	62	56	60	54	47	46	42	36	32	31	30	28	31	30	30	31	33	33	35	35	38	41	62	28
14	42	44	48	48	51	50	51	49	45	38	36	33	32	30	28	27	26	25	30	36	38	40	39	43	39	51	25
15	45	44	49	50	51	50	46	41	37	38	34	31	28	27	--	--	--	--	34	43	37	41	56	83	43	83	27
16	88	87	88	89	89	88	85	83	80	--	70	68	66	56	53	54	55	54	52	57	67	69	79	79	72	89	52
17	79	81	75	66	69	72	64	53	47	46	35	34	32	31	31	29	31	33	36	41	46	46	46	43	49	81	29
18	44	48	53	57	60	59	55	52	47	42	37	33	31	29	28	27	27	29	31	33	38	68	72	69	44	72	27
19	67	64	62	62	63	66	68	67	57	49	43	42	41	39	35	32	34	34	35	39	55	68	74	69	53	74	32
20	70	76	77	74	80	78	72	68	66	62	55	50	53	72	56	47	42	42	85	90	88	87	92	90	70	92	42
21	90	88	89	91	93	94	91	88	85	78	74	75	82	77	83	76	68	61	74	78	78	76	82	79	81	94	61
22	81	78	84	91	90	89	85	67	69	70	67	61	59	54	52	69	70	70	72	74	71	71	74	65	72	91	52
23	68	71	75	77	79	76	67	59	55	55	51	48	46	44	43	41	38	38	39	41	43	44	49	51	54	79	38
24	47	52	57	56	59	58	58	51	45	44	42	42	40	38	37	37	51	56	53	50	55	56	58	57	50	59	37
25	57	59	63	70	73	66	67	62	53	54	54	59	68	49	49	75	86	81	77	78	82	82	78	79	68	86	49
26	79	71	70	76	82	84	80	73	70	62	52	52	48	59	51	46	47	46	46	53	64	66	67	70	63	84	46
27	73	72	72	72	70	72	70	62	58	54	51	44	39	38	38	42	47	41	40	42	44	47	51	54	54	73	38
28	65	69	62	60	63	66	68	64	53	45	40	35	30	25	23	22	22	23	24	26	29	26	23	22	41	69	22
29	22	24	29	32	31	31	33	26	23	22	20	19	18	17	17	17	17	18	19	20	23	26	29	30	24	33	17
30	28	26	27	28	29	35	32	27	23	25	24	23	21	20	19	19	19	20	22	23	24	25	25	26	25	35	19
31	27	28	29	32	31	32	33	32	25	26	25	26	24	22	20	20	24	29	31	35	38	46	46	43	30	46	20
Avg	54	55	57	58	60	60	58	53	49	45	43	40	39	37	35	35	35	36	41	43	46	49	52	53	47	--	--
Max	90	88	89	91	93	94	91	88	85	78	74	75	82	77	83	76	86	81	85	90	88	87	92	90	--	94	--
Min	22	24	27	28	29	31	32	26	23	22	20	19	18	17	17	17	17	18	19	20	22	22	22	22	--	--	17

-- Indicates Invalid Data

SAROAD for Resolution, East_Plant
"Component, Channel: Table100, RH_Percent"
Month: Aug 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	40	45	46	50	51	51	53	50	46	39	34	33	34	36	39	38	39	40	39	43	48	47	46	46	43	53	33
2	47	49	50	49	55	56	56	54	44	27	27	31	33	39	40	39	40	44	52	47	46	47	49	50	45	56	27
3	51	52	50	52	53	57	55	49	35	20	20	23	20	20	20	20	21	22	24	26	27	27	29	31	34	57	20
4	32	31	30	30	32	36	37	39	40	32	29	26	24	24	23	23	23	22	24	25	27	30	33	34	29	40	22
5	35	34	34	33	36	38	46	61	71	72	67	50	44	37	35	34	30	28	25	27	26	31	33	41	40	72	25
6	49	60	64	66	65	77	89	91	92	91	92	87	90	83	74	67	63	64	67	71	73	80	81	72	75	92	49
7	77	84	83	86	78	79	75	60	49	52	48	46	43	40	35	30	31	31	30	33	34	35	34	40	51	86	30
8	41	42	45	42	47	50	48	41	31	25	24	21	20	18	17	14	13	12	13	13	16	19	18	20	27	50	12
9	20	18	18	21	21	24	22	20	17	16	14	13	13	12	14	13	13	14	15	16	18	20	18	17	17	24	12
10	17	17	18	16	17	21	21	24	16	12	12	11	11	12	12	11	11	12	13	14	15	23	37	41	17	41	11
11	42	44	48	50	53	54	51	45	42	36	33	30	26	25	24	23	24	22	23	30	36	38	46	47	37	54	22
12	45	46	49	51	52	52	51	47	43	38	33	28	23	24	23	17	17	18	17	15	15	18	15	14	31	52	14
13	14	14	16	17	18	26	31	32	26	14	13	11	10	10	10	10	10	11	11	11	12	13	14	13	15	32	10
14	16	17	18	17	17	14	13	15	15	16	15	14	14	14	15	15	15	15	16	17	18	21	35	40	18	40	13
15	42	45	49	53	52	52	51	47	39	32	28	23	20	20	20	19	20	46	52	40	36	35	38	37	37	53	19
16	39	40	41	43	42	42	38	33	29	26	24	22	22	20	18	22	21	23	24	31	37	34	36	36	31	43	18
17	38	35	36	39	39	40	41	40	30	27	26	25	22	20	19	18	18	20	36	38	39	58	58	55	34	58	18
18	57	55	54	51	44	45	46	45	41	36	29	23	20	20	18	17	22	28	28	30	28	30	36	35	35	57	17
19	36	40	41	40	40	39	39	38	33	31	29	26	21	21	19	18	19	19	22	23	24	26	29	29	29	41	18
20	30	31	31	33	35	38	38	38	34	31	28	26	23	21	20	19	20	19	20	34	38	49	66	47	32	66	19
21	65	55	48	51	56	57	58	51	46	43	43	40	36	36	31	29	29	29	31	33	34	41	43	46	43	65	29
22	47	50	52	52	51	50	48	42	37	32	31	28	27	25	27	25	40	54	48	53	52	48	50	53	43	54	25
23	60	60	61	60	58	56	58	50	42	39	36	33	30	29	33	38	65	48	49	54	54	51	51	58	49	65	29
24	59	63	66	69	69	70	69	57	47	50	46	40	37	36	33	31	44	48	48	50	52	58	61	64	53	70	31
25	68	70	72	77	85	85	83	82	77	70	62	55	50	46	43	42	43	52	83	85	74	76	72	71	68	85	42
26	71	72	75	78	73	72	75	64	63	61	53	45	38	36	35	60	59	51	49	56	60	63	72	71	60	78	35
27	68	62	61	62	63	57	52	45	39	34	31	29	27	25	23	22	21	27	35	38	32	34	32	36	40	68	21
28	42	42	44	48	48	49	48	43	40	38	38	36	34	31	31	46	44	53	38	41	44	45	47	54	43	54	31
29	67	66	66	68	70	70	70	64	54	55	60	55	58	61	57	53	50	55	58	60	59	59	72	81	62	81	50
30	82	84	85	87	86	84	85	72	66	59	52	48	50	60	58	51	54	55	59	77	63	68	68	71	68	87	48
31	70	69	75	78	78	79	75	73	67	60	57	56	53	51	52	49	41	44	46	48	48	46	48	51	59	79	41
Avg	47	48	49	51	51	52	52	49	44	39	37	33	31	31	30	30	31	33	35	38	38	41	44	45	41	--	--
Max	82	84	85	87	86	85	89	91	92	91	92	87	90	83	74	67	65	64	83	85	74	80	81	81	--	92	--
Min	14	14	16	16	17	14	13	15	15	12	12	11	10	10	10	10	10	11	11	11	12	13	14	13	--	--	10

SAROAD for Resolution, East_Plant
"Component, Channel: Table100, RH_Percent"
Month: Sep 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	54	60	62	63	64	66	63	55	46	40	38	39	38	37	37	37	36	37	39	40	40	42	42	44	47	66	36
2	45	51	52	53	54	56	57	51	49	47	44	40	36	34	33	36	37	39	40	42	46	47	47	45	45	57	33
3	46	47	47	43	47	47	42	38	37	35	31	27	24	29	40	34	32	38	41	37	36	41	41	43	38	47	24
4	44	46	56	52	48	47	43	41	42	37	31	28	21	18	17	16	16	18	21	25	30	31	28	28	33	56	16
5	28	28	30	30	34	32	30	28	26	25	22	21	19	19	19	19	21	22	22	24	24	25	27	28	25	34	19
6	30	32	33	35	35	35	32	28	25	23	20	19	18	18	27	43	45	43	40	42	38	37	46	56	33	56	18
7	52	52	58	64	66	66	66	68	69	60	51	56	62	59	51	46	44	45	51	55	56	57	59	73	58	73	44
8	74	71	69	67	70	73	74	75	71	78	80	66	74	60	56	55	60	65	67	68	73	69	68	75	69	80	55
9	79	78	77	78	79	86	91	90	89	89	91	91	89	91	90	82	78	78	82	85	86	89	87	89	85	91	77
10	90	89	91	91	93	94	94	83	70	65	61	55	54	56	54	52	51	53	56	69	73	71	62	62	70	94	51
11	64	71	73	74	74	76	72	65	57	52	48	45	42	42	41	39	39	40	43	46	47	54	55	56	55	76	39
12	60	62	62	65	66	66	63	55	43	40	36	32	30	28	28	25	24	24	27	28	31	38	49	51	43	66	24
13	56	64	68	70	71	72	71	65	58	52	47	44	49	43	45	74	74	65	60	57	55	58	63	66	60	74	43
14	66	67	69	69	71	72	71	68	61	57	48	42	37	35	34	28	30	35	42	44	43	48	48	46	51	72	28
15	52	58	61	61	60	59	57	53	51	47	42	35	31	31	30	26	24	25	29	32	31	30	29	34	41	61	24
16	41	46	48	50	52	53	52	48	44	40	36	34	31	28	30	30	26	28	39	39	42	43	45	46	41	53	26
17	45	49	51	54	55	57	57	52	49	41	38	34	31	28	28	25	27	28	30	32	34	34	34	35	39	57	25
18	37	36	31	36	38	37	37	30	35	30	17	12	10	9	11	11	11	12	13	14	16	19	22	23	23	38	9
19	22	23	22	23	24	24	26	25	19	15	15	16	17	17	16	16	18	19	20	21	23	25	27	26	21	27	15
20	25	25	28	28	28	31	33	41	39	35	31	28	24	23	21	19	20	23	22	22	24	32	40	41	28	41	19
21	43	44	44	49	54	56	56	50	43	38	36	33	31	30	29	29	29	27	29	30	35	37	36	31	38	56	27
22	32	34	40	55	59	61	57	55	71	72	68	61	52	45	36	31	29	26	23	19	12	13	15	19	41	72	12
23	19	20	23	24	23	25	25	22	18	16	15	12	11	11	10	10	10	11	13	15	17	19	18	20	17	25	10
24	20	21	22	22	22	22	22	20	17	15	13	16	16	15	14	13	14	16	18	20	22	23	26	24	19	26	13
25	23	23	24	26	28	29	30	26	22	19	18	15	12	11	11	10	9	9	9	13	17	23	24	22	19	30	9
26	21	20	18	17	17	18	20	18	17	16	15	16	16	17	18	18	20	25	29	30	32	24	18	20	20	32	15
27	22	23	23	23	24	24	24	25	23	20	21	26	27	19	17	15	14	14	15	15	15	16	16	19	20	27	14
28	19	16	14	18	13	13	13	12	12	12	11	12	12	12	13	13	13	14	14	16	18	19	19	17	14	19	11
29	17	19	20	20	22	23	23	19	17	16	16	17	17	17	17	17	16	18	21	23	24	26	28	27	20	28	16
30	27	30	30	31	32	31	30	26	19	16	16	15	15	14	13	13	13	15	16	17	19	21	22	18	21	32	13
Avg	42	44	45	46	47	48	48	44	41	38	35	33	31	30	29	29	29	30	32	34	35	37	38	39	38	--	--
Max	90	89	91	91	93	94	94	90	89	89	91	91	89	91	90	82	78	78	82	85	86	89	87	89	--	94	--
Min	17	16	14	17	13	13	13	12	12	12	11	12	10	9	10	10	9	9	9	13	12	13	15	17	--	--	9

SAROAD for Resolution, East_Plant
"Component, Channel: Table100, Precip_Inches"
Month: Jul 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Total	Max	Min
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0.016	0.024	0	0.004	0	0	0	0	0	0	0	0	0	0	0	0	0.044	0.024	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.016	0.016	0.016	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.02	0.588	0.016	0.004	0	0	0	0.628	0.588	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0.212	0.071	0.004	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.287	0.212	0
12	0	0	0	0	0	0	0	0	0	0	0	0.016	0	0	0	0	0	0	0	0	0	0	0	0	0.016	0.016	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	--	--	--	--	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	--	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.004	0	0	0.004	0.004	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0.039	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.039	0.039	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0.083	0	0	0	0.048	0	0	0.004	0	0	0	0	0	0.135	0.083	0
26	0	0	0	0	0.004	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.004	0.004	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0.004	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.004	0.004	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0.004	0.212	0.071	0.004	0.004	0	0	0	0.016	0.063	0	0.103	0	0	0	0.048	0	0.02	0.592	0.016	0.004	0.004	0	0.016	1.18	--	--
Max	0.004	0.212	0.071	0.004	0.004	0	0	0	0.016	0.039	0	0.083	0	0	0	0.048	0	0.02	0.588	0.016	0.004	0.004	0	0.016	--	0.588	--
Min	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	--	--	0

-- Indicates Invalid Data

SAROAD for Resolution, East_Plant
"Component, Channel: Table100, Precip_Inches"
Month: Aug 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Total	Max	Min
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0.004	0.008	0	0	0.036	0.044	0.052	0.004	0.052	0.032	0.084	0	0.004	0	0	0	0	0	0	0	0	0	0	0.32	0.084	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.173	0.004	0	0	0	0	0	0.177	0.173	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.036	0	0	0	0	0	0	0.036	0.036	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.012	0	0.024	0.028	0.04	0.008	0.112	0.04	0
18	0.004	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.004	0.004	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.004	0	0.004	0.004	0
21	0.004	0	0	0	0	0	0	0	0	0	0.004	0	0	0	0	0	0	0	0	0	0	0	0	0	0.008	0.004	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.315	0.024	0	0	0	0	0	0	0.339	0.315	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.012	0.004	0.694	0	0	0	0	0	0	0	0.71	0.694	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0.004	0.016	0.004	0	0	0	0	0	0	0	0	0	0	0	0.02	0.135	0	0.004	0	0	0	0.183	0.135	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.035	0.043	0	0	0	0	0	0	0	0	0.078	0.043	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.016	0	0	0	0	0	0.016	0.016	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.004	0	0.004	0.004	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0.008	0.004	0.008	0.004	0.016	0.04	0.044	0.052	0.004	0.052	0.036	0.084	0	0.004	0.047	0.047	1.01	0.253	0.167	0	0.028	0.028	0.048	0.008	1.99	--	--
Max	0.004	0.004	0.008	0.004	0.016	0.036	0.044	0.052	0.004	0.052	0.032	0.084	0	0.004	0.035	0.043	0.694	0.173	0.135	0	0.024	0.028	0.04	0.008	--	0.694	--
Min	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	--	--	0

SAROAD for Resolution, East_Plant
"Component, Channel: Table100, Precip_Inches"
Month: Sep 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Total	Max	Min
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0.087	0.043	0	0	0	0	0	0	0	0	0	0.13	0.087	0
4	0	0	0.004	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.004	0.004	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.118	0.04	0	0	0	0	0	0	0	0	0.158	0.118	0
7	0	0	0	0	0	0	0	0	0.004	0	0	0	0	0.004	0	0	0	0	0	0	0	0	0	0	0.008	0.004	0
8	0	0	0	0	0	0	0	0	0	0	0.008	0	0	0	0	0	0	0	0	0	0	0	0	0	0.008	0.008	0
9	0	0	0	0	0	0.02	0.06	0.004	0.012	0.028	0.024	0.028	0.004	0.008	0	0	0	0	0	0	0	0	0	0	0.188	0.06	0
10	0.004	0.004	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.008	0.004	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.028	0.123	0.004	0	0	0	0	0	0	0	0.155	0.123	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0.106	0.02	0.02	0	0	0.004	0	0	0	0	0	0	0	0	0	0	0	0.15	0.106	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0.004	0.004	0.004	0	0	0.02	0.06	0.11	0.036	0.048	0.032	0.028	0.008	0.099	0.189	0.163	0.004	0	0	0	0	0	0	0	0.809	--	--
Max	0.004	0.004	0.004	0	0	0.02	0.06	0.106	0.02	0.028	0.024	0.028	0.004	0.087	0.118	0.123	0.004	0	0	0	0	0	0	0	--	0.123	--
Min	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	--	--	0

SAROAD for Resolution, East_Plant
"Component, Channel: Table100, BP_mmHg"
Month: Jul 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	654	654	653	653	653	654	654	654	654	654	654	654	653	653	652	652	652	651	652	652	652	653	653	653	653	654	651
2	654	654	654	654	655	655	656	656	656	656	656	656	655	654	654	653	653	652	653	654	654	654	654	654	654	656	652
3	654	653	653	653	653	653	653	654	654	654	654	653	653	652	652	651	650	650	650	650	651	650	650	651	652	654	650
4	651	651	651	651	651	651	652	652	653	653	652	652	652	651	651	650	650	650	650	650	651	651	651	651	651	653	650
5	651	651	651	651	651	652	652	653	653	653	653	653	653	652	651	651	651	651	651	650	651	652	652	652	652	653	650
6	651	651	651	651	651	651	651	652	652	652	652	652	651	651	650	650	650	650	650	650	650	651	652	651	651	652	650
7	651	651	650	650	650	651	651	652	652	652	652	652	652	651	651	650	650	650	651	651	651	652	653	653	651	653	650
8	653	653	653	653	653	653	654	654	654	654	655	654	654	653	653	653	652	653	654	654	654	654	654	654	654	655	652
9	654	655	655	655	656	656	656	657	657	657	657	656	656	656	655	654	654	654	653	653	654	654	654	654	655	657	653
10	655	655	655	655	655	655	655	655	655	655	655	655	655	654	654	653	653	653	653	653	654	654	654	654	654	655	653
11	654	655	654	654	654	654	654	655	655	655	655	655	654	654	654	653	653	653	653	653	653	653	653	653	654	655	653
12	653	653	653	653	653	654	654	654	654	654	654	654	654	654	653	653	653	652	652	653	653	653	653	653	653	654	652
13	653	653	653	653	653	654	654	655	655	655	655	654	654	653	653	653	652	652	652	653	653	653	653	654	653	655	652
14	654	653	653	653	653	654	654	654	654	654	654	654	653	653	652	652	651	651	652	652	652	652	652	652	653	654	651
15	652	652	652	652	652	652	652	652	653	653	653	653	652	652	--	--	--	--	650	651	651	652	652	653	652	653	650
16	653	653	653	653	653	653	654	654	654	--	655	655	655	654	654	654	654	654	654	654	655	655	656	656	654	656	653
17	655	655	655	655	655	655	656	656	656	656	656	656	656	655	655	655	654	654	654	654	655	655	655	655	655	656	654
18	655	655	655	654	655	655	655	655	655	655	655	655	655	654	654	653	653	653	653	653	654	654	654	654	654	655	653
19	654	654	653	653	653	653	654	654	654	654	654	654	654	653	653	652	651	651	651	652	652	653	653	653	653	654	651
20	653	653	653	652	652	652	653	653	653	653	653	653	652	652	651	651	650	650	652	652	652	652	652	652	652	653	650
21	652	652	652	652	652	652	653	653	653	653	654	653	653	653	653	653	653	653	652	653	653	654	654	654	653	654	652
22	654	654	653	653	654	654	654	655	655	655	655	655	655	654	654	654	654	653	653	653	654	654	654	654	654	655	653
23	654	654	654	654	654	654	655	655	655	655	655	655	655	654	654	653	653	653	653	653	653	654	654	654	654	655	653
24	653	654	653	653	653	653	653	654	654	654	654	654	654	653	653	652	653	652	652	653	653	654	654	654	653	654	652
25	654	654	654	654	654	654	655	655	655	656	656	656	655	655	655	655	655	655	655	655	655	656	656	656	655	656	654
26	656	656	656	656	656	657	657	657	658	658	658	658	658	657	656	656	656	656	656	656	656	656	656	656	656	658	656
27	656	656	656	656	656	656	656	656	656	656	656	655	655	654	654	653	653	653	652	652	653	653	653	653	655	656	652
28	653	652	652	652	652	652	653	653	653	653	653	653	653	653	652	652	651	651	651	652	652	652	653	653	652	653	651
29	653	653	653	653	653	654	654	655	655	655	656	656	656	655	655	655	655	654	654	655	655	656	656	656	655	656	653
30	656	656	656	656	656	657	657	658	658	658	658	658	657	657	656	656	656	656	656	656	656	656	656	656	657	658	656
31	656	656	656	656	656	656	656	657	657	657	657	656	656	656	655	655	655	655	655	655	655	655	655	655	656	657	655
Avg	654	654	653	653	653	654	654	654	655	655	655	654	654	654	653	653	653	652	653	653	653	653	654	654	654	--	--
Max	656	656	656	656	656	657	657	658	658	658	658	658	658	657	656	656	656	656	656	656	656	656	656	656	--	658	--
Min	651	651	650	650	650	651	651	652	652	652	652	652	651	651	650	650	650	650	650	650	650	650	650	651	--	--	650

-- Indicates Invalid Data

SAROAD for Resolution, East_Plant
"Component, Channel: Table100, BP_mmHg"
Month: Aug 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	655	655	654	654	654	655	655	655	655	656	656	655	655	655	655	654	654	654	653	654	654	654	654	654	655	656	653
2	654	654	653	653	653	654	654	654	655	655	655	655	654	654	654	654	654	654	654	654	654	654	654	654	654	655	653
3	654	654	654	654	654	654	655	655	656	656	656	655	655	655	654	654	654	654	654	654	654	654	654	654	654	656	654
4	654	654	654	654	654	655	655	655	656	656	656	656	656	655	655	654	654	654	654	654	654	654	654	654	655	656	654
5	654	654	654	654	654	655	655	656	656	656	656	655	655	655	654	654	654	653	653	653	654	654	654	654	654	656	653
6	654	654	654	654	654	654	655	655	655	656	656	656	655	655	655	654	654	654	654	654	654	654	654	654	655	656	654
7	654	655	654	654	654	655	655	655	655	656	656	655	655	655	655	654	654	654	654	654	654	654	654	654	654	656	654
8	654	653	653	653	653	654	654	654	654	655	655	654	654	654	653	653	653	652	652	652	652	653	653	653	653	655	652
9	653	653	653	652	652	653	653	653	654	654	654	654	654	653	653	653	653	652	652	652	653	653	654	654	653	654	652
10	654	654	654	654	654	655	655	655	656	656	656	656	655	655	654	654	654	653	653	654	654	654	655	655	655	656	653
11	655	655	655	655	655	655	655	655	655	655	655	655	654	654	653	653	652	652	652	653	653	653	653	654	654	655	652
12	654	654	653	653	653	653	654	654	654	654	654	654	654	654	653	653	653	653	653	653	653	654	654	654	653	654	653
13	654	654	654	654	654	654	655	655	655	656	656	655	655	655	654	654	653	653	653	653	653	653	654	654	654	656	653
14	653	653	653	653	653	654	654	655	655	655	655	655	654	654	653	653	653	652	653	653	653	654	654	655	654	655	652
15	655	654	654	654	654	655	655	655	655	656	656	655	655	654	654	654	653	654	654	654	654	654	654	654	654	656	653
16	654	654	654	654	654	655	655	655	655	656	656	655	655	654	654	653	653	653	654	654	654	655	655	655	654	656	653
17	655	655	654	654	654	655	655	655	656	656	655	655	654	654	653	653	652	652	653	653	654	655	656	656	654	656	652
18	655	655	654	654	654	654	654	655	655	655	655	655	655	654	654	653	654	653	653	654	654	655	655	655	654	655	653
19	655	655	654	654	654	654	654	655	655	655	655	655	655	654	653	653	653	653	653	653	653	653	654	653	654	655	653
20	653	653	653	653	653	654	654	654	654	654	654	654	653	653	652	652	652	652	652	653	654	655	655	655	653	655	652
21	654	653	653	653	654	654	654	654	655	655	655	655	655	654	654	653	653	653	653	653	654	654	654	654	654	655	653
22	654	654	654	654	654	654	654	655	655	655	655	655	654	654	653	652	652	652	653	653	653	654	654	654	654	655	652
23	653	653	653	652	652	653	653	653	653	653	653	653	652	652	652	652	651	651	651	652	652	652	652	653	652	653	651
24	653	653	653	653	653	653	653	654	654	655	655	654	654	653	653	653	652	653	653	654	654	654	654	654	654	655	652
25	654	654	654	654	654	655	655	655	655	656	656	656	655	655	654	654	654	654	654	654	655	655	655	655	655	656	654
26	654	654	654	654	654	654	654	655	655	655	655	655	654	654	653	653	653	653	653	653	653	654	654	653	654	655	653
27	653	653	652	652	652	653	653	653	653	654	654	653	653	653	652	652	652	651	651	652	652	652	652	653	653	654	651
28	652	652	652	652	652	652	653	653	654	654	654	654	654	653	653	653	652	653	653	654	654	655	655	655	653	655	652
29	655	655	655	655	655	655	656	656	657	657	657	657	657	656	656	655	655	656	656	656	657	657	657	657	656	657	655
30	657	656	656	656	656	656	657	657	657	657	657	657	656	656	655	655	655	655	655	656	656	656	656	655	656	657	655
31	655	655	654	654	654	655	655	655	655	656	655	655	655	654	654	653	653	653	653	653	654	654	654	654	654	656	653
Avg	654	654	654	654	654	654	654	655	655	655	655	655	655	654	654	653	653	653	653	653	654	654	654	654	654	--	--
Max	657	656	656	656	656	656	657	657	657	657	657	657	657	656	656	655	655	656	656	656	657	657	657	657	--	657	--
Min	652	652	652	652	652	652	653	653	653	653	653	653	652	652	652	652	651	651	651	652	652	652	652	653	--	--	651

SAROAD for Resolution, East_Plant
"Component, Channel: Table100, BP_mmHg"
Month: Sep 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	654	654	653	653	653	654	654	654	654	654	654	654	654	653	653	652	652	652	652	653	653	653	653	653	653	654	652
2	653	653	653	653	653	653	654	654	655	655	655	655	654	654	653	653	652	652	652	653	653	653	653	653	653	655	652
3	653	653	653	653	653	653	654	654	654	655	655	655	654	654	653	654	653	653	653	653	654	654	654	655	654	655	653
4	654	654	654	654	654	654	655	655	655	656	656	655	655	654	654	653	653	653	653	653	654	654	654	655	654	656	653
5	655	654	654	654	654	654	655	655	655	656	656	655	655	655	654	654	653	653	653	653	654	654	654	655	654	656	653
6	655	654	654	654	654	654	655	655	655	655	655	655	654	654	653	653	653	653	653	653	653	654	654	655	654	655	653
7	654	654	655	654	654	654	654	655	655	655	655	655	654	654	654	653	653	653	653	653	653	654	654	653	654	655	653
8	653	653	653	652	652	652	653	653	653	653	653	653	653	652	651	651	651	651	651	651	651	651	651	651	652	653	651
9	651	651	651	650	651	651	651	651	651	651	651	651	651	651	650	650	650	650	650	650	650	650	650	651	650	651	650
10	651	651	650	650	650	651	651	652	652	652	652	652	652	652	652	652	652	652	652	652	653	653	653	653	652	653	650
11	653	653	653	653	653	653	654	654	655	655	655	655	654	654	654	653	653	653	653	653	653	653	653	653	654	655	653
12	653	653	653	652	652	653	653	653	653	653	653	653	653	652	651	651	651	651	651	651	651	651	651	651	652	653	651
13	651	651	651	651	651	651	651	651	651	651	651	651	650	649	649	649	649	649	649	649	649	649	649	650	650	651	649
14	650	649	649	649	649	649	650	650	650	651	651	650	650	649	649	649	649	649	649	649	650	650	650	650	650	651	649
15	650	650	650	650	650	651	651	651	652	652	652	652	652	651	651	651	651	651	651	651	651	652	652	652	651	652	650
16	652	652	652	652	652	652	653	653	653	653	653	653	653	652	652	651	651	651	651	651	652	652	652	652	652	653	651
17	652	652	652	651	651	652	652	652	652	652	652	652	651	651	650	650	649	649	649	649	650	650	650	650	651	652	649
18	650	650	650	650	650	650	650	651	651	651	651	651	651	650	649	649	649	649	649	649	650	650	650	650	650	651	649
19	650	650	650	650	650	650	651	651	651	651	651	651	651	650	650	650	650	650	650	650	650	651	651	651	650	651	650
20	651	651	651	651	651	651	651	652	652	652	652	652	652	651	651	651	651	651	651	651	652	652	652	652	651	652	651
21	652	652	652	652	652	652	652	652	653	653	653	652	652	651	650	650	650	649	649	649	649	649	649	649	651	653	649
22	649	649	648	648	648	648	648	649	649	649	649	648	648	647	647	647	647	647	648	649	649	649	649	649	648	649	647
23	650	650	650	650	650	650	651	651	652	652	652	652	652	652	652	652	652	652	652	652	653	653	653	653	652	653	650
24	653	653	653	653	653	653	654	654	654	655	655	654	654	653	652	652	652	652	651	652	652	652	652	651	653	655	651
25	651	651	651	650	650	651	650	651	651	651	651	650	650	649	649	648	648	648	648	648	648	648	648	648	649	651	648
26	648	648	648	648	648	648	648	649	649	649	649	649	648	648	647	648	647	647	647	647	648	648	649	649	648	649	647
27	649	649	649	649	649	649	650	650	651	651	651	651	651	651	651	651	651	652	652	652	653	653	653	653	651	653	649
28	653	653	653	653	653	654	654	655	655	656	656	655	655	655	654	654	654	654	655	655	655	655	655	655	654	656	653
29	655	655	655	655	655	655	656	656	656	656	656	656	656	655	655	654	654	654	654	654	654	655	654	654	655	656	654
30	654	654	654	654	654	654	654	654	654	654	654	654	654	653	653	652	652	652	652	652	652	653	652	652	653	654	652
Avg	652	652	652	652	652	652	652	653	653	653	653	653	652	652	651	651	651	651	651	651	652	652	652	652	652	--	--
Max	655	655	655	655	655	655	656	656	656	656	656	656	656	655	655	654	654	654	655	655	655	655	655	655	--	656	--
Min	648	648	648	648	648	648	648	649	649	649	649	648	648	647	647	647	647	647	647	647	648	648	648	648	--	--	647

SAROAD for Resolution, West_Plant
"Component, Channel: Table100, WS_ms_10m"
Month: Jul 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	1.9	1.0	2.1	1.8	2.1	1.0	2.1	1.8	1.5	1.9	2.8	2.4	2.8	4.1	4.8	5.0	3.3	3.9	2.7	1.0	2.6	1.5	1.4	3.4	2.5	5.0	1.0
2	4.4	5.5	7.6	3.9	4.9	3.3	1.5	1.3	1.5	1.8	2.2	2.7	2.8	2.9	3.7	4.4	4.5	4.7	4.3	3.1	10.5	5.8	4.0	9.3	4.2	10.5	1.3
3	8.2	6.7	4.4	3.8	4.3	6.4	4.0	2.2	3.5	3.3	2.2	2.8	2.8	4.1	4.5	5.1	6.1	5.5	5.0	2.1	1.7	2.3	1.1	1.4	3.9	8.2	1.1
4	1.7	1.2	1.8	0.7	1.6	1.9	0.9	2.5	3.2	3.3	4.0	3.6	3.9	4.3	5.3	5.8	5.8	5.8	4.7	3.4	1.2	1.9	1.4	1.2	3.0	5.8	0.7
5	1.7	0.6	0.7	0.4	0.3	0.8	1.1	0.9	1.4	2.9	3.1	1.7	1.0	1.3	2.7	4.1	4.4	2.5	3.0	0.6	0.6	0.7	1.7	2.4	1.7	4.4	0.3
6	1.2	1.7	0.8	1.2	4.1	3.3	1.0	1.1	0.7	1.5	2.6	3.3	3.5	4.2	5.1	4.3	4.1	3.6	2.9	3.8	4.4	2.5	2.6	3.8	2.8	5.1	0.7
7	1.8	2.4	0.7	0.9	0.5	2.0	0.8	0.8	0.8	1.4	1.8	2.1	3.2	3.6	4.3	5.4	5.8	5.2	4.4	3.4	1.2	2.3	6.1	12.2	3.0	12.2	0.5
8	12.2	10.1	7.7	4.1	4.6	3.4	3.2	2.7	2.8	1.5	1.7	2.4	2.8	4.9	3.8	4.6	4.4	5.2	8.8	7.5	6.4	8.0	2.7	2.8	4.9	12.2	1.5
9	1.7	1.4	0.6	0.7	2.6	2.3	0.9	2.9	2.4	2.3	2.1	3.0	4.0	5.5	5.6	5.6	4.4	3.5	3.2	2.1	0.6	1.5	1.9	0.8	2.6	5.6	0.6
10	1.2	2.5	4.7	3.5	1.4	0.9	0.9	0.6	1.4	1.8	2.0	2.7	3.0	4.2	4.8	5.4	5.2	5.8	4.7	4.1	3.2	2.0	1.5	1.4	2.9	5.8	0.6
11	1.7	7.2	3.1	1.4	1.4	1.2	0.9	0.8	1.0	1.3	1.3	1.6	2.4	2.7	2.8	3.6	5.0	3.5	3.0	2.3	0.8	0.9	1.0	1.3	2.2	7.2	0.8
12	0.3	0.5	0.8	0.8	1.0	1.4	1.9	2.0	2.4	2.0	1.8	1.7	3.1	5.3	1.9	0.8	1.3	4.0	2.7	1.1	0.5	1.1	0.5	0.6	1.6	5.3	0.3
13	0.9	1.2	0.8	1.4	0.5	1.1	0.5	1.6	1.9	1.3	1.7	1.9	2.7	3.5	4.2	4.6	4.7	4.5	3.8	2.5	1.3	0.6	1.0	1.4	2.1	4.7	0.5
14	2.0	1.8	3.0	1.0	2.4	1.3	1.4	1.5	1.1	1.9	2.3	3.2	3.9	4.1	5.1	5.0	5.5	4.9	5.2	5.9	2.1	2.8	1.8	3.0	3.0	5.9	1.0
15	3.8	2.1	1.7	2.1	1.8	0.9	0.4	1.3	1.6	1.9	2.1	2.8	2.8	--	4.8	3.7	3.0	4.1	6.0	1.8	0.6	0.4	7.5	9.6	2.9	9.6	0.4
16	10.3	7.9	4.5	5.4	9.7	6.6	4.9	6.9	7.0	4.2	3.1	4.4	5.3	3.9	2.1	1.4	3.3	2.9	5.3	5.7	5.8	3.9	3.9	1.3	5.0	10.3	1.3
17	2.2	2.7	1.8	1.4	1.5	4.3	2.4	2.8	4.2	5.0	3.5	3.8	3.7	2.4	1.5	1.7	2.5	4.2	3.0	5.9	7.8	4.7	4.8	2.5	3.3	7.8	1.4
18	4.9	6.3	2.8	4.9	5.5	4.9	4.0	4.3	2.8	2.1	2.3	3.7	3.8	2.4	3.8	5.2	4.4	4.7	5.3	5.4	7.6	7.0	5.9	5.6	4.6	7.6	2.1
19	7.3	7.3	3.1	2.2	2.4	3.5	1.7	1.7	1.8	2.1	2.9	2.3	2.7	1.7	2.6	2.8	2.1	2.2	2.4	3.3	2.8	1.6	1.7	1.6	2.7	7.3	1.6
20	1.9	1.6	1.0	1.0	0.9	0.6	0.5	2.0	2.3	1.6	1.7	2.7	2.9	2.4	2.3	2.7	3.3	4.2	7.6	2.3	2.1	0.8	0.5	1.3	2.1	7.6	0.5
21	2.3	0.7	0.4	0.4	0.4	0.6	1.1	0.9	1.6	2.6	2.9	4.6	1.8	1.3	1.3	1.2	1.1	1.1	1.9	1.1	1.2	0.6	0.9	1.0	1.4	4.6	0.4
22	0.3	0.7	2.0	0.7	0.6	0.7	0.4	0.5	1.2	2.2	2.6	2.9	2.8	2.9	4.1	3.9	2.1	2.0	1.5	0.6	0.7	0.6	0.9	0.8	1.6	4.1	0.3
23	0.5	0.5	0.5	0.7	0.4	0.3	0.6	0.5	0.9	1.6	3.1	4.0	5.0	5.0	5.1	4.7	4.6	4.3	4.1	2.9	0.9	0.8	1.2	0.4	2.2	5.1	0.3
24	0.5	0.5	0.5	1.1	0.8	1.0	0.4	0.7	0.8	1.6	2.0	2.8	2.8	2.8	3.4	4.6	3.3	3.3	2.2	2.5	1.8	1.8	0.6	0.6	1.8	4.6	0.4
25	1.1	0.5	1.0	0.8	0.7	0.7	0.6	0.8	1.2	1.2	2.0	2.1	3.3	2.7	3.3	4.0	2.1	1.9	0.9	0.8	1.4	1.0	0.7	0.9	1.5	4.0	0.5
26	0.6	0.7	0.8	0.9	1.0	1.5	1.1	1.7	1.3	0.9	1.5	1.3	1.4	3.7	2.4	1.8	1.1	1.9	1.9	1.8	1.6	2.2	2.8	5.3	1.7	5.3	0.6
27	2.2	1.3	0.8	0.9	2.6	3.7	2.6	2.0	3.1	3.1	2.4	1.6	2.3	2.4	2.5	3.1	5.0	2.0	0.7	0.7	0.8	1.0	1.9	4.6	2.2	5.0	0.7
28	3.5	3.8	4.5	2.8	1.4	1.4	0.9	0.9	0.7	1.5	1.9	2.1	2.9	4.0	3.9	4.3	4.0	2.9	2.4	0.7	1.1	0.6	1.5	1.4	2.3	4.5	0.6
29	1.1	0.9	1.5	1.2	1.0	1.5	2.1	1.4	1.3	1.4	2.6	2.6	2.3	3.0	3.3	3.2	2.9	3.0	2.2	1.7	1.1	1.0	2.9	2.5	2.0	3.3	0.9
30	1.6	0.9	0.4	1.3	0.9	0.6	0.5	0.7	0.9	1.7	1.9	2.4	3.1	3.4	3.0	3.5	4.3	4.5	4.0	1.9	0.7	1.1	1.0	0.4	1.9	4.5	0.4
31	0.3	0.5	0.8	0.6	1.5	1.7	0.9	0.4	0.8	1.5	1.4	1.8	1.7	2.8	4.6	3.8	5.1	4.6	3.7	6.2	7.3	6.8	5.3	5.6	2.9	7.3	0.3
Avg	2.8	2.7	2.2	1.7	2.1	2.1	1.5	1.7	1.9	2.1	2.3	2.7	3.0	3.4	3.6	3.8	3.8	3.8	3.7	2.8	2.7	2.3	2.4	2.9	2.7	--	--
Max	12.2	10.1	7.7	5.4	9.7	6.6	4.9	6.9	7.0	5.0	4.0	4.6	5.3	5.5	5.6	5.8	6.1	5.8	8.8	7.5	10.5	8.0	7.5	12.2	--	12.2	--
Min	0.3	0.5	0.4	0.4	0.3	0.3	0.4	0.4	0.7	0.9	1.3	1.3	1.0	1.3	1.3	0.8	1.1	1.1	0.7	0.6	0.5	0.4	0.5	0.4	--	--	0.3

-- Indicates Invalid Data

SAROAD for Resolution, West_Plant
"Component, Channel: Table100, WS_ms_10m"
Month: Aug 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	6.1	4.7	2.3	2.4	2.3	2.1	3.9	2.9	2.8	4.5	3.2	2.6	4.1	5.4	5.1	4.7	2.9	2.5	1.6	1.4	2.6	2.4	1.9	1.8	3.2	6.1	1.4
2	1.6	1.3	0.8	0.8	0.9	0.7	0.7	0.7	0.8	1.6	2.4	3.7	3.7	4.0	2.8	1.7	0.9	3.0	5.7	4.7	4.6	4.8	3.6	4.4	2.5	5.7	0.7
3	3.2	2.1	2.4	1.6	3.7	2.3	4.1	3.1	1.4	1.1	1.6	2.2	3.1	3.0	2.6	3.0	3.3	3.4	3.4	1.9	0.9	0.9	0.6	0.5	2.3	4.1	0.5
4	1.0	0.3	0.4	0.6	0.7	0.4	0.6	1.9	2.1	2.1	3.7	2.6	3.3	2.8	1.7	2.3	2.6	2.9	2.2	1.2	2.2	0.9	1.1	2.1	1.7	3.7	0.3
5	1.5	2.2	1.0	0.9	0.6	0.7	5.7	8.1	6.8	4.7	5.6	2.4	2.4	2.9	3.8	4.2	4.2	3.8	3.8	2.0	0.8	0.7	1.1	1.4	3.0	8.1	0.6
6	2.5	1.6	1.7	1.3	1.8	1.9	1.2	0.8	0.4	0.5	1.4	1.1	1.7	2.0	2.3	3.1	2.7	2.4	2.0	1.0	1.5	0.6	0.6	0.7	1.5	3.1	0.4
7	1.5	1.7	1.3	1.3	1.6	1.5	0.7	0.7	0.9	1.2	2.3	3.7	3.2	3.8	4.0	5.1	4.1	4.5	4.0	1.8	1.2	0.4	0.6	0.9	2.2	5.1	0.4
8	1.3	0.5	0.6	0.4	1.4	3.6	3.1	1.2	0.9	1.6	1.6	2.0	4.2	3.4	4.1	3.4	3.7	3.4	3.4	1.4	1.8	0.9	0.5	0.7	2.1	4.2	0.4
9	0.7	1.1	2.3	1.4	1.6	3.9	5.7	4.4	1.4	1.6	1.9	3.4	3.7	2.7	2.6	4.5	4.2	3.9	3.4	1.7	0.6	0.8	1.3	0.8	2.5	5.7	0.6
10	1.0	0.8	0.8	0.7	1.5	2.4	1.1	3.9	2.9	1.4	1.7	2.9	2.5	3.3	4.2	4.4	4.2	4.0	2.8	1.6	1.2	3.0	4.3	3.9	2.5	4.4	0.7
11	3.7	3.9	3.6	3.5	3.4	3.2	4.3	4.9	4.3	3.0	2.8	2.8	2.8	3.6	2.9	2.1	2.4	4.5	3.3	3.1	5.2	4.7	4.4	8.1	3.8	8.1	2.1
12	7.7	5.8	5.3	3.4	3.1	4.9	3.9	3.0	3.2	2.2	2.1	2.1	2.7	4.4	3.0	4.4	5.2	3.8	3.0	1.6	0.9	1.3	1.1	0.7	3.3	7.7	0.7
13	0.9	1.4	2.3	2.6	1.2	1.0	1.6	0.8	1.0	1.8	1.9	2.6	2.7	3.2	3.1	3.4	3.1	4.4	3.2	1.1	0.3	0.9	0.9	0.9	1.9	4.4	0.3
14	0.5	1.5	1.4	1.6	0.8	0.8	1.4	1.1	0.8	3.1	1.7	1.2	2.1	2.5	2.7	2.9	2.6	2.9	1.7	0.8	1.7	2.9	7.2	4.2	2.1	7.2	0.5
15	6.4	3.6	4.0	5.9	3.3	2.9	2.1	1.9	4.4	3.2	2.4	3.0	2.6	1.8	2.2	2.4	2.5	8.6	7.8	5.7	2.4	0.9	3.0	3.1	3.6	8.6	0.9
16	2.0	3.5	2.2	2.9	3.1	2.2	1.7	2.6	2.5	2.6	2.1	2.1	2.3	2.6	2.6	5.2	2.1	3.7	4.2	3.9	3.5	3.8	1.7	1.3	2.8	5.2	1.3
17	1.9	1.2	1.3	1.1	1.2	1.0	1.0	1.3	0.8	0.9	0.9	1.5	2.2	2.9	3.4	4.0	3.8	5.3	9.8	9.6	9.3	4.8	4.3	5.6	3.3	9.8	0.8
18	5.5	4.7	5.7	5.8	1.9	3.8	5.9	4.7	3.3	2.3	2.1	2.2	1.9	3.0	3.8	3.9	6.2	7.1	3.3	1.2	1.0	1.7	2.3	0.9	3.5	7.1	0.9
19	1.1	2.9	5.1	4.0	2.0	2.3	1.0	0.9	1.3	1.1	1.4	1.5	2.0	3.1	4.2	4.7	3.9	3.3	2.1	1.3	0.5	0.6	0.7	0.5	2.1	5.1	0.5
20	0.7	1.1	1.1	1.8	3.1	3.5	4.4	2.0	1.0	1.2	1.7	2.3	3.7	4.8	4.7	5.0	5.3	4.3	5.7	5.6	4.7	5.4	7.9	5.0	3.6	7.9	0.7
21	4.4	4.5	3.4	3.5	2.9	1.6	2.1	3.2	1.8	1.0	2.5	2.3	3.0	3.5	4.0	4.7	4.7	4.2	3.2	1.4	0.6	1.3	0.7	2.2	2.8	4.7	0.6
22	4.4	4.1	4.4	2.0	1.3	1.3	2.6	2.5	2.0	1.4	1.8	2.5	2.7	3.4	3.9	4.0	5.2	4.9	3.2	1.8	1.7	0.8	1.2	1.1	2.7	5.2	0.8
23	1.8	1.2	1.4	2.1	1.9	3.1	0.9	1.0	1.5	1.4	1.7	2.0	2.6	5.2	2.8	7.6	7.9	2.9	2.1	6.0	4.8	4.0	4.1	3.0	3.0	7.9	0.9
24	6.2	3.5	2.3	2.5	4.7	5.6	3.2	2.3	2.7	2.5	2.6	3.6	2.6	2.4	1.7	2.4	4.4	1.9	1.7	1.8	1.8	1.2	0.7	3.3	2.8	6.2	0.7
25	3.6	1.9	2.5	2.3	2.0	1.7	1.7	2.1	3.1	1.9	1.7	1.7	1.7	1.6	2.8	4.1	2.5	3.5	4.2	2.1	1.0	2.1	1.2	0.6	2.2	4.2	0.6
26	0.8	0.9	1.3	1.9	0.9	0.7	0.7	0.5	0.6	0.6	1.2	1.9	3.4	3.8	3.2	5.4	1.5	1.0	1.2	2.5	1.3	2.1	2.0	0.8	1.7	5.4	0.5
27	0.9	0.6	1.1	1.9	3.1	5.6	5.9	6.8	6.9	6.4	4.5	5.6	6.0	5.1	4.8	3.2	3.5	4.2	2.5	1.0	2.1	5.3	4.9	5.7	4.1	6.9	0.6
28	5.4	4.2	3.6	4.1	6.4	4.8	3.2	2.8	6.3	5.0	4.0	4.2	3.6	4.4	4.3	6.6	4.2	3.0	3.6	3.9	2.8	3.3	2.6	3.6	4.2	6.6	2.6
29	2.0	1.7	0.8	0.6	1.9	2.6	1.2	1.6	1.9	2.1	1.9	1.7	2.5	2.1	1.1	1.7	2.5	4.2	4.2	2.8	1.7	1.0	1.4	2.8	2.0	4.2	0.6
30	2.4	1.7	2.7	0.7	1.3	1.1	1.5	0.9	1.0	1.3	2.0	2.1	2.9	1.6	3.0	2.7	1.9	1.2	3.8	2.3	1.6	0.9	0.7	1.0	1.8	3.8	0.7
31	0.3	0.8	0.6	0.6	0.9	1.0	1.1	1.1	1.0	0.9	1.7	2.4	3.1	3.7	4.7	5.4	5.3	4.8	3.6	1.8	1.4	1.0	0.8	0.8	2.0	5.4	0.3
Avg	2.7	2.3	2.2	2.1	2.2	2.4	2.5	2.4	2.3	2.1	2.3	2.5	2.9	3.3	3.3	3.9	3.7	3.8	3.5	2.6	2.2	2.1	2.2	2.3	2.7	--	--
Max	7.7	5.8	5.7	5.9	6.4	5.6	5.9	8.1	6.9	6.4	5.6	5.6	6.0	5.4	5.1	7.6	7.9	8.6	9.8	9.6	9.3	5.4	7.9	8.1	--	9.8	--
Min	0.3	0.3	0.4	0.4	0.6	0.4	0.6	0.5	0.4	0.5	0.9	1.1	1.7	1.6	1.1	1.7	0.9	1.0	1.2	0.8	0.3	0.4	0.5	0.5	--	--	0.3

SAROAD for Resolution, West_Plant
"Component, Channel: Table100, WS_ms_10m"
Month: Sep 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	0.6	0.5	0.9	2.0	1.6	1.0	0.6	0.8	1.0	1.8	2.1	2.4	3.1	3.5	3.8	4.5	4.5	4.4	3.7	1.4	1.1	0.5	0.6	0.4	2.0	4.5	0.4
2	0.5	0.6	0.9	0.8	1.0	1.2	1.7	1.5	4.7	2.9	2.0	2.3	1.7	2.4	3.8	4.7	3.2	2.0	1.9	1.4	0.6	0.5	1.4	1.1	1.9	4.7	0.5
3	1.4	1.2	1.6	1.8	1.9	2.8	1.9	2.5	2.5	2.2	1.8	1.4	2.5	7.0	6.0	4.0	1.8	3.0	5.0	1.5	1.1	3.1	1.9	1.2	2.5	7.0	1.1
4	1.3	1.2	2.2	2.9	2.2	0.9	1.2	1.0	1.1	1.3	2.3	2.1	3.6	3.6	4.7	5.0	3.6	3.2	2.3	1.3	2.6	4.4	4.4	5.0	2.6	5.0	0.9
5	5.0	5.4	5.5	5.8	5.9	6.2	4.7	4.9	5.1	5.3	3.6	4.3	4.6	4.3	3.8	3.7	4.5	1.7	2.9	3.1	3.7	4.0	5.0	2.2	4.4	6.2	1.7
6	1.5	2.6	3.1	3.5	5.3	4.2	3.6	1.8	2.8	4.7	4.1	3.5	3.8	3.0	4.8	5.8	4.1	2.9	2.1	2.5	1.5	1.2	2.7	1.2	3.2	5.8	1.2
7	0.9	0.8	1.6	1.6	1.1	0.6	0.9	0.6	1.3	1.5	1.4	2.0	1.4	1.8	2.9	3.3	2.5	2.4	1.6	2.4	2.1	4.4	6.7	4.5	2.1	6.7	0.6
8	2.2	2.8	3.0	2.4	4.9	4.6	3.6	4.4	3.0	3.6	1.6	2.9	1.4	2.1	1.8	2.5	3.7	3.1	1.5	0.8	0.9	3.3	2.4	1.5	2.7	4.9	0.8
9	2.2	2.9	3.4	2.2	3.2	2.8	4.8	2.2	1.4	1.0	1.2	1.8	2.2	3.2	2.4	1.7	1.6	2.3	1.3	1.0	2.0	3.6	1.4	0.5	2.2	4.8	0.5
10	0.5	1.6	0.9	1.1	0.9	0.6	0.9	3.5	2.8	3.4	3.8	4.6	4.7	5.4	5.8	5.8	4.4	4.5	4.1	2.2	1.1	1.0	0.9	0.5	2.7	5.8	0.5
11	0.4	1.1	1.2	0.4	0.9	1.2	1.8	1.1	0.8	1.4	1.8	2.1	2.8	3.6	4.1	5.1	4.8	4.8	3.6	1.7	1.2	1.3	1.3	1.4	2.1	5.1	0.4
12	0.8	0.7	0.5	0.5	0.4	0.8	1.2	1.8	1.1	1.3	1.9	1.9	3.3	3.2	3.7	4.2	5.0	4.5	3.6	1.4	0.8	2.4	4.2	4.3	2.2	5.0	0.4
13	5.4	2.8	2.2	5.8	6.2	6.4	4.7	4.2	5.7	3.3	2.5	3.1	2.5	5.6	4.6	2.8	2.2	4.5	4.2	3.8	4.0	4.4	5.2	7.7	4.3	7.7	2.2
14	7.6	4.9	2.9	2.7	3.9	4.6	3.6	3.6	5.1	4.8	3.7	2.3	2.4	2.5	2.5	3.0	2.4	2.4	3.2	4.5	3.2	2.8	4.5	5.3	3.7	7.6	2.3
15	6.6	4.0	2.8	2.9	4.1	4.6	4.5	6.0	6.4	6.2	3.9	2.4	2.7	2.1	2.6	2.9	2.9	3.4	3.6	3.3	3.2	2.0	2.7	4.9	3.8	6.6	2.0
16	5.5	5.5	5.5	5.4	3.8	4.4	5.7	7.2	8.4	5.4	3.3	2.8	3.2	2.6	2.9	3.3	2.1	2.6	3.9	4.4	5.5	7.9	6.0	7.7	4.8	8.4	2.1
17	8.7	8.7	7.7	6.6	4.8	4.1	4.9	3.1	4.3	8.3	7.3	5.4	4.5	4.2	4.1	3.6	3.0	2.1	3.9	4.6	5.0	5.4	5.5	5.4	5.2	8.7	2.1
18	1.9	1.6	1.4	3.1	3.3	4.1	4.7	4.9	2.6	2.6	2.7	3.5	3.9	4.8	4.7	4.6	4.7	3.9	2.6	0.6	1.3	0.6	1.2	0.4	2.9	4.9	0.4
19	0.9	0.5	0.4	0.3	1.6	0.6	0.5	0.6	0.7	1.1	2.3	1.9	3.1	3.7	3.9	4.3	4.3	4.4	2.9	1.1	0.9	0.6	1.0	0.9	1.8	4.4	0.3
20	0.7	0.9	1.7	1.4	1.3	2.6	1.7	1.7	2.0	2.1	1.9	3.2	3.8	4.0	3.5	4.1	3.6	3.7	1.8	0.4	1.3	2.4	6.4	5.0	2.6	6.4	0.4
21	5.6	6.9	5.2	4.0	2.9	3.4	3.6	4.1	5.0	6.4	4.0	3.7	4.5	3.4	2.7	2.6	1.5	3.7	1.5	0.4	3.3	3.9	1.3	0.5	3.5	6.9	0.4
22	0.6	0.8	0.9	1.5	1.5	0.8	1.4	1.9	1.4	1.0	2.1	4.0	6.3	6.9	7.0	7.4	5.7	5.4	4.3	1.1	1.0	0.5	1.6	1.5	2.8	7.4	0.5
23	1.5	1.6	3.1	3.0	3.7	5.3	3.8	3.8	1.9	1.5	2.2	1.6	2.7	2.6	3.1	3.1	4.5	3.6	2.0	2.1	1.1	1.3	1.1	1.5	2.6	5.3	1.1
24	0.3	0.6	1.2	2.1	1.4	1.9	5.4	5.6	3.2	3.4	2.4	2.0	2.4	2.4	2.7	3.2	3.7	3.3	1.9	0.5	1.2	0.8	0.6	1.8	2.3	5.6	0.3
25	1.0	1.1	0.7	1.9	0.8	0.8	1.6	0.8	1.3	3.5	3.8	4.2	5.5	6.2	5.6	5.5	5.6	4.6	2.9	1.8	2.5	2.4	1.4	1.3	2.8	6.2	0.7
26	1.5	3.0	2.8	1.9	1.2	0.5	0.4	0.8	2.8	4.0	5.4	6.1	7.5	8.7	8.3	7.6	7.0	6.4	4.9	3.8	3.3	3.1	3.4	2.2	4.0	8.7	0.4
27	2.4	2.0	1.5	1.4	1.0	0.5	1.0	2.1	2.0	1.8	2.0	3.9	4.0	4.3	4.1	3.6	3.3	3.1	1.9	0.9	0.3	0.7	0.7	0.6	2.0	4.3	0.3
28	1.5	3.7	4.6	4.2	7.0	7.0	6.7	7.3	7.4	7.0	5.2	2.4	2.5	2.5	2.1	2.3	2.4	3.3	1.4	0.9	0.8	1.9	1.6	0.8	3.6	7.4	0.8
29	1.0	1.7	1.5	1.0	1.3	2.1	2.6	1.4	1.0	1.1	1.8	3.3	3.3	3.3	4.1	3.5	3.5	4.0	2.1	0.5	0.4	0.5	0.2	0.3	1.9	4.1	0.2
30	0.2	0.3	0.5	0.8	1.0	0.8	1.3	0.8	0.9	1.1	3.0	3.4	3.6	3.3	4.1	4.3	4.1	3.8	2.3	1.0	0.7	0.6	0.8	0.3	1.8	4.3	0.2
Avg	2.3	2.4	2.4	2.5	2.7	2.7	2.8	2.9	3.0	3.2	2.9	3.0	3.4	3.9	4.0	4.1	3.7	3.6	2.8	1.9	1.9	2.4	2.6	2.4	2.9	--	--
Max	8.7	8.7	7.7	6.6	7.0	7.0	6.7	7.3	8.4	8.3	7.3	6.1	7.5	8.7	8.3	7.6	7.0	6.4	5.0	4.6	5.5	7.9	6.7	7.7	--	8.7	--
Min	0.2	0.3	0.4	0.3	0.4	0.5	0.4	0.6	0.7	1.0	1.2	1.4	1.4	1.8	1.8	1.7	1.5	1.7	1.3	0.4	0.3	0.5	0.2	0.3	--	--	0.2

SAROAD for Resolution, West_Plant
"Component, Channel: Table100, WD_10m"
Month: Jul 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	246	61	74	62	92	351	240	224	90	103	226	159	251	251	244	247	276	325	288	278	42	336	11	64	298	351	11
2	68	75	65	125	83	104	161	10	260	231	239	247	246	213	234	252	251	253	255	270	59	57	19	42	230	270	10
3	37	39	48	76	79	45	115	104	56	94	178	189	230	232	257	248	260	259	272	306	327	349	7	342	1	349	7
4	46	56	49	57	76	87	156	173	197	235	245	234	249	242	243	250	248	255	267	267	295	9	291	303	257	303	9
5	306	336	41	117	81	225	304	244	312	329	8	43	360	5	289	230	242	228	199	277	345	35	64	92	329	360	5
6	336	95	278	335	55	58	289	194	222	217	249	229	241	246	232	241	258	249	290	63	63	98	257	34	262	336	34
7	312	2	32	302	290	30	38	84	258	188	198	251	226	218	257	241	246	240	232	227	178	62	62	57	259	312	2
8	50	52	56	56	148	223	326	241	33	119	113	158	160	253	237	247	268	280	38	61	45	58	120	125	95	326	33
9	12	358	82	209	99	111	235	258	241	269	249	235	234	237	246	246	245	247	261	250	354	336	279	244	256	358	12
10	174	193	235	260	231	264	240	112	243	261	244	266	238	239	249	251	255	253	255	256	180	135	145	163	228	266	112
11	151	99	26	272	347	315	256	151	56	309	288	240	225	240	259	238	261	257	242	257	303	308	1	78	275	347	1
12	65	13	337	347	273	37	44	64	58	75	120	113	140	298	165	189	212	240	236	165	357	39	358	319	40	358	13
13	288	63	68	22	293	12	223	208	256	253	188	197	240	254	239	241	256	256	254	245	286	312	332	357	266	357	12
14	64	300	47	165	46	29	94	89	191	199	199	257	262	237	244	249	245	251	337	62	102	28	102	59	141	337	28
15	61	217	13	104	76	79	84	151	171	145	208	214	226	--	353	346	314	307	250	208	191	97	39	48	122	353	13
16	44	68	163	81	42	87	48	53	57	55	34	44	50	41	52	98	162	94	51	30	53	53	85	105	65	163	30
17	163	109	269	61	288	28	59	104	67	45	87	136	159	92	151	207	305	29	74	63	58	42	22	194	80	305	22
18	67	68	299	53	29	39	354	328	53	36	75	131	161	174	76	130	115	107	125	72	62	73	50	39	70	354	29
19	41	51	108	149	98	14	176	152	53	167	185	137	181	213	217	209	274	304	290	228	171	227	172	118	170	304	14
20	55	243	218	62	335	129	212	297	278	283	177	230	223	63	329	274	276	263	35	166	296	162	50	88	259	335	35
21	63	327	26	306	183	220	220	254	196	165	166	270	84	155	233	290	159	244	243	257	321	314	21	24	247	327	21
22	272	308	304	17	280	347	133	253	247	264	245	241	261	257	256	186	299	282	255	297	23	341	353	51	285	353	17
23	313	308	358	287	45	320	5	119	191	252	249	239	245	253	263	259	266	253	258	270	332	33	5	288	287	358	5
24	19	296	96	252	15	4	297	320	183	189	178	178	176	194	239	275	1	72	134	144	133	318	334	27	250	334	1
25	264	256	275	334	47	287	134	173	229	286	86	109	13	343	273	89	32	52	168	21	44	318	316	11	348	343	11
26	152	274	25	49	351	36	19	195	246	201	235	241	163	62	165	166	194	313	8	287	123	38	73	54	98	351	8
27	85	279	41	30	84	64	78	66	73	89	75	83	265	240	232	224	169	147	207	248	11	20	58	56	76	279	11
28	23	49	72	80	335	23	71	164	162	165	161	134	178	222	216	254	241	251	278	349	35	102	87	35	110	349	23
29	26	44	53	54	40	37	34	64	88	238	175	231	254	244	249	270	245	243	256	323	332	17	43	20	346	332	17
30	8	341	290	16	346	334	352	69	153	206	254	256	248	251	282	261	251	250	262	281	318	346	321	314	296	352	8
31	323	302	36	350	21	42	80	234	152	135	147	169	253	270	251	251	190	148	105	47	52	63	73	73	86	350	21
Avg	29	10	31	37	35	29	64	157	179	202	194	203	223	240	245	239	250	258	257	278	20	25	29	45	288	--	--
Max	336	358	358	350	351	351	354	328	312	329	288	270	360	343	353	346	314	325	337	349	357	349	358	357	--	360	--
Min	8	2	13	16	15	4	5	10	33	36	8	43	13	5	52	89	1	29	8	21	11	9	1	11	--	--	1

-- Indicates Invalid Data

SAROAD for Resolution, West_Plant
"Component, Channel: Table100, WD_10m"
Month: Aug 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	47	13	133	223	202	250	44	66	69	82	76	82	136	157	152	157	91	72	183	122	93	78	90	163	109	250	13
2	193	49	258	300	37	253	281	259	156	149	150	168	181	153	198	195	260	40	65	67	65	65	70	72	143	300	37
3	73	66	58	83	60	28	53	73	168	160	191	268	269	225	234	275	248	259	247	292	344	340	271	277	284	344	28
4	16	50	348	311	325	8	32	83	72	197	239	197	243	278	279	259	279	258	262	334	357	329	223	55	310	357	8
5	79	12	314	6	198	64	108	93	45	19	65	14	266	238	234	227	248	255	257	284	324	345	150	134	331	345	6
6	170	18	280	306	296	230	162	126	205	180	187	224	229	264	265	261	257	248	286	300	299	305	118	168	242	306	18
7	332	5	59	85	298	46	240	242	126	210	258	257	250	247	247	244	242	254	261	283	352	286	271	333	273	352	5
8	6	313	351	279	24	46	52	217	156	194	211	295	260	197	249	245	220	225	261	326	355	230	314	327	276	355	6
9	292	352	21	356	30	68	68	87	187	216	177	167	148	170	272	220	244	222	229	290	320	31	55	26	284	356	21
10	348	19	330	237	39	36	23	58	78	163	184	127	218	208	225	262	259	245	265	296	18	60	64	74	352	348	18
11	72	72	74	58	79	69	62	64	90	92	94	149	154	201	216	184	262	247	258	147	57	49	47	55	94	262	47
12	56	61	43	324	351	53	9	201	293	94	81	211	193	214	138	240	238	243	248	264	337	350	11	334	320	351	9
13	34	35	33	40	335	43	360	103	198	276	280	249	281	264	264	256	256	256	253	286	28	45	23	355	321	360	23
14	337	17	332	51	323	319	28	75	245	305	229	103	187	179	257	257	254	236	293	338	45	93	105	75	327	338	17
15	55	63	63	60	72	68	58	8	65	103	179	72	116	172	227	288	339	32	46	47	20	4	59	67	57	339	4
16	51	59	81	69	105	264	283	2	64	104	115	234	182	152	232	342	348	351	10	116	50	107	21	350	53	351	2
17	23	293	2	36	14	34	38	24	192	185	231	214	237	221	259	267	266	310	36	7	49	55	33	358	343	358	2
18	13	12	52	65	153	50	62	66	73	205	90	131	190	228	223	255	177	104	90	71	318	231	175	290	108	318	12
19	350	58	61	78	58	54	311	266	245	261	152	185	166	271	247	244	259	256	265	296	13	297	6	289	288	350	6
20	274	16	26	30	96	64	59	68	179	252	165	238	241	238	247	240	234	240	235	149	119	63	50	16	191	274	16
21	28	91	67	73	62	18	102	69	164	220	338	322	296	272	277	279	276	254	252	267	60	39	238	270	323	338	18
22	52	57	66	358	247	27	58	78	101	188	154	179	189	233	241	230	151	11	261	149	74	260	231	50	135	358	11
23	44	274	30	48	11	73	344	315	205	229	162	162	210	265	303	81	37	78	62	50	58	59	78	83	50	344	11
24	113	125	50	76	12	36	32	314	166	131	128	168	170	212	257	211	129	95	92	89	166	321	62	32	105	321	12
25	122	166	319	249	138	263	233	130	114	169	55	161	189	225	278	257	293	100	71	57	180	6	284	264	195	319	6
26	264	291	300	296	235	307	76	177	223	250	197	155	115	125	133	335	69	96	245	319	327	243	311	38	261	335	38
27	192	290	312	287	25	47	56	50	58	42	67	135	121	111	128	129	53	324	56	117	62	62	67	79	67	324	25
28	61	78	72	77	56	79	102	111	66	62	40	148	116	125	143	32	48	78	88	53	68	51	6	307	73	307	6
29	310	344	272	235	218	113	136	176	143	240	202	201	272	112	38	319	254	218	216	202	192	221	40	63	214	344	38
30	90	99	62	172	111	210	50	264	181	263	194	241	309	297	131	339	317	295	284	267	201	78	50	249	243	339	50
31	2	167	110	142	170	279	258	22	162	252	246	271	236	264	260	253	266	283	309	294	304	308	179	247	256	309	2
Avg	33	33	26	25	41	34	45	74	142	190	165	188	206	214	235	253	261	265	269	329	25	15	45	15	5	--	--
Max	350	352	351	358	351	319	360	315	293	305	338	322	309	297	303	342	348	351	309	338	357	350	314	358	--	360	--
Min	2	5	2	6	11	8	9	2	45	19	40	14	115	111	38	32	37	11	10	7	13	4	6	16	--	--	2

SAROAD for Resolution, West_Plant
"Component, Channel: Table100, WD_10m"
Month: Sep 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	12	0	47	40	24	357	2	122	161	187	223	255	240	254	253	251	257	262	254	276	307	345	307	261	288	357	0
2	341	265	316	339	34	30	46	140	177	166	204	255	186	250	256	248	245	242	314	32	99	79	54	39	293	341	30
3	40	109	49	66	25	30	351	285	210	12	136	221	190	104	26	122	351	73	66	187	282	50	344	56	52	351	12
4	356	359	65	60	35	351	322	324	216	128	84	29	73	71	165	150	146	155	170	310	66	62	62	70	65	359	29
5	60	66	69	56	59	65	65	71	66	77	89	123	153	135	124	61	129	118	51	63	75	83	71	117	84	153	51
6	344	54	49	54	45	42	26	281	38	54	101	123	145	136	29	82	81	87	56	63	54	75	213	345	61	345	26
7	138	228	133	301	286	74	35	216	74	259	170	202	122	105	131	150	167	148	105	50	38	81	56	93	121	301	35
8	130	232	224	293	41	44	58	36	73	59	18	247	246	207	216	222	242	258	232	177	182	94	90	75	179	293	18
9	93	66	77	87	43	36	54	88	126	205	195	109	225	284	319	276	275	115	9	313	69	67	136	40	71	319	9
10	150	171	260	279	322	4	194	60	91	160	156	152	176	200	193	210	227	221	231	244	0	326	356	15	211	356	0
11	313	31	75	313	37	45	110	116	142	241	266	251	253	253	227	248	249	256	258	292	327	44	34	42	297	327	31
12	57	309	303	290	282	288	298	337	225	241	168	241	245	254	270	246	248	260	273	339	55	54	69	84	282	339	54
13	58	300	280	44	52	49	36	354	35	58	101	145	70	58	9	43	23	56	70	68	69	70	56	50	49	354	9
14	44	22	276	287	28	36	22	33	41	37	92	154	191	206	228	221	227	350	240	69	71	75	65	65	46	350	22
15	58	33	260	288	352	32	39	44	37	38	52	102	111	75	18	90	37	53	69	84	48	60	74	53	51	352	18
16	47	55	66	77	13	16	41	40	42	64	81	115	113	127	50	54	58	93	78	64	57	62	80	87	65	127	13
17	63	65	74	77	66	70	49	81	96	92	63	78	120	132	147	170	115	73	94	86	73	79	84	90	87	170	49
18	112	164	36	49	49	60	61	57	81	147	178	193	218	251	260	262	243	246	262	344	297	338	48	349	354	349	36
19	360	337	317	15	4	337	294	356	184	216	216	232	233	209	223	223	246	254	266	290	42	343	255	338	283	360	4
20	306	274	32	347	309	67	351	287	71	193	91	171	206	246	253	219	240	246	257	43	27	68	68	54	316	351	27
21	61	54	55	58	32	35	54	46	64	46	90	105	148	150	164	180	160	257	269	86	54	51	129	65	81	269	32
22	59	272	313	263	325	82	117	150	41	25	217	212	220	248	249	256	266	272	253	288	294	15	30	44	286	325	15
23	33	33	42	50	64	58	52	104	217	236	66	323	169	190	255	231	240	238	288	342	58	29	334	338	9	342	29
24	255	289	327	24	297	348	60	66	93	82	82	189	204	175	253	251	251	254	277	6	24	27	302	43	327	348	6
25	58	41	356	46	316	55	30	82	116	146	166	189	208	207	201	207	203	209	193	170	177	187	108	72	148	356	30
26	127	125	126	115	133	46	263	1	147	171	207	205	203	209	213	209	218	231	231	238	239	245	252	247	201	263	1
27	236	225	237	249	166	193	216	276	290	276	211	239	234	248	252	239	233	235	260	300	5	354	266	348	252	354	5
28	272	43	35	80	36	46	47	40	33	27	30	3	29	223	197	184	218	235	266	14	1	42	114	291	24	291	1
29	6	57	41	11	24	27	34	277	210	236	209	248	222	240	232	237	253	246	261	348	344	327	241	309	288	348	6
30	329	339	3	342	342	337	27	46	164	191	241	229	245	234	221	240	235	257	279	22	358	289	316	295	294	358	3
Avg	39	18	21	17	18	34	34	41	104	132	140	191	190	201	228	213	229	230	262	7	32	43	50	36	46	--	--
Max	360	359	356	347	352	357	351	356	290	276	266	323	253	284	319	276	351	350	314	348	358	354	356	349	--	360	--
Min	6	0	3	11	4	4	2	1	33	12	18	3	29	58	9	43	23	53	9	6	0	15	30	15	--	--	0

SAROAD for Resolution, West_Plant
"Component, Channel: Table100, DeltaTemp_C"
Month: Jul 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	-0.20	-0.21	-0.05	0.02	0.07	0.25	-0.09	-0.45	-0.97	-1.48	-1.28	-1.66	-1.43	-1.60	-1.28	-1.24	-0.57	-0.36	-0.19	0.04	0.16	0.35	0.38	0.20	-0.48	0.38	-1.66
2	-0.03	-0.08	-0.13	-0.19	-0.15	-0.10	-0.35	-0.54	-0.65	-1.07	-1.18	-1.30	-1.25	-1.67	-1.58	-1.36	-0.99	-0.52	-0.29	-0.22	-0.31	-0.22	-0.16	-0.12	-0.60	-0.03	-1.67
3	-0.09	-0.08	-0.03	0.05	-0.01	-0.02	-0.14	-0.48	-1.04	-1.77	-1.72	-1.96	-1.55	-1.68	-0.99	-0.96	-0.88	-0.49	-0.23	-0.13	0.10	0.19	0.40	0.60	-0.54	0.60	-1.96
4	0.89	1.05	0.89	0.84	0.60	0.34	-0.32	-1.03	-1.56	-0.99	-1.40	-1.34	-1.29	-1.35	-1.43	-1.07	-0.94	-0.79	-0.44	-0.17	0.04	0.11	0.12	0.24	-0.37	1.05	-1.56
5	-0.05	0.31	0.27	0.06	0.03	0.05	-0.20	-0.48	-0.18	0.31	0.23	-0.06	-0.30	-0.55	-0.75	-0.62	-0.27	-0.38	-0.36	0.19	0.80	0.72	0.27	0.09	-0.04	0.80	-0.75
6	0.37	0.16	0.14	0.64	0.26	0.16	-0.16	-0.68	-0.70	-1.02	-0.99	-1.61	-1.50	-1.36	-1.74	-1.14	-0.95	-0.72	-0.42	-0.19	-0.02	-0.08	-0.08	0.33	-0.47	0.64	-1.74
7	0.25	0.39	0.89	0.84	0.90	0.66	0.01	-0.53	-0.42	-1.16	-1.45	-1.36	-1.44	-1.72	-1.14	-1.35	-1.10	-0.75	-0.48	-0.24	-0.21	-0.10	-0.16	-0.13	-0.41	0.90	-1.72
8	-0.08	0.01	0.04	-0.04	-0.02	-0.01	-0.08	-0.42	-0.96	-1.50	-1.71	-2.00	-2.18	-1.27	-1.59	-1.26	-0.94	-0.78	1.18	0.60	0.29	0.30	0.25	0.33	-0.49	1.18	-2.18
9	0.67	0.61	0.36	0.45	0.52	0.31	-0.08	-0.05	-0.35	-0.51	-1.05	-0.97	-0.87	-1.06	-1.11	-0.97	-0.81	-0.42	0.02	0.10	0.16	0.37	0.24	0.02	-0.19	0.67	-1.11
10	-0.04	-0.01	-0.05	-0.16	-0.21	-0.15	-0.31	-0.80	-0.86	-0.79	-1.23	-1.16	-1.27	-1.30	-1.28	-1.00	-0.81	-0.61	-0.33	-0.11	-0.25	-0.25	-0.19	-0.21	-0.56	-0.01	-1.30
11	-0.21	-0.14	0.08	-0.02	0.18	0.05	-0.05	-0.41	-0.56	-0.57	-0.70	-0.81	-0.79	-0.90	-0.91	-0.82	-0.53	-0.35	-0.20	0.03	0.07	0.27	0.28	0.15	-0.29	0.28	-0.91
12	0.37	0.87	0.71	0.81	0.47	0.45	0.15	-0.38	-0.84	-0.94	-0.98	-0.68	-1.00	-0.59	-0.76	-0.78	-0.89	-0.78	-0.49	-0.20	0.24	0.46	0.49	0.60	-0.15	0.87	-1.00
13	0.65	0.61	0.47	0.61	1.09	1.03	0.13	-0.69	-0.87	-0.92	-1.30	-1.31	-1.10	-1.32	-1.25	-1.01	-0.90	-0.71	-0.38	-0.14	-0.01	0.20	0.20	0.43	-0.27	1.09	-1.32
14	0.29	0.22	0.27	0.25	0.38	0.05	-0.50	-0.88	-0.87	-1.28	-1.66	-1.16	-1.22	-1.54	-1.43	-1.01	-1.10	-0.88	-0.62	-0.28	-0.19	-0.04	-0.02	0.08	-0.55	0.38	-1.66
15	0.03	0.05	0.04	0.05	0.16	0.14	-0.31	-0.75	-1.34	-1.63	-1.64	-1.35	-1.21	--	-1.05	-1.37	-0.94	-0.70	-0.32	-0.35	-0.21	0.00	-0.10	0.02	-0.56	0.16	-1.64
16	0.21	0.10	-0.03	-0.03	0.04	0.06	-0.11	-0.14	-0.38	-0.59	-0.86	-0.95	-0.73	-1.24	-0.93	-0.80	-0.79	-0.44	-0.22	-0.11	-0.09	0.02	0.18	0.00	-0.33	0.21	-1.24
17	0.05	0.08	0.10	0.55	0.37	0.18	-0.15	-0.66	-0.97	-1.42	-1.66	-2.06	-2.31	-1.90	-1.42	-0.87	-0.44	-0.40	-0.24	-0.13	-0.07	-0.05	-0.04	-0.05	-0.56	0.55	-2.31
18	-0.04	-0.05	-0.04	0.02	-0.03	-0.05	-0.08	-0.44	-1.11	-1.34	-1.61	-2.08	-1.70	-1.34	-1.76	-1.57	-1.27	-0.82	-0.42	-0.23	-0.15	0.28	0.07	0.04	-0.66	0.28	-2.08
19	0.00	0.01	-0.09	-0.07	-0.07	-0.08	-0.21	-0.47	-0.94	-1.54	-1.74	-1.91	-1.70	-1.30	-1.22	-1.49	-0.94	-0.59	-0.37	-0.39	-0.54	-0.28	-0.31	-0.31	-0.69	0.01	-1.91
20	-0.24	-0.27	-0.34	-0.25	-0.07	-0.37	-0.31	-0.55	-0.77	-1.18	-1.50	-1.31	-1.32	-0.45	-0.84	-1.06	-0.93	-0.81	-0.17	-0.05	-0.08	-0.09	-0.16	0.02	-0.55	0.02	-1.50
21	0.19	-0.02	-0.09	-0.02	-0.15	-0.04	-0.25	-0.28	-0.67	-1.27	-1.70	-0.76	-0.21	-0.41	-0.46	-0.45	-0.75	-0.54	-0.33	-0.06	0.17	0.16	0.15	0.35	-0.31	0.35	-1.70
22	0.10	0.25	0.21	0.21	0.17	0.18	-0.24	-0.41	-0.54	-0.55	-0.78	-0.78	-0.68	-0.81	-0.88	-1.35	-0.66	-0.56	-0.35	-0.16	0.13	0.24	0.44	0.40	-0.27	0.44	-1.35
23	0.70	0.34	0.57	0.64	0.41	0.64	0.08	-0.79	-0.80	-0.73	-0.87	-0.96	-1.17	-1.08	-0.99	-0.87	-0.85	-0.59	-0.31	0.00	0.20	0.90	1.42	0.80	-0.14	1.42	-1.17
24	0.51	0.54	0.53	0.30	0.78	0.66	0.27	-0.31	-0.76	-1.10	-1.42	-1.65	-1.56	-1.45	-1.15	-1.02	-0.93	-0.92	-0.70	-0.32	-0.24	0.41	0.64	0.48	-0.35	0.78	-1.65
25	0.37	0.06	0.17	0.09	0.08	-0.01	-0.27	-0.66	-0.56	-0.56	-1.08	-0.93	-0.24	-0.89	-0.46	-0.01	0.32	0.24	-0.02	0.30	0.69	0.45	0.45	0.57	-0.08	0.69	-1.08
26	0.61	0.26	0.69	0.57	0.52	0.61	0.34	-0.16	-0.33	-0.76	-0.65	-0.79	-1.29	-0.86	-0.57	-0.78	-0.65	-0.38	-0.09	0.11	0.09	0.10	0.13	0.26	-0.13	0.69	-1.29
27	0.16	0.15	0.26	0.33	0.34	0.14	0.07	-0.39	-0.77	-1.29	-1.44	-1.37	-1.17	-1.37	-1.45	-1.41	-1.32	-0.74	-0.67	-0.20	0.74	0.98	0.51	0.19	-0.40	0.98	-1.45
28	0.74	0.79	0.56	0.63	0.70	0.66	0.30	-0.27	-0.73	-1.30	-1.33	-1.64	-1.79	-1.57	-1.64	-1.13	-1.00	-0.75	-0.41	0.13	0.91	0.21	0.31	0.44	-0.30	0.91	-1.79
29	1.36	1.47	1.37	0.96	1.76	1.75	1.33	-0.56	-1.07	-0.99	-1.74	-1.17	-1.02	-1.27	-1.17	-1.03	-1.07	-0.78	-0.55	0.01	0.42	0.95	1.06	0.82	0.04	1.76	-1.74
30	0.52	1.16	1.10	2.13	1.92	1.74	1.03	-0.56	-1.12	-1.18	-0.95	-1.07	-1.20	-1.44	-1.21	-1.14	-0.88	-0.67	-0.34	-0.05	0.19	0.51	0.48	0.84	-0.01	2.13	-1.44
31	1.21	1.04	1.88	0.89	0.76	0.91	0.31	-0.26	-1.05	-1.62	-1.32	-1.32	-0.88	-1.11	-1.03	-1.02	-1.20	-0.83	-0.41	-0.15	-0.08	-0.05	-0.03	0.01	-0.22	1.88	-1.62
Avg	0.30	0.31	0.35	0.36	0.38	0.33	-0.01	-0.50	-0.80	-1.06	-1.25	-1.27	-1.21	-1.21	-1.14	-1.03	-0.84	-0.61	-0.29	-0.08	0.10	0.23	0.23	0.24	-0.35	--	--
Max	1.36	1.47	1.88	2.13	1.92	1.75	1.33	-0.05	-0.18	0.31	0.23	-0.06	-0.21	-0.41	-0.46	-0.01	0.32	0.24	1.18	0.60	0.91	0.98	1.42	0.84	--	2.13	--
Min	-0.24	-0.27	-0.34	-0.25	-0.21	-0.37	-0.50	-1.03	-1.56	-1.77	-1.74	-2.08	-2.31	-1.90	-1.76	-1.57	-1.32	-0.92	-0.70	-0.39	-0.54	-0.28	-0.31	-0.31	--	--	-2.31

-- Indicates Invalid Data

SAROAD for Resolution, West_Plant
"Component, Channel: Table100, DeltaTemp_C"
Month: Aug 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	-0.02	-0.09	-0.04	0.02	-0.02	-0.06	-0.10	-0.26	-0.88	-1.06	-1.28	-0.92	-1.01	-1.03	-0.95	-0.91	-0.75	-0.34	-0.46	-0.21	0.00	0.02	-0.05	0.04	-0.43	0.04	-1.28
2	0.06	0.11	0.04	0.46	0.45	0.13	0.00	-0.22	-0.97	-1.56	-1.74	-2.59	-2.19	-1.50	-1.13	-0.71	-0.41	-0.41	-0.32	-0.10	0.00	0.01	0.03	0.11	-0.52	0.46	-2.59
3	0.16	0.18	0.25	0.30	0.34	0.38	0.16	-0.30	-0.90	-1.10	-1.49	-1.13	-1.33	-1.40	-1.35	-1.11	-1.15	-0.71	-0.31	-0.16	0.14	0.33	0.34	0.62	-0.39	0.62	-1.49
4	0.71	0.29	0.44	0.35	0.67	0.79	0.50	0.00	-0.46	-1.07	-1.05	-1.34	-0.63	-0.69	-0.52	-0.58	-0.78	-0.53	-0.24	0.17	0.24	0.53	0.64	0.57	-0.08	0.79	-1.34
5	0.42	0.78	0.53	0.88	0.60	0.60	0.21	-0.22	-0.27	-0.36	-0.50	-0.55	-0.38	-1.00	-1.66	-1.33	-0.95	-0.64	-0.30	-0.10	0.16	0.34	0.11	-0.10	-0.16	0.88	-1.66
6	-0.19	0.00	0.03	-0.08	-0.10	-0.25	-0.21	-0.28	-0.34	-0.36	-0.47	-0.36	-0.58	-0.48	-0.54	-0.43	-0.33	-0.27	-0.20	0.01	0.13	-0.05	-0.14	-0.19	-0.24	0.13	-0.58
7	-0.10	-0.01	0.02	0.04	0.10	0.16	0.13	-0.28	-0.75	-0.78	-0.74	-0.88	-1.07	-1.13	-1.21	-1.16	-0.97	-0.67	-0.32	0.01	0.45	0.68	0.88	1.18	-0.27	1.18	-1.21
8	1.35	1.33	1.60	1.34	1.71	0.78	0.63	-0.34	-1.03	-1.18	-1.17	-1.29	-1.16	-1.70	-1.27	-1.05	-1.21	-0.91	-0.31	0.29	0.86	0.72	0.84	0.92	-0.01	1.71	-1.70
9	1.11	2.16	0.96	1.49	2.07	0.78	0.54	-0.40	-0.88	-0.92	-1.36	-2.17	-1.95	-1.63	-1.25	-1.41	-1.19	-0.84	-0.36	0.06	0.55	0.78	0.63	1.71	-0.06	2.16	-2.17
10	1.42	1.59	1.52	0.73	2.63	1.59	0.56	0.18	-0.71	-1.17	-1.30	-1.55	-1.41	-1.77	-1.55	-1.12	-0.95	-0.73	-0.36	0.06	0.92	0.44	0.21	0.22	-0.02	2.63	-1.77
11	0.20	0.12	0.13	0.11	0.11	0.10	-0.05	-0.47	-0.89	-1.35	-1.61	-1.81	-1.80	-2.22	-1.55	-1.46	-0.86	-0.75	-0.40	-0.15	-0.07	-0.01	0.03	0.08	-0.61	0.20	-2.22
12	0.10	0.15	0.11	0.01	0.05	0.07	-0.02	-0.62	-0.62	-1.01	-1.37	-1.57	-1.87	-1.90	-1.44	-1.32	-1.07	-0.71	-0.38	0.02	0.50	0.96	1.12	1.87	-0.37	1.87	-1.90
13	2.38	2.90	1.98	0.91	1.09	1.59	0.95	-0.31	-0.87	-0.74	-0.96	-1.07	-1.21	-1.34	-1.19	-0.99	-0.89	-0.57	-0.22	0.02	0.62	1.75	1.83	1.73	0.31	2.90	-1.34
14	1.31	1.71	0.97	0.93	1.26	1.14	0.50	-0.07	-0.30	-0.51	-0.94	-1.05	-1.50	-1.70	-0.77	-0.71	-0.44	-0.41	-0.08	0.51	0.69	0.40	-0.02	-0.04	0.04	1.71	-1.70
15	0.02	0.04	0.03	0.05	0.05	0.09	-0.02	-0.45	-1.04	-1.46	-1.42	-1.73	-1.62	-1.37	-1.04	-1.15	-0.86	-0.69	-0.31	-0.05	0.04	0.33	0.36	0.14	-0.50	0.36	-1.73
16	0.21	0.32	0.22	0.12	0.20	0.28	0.00	-0.28	-0.82	-1.24	-1.61	-1.40	-1.67	-1.61	-1.32	0.01	0.43	0.10	0.24	0.32	0.78	0.57	0.99	1.28	-0.16	1.28	-1.67
17	1.26	0.87	0.90	1.35	1.58	1.86	0.84	0.13	-0.76	-0.93	-0.75	-1.22	-1.41	-1.52	-1.23	-1.01	-0.86	-0.77	0.12	0.13	0.06	0.46	0.73	0.54	0.01	1.86	-1.52
18	0.46	0.45	0.49	0.44	0.60	0.49	0.32	0.04	-0.22	-0.78	-1.24	-1.68	-1.46	-1.38	-1.69	-1.01	-0.91	-0.39	-0.12	0.05	0.20	0.09	-0.03	0.07	-0.30	0.60	-1.69
19	0.34	0.24	0.19	0.19	0.56	0.26	0.16	-0.23	-0.41	-0.58	-1.52	-1.33	-1.53	-1.18	-1.19	-1.06	-0.76	-0.50	-0.28	0.15	0.60	0.72	1.03	0.77	-0.22	1.03	-1.53
20	0.69	1.04	1.10	1.24	0.43	0.12	0.17	-0.29	-0.94	-1.00	-1.45	-1.22	-1.23	-1.56	-1.31	-1.22	-1.16	-0.69	-0.38	-0.40	-0.25	-0.22	-0.02	0.04	-0.36	1.24	-1.56
21	0.03	0.02	-0.04	-0.11	-0.03	-0.01	-0.14	-0.16	-0.48	-0.45	-0.32	-0.70	-0.89	-0.60	-1.00	-1.01	-0.92	-0.58	-0.27	-0.10	0.13	0.40	0.28	0.27	-0.28	0.40	-1.01
22	0.09	0.22	0.25	0.12	0.36	0.33	0.04	-0.75	-0.96	-1.19	-1.54	-1.72	-1.94	-1.44	-1.07	-1.49	-0.98	0.28	-0.09	-0.15	0.36	0.13	0.03	0.39	-0.45	0.39	-1.94
23	0.38	0.28	0.46	0.38	0.27	0.35	0.20	-0.43	-0.88	-0.87	-1.65	-1.81	-1.51	-1.17	-1.04	-1.09	0.58	-0.01	0.41	0.33	0.46	0.68	0.62	0.37	-0.20	0.68	-1.81
24	0.14	0.08	0.06	0.09	0.24	0.18	0.06	-0.22	-1.35	-1.36	-1.67	-1.93	-1.75	-1.23	-1.05	-1.15	-0.94	-0.51	-0.30	-0.17	-0.22	-0.04	-0.06	0.03	-0.55	0.24	-1.93
25	0.03	-0.03	-0.02	0.06	0.30	0.12	0.02	-0.10	-0.33	-0.76	-1.08	-1.00	-1.08	-0.95	-1.01	-0.98	-0.87	-0.20	0.36	0.12	-0.04	0.06	0.03	-0.04	-0.31	0.36	-1.08
26	0.00	0.02	0.11	0.15	0.15	0.19	0.18	-0.44	-0.42	-0.34	-0.81	-1.37	-1.66	-1.61	-1.33	-0.05	-0.22	-0.23	-0.06	0.13	0.16	0.05	0.02	0.04	-0.31	0.19	-1.66
27	0.36	0.40	0.43	0.77	0.56	0.37	0.32	-0.09	-0.53	-0.81	-1.15	-1.42	-1.50	-1.63	-1.53	-1.17	-0.57	-0.32	0.04	0.33	0.80	0.43	0.43	0.28	-0.22	0.80	-1.63
28	0.25	0.27	0.32	0.36	0.27	0.15	0.17	-0.41	-0.73	-1.09	-0.81	-1.15	-1.52	-1.90	-2.02	-1.06	-0.62	-0.39	-0.16	-0.07	-0.06	-0.02	-0.08	-0.18	-0.44	0.36	-2.02
29	-0.14	-0.08	0.13	0.07	0.13	0.05	-0.04	-0.44	-0.99	-0.54	-0.75	-0.79	-0.49	-0.55	-0.86	-0.95	-0.67	-0.63	-0.44	-0.26	-0.15	-0.12	-0.08	-0.05	-0.36	0.13	-0.99
30	-0.17	-0.21	-0.05	-0.29	-0.18	-0.14	-0.09	-0.37	-0.87	-0.76	-1.46	-1.28	-0.96	-0.59	-0.94	-0.75	-0.47	-0.30	-0.30	-0.47	-0.29	-0.11	0.17	0.00	-0.45	0.17	-1.46
31	-0.01	0.15	0.10	0.04	0.07	-0.03	-0.06	-0.24	-0.65	-0.57	-0.77	-0.99	-1.19	-1.27	-1.27	-1.25	-1.04	-0.75	-0.46	-0.20	0.09	0.09	0.06	0.14	-0.42	0.15	-1.27
Avg	0.41	0.49	0.43	0.40	0.53	0.40	0.19	-0.27	-0.72	-0.90	-1.16	-1.32	-1.34	-1.32	-1.20	-0.99	-0.74	-0.49	-0.20	0.00	0.25	0.34	0.35	0.41	-0.27	--	--
Max	2.38	2.90	1.98	1.49	2.63	1.86	0.95	0.18	-0.22	-0.34	-0.32	-0.36	-0.38	-0.48	-0.52	0.01	0.58	0.28	0.41	0.51	0.92	1.75	1.83	1.87	--	2.90	--
Min	-0.19	-0.21	-0.05	-0.29	-0.18	-0.25	-0.21	-0.75	-1.35	-1.56	-1.74	-2.59	-2.19	-2.22	-2.02	-1.49	-1.21	-0.91	-0.46	-0.47	-0.29	-0.22	-0.14	-0.19	--	--	-2.59

SAROAD for Resolution, West_Plant
"Component, Channel: Table100, DeltaTemp_C"
Month: Sep 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	0.67	0.58	0.67	0.73	0.56	0.67	0.49	-0.83	-0.94	-1.11	-1.34	-1.23	-1.27	-1.35	-1.17	-1.00	-0.99	-0.68	-0.35	-0.14	0.00	0.53	0.42	0.49	-0.28	0.73	-1.35
2	0.97	0.51	0.65	0.61	0.70	0.80	0.41	-0.59	-1.19	-1.30	-1.38	-1.12	-1.40	-1.06	-0.87	-0.74	-0.73	-0.56	-0.28	0.10	0.22	0.27	0.29	0.37	-0.22	0.97	-1.40
3	1.01	0.44	0.64	0.30	0.36	0.27	0.46	-0.23	-0.96	-1.00	-1.35	-1.24	-1.84	-1.94	-0.14	-0.19	0.07	0.02	0.15	0.32	0.27	0.12	0.12	0.45	-0.16	1.01	-1.94
4	0.64	0.33	0.25	0.40	0.88	0.77	0.75	-0.15	-0.65	-1.32	-1.52	-1.60	-1.60	-1.66	-1.90	-1.78	-1.23	-0.77	-0.17	0.10	0.12	0.15	0.20	0.21	-0.40	0.88	-1.90
5	0.21	0.27	0.32	0.23	0.33	0.41	0.24	-0.40	-0.93	-1.33	-1.58	-2.04	-2.18	-1.93	-1.67	-1.37	-0.64	-0.27	-0.11	0.02	0.09	0.09	0.10	0.18	-0.50	0.41	-2.18
6	0.36	0.20	0.26	0.28	0.20	0.18	0.11	-0.17	-0.71	-1.10	-1.68	-1.95	-2.01	-1.77	-0.59	1.39	0.76	0.22	0.31	0.54	0.89	0.86	0.46	0.24	-0.12	1.39	-2.01
7	0.40	0.23	0.08	0.16	0.31	-0.03	0.13	-0.20	-0.24	-0.53	-0.97	-0.67	-0.86	-1.28	-0.94	-1.38	-0.96	-0.84	-0.36	-0.03	-0.01	-0.06	-0.01	0.05	-0.33	0.40	-1.38
8	0.02	-0.06	-0.06	-0.03	-0.04	0.02	-0.01	-0.15	-0.19	-0.28	-0.44	-0.64	-0.39	-0.74	-0.79	-0.92	-0.67	-0.37	-0.31	-0.23	0.03	-0.03	-0.05	0.02	-0.26	0.03	-0.92
9	-0.05	-0.05	-0.05	-0.03	-0.03	0.05	0.35	0.02	0.00	-0.21	-0.34	-0.30	-0.38	-0.36	-0.42	-0.47	-0.45	-0.37	-0.02	0.03	0.25	0.16	0.25	0.26	-0.09	0.35	-0.47
10	-0.08	-0.08	0.03	0.12	0.22	0.29	0.06	-0.52	-0.99	-1.21	-1.57	-1.94	-2.09	-1.89	-1.71	-1.39	-0.88	-0.51	-0.31	-0.13	0.09	0.14	0.35	0.41	-0.57	0.41	-2.09
11	0.65	0.80	0.42	0.53	1.08	0.69	0.35	-0.71	-0.79	-0.83	-0.80	-0.99	-1.01	-1.05	-1.51	-0.97	-0.93	-0.50	-0.21	-0.02	0.08	0.47	0.35	1.02	-0.16	1.08	-1.51
12	0.60	0.83	1.05	0.68	0.78	0.90	0.73	-0.19	-0.54	-0.64	-1.20	-0.98	-0.99	-1.26	-1.03	-1.11	-0.77	-0.45	-0.14	0.20	0.70	0.57	0.09	0.11	-0.09	1.05	-1.26
13	0.07	0.04	0.15	0.06	0.09	0.10	0.11	-0.37	-0.85	-1.32	-1.57	-2.03	-1.27	-1.90	-0.23	0.19	-0.40	0.17	0.64	0.72	0.84	0.73	0.51	0.35	-0.22	0.84	-2.03
14	0.27	0.26	0.29	0.39	0.16	0.18	0.15	-0.03	-0.40	-0.90	-1.43	-1.65	-1.52	-1.47	-0.96	-1.26	-0.95	-0.69	-0.21	0.08	0.29	0.25	0.26	0.26	-0.36	0.39	-1.65
15	0.17	0.13	0.04	0.05	0.07	0.09	0.10	-0.23	-0.62	-1.02	-1.36	-1.38	-1.89	-1.65	-1.38	-1.39	-1.15	-0.49	-0.06	0.10	0.17	0.25	0.36	0.25	-0.45	0.36	-1.89
16	0.11	0.11	0.09	0.10	0.06	0.15	0.10	-0.25	-0.77	-1.15	-1.44	-1.79	-1.81	-1.83	-1.38	-1.32	-0.84	-0.58	-0.20	-0.03	0.00	0.02	0.04	0.03	-0.53	0.15	-1.83
17	0.03	0.03	0.05	0.04	0.02	0.04	0.05	-0.33	-0.51	-1.03	-1.23	-1.60	-1.76	-2.05	-1.98	-1.81	-0.74	-0.37	-0.01	0.14	0.05	0.10	0.03	0.04	-0.53	0.14	-2.05
18	0.09	0.12	1.26	0.57	0.56	0.46	0.46	-0.26	-1.03	-1.27	-1.53	-1.94	-1.69	-1.26	-0.94	-0.86	-0.76	-0.34	0.04	0.53	0.70	1.01	1.46	1.70	-0.12	1.70	-1.94
19	2.00	0.94	1.51	1.73	0.97	1.36	1.36	0.19	-0.73	-0.57	-1.19	-1.00	-1.37	-1.86	-1.46	-1.24	-0.75	-0.35	-0.05	0.17	1.19	1.17	0.83	1.43	0.18	2.00	-1.86
20	1.16	1.18	1.06	1.26	1.17	0.75	0.70	0.06	-0.61	-0.89	-1.29	-1.98	-1.75	-0.87	-0.99	-1.31	-0.73	-0.36	-0.04	0.53	0.84	0.42	0.02	0.00	-0.07	1.26	-1.98
21	0.04	0.04	0.05	0.05	0.01	0.01	-0.01	-0.26	-0.84	-1.32	-1.74	-2.02	-2.37	-1.70	-1.52	-1.00	-0.71	-0.50	-0.13	-0.11	0.02	0.10	0.10	0.45	-0.56	0.45	-2.37
22	0.92	0.52	0.41	0.15	0.72	0.35	0.34	-0.13	0.07	-0.14	-0.57	-1.04	-1.30	-0.78	-0.98	-0.88	-0.71	-0.39	-0.12	0.18	0.30	0.88	1.24	1.32	0.01	1.32	-1.30
23	1.74	1.48	0.69	0.79	0.65	0.48	0.59	-0.23	-0.59	-0.73	-1.42	-1.17	-2.05	-1.63	-1.05	-1.01	-0.78	-0.45	-0.03	0.26	0.54	1.04	0.95	1.19	-0.03	1.74	-2.05
24	1.73	1.57	1.45	1.85	1.03	1.47	0.54	-0.21	-0.83	-1.30	-1.71	-1.55	-1.41	-1.60	-1.22	-0.85	-0.65	-0.35	0.03	1.09	1.36	1.37	1.19	1.78	0.20	1.85	-1.71
25	1.92	1.74	1.53	1.29	1.38	1.43	1.83	-0.12	-1.11	-1.74	-2.07	-2.10	-2.03	-2.09	-2.13	-1.58	-1.29	-0.49	0.09	0.26	0.29	0.20	0.53	0.53	-0.15	1.92	-2.13
26	0.37	0.40	0.45	0.56	0.76	1.16	1.02	0.20	-1.17	-1.73	-1.82	-1.94	-2.08	-1.69	-1.54	-1.31	-0.77	-0.37	-0.11	0.01	-0.05	-0.09	-0.13	-0.10	-0.42	1.16	-2.08
27	-0.17	-0.21	-0.17	-0.17	-0.10	-0.10	-0.16	-0.27	-0.45	-0.81	-1.30	-0.95	-1.28	-1.09	-0.96	-1.00	-0.93	-0.50	-0.06	0.21	1.03	1.34	0.75	0.95	-0.27	1.34	-1.30
28	0.66	0.54	0.35	0.49	0.33	0.30	0.30	-0.21	-0.83	-1.23	-1.57	-1.34	-1.65	-1.19	-1.34	-1.36	-1.15	-0.44	-0.01	0.77	1.45	1.29	0.44	0.76	-0.19	1.45	-1.65
29	1.24	1.46	1.14	1.11	1.68	0.87	0.54	0.25	-0.54	-0.59	-1.14	-0.97	-1.52	-1.17	-1.33	-1.16	-0.74	-0.38	-0.07	0.37	0.88	1.13	0.99	1.19	0.14	1.68	-1.52
30	1.44	1.32	1.84	1.58	1.40	1.61	1.64	0.36	-0.78	-0.88	-0.88	-1.18	-1.16	-1.04	-1.44	-0.91	-0.77	-0.28	0.09	0.83	1.32	1.04	1.53	1.76	0.35	1.84	-1.44
Avg	0.64	0.52	0.55	0.53	0.54	0.52	0.46	-0.20	-0.69	-0.98	-1.31	-1.41	-1.53	-1.44	-1.19	-1.00	-0.74	-0.41	-0.07	0.23	0.47	0.52	0.46	0.59	-0.21	--	--
Max	2.00	1.74	1.84	1.85	1.68	1.61	1.83	0.36	0.07	-0.14	-0.34	-0.30	-0.38	-0.36	-0.14	1.39	0.76	0.22	0.64	1.09	1.45	1.37	1.53	1.78	--	2.00	--
Min	-0.17	-0.21	-0.17	-0.17	-0.10	-0.10	-0.16	-0.83	-1.19	-1.74	-2.07	-2.10	-2.37	-2.09	-2.13	-1.81	-1.29	-0.84	-0.36	-0.23	-0.05	-0.09	-0.13	-0.10	--	--	-2.37

SAROAD for Resolution, West_Plant
"Component, Channel: Table100, Temp_2m_C"
Month: Jul 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	29.3	29.2	29.4	29.6	29.5	28.4	29.2	30.9	33.7	35.5	36.2	37.5	38.3	39.2	39.3	39.2	37.9	36.8	36.8	36.3	35.2	34.7	33.5	33.8	34.2	39.3	28.4
2	32.9	32.6	30.1	27.1	26.0	26.1	26.1	27.3	28.9	30.7	32.2	33.4	34.5	35.5	36.3	36.3	35.8	34.7	34.2	33.8	29.5	28.2	26.9	26.6	31.1	36.3	26.0
3	26.8	26.6	27.0	28.1	26.9	26.4	27.0	28.7	31.2	33.2	34.2	35.5	36.1	37.5	37.2	37.3	37.7	36.9	36.2	35.6	34.9	34.8	33.8	32.2	32.6	37.7	26.4
4	31.9	31.0	30.6	30.1	29.7	29.4	28.8	30.6	31.7	31.8	32.9	33.5	34.9	36.0	36.7	36.4	36.4	36.4	35.7	34.9	34.2	34.1	33.4	32.4	33.1	36.7	28.8
5	31.7	30.7	30.3	30.1	29.7	29.2	29.5	29.9	29.5	26.9	27.2	28.4	29.9	30.9	33.3	34.2	33.3	33.7	32.4	31.2	30.0	29.5	29.7	29.7	30.4	34.2	26.9
6	28.8	28.8	27.5	27.2	28.0	27.5	27.0	29.1	30.5	32.4	33.6	35.4	36.4	37.0	37.8	37.3	37.2	37.0	36.4	35.2	34.6	34.2	30.8	28.5	32.4	37.8	27.0
7	28.5	30.0	28.7	28.4	27.9	28.4	28.4	30.2	31.9	34.2	36.2	37.4	38.6	39.5	39.4	39.8	39.8	39.0	38.2	37.1	35.8	35.2	33.2	31.5	34.1	39.8	27.9
8	31.6	32.3	32.0	31.1	29.9	29.7	30.1	31.2	33.1	34.7	35.9	37.4	39.3	38.7	39.4	39.7	39.4	37.7	26.4	28.1	28.4	29.9	30.6	30.5	33.2	39.7	26.4
9	29.5	29.9	28.8	28.7	29.3	28.3	27.5	27.6	28.2	29.2	30.9	32.4	33.0	33.6	34.1	34.4	34.6	33.9	32.8	32.6	32.4	31.9	31.0	30.3	31.0	34.6	27.5
10	29.8	29.2	27.7	25.4	24.5	24.3	24.7	26.1	27.5	28.6	31.0	32.1	33.4	34.0	34.4	34.3	34.3	33.8	33.2	32.4	31.1	29.8	29.2	28.7	30.0	34.4	24.3
11	28.4	25.3	22.5	22.5	23.3	23.6	24.4	24.1	24.9	25.7	26.7	28.2	28.8	29.8	30.9	31.5	30.6	30.0	29.6	28.9	28.4	28.0	27.7	27.1	27.1	31.5	22.5
12	26.3	26.2	26.1	25.6	25.2	24.9	25.7	27.0	28.1	29.1	29.4	27.8	29.4	24.2	25.7	27.9	31.4	30.6	29.4	28.5	27.6	27.0	26.7	26.4	27.3	31.4	24.2
13	26.0	26.5	26.2	26.0	24.9	24.9	25.9	26.9	28.3	29.3	31.5	32.8	33.6	34.8	35.6	35.3	35.6	35.3	34.4	33.8	33.1	32.4	32.0	31.3	30.7	35.6	24.9
14	30.6	30.0	29.8	28.7	28.7	27.8	28.8	30.2	31.2	32.7	34.4	34.9	35.8	36.8	37.2	36.8	37.3	37.1	35.6	33.3	33.1	32.4	31.5	31.2	32.8	37.3	27.8
15	30.8	29.8	29.7	29.2	28.5	28.1	28.8	30.0	31.8	32.7	33.9	34.7	35.6	--	34.5	36.1	36.4	36.5	34.1	31.8	31.0	30.7	29.8	24.7	31.7	36.5	24.7
16	23.5	23.9	23.6	23.5	23.6	24.4	24.5	24.9	25.5	26.1	27.1	27.2	27.0	29.1	29.8	29.9	30.1	29.6	28.9	28.2	27.2	27.1	25.8	25.4	26.5	30.1	23.5
17	25.2	25.0	25.4	24.5	24.7	25.5	26.6	28.2	29.6	30.7	32.1	33.5	34.5	34.5	34.8	34.3	33.7	32.7	32.6	31.6	29.6	29.2	29.5	28.9	29.9	34.8	24.5
18	28.2	27.3	26.9	26.7	26.0	25.9	25.9	27.0	28.6	30.3	32.0	33.6	33.6	33.7	35.1	34.9	34.9	34.2	33.1	32.1	31.1	26.5	26.5	27.9	30.1	35.1	25.9
19	27.7	27.4	26.8	26.5	26.4	26.2	26.2	26.8	28.1	30.2	31.2	32.6	32.8	33.1	34.0	34.9	34.4	34.0	33.5	31.6	28.5	27.4	26.9	26.4	29.7	34.9	26.2
20	26.3	25.0	24.9	25.0	25.3	24.7	24.7	25.9	26.7	27.9	29.7	31.1	31.8	28.7	29.7	32.0	33.0	33.3	23.6	21.4	22.4	22.6	23.2	23.4	26.8	33.3	21.4
21	23.9	22.8	23.3	23.7	23.1	23.0	23.2	23.8	24.9	26.7	28.1	25.7	21.3	23.0	23.8	25.0	25.9	26.5	26.4	25.7	25.1	24.6	24.1	24.2	24.5	28.1	21.3
22	23.6	23.7	23.2	22.8	22.1	22.2	22.5	23.8	25.3	25.8	27.1	28.2	28.7	29.4	30.5	26.8	26.8	27.2	26.9	26.5	26.0	25.5	25.2	24.8	25.6	30.5	22.1
23	24.7	24.4	24.0	23.7	23.6	23.1	23.6	25.6	27.0	28.0	29.3	30.3	31.4	31.9	32.3	32.7	33.1	32.8	32.3	31.3	30.4	29.0	28.3	28.2	28.4	33.1	23.1
24	27.7	27.5	27.3	26.5	26.2	25.8	25.8	26.8	28.6	30.2	31.8	32.5	33.5	34.0	34.2	34.3	33.1	32.4	32.5	32.0	31.1	28.4	27.4	27.7	29.9	34.3	25.8
25	28.0	27.4	27.0	26.4	26.4	25.7	25.7	27.3	28.3	28.9	30.3	30.7	28.6	31.8	31.2	25.4	25.6	26.5	26.2	26.4	26.4	26.4	26.2	25.7	27.4	31.8	25.4
26	25.7	25.5	25.4	25.5	25.0	24.9	25.6	26.1	25.2	27.2	28.9	30.0	31.8	30.4	30.2	30.5	31.2	31.1	30.8	29.3	28.5	28.4	27.9	27.5	28.0	31.8	24.9
27	27.2	26.1	25.5	25.4	25.9	26.6	26.5	27.7	28.9	30.4	31.1	32.1	32.8	33.6	34.4	34.5	32.6	32.2	32.7	31.7	30.5	30.1	29.0	29.0	29.9	34.5	25.4
28	25.7	26.7	27.5	27.0	25.9	25.8	25.9	26.7	28.8	30.9	31.9	32.9	34.4	35.0	35.7	35.5	35.5	35.3	34.6	33.5	32.2	31.8	30.9	30.2	30.8	35.7	25.7
29	28.5	27.9	27.5	27.2	26.1	25.5	25.7	28.2	29.8	30.9	32.6	32.8	33.4	34.4	34.6	35.0	35.3	35.0	34.5	33.1	31.7	30.0	29.9	29.7	30.8	35.3	25.5
30	28.2	28.6	27.1	26.3	26.3	25.6	25.9	29.1	30.9	32.1	33.2	34.3	35.4	36.6	36.7	37.1	36.7	36.3	35.5	34.1	33.1	32.2	31.9	30.4	31.8	37.1	25.6
31	30.1	28.9	28.3	28.5	28.9	29.0	29.0	29.3	31.3	33.3	33.8	34.4	34.6	36.1	36.7	37.0	36.7	35.2	34.8	33.0	32.3	31.9	31.5	30.9	32.3	37.0	28.3
Avg	28.0	27.6	27.1	26.7	26.4	26.2	26.4	27.6	29.0	30.2	31.5	32.4	33.0	33.4	34.1	34.1	34.1	33.7	32.4	31.4	30.5	29.8	29.2	28.6	30.1	--	--
Max	32.9	32.6	32.0	31.1	29.9	29.7	30.1	31.2	33.7	35.5	36.2	37.5	39.3	39.5	39.4	39.8	39.8	39.0	38.2	37.1	35.8	35.2	33.8	33.8	--	39.8	--
Min	23.5	22.8	22.5	22.5	22.1	22.2	22.5	23.8	24.9	25.7	26.7	25.7	21.3	23.0	23.8	25.0	25.6	26.5	23.6	21.4	22.4	22.6	23.2	23.4	--	--	21.3

-- Indicates Invalid Data

SAROAD for Resolution, West_Plant
"Component, Channel: Table100, Temp_2m_C"
Month: Aug 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	31.0	29.9	29.6	28.8	28.6	28.4	28.5	29.1	30.6	31.5	33.0	33.2	33.2	32.1	31.2	31.1	31.6	31.1	30.7	30.0	30.3	30.3	30.4	30.1	30.6	33.2	28.4
2	29.1	29.0	28.2	27.4	27.2	26.9	27.2	27.0	29.4	32.4	33.3	34.3	34.2	32.7	32.7	32.3	31.9	31.4	29.5	29.5	29.6	29.1	29.0	28.2	30.1	34.3	26.9
3	27.8	27.2	26.9	26.9	27.0	26.3	26.4	27.6	29.4	31.5	33.2	33.9	34.9	35.5	36.2	36.2	36.3	35.7	34.5	33.6	32.8	32.4	31.0	30.6	31.4	36.3	26.3
4	30.3	30.3	29.6	29.2	28.6	27.7	28.0	28.8	29.9	32.0	32.5	33.1	32.3	32.5	32.5	33.1	34.1	34.0	33.3	32.3	32.2	30.4	30.5	31.0	31.2	34.1	27.7
5	28.6	29.2	27.9	27.9	27.4	27.3	27.5	25.7	24.4	23.7	24.8	27.5	28.9	31.1	32.6	32.4	32.2	32.2	31.4	30.6	29.9	29.2	28.2	27.6	28.7	32.6	23.7
6	26.7	25.1	24.8	24.5	24.4	23.3	21.6	20.8	21.3	21.1	21.0	21.3	22.2	23.1	24.7	25.4	25.6	25.4	24.9	24.0	23.3	22.7	22.6	22.5	23.4	26.7	20.8
7	22.1	22.3	22.2	21.9	21.5	21.5	21.6	23.0	25.0	26.1	27.5	29.0	29.9	30.7	31.6	32.2	32.0	31.8	31.2	30.1	29.3	27.9	27.2	26.2	26.8	32.2	21.5
8	26.4	25.9	25.3	24.9	24.4	25.5	25.9	26.7	28.9	31.0	32.5	33.4	34.0	34.9	34.8	35.1	35.2	34.9	33.6	32.1	31.3	29.9	28.5	27.8	30.1	35.2	24.4
9	27.2	26.7	26.8	26.2	25.3	26.5	27.0	28.5	29.8	31.7	34.3	36.5	36.6	36.7	36.5	37.3	36.9	36.5	35.4	34.0	32.8	31.1	29.9	28.8	31.6	37.3	25.3
10	28.4	27.8	27.5	26.2	25.2	25.2	25.4	27.2	29.8	31.7	33.0	34.1	34.8	35.8	36.1	35.8	35.5	35.0	34.1	33.0	31.4	31.6	30.2	29.0	31.0	36.1	25.2
11	28.6	28.2	27.7	27.4	27.1	26.8	26.9	27.9	29.2	31.1	32.4	33.7	34.6	36.0	35.9	36.0	35.5	35.6	34.5	33.0	31.1	30.5	29.7	29.3	31.2	36.0	26.8
12	29.2	28.9	28.7	27.7	27.5	27.5	27.5	28.5	30.2	32.4	34.2	35.4	36.5	37.3	36.6	37.5	37.1	36.5	35.9	34.7	33.2	31.0	30.3	29.1	32.2	37.5	27.5
13	28.4	27.5	27.7	27.7	26.5	26.4	26.5	27.8	30.7	31.6	33.1	34.5	35.5	36.4	36.7	36.9	37.1	36.3	35.1	34.0	32.4	30.3	29.9	29.6	31.6	37.1	26.4
14	28.9	28.7	28.3	29.0	27.7	27.8	28.8	28.8	29.7	29.9	31.2	33.3	36.1	37.5	37.0	37.2	37.0	36.9	35.9	34.7	34.0	33.5	31.7	30.5	32.3	37.5	27.7
15	29.9	29.3	28.9	28.2	28.3	28.2	28.4	29.2	30.7	33.0	34.3	35.7	36.6	37.0	37.6	38.0	37.7	34.9	33.6	33.9	33.4	32.5	32.0	31.6	32.6	38.0	28.2
16	31.3	30.8	31.0	30.9	31.1	30.3	30.6	31.9	33.5	35.4	36.8	37.4	38.2	38.6	39.2	35.3	34.5	36.5	34.6	31.5	31.7	31.2	29.6	29.8	33.4	39.2	29.6
17	29.5	29.1	29.1	28.2	27.9	27.3	27.4	28.8	31.6	33.0	34.3	36.5	37.8	38.9	39.1	39.2	39.1	38.0	32.1	31.6	30.7	27.6	26.6	27.2	32.1	39.2	26.6
18	27.3	28.5	28.9	28.4	27.3	28.4	28.7	28.7	29.9	32.3	34.8	36.8	37.4	38.3	39.3	38.2	36.7	33.5	33.4	32.7	32.1	31.0	30.2	30.0	32.2	39.3	27.3
19	29.7	29.6	29.8	29.6	29.4	29.5	28.9	29.0	30.1	31.1	33.3	34.7	36.6	37.1	37.8	37.6	36.8	36.6	36.0	34.9	33.7	32.6	31.9	31.7	32.8	37.8	28.9
20	30.7	30.5	29.9	29.7	30.2	29.3	28.9	29.6	31.4	32.5	34.1	35.4	36.6	37.9	38.3	38.3	38.2	37.6	36.2	31.8	30.7	30.2	28.4	30.4	32.8	38.3	28.4
21	29.8	28.6	28.4	27.7	27.1	27.0	27.0	28.0	28.6	28.4	28.9	29.6	30.7	31.1	32.7	33.3	33.3	32.9	32.2	31.0	30.3	29.6	28.9	28.4	29.7	33.3	27.0
22	29.4	29.0	28.7	28.3	27.3	26.5	27.1	29.2	30.5	31.9	33.5	34.8	36.0	35.8	35.6	36.4	34.2	29.3	29.5	27.9	28.7	28.4	27.7	26.8	30.5	36.4	26.5
23	26.5	25.7	25.4	25.9	25.9	26.7	25.6	27.1	28.6	30.1	32.6	34.2	35.5	35.1	34.4	31.5	25.5	29.0	29.2	28.4	28.4	28.8	28.8	27.2	29.0	35.5	25.4
24	26.6	25.2	24.6	24.2	24.7	25.0	24.9	25.4	27.5	28.5	29.4	30.4	31.2	31.5	32.0	32.2	31.2	30.0	29.4	29.1	28.6	26.3	26.3	26.5	28.0	32.2	24.2
25	25.7	25.3	25.1	24.7	23.5	23.4	23.9	24.5	25.5	26.7	28.1	28.8	29.4	30.2	31.2	31.8	32.2	30.6	25.0	24.9	24.9	25.5	25.0	24.6	26.7	32.2	23.4
26	24.6	24.4	24.7	25.2	24.6	24.0	23.8	24.9	25.7	27.0	29.3	32.4	34.0	34.9	35.1	26.6	27.8	30.0	29.3	27.7	27.2	25.9	24.4	23.8	27.4	35.1	23.8
27	23.8	23.4	24.0	24.7	27.8	28.7	28.6	29.6	30.9	32.4	33.8	35.0	35.7	36.5	36.8	36.6	35.8	34.1	34.1	32.7	31.5	32.0	32.0	31.2	31.3	36.8	23.4
28	30.6	29.8	29.1	28.6	28.9	28.8	28.2	29.9	30.9	32.2	32.3	33.3	34.3	35.7	36.3	33.5	33.5	32.9	32.5	31.3	30.4	29.9	29.1	26.6	31.2	36.3	26.6
29	25.7	25.3	24.8	24.9	25.1	25.5	25.6	26.5	27.8	27.3	27.8	28.2	27.7	27.3	28.5	30.2	30.5	30.1	29.0	28.0	27.7	27.3	27.0	25.9	27.2	30.5	24.8
30	25.8	25.4	24.8	24.4	24.5	24.3	24.6	25.4	26.8	27.6	30.0	31.0	30.9	30.0	29.8	29.5	29.5	29.6	27.6	23.4	23.2	23.2	24.1	23.6	26.6	31.0	23.2
31	24.4	24.5	24.7	24.4	24.6	23.7	23.5	24.4	25.6	26.8	28.1	29.3	31.1	31.8	32.3	33.1	33.2	32.8	31.4	30.1	29.4	29.1	27.5	27.7	28.1	33.2	23.5
Avg	27.9	27.5	27.2	26.9	26.7	26.6	26.6	27.4	28.8	30.1	31.5	32.8	33.7	34.2	34.6	34.2	33.8	33.3	32.1	30.9	30.2	29.4	28.7	28.2	30.1	--	--
Max	31.3	30.8	31.0	30.9	31.1	30.3	30.6	31.9	33.5	35.4	36.8	37.4	38.2	38.9	39.3	39.2	39.1	38.0	36.2	34.9	34.0	33.5	32.0	31.7	--	39.3	--
Min	22.1	22.3	22.2	21.9	21.5	21.5	21.6	20.8	21.3	21.1	21.0	21.3	22.2	23.1	24.7	25.4	25.5	25.4	24.9	23.4	23.2	22.7	22.6	22.5	--	--	20.8

SAROAD for Resolution, West_Plant
"Component, Channel: Table100, Temp_2m_C"
Month: Sep 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	27.1	26.8	26.1	26.2	26.3	25.5	25.5	27.3	29.7	31.1	32.6	33.3	33.9	34.6	34.7	35.1	34.8	34.3	33.4	32.4	31.9	30.7	30.3	29.5	30.5	35.1	25.5
2	29.0	28.7	28.3	28.1	27.7	27.2	27.8	29.0	30.1	30.7	31.4	32.3	33.7	34.5	34.5	33.7	32.8	33.0	32.9	31.9	30.6	30.2	29.7	28.5	30.7	34.5	27.2
3	28.4	28.5	28.1	27.9	28.3	28.9	28.0	29.6	32.1	33.3	35.2	36.2	37.8	36.6	32.2	31.7	30.5	30.7	31.2	31.1	29.8	30.7	29.2	28.4	31.0	37.8	27.9
4	27.6	27.3	27.5	27.7	27.0	26.9	27.0	28.2	30.6	32.9	34.9	36.2	37.0	37.7	38.5	38.7	38.1	37.4	36.0	34.9	34.0	33.6	33.5	33.1	32.8	38.7	26.9
5	32.8	32.6	31.8	30.7	30.1	30.0	30.0	31.0	32.7	34.3	35.7	37.1	38.0	37.9	37.9	37.5	36.0	35.4	35.0	34.6	34.3	33.9	33.5	32.6	34.0	38.0	30.0
6	31.4	31.7	31.4	31.0	30.9	30.6	30.6	31.6	33.3	34.4	36.0	36.9	37.6	38.0	35.1	28.0	29.3	31.3	31.3	30.7	29.8	28.7	27.3	25.7	31.8	38.0	25.7
7	25.4	24.8	24.8	24.3	23.8	23.4	23.8	24.2	24.1	25.4	27.1	27.4	27.5	28.7	29.3	30.4	30.0	29.9	29.2	28.2	27.8	27.0	26.5	25.9	26.6	30.4	23.4
8	25.0	25.0	24.9	25.4	24.6	24.2	24.4	24.0	24.3	24.3	24.3	24.4	23.0	25.4	28.2	28.5	27.9	26.6	26.0	25.5	24.8	25.0	24.8	24.1	25.2	28.5	23.0
9	23.6	23.3	23.4	23.4	23.4	22.4	21.2	21.6	21.8	21.7	22.0	22.2	21.5	20.5	21.3	23.1	24.4	24.9	24.1	22.9	22.3	22.6	22.2	22.0	22.6	24.9	20.5
10	21.9	21.5	20.9	20.3	19.9	19.9	19.4	21.9	23.7	24.8	25.9	27.3	28.1	28.3	28.0	28.1	27.5	26.7	25.6	23.9	23.2	22.8	22.4	21.9	23.9	28.3	19.4
11	21.3	20.9	20.9	20.2	20.0	20.1	20.7	22.5	24.4	25.4	26.3	27.6	28.8	29.4	30.5	30.2	30.0	29.2	27.9	27.0	26.3	25.0	24.7	23.7	25.1	30.5	20.0
12	23.7	23.2	22.6	22.5	21.9	21.8	21.8	24.4	26.2	28.4	30.4	31.2	31.9	32.9	33.1	33.5	33.0	32.3	31.1	29.7	28.2	28.5	28.4	27.7	27.8	33.5	21.8
13	27.2	26.7	25.9	26.3	26.0	25.9	25.7	26.4	28.0	29.8	31.1	32.5	31.7	32.7	28.7	22.6	25.9	28.1	28.7	28.1	28.2	28.2	28.0	27.6	27.9	32.7	22.6
14	27.2	27.0	25.9	25.1	25.5	25.5	25.5	25.9	27.0	28.8	30.5	31.9	32.8	33.7	33.9	34.4	33.9	33.3	31.5	29.8	29.7	29.0	28.6	28.6	29.4	34.4	25.1
15	27.8	27.1	26.5	26.4	26.4	26.4	26.2	26.9	28.0	29.4	31.0	32.6	34.3	35.0	35.2	35.4	35.3	34.3	33.0	31.8	31.5	31.2	30.9	30.8	30.6	35.4	26.2
16	30.1	29.5	28.9	28.5	28.1	28.2	28.2	28.8	29.6	31.1	32.5	34.0	34.7	35.6	35.2	35.4	35.2	35.1	32.7	32.0	31.1	30.3	29.6	29.4	31.4	35.6	28.1
17	29.1	28.5	28.2	27.9	27.8	27.7	27.7	28.4	28.8	30.5	31.6	33.1	34.6	35.7	36.2	36.4	35.1	34.7	33.8	33.1	32.5	32.3	32.1	31.8	31.6	36.4	27.7
18	31.0	29.4	28.0	28.2	28.0	27.8	27.4	28.5	30.5	32.3	33.3	34.9	35.1	35.0	34.6	34.7	34.6	33.8	32.2	30.8	30.3	28.6	27.1	26.5	30.9	35.1	26.5
19	25.9	25.4	25.0	25.0	25.3	24.8	24.3	26.3	28.7	30.9	32.4	33.1	34.3	35.5	35.5	35.0	34.2	33.1	31.6	30.2	28.7	28.2	27.3	27.1	29.5	35.5	24.3
20	26.6	26.7	26.7	26.1	26.0	26.9	26.1	27.2	30.1	31.6	33.3	35.0	35.2	34.5	35.1	35.7	35.0	34.2	32.9	31.3	30.5	30.4	29.4	28.2	30.6	35.7	26.0
21	27.4	27.0	26.6	26.1	25.8	25.4	25.0	25.8	27.5	29.2	31.2	32.2	33.5	33.4	33.5	33.0	32.6	32.6	31.4	30.9	30.3	29.9	29.1	28.2	29.5	33.5	25.0
22	27.3	26.8	26.1	25.4	24.1	23.6	23.7	24.4	23.2	23.1	24.6	26.3	28.2	28.0	28.4	27.7	26.9	26.0	24.6	23.3	22.5	21.5	20.5	19.7	24.8	28.4	19.7
23	19.0	19.1	19.6	19.2	19.3	19.0	18.7	20.9	22.5	25.0	27.0	27.7	29.8	30.2	30.2	30.4	29.6	28.6	27.1	26.3	24.4	23.7	23.1	23.7	24.3	30.4	18.7
24	22.5	22.2	22.5	22.5	22.1	21.7	22.8	24.4	26.7	28.8	31.0	31.5	32.0	32.8	33.1	32.8	32.3	31.3	29.6	27.7	26.5	25.7	24.8	24.8	27.2	33.1	21.7
25	24.1	23.5	22.6	22.4	22.3	20.9	20.9	22.1	25.8	27.6	29.2	30.6	31.2	31.8	32.4	32.2	32.0	30.6	28.4	26.8	25.9	24.8	23.4	22.6	26.4	32.4	20.9
26	22.6	22.8	22.7	22.7	22.1	21.2	20.3	22.1	25.9	27.7	28.8	30.3	31.4	31.5	31.6	31.3	30.2	29.1	27.7	26.4	25.1	24.2	23.3	22.6	26.0	31.6	20.3
27	22.0	21.3	20.8	20.3	19.7	19.6	19.5	19.2	19.4	20.3	22.3	22.5	23.4	24.0	24.2	24.3	24.4	23.7	22.3	21.4	20.2	19.8	18.7	18.6	21.3	24.4	18.6
28	18.5	20.8	21.1	19.5	20.7	20.6	20.6	21.4	22.7	24.0	25.6	26.1	27.2	27.6	28.6	29.1	29.1	27.7	25.7	24.1	23.0	22.6	23.5	23.4	23.9	29.1	18.5
29	22.8	22.0	21.9	21.1	20.4	21.0	21.3	21.3	23.9	26.4	28.5	28.6	29.9	30.0	30.2	30.3	29.8	28.7	26.9	25.6	24.6	23.9	22.8	22.2	25.2	30.3	20.4
30	21.5	21.3	20.9	20.5	20.1	19.9	19.7	21.6	24.3	26.3	27.9	28.8	29.3	29.8	30.7	30.0	29.5	28.2	26.6	25.1	24.1	22.9	22.2	21.8	24.7	30.7	19.7
Avg	25.7	25.4	25.0	24.7	24.4	24.2	24.1	25.2	26.9	28.3	29.8	30.8	31.6	32.0	32.0	31.6	31.3	30.8	29.7	28.6	27.7	27.2	26.6	26.0	27.9	--	--
Max	32.8	32.6	31.8	31.0	30.9	30.6	30.6	31.6	33.3	34.4	36.0	37.1	38.0	38.0	38.5	38.7	38.1	37.4	36.0	34.9	34.3	33.9	33.5	33.1	--	38.7	--
Min	18.5	19.1	19.6	19.2	19.3	19.0	18.7	19.2	19.4	20.3	22.0	22.2	21.5	20.5	21.3	22.6	24.4	23.7	22.3	21.4	20.2	19.8	18.7	18.6	--	--	18.5

SAROAD for Resolution, West_Plant
"Component, Channel: Table100, SR_Wm2_2m"
Month: Jul 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	0	0	0	0	0	11	119	314	518	695	830	922	972	946	870	711	140	23	36	6	0	0	0	0	296	972	0
2	0	0	0	0	0	8	103	189	479	725	860	951	987	952	863	727	524	138	53	2	0	0	0	0	315	987	0
3	0	0	0	0	0	7	107	318	520	713	842	937	980	948	867	654	522	174	41	4	0	0	0	0	318	980	0
4	0	0	0	0	0	11	107	314	524	704	844	937	970	937	858	572	484	373	118	11	0	0	0	0	323	970	0
5	0	0	0	0	0	13	95	122	62	47	83	163	192	370	665	267	201	172	56	5	0	0	0	0	105	665	0
6	0	0	0	0	0	11	126	297	520	711	849	941	978	946	862	657	506	305	63	10	0	0	0	0	324	978	0
7	0	0	0	0	0	10	106	163	304	707	846	969	877	969	823	738	564	271	79	7	0	0	0	0	310	969	0
8	0	0	0	0	0	5	81	336	562	651	674	960	1040	892	822	784	584	193	7	4	0	0	0	0	316	1040	0
9	0	0	0	0	0	6	71	143	369	591	798	706	621	926	859	727	504	40	7	4	0	0	0	0	266	926	0
10	0	0	0	0	0	8	113	304	503	693	851	910	953	945	861	667	482	247	81	2	0	0	0	0	318	953	0
11	0	0	2	2	2	9	36	66	226	488	662	711	480	765	736	457	256	128	64	9	0	0	0	0	212	765	0
12	0	0	0	0	0	6	61	195	501	339	381	314	372	81	242	538	566	359	155	8	0	0	0	0	172	566	0
13	0	0	0	0	0	11	126	371	636	725	868	960	991	960	881	408	466	334	75	7	0	0	0	0	326	991	0
14	0	0	0	0	0	11	122	319	529	714	856	949	983	985	884	614	591	428	125	14	0	0	0	0	338	985	0
15	0	0	0	0	0	10	77	263	562	585	804	832	1005	--	434	642	337	278	17	2	0	0	0	0	254	1005	0
16	0	0	0	0	0	17	112	135	275	416	416	454	289	668	296	225	224	74	27	2	0	0	0	0	151	668	0
17	0	0	0	0	0	5	152	411	509	734	879	965	1045	826	640	175	81	69	27	1	0	0	0	0	272	1045	0
18	0	0	0	0	0	8	57	312	561	740	878	1010	553	707	831	761	551	355	97	7	0	0	0	0	309	1010	0
19	0	0	0	0	0	6	59	157	456	750	844	960	594	715	780	720	278	98	45	7	0	0	0	0	270	960	0
20	0	0	0	0	0	4	85	314	501	718	873	978	719	124	482	728	538	290	1	0	0	0	0	0	265	978	0
21	1	0	0	0	0	6	66	174	246	536	686	193	90	193	384	275	275	275	134	6	0	0	0	0	148	686	0
22	0	0	0	0	0	4	86	306	503	476	683	621	618	835	670	413	336	229	69	5	0	0	0	0	244	835	0
23	0	0	0	0	0	4	74	284	516	701	855	952	979	866	750	696	538	325	128	9	0	0	0	0	320	979	0
24	0	0	0	0	0	3	54	150	336	603	718	653	661	866	754	620	477	276	95	12	0	0	0	0	262	866	0
25	0	0	0	0	0	4	82	296	346	318	558	472	463	776	180	17	41	51	41	6	0	0	0	0	152	776	0
26	0	0	0	0	0	6	74	102	219	536	580	794	715	386	258	322	303	201	82	6	0	0	0	0	191	794	0
27	0	0	0	0	0	5	58	285	520	729	841	957	966	830	953	560	259	253	123	11	0	0	0	0	306	966	0
28	0	0	0	0	0	6	82	184	429	641	793	877	963	942	871	731	542	275	109	4	0	0	0	0	310	963	0
29	0	0	0	0	0	2	74	304	535	727	876	969	1001	966	879	734	545	334	123	4	0	0	0	0	336	1001	0
30	0	0	0	0	0	3	87	301	530	722	868	960	990	953	866	725	537	325	118	4	0	0	0	0	333	990	0
31	0	0	0	0	0	2	67	169	551	722	515	382	655	966	862	721	475	301	74	4	0	0	0	0	269	966	0
Avg	0	0	0	0	0	7	88	245	447	618	739	786	764	775	709	567	411	232	73	6	0	0	0	0	269	--	--
Max	1	0	2	2	2	17	152	411	636	750	879	1010	1045	985	953	784	591	428	155	14	0	0	0	0	--	1045	--
Min	0	0	0	0	0	2	36	66	62	47	83	163	90	81	180	17	41	23	1	0	0	0	0	0	--	--	0

-- Indicates Invalid Data

SAROAD for Resolution, West_Plant
"Component, Channel: Table100, SR_Wm2_2m"
Month: Aug 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	0	0	0	0	0	5	81	171	540	632	637	322	364	275	334	276	256	114	46	4	0	0	0	0	169	637	0
2	0	0	0	0	0	3	53	104	513	778	642	956	639	400	294	122	61	75	57	5	0	0	0	0	196	956	0
3	0	0	0	0	0	3	67	208	491	708	849	945	979	944	858	714	417	278	44	5	0	0	0	0	313	979	0
4	0	0	0	0	0	2	30	111	249	647	603	411	258	447	364	372	646	287	67	2	0	0	0	0	187	647	0
5	0	0	0	0	0	1	29	65	110	181	270	303	358	799	875	755	535	300	69	0	0	0	0	0	194	875	0
6	0	0	0	0	0	0	11	56	74	99	157	155	464	528	478	432	219	179	63	1	0	0	0	0	121	528	0
7	0	0	0	0	0	4	43	252	502	695	850	947	983	953	863	716	516	305	100	1	0	0	0	0	322	983	0
8	0	0	0	0	0	1	65	301	521	715	866	964	957	970	855	734	541	322	107	0	0	0	0	0	330	970	0
9	0	0	0	0	0	1	65	310	528	722	871	963	1003	739	687	750	521	307	96	1	0	0	0	0	315	1003	0
10	0	0	0	0	0	3	46	175	462	577	785	646	874	962	872	722	528	309	93	1	0	0	0	0	294	962	0
11	0	0	0	0	0	1	83	283	502	719	775	939	927	981	904	409	332	305	91	1	0	0	0	0	302	981	0
12	0	0	0	0	0	1	60	251	494	669	739	966	912	877	507	716	514	293	118	1	0	0	0	0	297	966	0
13	0	0	0	0	0	1	34	228	512	649	832	957	982	964	871	715	561	193	73	1	0	0	0	0	316	982	0
14	0	0	0	0	0	3	83	68	297	219	559	836	762	763	512	487	267	157	33	0	0	0	0	0	210	836	0
15	0	0	0	0	0	1	49	255	505	675	810	913	749	694	661	561	255	239	103	5	0	0	0	0	270	913	0
16	0	0	0	0	0	0	50	277	495	687	834	925	657	613	801	290	384	250	90	1	0	0	0	0	265	925	0
17	0	0	0	0	0	0	41	190	484	685	824	919	965	935	776	702	512	303	26	1	0	0	0	0	307	965	0
18	0	0	0	0	0	0	39	142	258	681	832	924	954	945	866	559	347	91	28	0	0	0	0	0	278	954	0
19	0	0	0	0	0	0	35	114	354	392	712	911	956	895	798	568	333	192	61	0	0	0	0	0	263	956	0
20	0	0	0	0	0	0	24	201	491	692	824	919	966	954	864	702	515	275	31	0	0	0	0	0	311	966	0
21	0	0	0	0	0	0	34	73	138	75	195	403	590	402	796	671	481	261	56	0	0	0	0	0	174	796	0
22	0	0	0	0	0	1	65	273	368	668	789	927	1004	958	594	700	247	6	4	0	0	0	0	0	275	1004	0
23	0	0	0	0	0	0	42	248	475	629	788	861	830	663	582	261	299	301	45	0	0	0	0	0	251	861	0
24	0	0	0	0	0	0	42	261	495	606	830	881	913	661	746	283	286	71	4	0	0	0	0	0	253	913	0
25	0	0	0	0	0	0	23	106	239	389	476	431	435	655	844	706	397	31	0	0	0	0	0	0	197	844	0
26	0	0	0	0	0	0	23	194	145	294	546	980	936	913	503	71	136	171	35	0	0	0	0	0	206	980	0
27	0	0	0	0	0	0	39	258	477	673	820	915	963	928	806	483	279	81	57	0	0	0	0	0	282	963	0
28	0	0	0	0	0	0	36	258	427	594	446	404	843	992	767	380	167	83	24	0	0	0	0	0	226	992	0
29	0	0	0	0	0	0	24	252	291	172	206	247	167	322	395	664	350	79	44	0	0	0	0	0	134	664	0
30	0	0	0	0	0	0	38	209	328	521	733	951	273	169	310	191	123	60	11	0	0	0	0	0	163	951	0
31	0	0	0	0	0	1	26	77	191	406	583	941	958	872	849	722	471	218	39	0	0	0	0	0	265	958	0
Avg	0	0	0	0	0	1	45	193	386	544	667	766	762	747	685	530	371	198	55	1	0	0	0	0	248	--	--
Max	0	0	0	0	0	5	83	310	540	778	871	980	1004	992	904	755	646	322	118	5	0	0	0	0	--	1004	--
Min	0	0	0	0	0	0	11	56	74	75	157	155	167	169	294	71	61	6	0	0	0	0	0	0	--	--	0

SAROAD for Resolution, West_Plant
"Component, Channel: Table100, SR_Wm2_2m"
Month: Sep 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	0	0	0	0	0	0	32	249	467	662	835	959	963	898	773	638	439	217	34	0	0	0	0	0	299	963	0
2	0	0	0	0	0	0	37	224	364	502	796	847	751	685	424	277	330	154	30	0	0	0	0	0	226	847	0
3	0	0	0	0	0	0	32	237	454	648	792	880	947	754	166	32	43	42	13	0	0	0	0	0	210	947	0
4	0	0	0	0	0	0	35	176	455	673	803	890	767	731	734	643	416	208	29	0	0	0	0	0	273	890	0
5	0	0	0	0	0	0	23	243	469	663	812	912	882	781	660	549	117	74	20	0	0	0	0	0	259	912	0
6	0	0	0	0	0	0	25	233	418	623	798	892	877	847	178	55	70	203	25	0	0	0	0	0	218	892	0
7	0	0	0	0	0	0	15	76	136	305	421	266	331	473	314	513	334	208	34	0	0	0	0	0	143	513	0
8	0	0	0	0	0	0	16	97	147	173	266	320	380	437	630	353	281	72	5	0	0	0	0	0	132	630	0
9	0	0	0	0	0	0	3	46	84	122	157	203	112	162	262	453	372	182	11	0	0	0	0	0	90	453	0
10	0	0	0	0	0	0	22	235	392	427	721	871	681	570	452	427	383	87	15	0	0	0	0	0	220	871	0
11	0	0	0	0	0	0	13	232	449	646	798	896	867	924	808	619	405	184	8	0	0	0	0	0	285	924	0
12	0	0	0	0	0	0	12	231	452	652	798	894	946	872	713	608	399	177	11	0	0	0	0	0	282	946	0
13	0	0	0	0	0	0	13	227	449	642	832	783	434	740	48	42	416	160	11	0	0	0	0	0	200	832	0
14	0	0	0	0	0	0	14	154	361	652	794	865	937	870	781	612	389	226	15	0	0	0	0	0	278	937	0
15	0	0	0	0	0	0	12	219	446	643	791	876	922	925	841	523	425	185	10	0	0	0	0	0	284	925	0
16	0	0	0	0	0	0	12	213	441	634	779	864	890	857	628	628	342	176	12	0	0	0	0	0	270	890	0
17	0	0	0	0	0	0	14	245	298	604	694	852	851	853	724	465	158	100	8	0	0	0	0	0	244	853	0
18	0	0	0	0	0	0	11	210	439	500	705	839	911	861	750	585	377	143	8	0	0	0	0	0	264	911	0
19	0	0	0	0	0	0	10	205	435	633	779	867	890	839	739	572	367	138	8	0	0	0	0	0	270	890	0
20	0	0	0	0	0	0	17	199	389	602	756	899	827	528	741	598	378	137	7	0	0	0	0	0	253	899	0
21	0	0	0	0	0	0	11	197	429	625	768	852	876	572	489	300	181	156	5	0	0	0	0	0	228	876	0
22	0	0	0	0	0	0	24	97	75	133	336	571	621	621	699	537	339	121	4	0	0	0	0	0	174	699	0
23	0	0	0	0	0	0	8	210	457	656	808	897	918	861	751	576	363	125	3	0	0	0	0	0	276	918	0
24	0	0	0	0	0	0	8	204	447	643	789	871	889	836	727	559	347	116	3	0	0	0	0	0	268	889	0
25	0	0	0	0	0	0	8	193	434	644	793	881	904	849	733	559	344	115	2	0	0	0	0	0	269	904	0
26	0	0	0	0	0	0	7	194	437	633	785	869	885	730	675	465	260	105	3	0	0	0	0	0	252	885	0
27	0	0	0	0	0	0	9	70	178	518	616	618	746	836	726	553	333	107	1	0	0	0	0	0	221	836	0
28	0	0	0	0	0	0	7	193	449	646	789	872	890	833	716	541	326	103	0	0	0	0	0	0	265	890	0
29	0	0	0	0	0	0	8	178	422	618	767	855	874	818	707	534	322	98	0	0	0	0	0	0	258	874	0
30	0	0	0	0	0	0	7	180	428	627	782	866	883	829	713	539	323	96	0	0	0	0	0	0	261	883	0
Avg	0	0	0	0	0	0	15	189	377	558	712	794	788	746	610	479	319	140	11	0	0	0	0	0	239	--	--
Max	0	0	0	0	0	0	37	249	469	673	835	959	963	925	841	643	439	226	34	0	0	0	0	0	--	963	--
Min	0	0	0	0	0	0	3	46	75	122	157	203	112	162	48	32	43	42	0	0	0	0	0	0	--	--	0

SAROAD for Resolution, West_Plant
"Component, Channel: Table100, RH_Percent"
Month: Jul 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	35	35	34	32	32	34	31	28	22	20	19	17	16	15	15	15	16	15	16	16	17	19	21	20	22	35	15
2	23	25	33	43	46	42	42	38	33	29	26	24	23	21	20	20	21	24	25	25	31	34	38	38	30	46	20
3	36	36	34	29	33	36	34	30	24	21	20	19	18	17	17	17	16	16	16	18	18	18	20	22	24	36	16
4	22	23	24	25	26	28	31	30	28	28	26	24	22	20	18	18	19	19	20	20	22	21	22	24	23	31	18
5	27	29	29	30	31	33	33	33	37	54	51	48	39	35	26	22	24	23	32	36	40	41	40	39	35	54	22
6	43	42	47	49	44	46	47	41	34	30	28	25	22	21	20	20	20	20	20	22	22	23	37	49	32	49	20
7	46	32	36	36	37	34	34	31	27	23	20	18	17	15	15	14	14	15	16	18	21	22	26	30	25	46	14
8	28	24	25	27	31	32	30	29	27	24	22	19	17	18	17	16	16	21	57	48	45	36	33	34	28	57	16
9	40	38	46	46	41	46	53	53	52	48	42	36	34	35	34	32	30	31	33	34	36	37	40	44	40	53	30
10	47	46	50	60	65	67	64	55	51	47	40	37	34	32	32	31	31	31	32	34	40	46	47	49	44	67	31
11	50	71	86	84	79	75	71	75	71	68	64	58	56	51	45	41	46	48	48	51	53	54	55	57	61	86	41
12	62	60	58	59	60	63	58	53	53	48	46	60	50	68	60	51	28	38	44	51	55	54	52	52	53	68	28
13	53	46	47	46	52	51	49	48	41	38	33	28	28	25	23	26	25	25	26	28	29	31	31	34	36	53	23
14	36	37	37	41	40	45	43	39	37	33	29	28	27	25	23	23	21	21	23	27	28	29	32	32	32	45	21
15	33	36	36	37	38	39	39	37	32	32	29	28	25	--	29	25	23	23	28	36	40	41	42	64	34	64	23
16	68	65	69	69	68	61	61	59	57	56	55	54	54	45	43	42	44	44	41	43	48	47	52	56	54	69	41
17	58	57	52	54	53	49	42	38	35	36	29	27	25	26	25	25	26	26	26	29	34	34	33	33	36	58	25
18	33	36	37	39	42	43	43	40	36	32	29	26	25	24	21	21	22	23	25	27	29	49	47	41	33	49	21
19	44	43	46	47	47	47	49	48	44	39	36	33	33	31	29	27	27	28	29	35	47	55	58	59	41	59	27
20	59	66	67	67	63	69	66	58	57	53	47	42	41	59	46	39	35	34	78	87	85	85	84	85	61	87	34
21	74	83	80	79	88	88	86	81	78	69	62	75	87	81	76	69	67	64	66	69	72	75	77	76	76	88	62
22	82	78	81	83	88	88	86	72	64	66	59	54	53	50	45	64	64	61	62	64	69	73	72	74	69	88	45
23	72	75	75	77	78	79	76	61	52	48	45	42	40	39	38	36	33	33	34	36	39	45	48	49	52	79	33
24	51	51	49	53	54	54	57	53	44	38	35	35	34	32	32	32	36	40	39	38	42	59	69	65	46	69	32
25	58	61	62	67	66	69	68	58	52	51	46	46	61	46	46	74	77	73	78	75	74	73	73	75	64	78	46
26	74	75	75	73	77	76	73	72	78	65	52	50	42	47	48	49	43	43	42	51	55	54	54	56	59	78	42
27	56	64	68	68	64	57	57	51	48	45	43	39	36	34	32	32	39	39	36	43	43	44	48	46	47	68	32
28	64	56	49	51	57	57	57	59	46	36	31	31	24	22	19	19	19	19	20	24	28	27	22	22	36	64	19
29	26	27	28	30	33	34	33	26	21	18	17	16	16	15	15	15	15	15	16	18	21	26	24	25	22	34	15
30	29	28	31	33	34	36	36	28	24	22	20	19	19	17	17	16	17	17	18	20	22	24	24	28	24	36	16
31	28	31	32	32	30	29	30	30	26	24	22	22	21	18	18	17	20	23	23	27	27	28	29	30	26	32	17
Avg	47	48	49	51	52	52	51	47	43	40	36	35	33	33	30	31	30	31	34	37	40	42	44	45	41	--	--
Max	82	83	86	84	88	88	86	81	78	69	64	75	87	81	76	74	77	73	78	87	85	85	84	85	--	88	--
Min	22	23	24	25	26	28	30	26	21	18	17	16	16	15	15	14	14	15	16	16	17	18	20	20	--	--	14

-- Indicates Invalid Data

SAROAD for Resolution, West_Plant
"Component, Channel: Table100, RH_Percent"
Month: Aug 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	29	33	34	37	38	39	39	37	35	33	29	28	29	32	35	34	31	32	35	39	37	37	36	38	34	39	28
2	41	42	45	47	47	49	48	51	43	26	24	27	28	34	33	33	33	35	39	35	34	34	34	36	37	51	24
3	36	38	40	40	39	41	41	38	34	23	20	18	17	17	17	17	18	19	21	23	24	25	28	29	28	41	17
4	30	31	33	32	34	36	36	34	33	27	25	21	21	21	20	20	19	19	20	22	23	27	27	26	27	36	19
5	30	30	33	32	34	34	37	50	57	57	53	43	39	31	28	27	25	22	20	23	23	26	28	34	34	57	20
6	43	55	55	56	56	67	82	86	79	81	88	85	80	74	67	57	57	58	59	66	69	74	77	77	69	88	43
7	79	75	74	78	79	78	75	62	52	48	44	40	37	34	29	26	26	25	25	29	31	37	38	41	48	79	25
8	38	40	41	43	44	39	37	36	30	26	19	17	16	15	14	11	10	9	10	12	12	14	17	18	24	44	9
9	19	19	18	19	21	17	16	16	17	16	13	11	11	10	11	11	11	11	12	14	16	19	19	18	15	21	10
10	17	17	17	18	19	18	20	16	12	11	10	10	9	10	10	9	9	10	11	12	14	14	25	28	14	28	9
11	30	33	36	38	39	40	40	38	35	31	28	24	23	20	20	20	20	18	19	24	29	30	33	33	29	40	18
12	33	32	34	38	38	38	39	37	35	31	28	25	21	18	19	14	14	14	13	13	14	17	16	16	25	39	13
13	16	16	15	14	16	16	18	21	14	12	11	9	8	8	9	9	9	8	9	10	12	14	14	14	12	21	8
14	15	14	15	15	17	16	14	16	15	16	14	13	13	12	13	13	12	13	13	15	16	17	29	32	16	32	12
15	33	35	36	38	37	37	37	35	32	26	23	19	18	17	17	16	17	23	25	22	22	24	24	24	27	38	16
16	24	25	25	25	25	27	26	25	23	21	19	18	17	17	15	26	31	22	23	31	29	30	37	36	25	37	15
17	35	37	36	39	38	41	39	36	29	25	23	21	18	17	16	15	15	16	28	26	29	43	48	41	30	48	15
18	39	33	31	33	38	31	30	32	30	26	23	19	17	17	15	15	18	23	22	23	25	28	32	32	26	39	15
19	32	31	30	30	31	30	33	34	31	29	26	22	18	18	15	15	15	16	18	20	21	22	23	24	24	34	15
20	25	25	26	26	26	29	32	32	29	27	25	22	19	17	17	16	16	16	16	29	31	34	38	27	25	38	16
21	28	34	34	37	39	40	40	36	36	38	38	35	32	31	27	24	25	25	26	28	29	31	35	36	33	40	24
22	34	35	35	37	39	41	38	33	31	28	26	24	22	22	23	21	29	42	36	46	41	41	43	45	34	46	21
23	45	49	49	45	45	41	46	40	38	34	30	26	23	23	24	27	48	43	42	37	38	34	33	42	38	49	23
24	45	50	53	53	47	43	44	44	42	39	37	35	30	28	27	27	34	37	38	39	43	56	56	51	42	56	27
25	53	54	55	59	67	70	65	63	57	55	49	45	43	40	38	35	35	42	71	73	75	63	71	74	56	75	35
26	74	74	70	64	69	72	75	67	67	56	47	37	31	29	28	57	54	47	54	57	56	64	70	72	58	75	28
27	73	73	68	62	42	36	36	33	31	28	25	23	22	20	19	18	18	22	22	26	27	23	22	28	33	73	18
28	31	32	33	36	36	36	38	35	34	31	31	29	27	25	23	27	26	29	31	32	35	37	39	57	33	57	23
29	62	63	64	61	55	53	53	50	47	51	51	51	55	61	53	46	44	44	47	49	49	50	53	61	53	64	44
30	62	64	68	75	71	73	67	63	57	52	46	41	42	45	46	48	49	45	56	72	75	78	76	78	60	78	41
31	70	68	65	66	66	68	70	66	62	56	50	48	44	44	43	39	34	35	38	41	42	41	49	47	52	70	34
Avg	39	41	41	42	42	42	42	41	38	34	31	29	27	26	25	25	26	26	29	32	33	35	38	39	34	--	--
Max	79	75	74	78	79	78	82	86	79	81	88	85	80	74	67	57	57	58	71	73	75	78	77	78	--	88	--
Min	15	14	15	14	16	16	14	16	12	11	10	9	8	8	9	9	9	8	9	10	12	14	14	14	--	--	8

SAROAD for Resolution, West_Plant
"Component, Channel: Table100, RH_Percent"
Month: Sep 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	48	50	53	52	52	55	55	48	41	38	35	34	33	32	32	30	30	31	32	34	34	37	38	41	40	55	30
2	42	42	43	44	45	47	45	43	40	39	36	33	31	28	28	30	33	33	31	31	36	35	36	39	37	47	28
3	38	38	37	36	35	33	35	32	28	26	24	22	20	23	27	28	34	33	29	28	33	31	36	38	31	38	20
4	41	42	42	37	39	38	39	36	31	28	23	21	17	14	14	13	13	14	16	18	21	20	19	19	26	42	13
5	18	18	18	20	22	22	21	21	21	20	18	16	15	15	15	15	18	18	18	19	19	19	20	22	19	22	15
6	24	23	23	23	23	23	23	21	19	18	16	15	14	14	20	43	36	31	32	31	36	41	45	53	27	53	14
7	54	57	54	57	62	66	63	62	64	57	49	49	50	48	40	35	36	35	38	43	45	45	47	49	50	66	35
8	53	52	52	48	51	54	53	55	56	59	59	62	79	69	48	47	51	55	56	60	66	57	54	59	56	79	47
9	62	63	60	62	62	68	75	75	77	82	83	77	85	91	87	74	66	62	66	75	75	70	75	78	73	91	60
10	81	83	86	88	89	88	90	70	58	53	48	45	43	43	42	41	41	42	48	59	63	63	60	65	62	90	41
11	66	66	63	68	68	67	64	58	48	44	41	38	36	36	34	33	33	33	36	39	41	45	46	49	48	68	33
12	50	51	54	53	56	55	55	43	39	32	28	24	25	23	22	20	20	20	22	25	27	27	37	39	35	56	20
13	45	48	53	51	52	52	53	51	46	41	38	34	37	33	43	80	69	50	42	44	43	43	43	45	47	80	33
14	46	46	51	55	52	52	51	50	47	43	39	35	32	27	23	23	25	26	29	32	31	34	35	34	38	55	23
15	36	40	43	44	43	43	43	40	38	36	33	29	23	20	21	19	19	20	22	24	23	22	23	25	30	44	19
16	30	33	35	36	37	36	36	35	35	32	29	27	25	23	24	23	20	19	26	29	31	32	33	33	30	37	19
17	35	37	39	39	39	39	39	37	38	33	32	28	26	23	22	20	21	22	24	25	27	27	27	28	30	39	20
18	30	31	29	25	25	25	25	25	26	18	16	8	7	8	10	9	9	10	11	13	14	18	21	23	18	31	7
19	22	21	22	22	20	22	24	21	20	13	12	14	14	13	13	14	15	15	17	19	22	22	23	23	19	24	12
20	23	22	22	23	23	23	25	28	28	26	24	23	21	19	18	16	16	17	18	20	21	24	32	34	23	34	16
21	35	35	35	36	37	38	40	38	35	31	29	27	26	25	25	25	25	22	24	25	28	29	30	29	30	40	22
22	29	30	33	45	61	62	55	53	63	66	56	48	39	34	27	25	23	21	18	17	12	12	13	15	36	66	12
23	17	17	15	16	16	17	18	16	15	12	11	9	9	8	8	8	8	9	11	12	15	16	17	15	13	18	8
24	17	18	18	17	17	18	16	15	13	11	10	13	13	12	11	11	12	13	16	18	20	21	22	22	16	22	10
25	22	23	24	24	24	28	28	25	18	15	13	11	9	9	8	8	7	7	8	11	15	19	22	21	17	28	7
26	19	17	16	15	15	17	18	16	13	12	11	12	12	13	14	14	16	21	24	25	26	19	16	17	17	26	11
27	19	19	19	19	20	20	20	21	20	18	18	24	21	16	15	13	11	11	13	13	15	15	17	17	17	24	11
28	15	10	8	10	8	9	9	9	9	8	9	11	10	11	11	11	11	10	12	14	15	15	13	14	11	15	8
29	15	16	17	18	19	19	18	18	15	13	13	14	14	14	14	13	13	14	17	20	21	23	24	25	17	25	13
30	27	27	27	27	27	27	27	23	19	16	13	13	13	12	11	11	11	12	14	15	17	18	19	21	19	27	11
Avg	35	36	36	37	38	39	39	36	34	31	29	27	27	25	24	25	25	24	26	28	30	30	31	33	31	--	--
Max	81	83	86	88	89	88	90	75	77	82	83	77	85	91	87	80	69	62	66	75	75	70	75	78	--	91	--
Min	15	10	8	10	8	9	9	9	9	8	9	8	7	8	8	8	7	7	8	11	12	12	13	14	--	--	7

SAROAD for Resolution, West_Plant
"Component, Channel: Table100, Precip_Inches"
Month: Jul 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Total	Max	Min
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0.016	0.04	0.004	0	0	0	0	0	0	0	0	0	0	0	0	0	0.06	0.04	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.008	0.008	0.008	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.012	0.666	0	0	0	0	0	0.678	0.666	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0.383	0.079	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.462	0.383	0
12	0	0	0	0	0	0	0	0	0	0	0	0.004	0	0	0	0	0	0	0	0	0	0	0	0	0.004	0.004	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.075	0	0	0	0	0	0	0	0	0.075	0.075	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.044	0	0	0.044	0.044	0
25	0	0	0	0	0	0	0	0	0	0	0	0.035	0.043	0	0	0.473	0.004	0	0	0	0	0	0	0	0.555	0.473	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.012	0.012	0.012	0
28	0.036	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.036	0.036	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0.036	0.383	0.079	0	0	0	0	0	0.016	0.04	0.004	0.039	0.043	0	0	0.548	0.004	0.012	0.666	0	0	0.044	0	0.02	1.93	--	--
Max	0.036	0.383	0.079	0	0	0	0	0	0.016	0.04	0.004	0.035	0.043	0	0	0.473	0.004	0.012	0.666	0	0	0.044	0	0.012	--	0.666	--
Min	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	--	--	0

SAROAD for Resolution, West_Plant
"Component, Channel: Table100, Precip_Inches"
Month: Aug 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Total	Max	Min
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0.052	0.064	0	0.06	0.036	0.02	0	0	0	0	0	0	0	0	0	0	0	0	0.232	0.064	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.138	0.047	0	0	0	0	0	0	0	0.185	0.138	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.016	0	0.004	0.004	0.044	0.004	0.072	0.044	0
18	0	0.004	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.004	0.004	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.02	0.004	0	0	0	0	0	0	0.024	0.02	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.446	0	0	0	0	0	0	0	0.446	0.446	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.008	0	0	0	0.008	0.008	0
25	0	0	0	0	0.016	0.004	0	0	0	0	0	0	0	0	0	0	0	0.008	0.075	0	0	0	0	0	0.103	0.075	0
26	0	0	0	0.004	0	0	0	0	0	0	0	0	0	0	0	0.079	0	0	0	0	0	0	0	0	0.083	0.079	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0.008	0.004	0.008	0	0	0	0	0	0	0	0	0	0	0.02	0.008	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.008	0	0	0.008	0.008	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0.004	0	0.004	0.016	0.004	0.052	0.064	0	0.06	0.036	0.028	0.004	0.008	0	0.217	0.513	0.012	0.091	0	0.012	0.012	0.044	0.004	1.19	--	--
Max	0	0.004	0	0.004	0.016	0.004	0.052	0.064	0	0.06	0.036	0.02	0.004	0.008	0	0.138	0.446	0.008	0.075	0	0.008	0.008	0.044	0.004	--	0.446	--
Min	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	--	--	0

SAROAD for Resolution, West_Plant
"Component, Channel: Table100, Precip_Inches"
Month: Sep 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Total	Max	Min
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0.028	0	0	0.004	0	0	0	0	0	0	0	0.032	0.028	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.004	0.217	0	0	0.004	0	0	0	0	0	0.225	0.217	0
7	0	0	0	0	0	0	0	0	0.004	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.004	0.004	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0.012	0.004	0	0	0	0	0	0	0	0	0	0	0.016	0.012	0
9	0	0	0	0	0	0.004	0.04	0.004	0.008	0.012	0.008	0.008	0.016	0.012	0.008	0	0	0	0	0	0	0	0	0	0.12	0.04	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.138	0.162	0	0	0	0	0	0	0	0	0.3	0.162	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0.012	0	0	0	0.02	0.016	0.02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.068	0.02	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0.012	0	0.004	0.04	0.024	0.028	0.032	0.008	0.008	0.028	0.044	0.15	0.379	0.004	0	0.004	0	0	0	0	0	0.765	--	--
Max	0	0	0	0.012	0	0.004	0.04	0.02	0.016	0.02	0.008	0.008	0.016	0.028	0.138	0.217	0.004	0	0.004	0	0	0	0	0	--	0.217	--
Min	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	--	--	0

SAROAD for Resolution, West_Plant
"Component, Channel: Table100, BP_mmHg"
Month: Jul 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	682	682	682	682	682	682	682	682	682	682	682	682	681	681	680	680	680	679	680	680	680	680	681	681	681	682	679
2	682	682	683	683	683	684	685	685	685	685	685	684	683	683	682	681	681	681	681	682	682	682	682	682	683	685	681
3	682	682	682	681	682	682	682	682	682	682	682	682	681	680	680	679	678	678	678	678	678	678	678	679	680	682	678
4	679	679	679	679	679	680	681	681	681	681	681	680	680	679	679	678	678	678	678	678	679	679	679	679	679	681	678
5	680	680	680	680	680	680	681	681	682	682	682	682	681	680	679	679	679	679	679	679	679	680	680	680	680	682	679
6	680	680	680	680	680	680	680	680	680	680	680	680	679	679	678	678	677	678	678	678	678	679	680	679	679	680	677
7	679	679	678	679	679	679	680	680	680	680	680	680	679	679	678	678	678	678	678	679	679	680	681	681	679	681	678
8	681	681	681	681	681	682	682	682	683	683	683	682	682	681	681	680	680	681	682	682	682	682	682	682	682	683	680
9	683	683	683	683	684	685	685	686	686	685	685	685	684	684	683	683	683	682	682	681	682	682	682	683	684	686	681
10	683	684	684	684	684	684	684	684	685	684	684	684	683	683	682	682	681	681	681	682	682	682	683	683	683	685	681
11	683	684	683	683	683	683	684	684	684	684	684	684	683	683	682	682	681	681	681	681	681	681	682	682	683	684	681
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16	681	681	682	681	681	682	682	683	683	683	684	684	683	683	683	682	682	682	682	683	683	684	684	684	683	684	681
17	684	684	683	683	684	684	684	685	685	685	685	684	684	684	683	683	682	682	682	683	683	683	684	684	684	685	682
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Avg	682	682	682	682	682	682	683	683	683	683	683	683	682	682	681	681	681	681	681	681	681	682	682	682	682	--	--
Max	685	685	685	685	685	685	686	686	687	687	686	686	686	685	685	684	684	684	684	684	685	685	685	685	--	687	--
Min	679	679	678	679	679	679	680	680	680	680	680	680	679	679	678	678	677	678	678	678	678	678	678	679	--	--	677

-- Indicates Invalid Data

SAROAD for Resolution, West_Plant
"Component, Channel: Table100, BP_mmHg"
Month: Aug 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	683	683	683	683	683	683	683	684	684	684	684	684	684	684	683	682	682	682	682	682	682	682	682	682	683	684	682
2	682	682	682	682	682	682	683	683	683	683	683	683	683	682	682	682	682	682	682	682	682	683	683	683	682	683	682
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7	684	684	684	684	684	684	684	684	685	685	685	684	684	684	683	683	682	682	682	682	682	682	682	682	683	685	682
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Avg	683	682	682	682	682	683	683	683	684	684	684	683	683	682	682	682	681	681	681	682	682	683	683	683	682	--	--
Max	686	685	685	685	685	685	686	686	686	686	686	686	685	685	684	684	684	684	685	685	686	686	686	686	--	686	--
Min	680	680	680	681	681	681	681	682	682	682	682	681	680	680	680	680	679	679	679	680	680	680	680	680	--	--	679

SAROAD for Resolution, West_Plant
"Component, Channel: Table100, BP_mmHg"
Month: Sep 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	682	682	682	682	682	682	682	683	683	683	683	682	682	682	681	680	680	680	680	681	681	682	681	682	682	683	680
2	682	682	681	681	681	682	682	683	684	684	684	683	683	682	681	681	680	680	680	681	681	681	682	682	682	684	680
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7	683	683	684	683	683	683	683	684	684	684	684	684	683	683	682	682	681	681	681	682	682	682	682	682	683	684	681
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22	677	677	677	677	677	677	677	677	678	678	678	677	677	676	676	676	676	677	677	678	678	678	678	679	677	679	676
23	679	679	679	679	679	680	680	681	681	681	681	681	681	680	680	680	680	681	681	681	682	682	682	682	680	682	679
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25	680	680	680	679	679	680	679	680	680	680	679	679	678	678	677	677	676	676	676	677	677	677	677	677	678	680	676
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27	678	678	678	678	678	679	679	680	680	681	681	681	681	681	680	680	681	681	681	682	682	682	682	682	680	682	678
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Avg	681	681	680	680	680	681	681	681	682	682	682	681	681	680	680	680	679	679	679	680	680	680	680	681	680	--	--
Max	684	684	684	684	684	685	685	685	685	686	685	685	684	684	683	683	683	683	684	684	684	684	684	684	--	686	--
Min	677	677	677	677	677	677	677	677	678	678	678	677	677	676	676	676	676	676	676	676	677	677	677	677	--	--	676

Appendix D: PM_{10} and $PM_{2.5}$ Data – Hourly

SAROAD for Resolution, East_Plant

"Component, Channel: Table125, conc_PM10_µg/m^3_STP"

Month: Jul 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	21.0	21.0	18.6	18.6	19.8	22.1	22.2	37.6	46.1	64.2	54.9	38.3	30.0	37.4	36.2	42.2	44.4	15.5	55.1	34.6	23.7	28.4	24.8	32.9	32.9	64.2	15.5
2	44.5	83.3	74.5	103.0	44.8	28.7	19.5	28.8	12.8	11.7	10.6	13.0	37.8	16.6	20.3	27.5	27.4	39.2	47.4	50.8	23.2	8.1	8.1	6.9	32.8	103.0	6.9
3	5.8	6.9	6.9	4.6	6.9	9.2	6.9	10.5	12.9	14.1	15.4	27.3	23.9	22.8	25.2	44.4	38.5	44.4	39.5	34.7	32.3	37.0	40.6	29.7	22.5	44.4	4.6
4	28.4	28.3	28.2	23.5	21.0	32.7	40.9	38.6	24.6	22.4	20.1	23.7	29.8	31.1	32.4	40.8	40.8	42.0	46.6	43.0	45.3	42.8	41.6	33.2	33.4	46.6	20.1
5	53.1	37.7	35.3	36.4	43.4	39.8	35.1	31.6	31.5	25.5	25.5	19.8	23.3	24.7	20.2	19.0	14.2	22.6	28.4	24.8	25.9	25.8	31.5	30.4	29.4	53.1	14.2
6	23.4	24.5	25.6	24.4	24.4	27.8	24.4	22.2	23.5	23.6	24.9	22.6	26.3	22.8	27.7	27.7	26.5	27.6	26.4	21.5	22.6	24.9	34.1	23.3	25.1	34.1	21.5
7	12.9	12.9	14.0	15.2	17.5	16.3	16.4	17.6	20.1	15.5	15.6	16.8	16.9	16.9	19.4	19.4	19.4	24.2	19.3	25.2	22.7	22.6	36.5	44.5	19.9	44.5	12.9
8	8.2	5.9	7.0	10.5	14.0	26.7	16.3	22.3	15.3	20.1	11.9	19.1	15.6	15.6	15.7	15.7	16.9	24.0	22.0	17.3	11.6	10.4	9.3	8.2	15.0	26.7	5.9
9	5.8	5.8	8.2	11.6	11.6	25.4	23.1	33.5	30.0	45.2	47.8	56.2	40.0	34.2	35.4	40.2	40.3	31.8	31.9	35.4	31.8	31.8	38.8	49.1	31.0	56.2	5.8
10	31.5	27.9	54.4	426.0	108.0	186.0	247.0	213.0	116.0	69.6	52.5	32.9	35.4	36.6	41.5	46.2	48.6	43.8	42.5	40.1	231.0	189.0	91.9	51.1	103.0	426.0	27.9
11	10.4	26.4	9.1	10.3	10.3	9.2	10.3	12.6	14.9	12.7	10.4	11.6	18.6	15.2	14.1	12.9	29.3	22.2	21.0	17.5	19.8	14.0	15.1	16.2	15.2	29.3	9.1
12	16.2	15.0	11.5	12.7	10.4	9.2	12.6	15.0	15.1	13.9	14.0	11.6	12.8	9.2	5.8	7.0	5.9	5.9	11.7	15.1	13.9	9.3	6.9	11.6	11.3	16.2	5.8
13	11.5	9.2	10.4	11.5	10.4	4.6	6.9	10.4	8.1	7.0	4.7	5.9	7.1	7.1	4.8	8.3	23.8	13.1	14.2	23.7	20.1	17.7	16.5	18.8	11.5	23.8	4.6
14	16.4	15.2	12.8	18.6	12.8	12.8	15.1	24.5	16.4	16.5	16.5	15.4	15.5	20.3	15.6	15.6	12.0	10.8	23.8	7.1	10.6	9.4	5.9	7.0	14.4	24.5	5.9
15	9.4	7.0	7.0	7.0	5.8	5.8	4.7	7.0	18.8	22.4	18.9	16.6	14.3	12.0	--	--	--	--	175.0	16.5	11.8	10.6	12.8	11.5	19.7	175.0	4.7
16	6.9	6.9	8.0	6.9	4.6	6.9	6.9	6.9	4.6	--	--	--	--	--	2.3	5.8	18.7	11.6	10.5	19.7	10.4	8.0	5.7	6.9	8.3	19.7	2.3
17	6.9	8.0	9.1	10.3	12.6	14.8	13.8	12.7	15.1	15.2	12.9	10.6	11.8	10.6	9.5	11.8	20.1	17.7	17.6	17.5	23.2	12.7	9.3	6.9	12.9	23.2	6.9
18	8.1	10.4	8.1	10.3	14.9	17.2	16.1	13.8	12.8	12.8	12.9	11.8	11.8	9.4	7.1	9.5	14.2	9.5	2.4	2.4	1.2	1.2	2.3	4.6	9.4	17.2	1.2
19	6.9	6.9	5.8	3.5	2.3	2.3	3.5	4.6	7.0	10.5	9.4	7.0	10.6	11.8	9.5	7.1	9.5	11.9	11.8	8.3	37.3	13.9	18.5	11.6	9.6	37.3	2.3
20	10.4	11.5	15.0	15.0	11.5	6.9	18.4	10.4	9.2	10.4	12.8	11.7	8.2	8.2	11.7	11.8	13.0	14.2	23.0	5.7	6.9	9.2	10.3	11.5	11.5	23.0	5.7
21	13.8	12.6	9.2	9.2	9.2	10.3	11.5	13.8	15.0	12.7	11.6	18.5	8.0	6.9	5.7	6.9	6.9	3.5	3.5	3.5	5.8	9.2	6.9	6.9	9.2	18.5	3.5
22	10.3	9.2	9.2	6.9	6.9	8.0	9.1	8.0	6.9	5.8	8.1	10.4	10.5	11.7	15.2	50.9	82.1	84.6	60.2	50.9	39.3	31.2	25.3	17.3	24.1	84.6	5.8
23	16.2	24.2	28.8	35.6	31.0	26.4	23.0	25.3	18.5	20.8	20.9	15.2	17.6	18.8	21.2	31.8	21.3	20.1	25.9	25.9	19.9	17.6	17.5	17.5	22.5	35.6	15.2
24	17.5	15.1	11.6	11.6	18.5	6.9	8.1	25.5	11.7	19.9	16.4	16.4	16.5	20.1	16.6	28.4	11.8	12.9	18.8	20.0	15.2	14.0	12.8	15.1	15.9	28.4	6.9
25	18.6	12.8	10.4	11.6	15.0	16.2	15.0	13.9	14.0	13.9	--	14.0	11.6	12.9	15.3	15.0	15.0	16.2	13.9	15.0	15.0	15.0	16.2	18.4	14.6	18.6	10.4
26	15.0	13.9	13.8	13.8	13.8	16.0	14.9	12.7	15.0	18.5	7.0	10.5	11.7	9.3	10.5	11.7	11.7	12.9	14.0	14.0	24.3	13.9	10.4	10.4	13.3	24.3	7.0
27	12.6	12.6	12.6	11.5	10.3	10.3	17.2	10.4	10.4	10.5	9.4	8.2	10.6	18.9	20.2	20.1	18.8	14.2	15.4	16.5	15.3	15.2	16.3	16.3	13.9	20.2	8.2
28	11.6	8.1	12.7	15.0	9.2	4.6	9.2	13.9	18.6	17.6	20.0	16.5	14.2	10.7	9.5	9.6	13.1	14.3	13.1	10.7	10.6	14.2	31.8	32.9	14.2	32.9	4.6
29	19.9	11.7	14.0	12.8	9.3	8.1	10.4	11.6	7.0	7.0	7.0	8.2	8.3	8.3	9.5	10.7	9.5	8.3	8.3	10.6	10.6	8.2	7.0	7.0	9.7	19.9	7.0
30	10.5	14.0	14.0	10.5	8.1	11.5	11.5	10.5	10.5	8.2	7.0	8.2	9.5	7.1	7.1	10.7	11.9	20.2	14.2	18.9	16.5	18.8	17.6	16.4	12.2	20.2	7.0
31	11.7	8.2	9.4	9.3	9.3	10.5	11.6	14.0	14.1	14.1	14.1	21.2	14.2	15.4	22.7	17.9	48.8	22.5	27.2	17.6	17.5	12.8	19.8	8.2	16.3	48.8	8.2
Avg	16.0	16.5	16.6	29.9	17.6	20.4	22.6	23.6	19.2	19.4	17.7	17.3	17.4	16.8	16.9	20.9	23.8	22.0	28.5	21.4	26.3	22.5	20.7	18.8	20.5	--	--
Max	53.1	83.3	74.5	426.0	108.0	186.0	247.0	213.0	116.0	69.6	54.9	56.2	40.0	37.4	41.5	50.9	82.1	84.6	175.0	50.9	231.0	189.0	91.9	51.1	--	426.0	--
Min	5.8	5.8	5.8	3.5	2.3	2.3	3.5	4.6	4.6	5.8	4.7	5.9	7.1	6.9	2.3	5.8	5.9	3.5	2.4	2.4	1.2	1.2	2.3	4.6	--	--	1.2

-- Indicates Invalid Data

SAROAD for Resolution, East_Plant

"Component, Channel: Table125, conc_PM10_µg/m^3_STP"

Month: Aug 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	7.0	10.5	10.4	9.3	10.4	9.3	12.7	18.6	12.8	10.5	9.4	12.9	24.7	12.9	10.6	9.4	12.9	14.1	14.1	18.7	22.2	19.8	17.5	14.0	13.5	24.7	7.0
2	12.8	14.0	15.1	12.8	10.4	20.8	19.7	16.2	19.8	14.1	14.1	12.9	11.8	14.1	16.5	16.5	20.0	12.9	17.4	11.6	9.3	7.0	6.9	4.6	13.8	20.8	4.6
3	3.5	4.6	4.6	3.5	6.9	4.6	2.3	5.8	11.7	16.4	12.9	11.8	13.0	19.0	17.9	19.1	19.1	17.8	20.2	21.3	18.9	15.3	15.3	15.2	12.5	21.3	2.3
4	16.4	14.1	9.4	7.0	5.8	5.8	5.8	11.6	22.1	11.7	12.9	15.3	14.1	17.6	14.1	15.3	16.5	15.4	15.4	20.0	12.9	11.7	10.5	11.6	13.1	22.1	5.8
5	12.8	12.8	10.5	11.7	13.9	12.7	30.0	17.2	13.7	6.8	3.4	18.5	9.3	10.5	11.7	14.1	16.5	15.3	14.1	15.2	17.5	11.7	10.5	32.5	14.3	32.5	3.4
6	16.2	16.1	18.4	8.0	11.5	12.5	9.1	7.9	7.9	11.3	11.3	11.3	11.4	12.5	13.8	13.8	11.5	10.4	13.8	12.6	12.6	12.5	13.7	18.3	12.4	18.4	7.9
7	12.6	25.0	27.3	22.7	20.5	17.1	14.8	13.7	12.6	11.5	11.6	13.9	15.1	14.0	15.2	22.3	20.0	25.8	18.8	17.5	18.7	19.8	19.8	20.8	18.0	27.3	11.5
8	17.4	12.7	17.3	20.8	13.8	18.4	21.8	16.2	19.8	34.0	--	23.6	14.2	13.0	14.2	15.5	13.1	9.5	8.3	10.6	8.2	9.3	8.2	8.1	15.1	34.0	8.1
9	10.5	9.3	11.6	10.4	10.4	10.3	12.7	25.6	15.3	22.4	14.2	13.1	10.7	9.6	11.9	13.2	20.3	17.9	17.9	16.6	13.0	11.8	20.0	29.3	14.9	29.3	9.3
10	19.8	9.3	7.0	7.0	4.6	4.6	3.5	3.5	5.8	4.7	2.4	4.7	7.1	13.1	14.3	9.5	7.1	7.1	9.5	9.4	8.2	26.9	41.8	19.7	10.4	41.8	2.4
11	18.5	21.9	18.4	16.1	16.1	19.5	13.8	15.0	15.1	25.8	16.5	16.5	15.4	15.5	15.5	11.9	11.9	13.1	15.4	28.3	8.2	7.0	8.1	12.8	15.7	28.3	7.0
12	11.6	9.3	9.3	11.5	10.4	10.4	11.5	13.9	16.4	25.9	24.9	20.2	20.3	16.7	15.5	14.4	16.7	19.1	23.8	14.3	14.2	14.1	14.1	11.7	15.4	25.9	9.3
13	12.9	11.7	7.0	7.0	6.9	8.1	12.7	13.9	18.7	17.5	11.8	11.8	14.2	13.1	11.9	13.2	12.0	19.1	25.0	19.0	35.5	27.1	28.2	22.4	15.9	35.5	6.9
14	18.7	11.7	11.6	12.8	12.8	12.9	12.8	21.0	14.1	19.9	20.0	10.6	13.1	17.9	13.2	13.2	12.0	20.3	21.5	20.2	16.6	16.5	32.8	8.2	16.0	32.8	8.2
15	5.8	7.0	10.4	10.4	12.7	15.0	15.0	12.7	11.7	14.1	14.2	23.8	29.8	14.3	13.2	14.4	15.6	68.0	5.8	8.2	10.5	8.2	8.2	9.3	14.9	68.0	5.8
16	9.3	8.1	5.8	4.6	4.6	7.0	10.4	9.4	10.6	10.7	7.1	7.2	9.6	10.8	--	--	--	--	--	--	--	--	--	--	--	10.8	4.6
17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
19	--	--	--	--	--	--	--	--	--	--	--	20.1	8.3	13.2	15.6	8.4	8.4	11.9	19.1	13.1	14.2	18.9	15.3	11.7	--	20.1	8.3
20	9.4	12.9	15.2	14.0	18.6	19.7	18.6	15.1	23.4	21.1	17.7	25.0	20.3	18.0	21.6	26.5	20.4	19.2	23.9	128.0	37.4	23.2	14.9	11.6	24.0	128.0	9.4
21	5.7	4.6	7.0	8.1	11.5	9.2	8.1	8.1	10.4	13.9	15.1	21.0	12.9	10.5	9.4	23.6	3.5	5.9	8.3	8.2	7.0	8.2	11.6	11.6	10.1	23.6	3.5
22	18.5	10.4	10.4	9.2	9.2	9.2	10.4	8.1	10.5	17.6	18.8	17.8	17.8	15.5	15.5	17.9	23.6	11.6	11.7	12.8	29.0	87.2	62.6	50.9	21.1	87.2	8.1
23	50.7	55.3	46.0	50.6	56.5	49.6	44.9	30.1	26.8	31.6	30.6	27.2	40.4	23.8	27.2	9.4	11.5	15.2	11.7	10.4	15.1	11.6	7.0	12.7	29.0	56.5	7.0
24	19.6	12.6	9.2	5.7	6.9	5.7	6.9	6.9	2.3	4.6	5.8	8.2	5.9	5.9	7.1	4.7	28.1	26.8	24.5	39.5	13.9	18.5	16.2	19.6	12.7	39.5	2.3
25	3.4	1.2	2.3	3.4	3.4	5.7	4.6	5.7	8.0	6.9	2.3	2.3	4.7	4.7	4.7	4.7	8.2	7.0	5.7	6.9	6.9	4.6	4.6	6.9	5.0	8.2	1.2
26	5.8	2.3	4.6	5.7	5.7	5.7	4.6	8.1	11.6	12.7	14.0	12.9	10.6	11.8	19.0	9.3	9.3	9.4	12.9	106.0	456.0	286.0	222.0	247.0	62.2	456.0	2.3
27	179.0	120.0	70.5	69.3	86.6	67.0	47.4	26.7	25.8	12.9	17.7	16.6	19.0	15.5	14.3	13.2	10.8	9.5	10.6	9.4	7.1	8.2	8.2	8.2	36.4	179.0	7.1
28	8.2	5.8	5.8	7.0	7.0	9.3	12.8	10.5	9.4	8.2	7.1	7.1	4.7	6.0	7.1	39.9	10.6	7.0	7.1	9.4	8.2	4.7	3.5	4.6	8.8	39.9	3.5
29	2.3	5.7	6.9	4.6	4.6	3.4	2.3	5.7	5.8	17.3	6.9	8.1	8.1	4.6	4.6	5.8	7.0	9.3	7.0	4.6	3.5	4.6	1.2	1.1	5.6	17.3	1.1
30	5.7	9.1	9.1	8.0	8.0	8.0	11.4	12.6	8.1	8.1	9.3	7.0	7.0	3.5	2.3	5.8	5.8	9.3	12.8	6.9	4.6	6.9	8.1	4.6	7.6	12.8	2.3
31	4.6	6.9	6.9	6.9	6.9	8.0	9.2	11.5	11.5	30.0	13.9	11.6	7.0	5.9	7.1	7.1	7.1	8.2	5.9	4.7	5.8	3.5	3.5	4.7	8.3	30.0	3.5
Avg	18.5	15.9	13.9	13.1	14.2	13.9	13.9	13.3	13.6	15.8	12.8	14.2	13.8	12.5	13.0	14.0	13.6	15.6	14.3	21.6	29.8	25.2	22.6	22.6	16.5	--	--
Max	179.0	120.0	70.5	69.3	86.6	67.0	47.4	30.1	26.8	34.0	30.6	27.2	40.4	23.8	27.2	39.9	28.1	68.0	25.0	128.0	456.0	286.0	222.0	247.0	--	456.0	--
Min	2.3	1.2	2.3	3.4	3.4	3.4	2.3	3.5	2.3	4.6	2.3	2.3	4.7	3.5	2.3	4.7	3.5	5.9	5.7	4.6	3.5	3.5	1.2	1.1	--	--	1.1

-- Indicates Invalid Data

SAROAD for Resolution, East_Plant

"Component, Channel: Table125, conc_PM10_µg/m^3_STP"

Month: Sep 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	5.8	5.8	5.8	6.9	6.9	5.8	6.9	8.1	5.8	7.0	7.1	4.7	3.6	3.6	1.2	4.8	7.1	8.3	7.1	8.3	9.4	7.1	5.9	5.9	6.2	9.4	1.2
2	4.7	5.8	10.5	11.6	10.4	10.4	10.4	9.3	8.2	12.8	16.4	23.5	28.3	27.3	21.4	27.2	26.0	28.4	25.9	14.1	12.8	9.3	8.2	9.3	15.5	28.4	4.7
3	9.3	9.3	7.0	4.6	5.8	5.8	8.1	11.7	19.9	29.4	21.4	26.2	27.5	39.2	15.2	14.1	9.4	10.5	11.7	18.7	11.7	14.0	11.7	10.5	14.7	39.2	4.6
4	10.5	10.4	15.0	11.5	9.2	10.4	11.6	16.3	19.8	15.3	29.6	23.8	21.5	--	6.0	7.2	8.4	10.8	13.1	11.8	12.9	11.7	11.7	14.0	13.6	29.6	6.0
5	15.2	11.7	9.3	9.3	11.6	10.4	11.6	16.3	18.8	17.7	16.6	21.4	17.9	13.1	11.9	15.6	14.3	10.7	9.5	13.0	13.0	9.4	11.7	11.7	13.4	21.4	9.3
6	9.4	11.7	10.5	10.5	11.6	9.3	25.6	18.7	20.0	30.7	19.0	25.0	19.1	22.8	49.8	15.2	12.8	22.3	17.6	9.4	11.7	12.9	24.4	21.9	18.4	49.8	9.3
7	12.7	11.5	26.4	40.1	41.2	33.2	36.7	41.2	34.4	26.5	36.0	24.3	24.3	31.3	20.9	12.8	10.5	7.0	18.6	19.7	10.4	13.9	12.7	6.9	23.1	41.2	6.9
8	4.6	4.6	4.6	4.6	1.1	1.1	5.7	5.7	3.4	2.3	1.1	3.5	3.5	5.8	10.5	10.5	7.0	4.6	4.6	5.8	5.8	3.5	2.3	2.3	4.5	10.5	1.1
9	0.0	1.1	4.6	4.6	3.4	2.3	5.7	9.1	8.0	6.9	4.6	2.3	3.4	5.7	4.6	6.9	9.2	8.1	9.2	10.3	8.0	5.7	6.9	6.9	5.7	10.3	0.0
10	6.9	5.7	6.9	4.6	4.6	5.7	4.5	6.8	9.2	9.2	5.8	8.1	9.3	7.0	7.0	8.1	12.8	16.2	13.8	10.3	10.3	13.7	11.4	8.0	8.6	16.2	4.5
11	3.4	4.5	8.0	7.9	7.9	9.1	11.3	11.4	21.8	8.0	11.5	12.7	8.2	8.2	10.5	8.2	10.5	9.3	8.1	8.1	8.1	8.0	10.3	11.5	9.4	21.8	3.4
12	10.3	9.1	6.9	8.0	9.1	8.0	6.8	8.0	8.1	8.2	11.7	22.3	9.4	11.8	11.8	10.7	11.8	10.6	8.2	9.4	9.3	9.3	10.5	10.4	10.0	22.3	6.8
13	5.8	2.3	4.6	5.8	8.1	8.1	4.6	4.6	5.8	2.3	5.9	9.4	5.9	8.2	27.0	8.1	8.2	8.2	7.0	7.0	8.2	9.3	12.8	11.6	7.9	27.0	2.3
14	6.9	6.9	8.1	8.1	11.5	12.7	11.5	11.5	11.6	9.3	9.4	8.3	9.5	8.3	7.2	9.6	7.2	9.5	14.1	10.5	7.0	4.7	8.2	8.2	9.2	14.1	4.7
15	4.6	6.9	8.1	6.9	9.2	10.4	10.4	10.4	11.6	12.8	11.7	10.6	8.3	7.1	8.3	8.3	8.4	10.7	14.2	9.4	5.9	2.3	4.7	8.2	8.7	14.2	2.3
16	10.5	11.6	9.3	17.4	9.3	10.4	10.4	11.6	12.8	17.6	10.6	9.5	7.1	7.2	10.7	10.7	9.6	9.5	10.6	15.3	14.0	8.2	7.0	8.1	10.8	17.6	7.0
17	8.2	13.9	11.6	9.3	10.4	9.2	9.2	10.4	10.5	22.3	9.4	8.3	21.4	9.6	11.9	10.8	8.4	11.9	10.7	9.5	9.5	5.9	5.9	9.5	10.7	22.3	5.9
18	10.6	12.9	14.1	14.0	17.5	13.9	10.4	18.6	8.2	7.1	7.1	3.6	2.4	7.2	9.6	9.6	10.7	13.1	14.2	13.0	11.8	12.9	12.9	19.8	11.5	19.8	2.4
19	24.5	29.0	25.6	26.7	24.3	20.8	13.9	23.2	34.0	14.2	13.0	14.2	15.5	21.4	9.6	13.1	9.5	5.9	11.8	13.0	11.8	9.4	7.0	5.8	16.5	34.0	5.8
20	3.5	2.3	4.6	9.3	29.0	8.1	12.7	15.1	19.9	28.3	34.4	10.7	11.9	15.5	16.7	14.3	9.6	9.5	11.9	13.0	15.3	12.9	31.5	31.4	15.5	34.4	2.3
21	13.9	9.3	5.8	8.1	10.3	6.9	3.4	4.6	7.0	7.0	7.0	8.2	10.6	11.9	10.7	8.3	7.1	8.3	18.9	15.3	9.4	5.9	10.6	15.2	9.3	18.9	3.4
22	16.4	16.4	17.5	16.3	15.1	13.9	13.9	13.9	13.8	12.6	19.6	16.2	26.8	44.4	99.6	119.0	83.9	63.9	45.1	31.2	18.4	21.8	11.4	12.5	31.8	119.0	11.4
23	11.4	10.2	11.3	12.4	13.5	13.5	14.6	15.9	20.6	15.0	17.4	14.0	11.7	11.7	15.2	15.2	18.7	26.8	20.9	34.7	23.0	21.8	16.1	14.8	16.7	34.7	10.2
24	12.5	12.5	12.5	11.4	9.1	5.7	6.8	9.1	10.4	9.3	10.5	11.7	21.2	11.8	10.6	11.8	14.2	17.6	19.9	24.5	22.1	17.4	20.8	19.7	13.9	24.5	5.7
25	19.7	22.0	19.6	24.1	19.5	19.5	19.4	13.8	19.7	16.3	12.8	9.4	7.1	10.6	16.5	31.9	30.7	20.0	21.2	29.3	19.8	18.6	15.0	11.5	18.7	31.9	7.1
26	6.9	10.4	10.4	4.6	5.8	4.6	4.6	5.8	4.6	5.8	5.8	8.2	23.6	150.0	151.0	116.0	67.2	50.5	36.3	32.7	60.3	33.5	23.0	33.3	35.6	151.0	4.6
27	35.5	29.7	20.5	21.6	26.1	27.3	29.5	30.6	21.5	35.2	36.5	28.6	27.5	44.8	31.1	21.9	23.0	21.8	20.6	20.5	19.3	18.2	11.3	10.1	25.5	44.8	10.1
28	9.0	10.2	13.5	12.3	7.9	6.8	10.1	14.7	14.7	12.5	10.3	18.4	13.9	9.3	7.0	9.3	7.0	7.0	10.4	11.5	10.3	7.9	6.8	6.8	10.3	18.4	6.8
29	5.7	9.1	9.0	5.7	4.5	4.5	4.5	3.4	5.7	8.1	8.1	8.1	10.5	12.8	10.5	10.5	11.7	13.9	16.2	15.0	15.0	12.6	11.4	12.6	9.5	16.2	3.4
30	11.4	10.2	10.2	11.3	11.3	--	10.2	12.5	--	12.7	12.7	13.9	11.7	9.4	11.7	11.7	17.5	11.6	12.8	13.9	15.0	16.0	14.8	15.0	12.6	17.5	9.4
Avg	10.3	10.6	11.1	11.6	12.2	10.6	11.5	13.1	14.1	14.1	14.1	13.6	14.1	19.9	21.2	19.4	16.4	15.6	15.5	15.3	14.0	11.9	12.0	12.4	13.9	--	--
Max	35.5	29.7	26.4	40.1	41.2	33.2	36.7	41.2	34.4	35.2	36.5	28.6	28.3	150.0	151.0	119.0	83.9	63.9	45.1	34.7	60.3	33.5	31.5	33.3	--	151.0	--
Min	0.0	1.1	4.6	4.6	1.1	1.1	3.4	3.4	3.4	2.3	1.1	2.3	2.4	3.6	1.2	4.8	7.0	4.6	4.6	5.8	5.8	2.3	2.3	2.3	--	--	0.0

-- Indicates Invalid Data

SAROAD for Resolution, East_Plant

"Component, Channel: Table126, conc_PM25_µg/m^3 Actual"

Month: Jul 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	9.0	7.0	7.0	10.0	10.0	8.0	9.0	11.0	16.0	15.0	37.0	29.0	30.0	35.0	19.0	20.0	24.0	13.0	20.0	20.0	38.0	17.0	19.0	20.0	18.5	38.0	7.0
2	15.0	14.0	13.0	27.0	18.0	10.0	9.0	9.0	11.0	11.0	7.0	8.0	11.0	10.0	8.0	7.0	9.0	10.0	17.0	22.0	4.0	4.0	3.0	4.0	10.9	27.0	3.0
3	4.0	3.0	2.0	2.0	4.0	3.0	4.0	6.0	4.0	4.0	8.0	19.0	15.0	16.0	10.0	19.0	25.0	15.0	14.0	12.0	17.0	11.0	12.0	13.0	10.1	25.0	2.0
4	13.0	10.0	8.0	8.0	8.0	8.0	19.0	10.0	9.0	18.0	7.0	8.0	10.0	16.0	14.0	14.0	12.0	10.0	12.0	12.0	10.0	10.0	9.0	9.0	11.0	19.0	7.0
5	16.0	10.0	8.0	9.0	12.0	12.0	11.0	11.0	10.0	7.0	9.0	11.0	9.0	8.0	10.0	9.0	10.0	9.0	7.0	9.0	11.0	8.0	8.0	11.0	9.8	16.0	7.0
6	9.0	8.0	8.0	7.0	9.0	10.0	8.0	8.0	9.0	9.0	9.0	9.0	9.0	9.0	15.0	14.0	54.0	14.0	12.0	21.0	18.0	16.0	11.0	10.0	12.7	54.0	7.0
7	11.0	7.0	6.0	9.0	8.0	9.0	15.0	13.0	24.0	30.0	19.0	10.0	10.0	8.0	9.0	17.0	9.0	9.0	10.0	10.0	5.0	6.0	8.0	7.0	11.2	30.0	5.0
8	8.0	5.0	3.0	6.0	9.0	8.0	8.0	12.0	11.0	8.0	7.0	7.0	6.0	6.0	6.0	6.0	8.0	9.0	10.0	6.0	4.0	5.0	6.0	6.0	7.1	12.0	3.0
9	5.0	7.0	4.0	3.0	8.0	19.0	13.0	13.0	10.0	10.0	11.0	13.0	13.0	13.0	13.0	13.0	14.0	13.0	10.0	11.0	11.0	10.0	9.0	11.0	10.7	19.0	3.0
10	11.0	9.0	9.0	36.0	14.0	17.0	20.0	17.0	11.0	11.0	9.0	8.0	9.0	8.0	8.0	11.0	11.0	9.0	8.0	7.0	18.0	17.0	11.0	8.0	12.4	36.0	7.0
11	5.0	5.0	5.0	3.0	3.0	4.0	5.0	4.0	5.0	6.0	6.0	8.0	7.0	5.0	6.0	6.0	6.0	8.0	8.0	8.0	9.0	8.0	5.0	6.0	5.9	9.0	3.0
12	8.0	7.0	5.0	5.0	6.0	6.0	5.0	6.0	7.0	7.0	6.0	4.0	6.0	5.0	2.0	1.0	0.0	1.0	3.0	5.0	5.0	4.0	3.0	3.0	4.6	8.0	0.0
13	4.0	4.0	5.0	4.0	3.0	3.0	6.0	7.0	6.0	5.0	4.0	3.0	5.0	6.0	5.0	3.0	6.0	6.0	6.0	6.0	7.0	8.0	5.0	6.0	5.1	8.0	3.0
14	6.0	4.0	3.0	5.0	9.0	9.0	6.0	4.0	4.0	5.0	8.0	10.0	11.0	8.0	6.0	6.0	5.0	5.0	5.0	3.0	3.0	5.0	5.0	4.0	5.8	11.0	3.0
15	3.0	3.0	2.0	1.0	1.0	4.0	5.0	7.0	6.0	6.0	6.0	5.0	6.0	5.0	4.0	4.0	6.0	7.0	20.0	4.0	5.0	5.0	4.0	4.0	5.1	20.0	1.0
16	2.0	0.0	0.0	0.0	2.0	5.0	5.0	3.0	2.0	4.0	--	--	--	--	--	--	--	-13.0	-6.0	-1.0	0.0	1.0	4.0	4.0	--	5.0	-13.0
17	4.0	5.0	6.0	6.0	5.0	5.0	4.0	5.0	7.0	8.0	6.0	6.0	7.0	7.0	6.0	6.0	5.0	5.0	6.0	6.0	6.0	7.0	5.0	3.0	5.7	8.0	3.0
18	2.0	4.0	3.0	2.0	4.0	3.0	3.0	3.0	2.0	2.0	3.0	5.0	5.0	6.0	6.0	4.0	3.0	3.0	4.0	4.0	2.0	-1.0	-2.0	-1.0	2.9	6.0	-2.0
19	-1.0	0.0	1.0	1.0	4.0	4.0	3.0	3.0	0.0	2.0	1.0	0.0	3.0	3.0	1.0	1.0	-1.0	-1.0	2.0	4.0	5.0	6.0	8.0	5.0	2.3	8.0	-1.0
20	3.0	3.0	1.0	3.0	6.0	5.0	3.0	4.0	3.0	5.0	4.0	5.0	5.0	3.0	4.0	3.0	5.0	6.0	3.0	2.0	5.0	6.0	4.0	6.0	4.0	6.0	1.0
21	6.0	3.0	3.0	4.0	4.0	5.0	6.0	6.0	6.0	6.0	5.0	7.0	4.0	1.0	3.0	5.0	3.0	2.0	2.0	3.0	5.0	4.0	1.0	0.0	3.9	7.0	0.0
22	2.0	2.0	1.0	4.0	5.0	5.0	5.0	5.0	3.0	2.0	5.0	8.0	6.0	6.0	8.0	10.0	12.0	11.0	11.0	9.0	9.0	9.0	7.0	7.0	6.3	12.0	1.0
23	7.0	8.0	9.0	9.0	10.0	12.0	13.0	10.0	8.0	10.0	9.0	5.0	6.0	9.0	8.0	9.0	11.0	9.0	7.0	8.0	10.0	9.0	6.0	8.0	8.8	13.0	5.0
24	7.0	6.0	6.0	7.0	6.0	5.0	5.0	8.0	8.0	7.0	6.0	6.0	7.0	6.0	5.0	6.0	7.0	9.0	7.0	5.0	7.0	5.0	6.0	9.0	6.5	9.0	5.0
25	7.0	6.0	5.0	5.0	6.0	6.0	8.0	10.0	8.0	8.0	--	5.0	2.0	5.0	6.0	6.0	5.0	6.0	6.0	6.0	7.0	7.0	9.0	9.0	6.4	10.0	2.0
26	8.0	7.0	8.0	7.0	6.0	7.0	7.0	7.0	5.0	5.0	5.0	5.0	5.0	3.0	5.0	6.0	6.0	7.0	8.0	5.0	4.0	4.0	3.0	4.0	5.7	8.0	3.0
27	6.0	7.0	5.0	6.0	5.0	4.0	5.0	6.0	7.0	6.0	6.0	4.0	4.0	7.0	5.0	3.0	5.0	7.0	7.0	5.0	5.0	5.0	7.0	8.0	5.6	8.0	3.0
28	7.0	6.0	6.0	6.0	4.0	4.0	3.0	4.0	6.0	8.0	10.0	11.0	9.0	8.0	7.0	7.0	6.0	4.0	5.0	6.0	4.0	5.0	7.0	7.0	6.3	11.0	3.0
29	6.0	3.0	5.0	4.0	1.0	3.0	5.0	6.0	5.0	5.0	4.0	3.0	5.0	5.0	2.0	3.0	4.0	3.0	3.0	5.0	5.0	5.0	5.0	3.0	4.1	6.0	1.0
30	4.0	7.0	7.0	4.0	4.0	4.0	2.0	4.0	4.0	4.0	3.0	4.0	3.0	3.0	5.0	5.0	3.0	3.0	6.0	7.0	7.0	9.0	9.0	8.0	5.0	9.0	2.0
31	7.0	6.0	7.0	8.0	6.0	6.0	9.0	5.0	4.0	4.0	4.0	5.0	8.0	9.0	7.0	9.0	8.0	6.0	6.0	6.0	8.0	7.0	7.0	6.0	6.6	9.0	4.0
Avg	6.6	5.7	5.2	6.8	6.5	6.9	7.4	7.3	7.1	7.7	7.7	7.7	7.9	8.0	7.1	7.8	9.4	6.6	7.7	7.6	8.2	7.2	6.6	6.7	7.4	--	--
Max	16.0	14.0	13.0	36.0	18.0	19.0	20.0	17.0	24.0	30.0	37.0	29.0	30.0	35.0	19.0	20.0	54.0	15.0	20.0	22.0	38.0	17.0	19.0	20.0	--	54.0	--
Min	-1.0	0.0	0.0	0.0	1.0	3.0	2.0	3.0	0.0	2.0	1.0	0.0	2.0	1.0	1.0	1.0	-1.0	-13.0	-6.0	-1.0	0.0	-1.0	-2.0	-1.0	--	--	-13.0

-- Indicates Invalid Data

SAROAD for Resolution, East_Plant

"Component, Channel: Table126, conc_PM25_µg/m^3 Actual"

Month: Aug 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	3.0	5.0	7.0	4.0	1.0	2.0	2.0	3.0	6.0	6.0	2.0	3.0	6.0	5.0	6.0	5.0	3.0	3.0	4.0	3.0	3.0	5.0	6.0	6.0	4.1	7.0	1.0
2	6.0	4.0	5.0	4.0	2.0	4.0	5.0	4.0	5.0	6.0	6.0	7.0	6.0	6.0	6.0	7.0	7.0	6.0	6.0	6.0	4.0	3.0	3.0	4.0	5.1	7.0	2.0
3	5.0	4.0	2.0	1.0	1.0	2.0	2.0	0.0	3.0	6.0	5.0	6.0	7.0	8.0	7.0	6.0	6.0	7.0	7.0	6.0	3.0	4.0	8.0	8.0	4.8	8.0	0.0
4	6.0	6.0	6.0	6.0	7.0	5.0	5.0	5.0	5.0	6.0	9.0	6.0	6.0	7.0	4.0	3.0	5.0	6.0	6.0	5.0	8.0	9.0	6.0	6.0	6.0	9.0	3.0
5	5.0	4.0	4.0	3.0	6.0	7.0	6.0	6.0	5.0	3.0	4.0	5.0	5.0	5.0	7.0	7.0	10.0	10.0	7.0	9.0	9.0	7.0	7.0	6.0	6.1	10.0	3.0
6	6.0	10.0	10.0	10.0	10.0	7.0	6.0	6.0	5.0	5.0	6.0	8.0	8.0	6.0	8.0	10.0	7.0	6.0	7.0	7.0	7.0	9.0	10.0	8.0	7.6	10.0	5.0
7	8.0	13.0	17.0	15.0	12.0	11.0	12.0	9.0	8.0	9.0	8.0	7.0	8.0	8.0	6.0	8.0	8.0	8.0	8.0	6.0	8.0	9.0	9.0	9.0	9.3	17.0	6.0
8	9.0	10.0	10.0	7.0	7.0	8.0	9.0	9.0	10.0	10.0	--	10.0	9.0	6.0	6.0	5.0	4.0	6.0	6.0	4.0	3.0	4.0	3.0	3.0	6.9	10.0	3.0
9	3.0	4.0	6.0	6.0	3.0	3.0	3.0	4.0	5.0	5.0	4.0	4.0	5.0	7.0	7.0	6.0	6.0	7.0	7.0	7.0	5.0	3.0	4.0	7.0	5.0	7.0	3.0
10	8.0	5.0	4.0	5.0	5.0	4.0	4.0	5.0	5.0	2.0	3.0	5.0	5.0	3.0	1.0	1.0	2.0	5.0	8.0	6.0	5.0	6.0	6.0	7.0	4.6	8.0	1.0
11	8.0	7.0	6.0	6.0	6.0	6.0	6.0	9.0	8.0	7.0	9.0	7.0	5.0	6.0	9.0	8.0	7.0	10.0	10.0	7.0	5.0	5.0	6.0	7.0	7.1	10.0	5.0
12	8.0	5.0	2.0	3.0	3.0	3.0	4.0	5.0	4.0	4.0	5.0	8.0	11.0	10.0	8.0	6.0	6.0	7.0	9.0	8.0	6.0	5.0	3.0	3.0	5.7	11.0	2.0
13	3.0	6.0	7.0	5.0	5.0	5.0	4.0	5.0	5.0	6.0	6.0	5.0	8.0	6.0	3.0	4.0	5.0	5.0	4.0	8.0	11.0	8.0	7.0	8.0	5.8	11.0	3.0
14	9.0	7.0	7.0	7.0	4.0	4.0	6.0	4.0	4.0	5.0	5.0	5.0	6.0	7.0	7.0	6.0	6.0	7.0	7.0	8.0	7.0	6.0	6.0	4.0	6.0	9.0	4.0
15	3.0	3.0	5.0	5.0	5.0	6.0	5.0	6.0	5.0	4.0	5.0	6.0	6.0	7.0	6.0	6.0	8.0	5.0	3.0	3.0	4.0	6.0	6.0	5.0	5.1	8.0	3.0
16	6.0	5.0	5.0	5.0	4.0	5.0	4.0	5.0	6.0	6.0	5.0	5.0	6.0	5.0	4.0	3.0	4.0	7.0	6.0	5.0	6.0	9.0	27.0	8.0	6.3	27.0	3.0
17	8.0	10.0	8.0	5.0	5.0	6.0	6.0	7.0	7.0	7.0	7.0	7.0	10.0	10.0	8.0	8.0	8.0	7.0	6.0	6.0	6.0	5.0	2.0	4.0	6.8	10.0	2.0
18	6.0	3.0	4.0	3.0	2.0	2.0	2.0	2.0	5.0	8.0	7.0	6.0	8.0	8.0	7.0	7.0	6.0	6.0	6.0	6.0	7.0	8.0	5.0	5.0	5.4	8.0	2.0
19	5.0	4.0	5.0	6.0	6.0	5.0	5.0	6.0	6.0	6.0	7.0	6.0	5.0	4.0	5.0	5.0	6.0	7.0	6.0	6.0	7.0	9.0	8.0	6.0	5.9	9.0	4.0
20	6.0	5.0	6.0	9.0	7.0	6.0	6.0	6.0	6.0	7.0	8.0	8.0	10.0	8.0	5.0	6.0	9.0	10.0	9.0	8.0	9.0	8.0	8.0	6.0	7.3	10.0	5.0
21	3.0	2.0	3.0	5.0	6.0	3.0	1.0	1.0	5.0	4.0	2.0	5.0	7.0	6.0	6.0	8.0	5.0	2.0	3.0	4.0	6.0	5.0	3.0	4.0	4.1	8.0	1.0
22	5.0	5.0	5.0	4.0	2.0	3.0	3.0	3.0	3.0	3.0	4.0	6.0	6.0	5.0	6.0	7.0	5.0	6.0	9.0	7.0	7.0	8.0	7.0	6.0	5.2	9.0	2.0
23	5.0	6.0	9.0	10.0	8.0	8.0	6.0	8.0	--	10.0	10.0	8.0	8.0	9.0	5.0	7.0	8.0	7.0	4.0	6.0	10.0	8.0	5.0	5.0	7.4	10.0	4.0
24	8.0	8.0	5.0	3.0	2.0	2.0	1.0	4.0	5.0	3.0	2.0	5.0	6.0	3.0	2.0	5.0	4.0	4.0	6.0	5.0	5.0	5.0	3.0	3.0	4.1	8.0	1.0
25	2.0	3.0	3.0	1.0	3.0	5.0	4.0	3.0	2.0	2.0	0.0	0.0	3.0	2.0	1.0	2.0	4.0	3.0	2.0	3.0	2.0	2.0	4.0	5.0	2.5	5.0	0.0
26	4.0	4.0	4.0	4.0	5.0	4.0	4.0	6.0	6.0	6.0	6.0	6.0	7.0	6.0	2.0	2.0	6.0	6.0	5.0	9.0	31.0	23.0	20.0	22.0	8.3	31.0	2.0
27	17.0	17.0	11.0	11.0	12.0	12.0	10.0	8.0	5.0	5.0	7.0	7.0	6.0	5.0	7.0	8.0	7.0	7.0	4.0	3.0	5.0	6.0	5.0	3.0	7.8	17.0	3.0
28	1.0	4.0	5.0	1.0	2.0	4.0	4.0	4.0	3.0	2.0	1.0	0.0	1.0	2.0	6.0	5.0	1.0	0.0	2.0	4.0	2.0	2.0	4.0	3.0	2.6	6.0	0.0
29	2.0	1.0	2.0	3.0	4.0	4.0	3.0	3.0	3.0	2.0	0.0	1.0	4.0	3.0	2.0	3.0	3.0	2.0	2.0	2.0	2.0	1.0	0.0	0.0	2.2	4.0	0.0
30	3.0	3.0	2.0	5.0	5.0	8.0	6.0	5.0	5.0	3.0	4.0	3.0	2.0	0.0	1.0	4.0	3.0	1.0	3.0	2.0	2.0	4.0	3.0	2.0	3.3	8.0	0.0
31	3.0	4.0	3.0	2.0	4.0	3.0	3.0	6.0	6.0	4.0	4.0	4.0	4.0	4.0	5.0	4.0	2.0	2.0	3.0	4.0	4.0	4.0	2.0	2.0	3.6	6.0	2.0
Avg	5.6	5.7	5.7	5.3	5.0	5.1	4.7	5.1	5.2	5.2	5.0	5.5	6.3	5.7	5.3	5.6	5.5	5.7	5.7	5.6	6.4	6.3	6.3	5.7	5.6	--	--
Max	17.0	17.0	17.0	15.0	12.0	12.0	12.0	9.0	10.0	10.0	10.0	10.0	11.0	10.0	9.0	10.0	10.0	10.0	10.0	9.0	31.0	23.0	27.0	22.0	--	31.0	--
Min	1.0	1.0	2.0	1.0	1.0	2.0	1.0	0.0	2.0	2.0	0.0	0.0	1.0	0.0	1.0	1.0	1.0	0.0	2.0	2.0	2.0	1.0	0.0	0.0	--	--	0.0

-- Indicates Invalid Data

SAROAD for Resolution, East_Plant

"Component, Channel: Table126, conc_PM25_µg/m^3 Actual"

Month: Sep 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	2.0	3.0	3.0	2.0	1.0	1.0	3.0	3.0	2.0	0.0	2.0	3.0	2.0	2.0	2.0	3.0	2.0	3.0	4.0	6.0	6.0	3.0	4.0	4.0	2.8	6.0	0.0
2	2.0	2.0	1.0	2.0	2.0	1.0	2.0	6.0	5.0	6.0	8.0	6.0	7.0	5.0	4.0	4.0	4.0	3.0	2.0	3.0	3.0	2.0	0.0	2.0	3.4	8.0	0.0
3	5.0	5.0	4.0	5.0	7.0	6.0	5.0	7.0	8.0	9.0	8.0	8.0	12.0	12.0	6.0	4.0	6.0	7.0	5.0	5.0	6.0	4.0	6.0	8.0	6.6	12.0	4.0
4	6.0	6.0	6.0	6.0	5.0	4.0	5.0	8.0	6.0	5.0	9.0	9.0	7.0	--	8.0	9.0	7.0	7.0	7.0	7.0	5.0	6.0	9.0	9.0	6.8	9.0	4.0
5	9.0	7.0	5.0	3.0	4.0	6.0	8.0	8.0	6.0	5.0	6.0	7.0	4.0	3.0	6.0	6.0	6.0	5.0	3.0	5.0	6.0	6.0	7.0	6.0	5.7	9.0	3.0
6	6.0	6.0	5.0	6.0	6.0	7.0	7.0	5.0	3.0	6.0	8.0	7.0	7.0	7.0	5.0	6.0	6.0	6.0	7.0	7.0	9.0	6.0	4.0	6.0	6.2	9.0	3.0
7	6.0	4.0	2.0	2.0	5.0	6.0	6.0	6.0	6.0	3.0	4.0	7.0	7.0	7.0	8.0	7.0	4.0	5.0	5.0	3.0	5.0	5.0	4.0	2.0	5.0	8.0	2.0
8	1.0	3.0	2.0	0.0	0.0	0.0	1.0	1.0	2.0	3.0	4.0	3.0	3.0	5.0	6.0	3.0	1.0	2.0	4.0	4.0	4.0	1.0	0.0	2.0	2.3	6.0	0.0
9	2.0	1.0	1.0	1.0	0.0	0.0	2.0	4.0	3.0	2.0	3.0	2.0	2.0	2.0	0.0	-1.0	2.0	3.0	3.0	4.0	4.0	4.0	4.0	5.0	2.2	5.0	-1.0
10	5.0	4.0	3.0	2.0	3.0	4.0	2.0	4.0	4.0	2.0	2.0	4.0	2.0	2.0	4.0	3.0	3.0	4.0	1.0	1.0	6.0	6.0	5.0	5.0	3.4	6.0	1.0
11	5.0	3.0	1.0	2.0	4.0	3.0	3.0	3.0	5.0	5.0	4.0	4.0	3.0	3.0	2.0	1.0	2.0	3.0	3.0	4.0	5.0	4.0	4.0	4.0	3.3	5.0	1.0
12	2.0	2.0	5.0	5.0	4.0	4.0	5.0	6.0	3.0	3.0	5.0	7.0	6.0	5.0	4.0	3.0	3.0	5.0	5.0	5.0	5.0	3.0	1.0	1.0	4.0	7.0	1.0
13	0.0	2.0	3.0	2.0	1.0	1.0	0.0	1.0	3.0	1.0	1.0	5.0	2.0	3.0	3.0	1.0	1.0	0.0	4.0	4.0	3.0	5.0	6.0	5.0	2.4	6.0	0.0
14	4.0	2.0	2.0	5.0	6.0	6.0	5.0	4.0	6.0	5.0	2.0	4.0	5.0	4.0	4.0	7.0	6.0	6.0	4.0	4.0	6.0	5.0	4.0	6.0	4.7	7.0	2.0
15	5.0	5.0	5.0	4.0	4.0	7.0	5.0	3.0	3.0	6.0	8.0	7.0	5.0	4.0	5.0	5.0	5.0	7.0	6.0	6.0	6.0	3.0	4.0	4.0	5.1	8.0	3.0
16	3.0	5.0	5.0	5.0	5.0	3.0	1.0	3.0	3.0	4.0	5.0	5.0	4.0	5.0	2.0	2.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	3.8	5.0	1.0
17	4.0	5.0	4.0	3.0	0.0	-1.0	3.0	5.0	2.0	3.0	4.0	5.0	5.0	3.0	4.0	5.0	3.0	4.0	4.0	1.0	4.0	4.0	3.0	2.0	3.3	5.0	-1.0
18	0.0	2.0	4.0	2.0	3.0	6.0	5.0	3.0	4.0	4.0	4.0	5.0	2.0	1.0	3.0	4.0	2.0	0.0	1.0	1.0	2.0	3.0	4.0	6.0	3.0	6.0	0.0
19	6.0	6.0	8.0	8.0	7.0	6.0	4.0	4.0	7.0	6.0	4.0	3.0	3.0	5.0	8.0	5.0	2.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.3	8.0	2.0
20	4.0	3.0	4.0	4.0	6.0	7.0	5.0	4.0	5.0	4.0	5.0	6.0	5.0	3.0	6.0	6.0	4.0	4.0	5.0	4.0	5.0	5.0	3.0	4.0	4.6	7.0	3.0
21	4.0	1.0	-1.0	2.0	3.0	3.0	6.0	3.0	2.0	3.0	3.0	2.0	1.0	3.0	6.0	4.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	6.0	3.1	6.0	-1.0
22	5.0	3.0	6.0	6.0	6.0	8.0	6.0	6.0	5.0	4.0	6.0	6.0	9.0	9.0	8.0	11.0	10.0	9.0	7.0	6.0	4.0	3.0	2.0	2.0	6.1	11.0	2.0
23	4.0	2.0	0.0	3.0	4.0	3.0	3.0	2.0	2.0	0.0	0.0	3.0	3.0	5.0	5.0	4.0	5.0	6.0	6.0	7.0	8.0	4.0	3.0	4.0	3.6	8.0	0.0
24	6.0	5.0	2.0	2.0	1.0	1.0	2.0	2.0	3.0	3.0	4.0	5.0	4.0	2.0	1.0	4.0	6.0	6.0	6.0	6.0	4.0	5.0	7.0	6.0	3.9	7.0	1.0
25	5.0	6.0	7.0	6.0	5.0	5.0	4.0	5.0	5.0	2.0	2.0	3.0	2.0	1.0	0.0	0.0	3.0	3.0	3.0	3.0	5.0	5.0	3.0	2.0	3.5	7.0	0.0
26	3.0	5.0	2.0	-1.0	1.0	1.0	1.0	3.0	2.0	1.0	2.0	4.0	3.0	6.0	12.0	11.0	7.0	6.0	5.0	6.0	7.0	6.0	6.0	7.0	4.4	12.0	-1.0
27	7.0	6.0	6.0	6.0	6.0	4.0	4.0	5.0	6.0	6.0	6.0	7.0	6.0	5.0	5.0	6.0	7.0	6.0	5.0	4.0	3.0	3.0	4.0	6.0	5.4	7.0	3.0
28	7.0	4.0	4.0	5.0	2.0	3.0	3.0	2.0	3.0	1.0	2.0	4.0	4.0	2.0	3.0	4.0	4.0	4.0	4.0	3.0	3.0	4.0	3.0	5.0	3.5	7.0	1.0
29	4.0	3.0	3.0	2.0	3.0	3.0	3.0	3.0	1.0	1.0	3.0	5.0	6.0	5.0	3.0	4.0	3.0	3.0	4.0	5.0	4.0	4.0	6.0	6.0	3.6	6.0	1.0
30	4.0	6.0	8.0	6.0	5.0	--	1.0	2.0	--	5.0	6.0	5.0	3.0	0.0	1.0	3.0	2.0	4.0	7.0	5.0	5.0	6.0	4.0	5.0	4.2	8.0	0.0
Avg	4.2	3.9	3.7	3.5	3.6	3.7	3.7	4.0	4.0	3.6	4.3	5.0	4.5	4.1	4.5	4.5	4.1	4.4	4.4	4.4	4.8	4.2	4.1	4.6	4.2	--	--
Max	9.0	7.0	8.0	8.0	7.0	8.0	8.0	8.0	8.0	9.0	9.0	9.0	12.0	12.0	12.0	11.0	10.0	9.0	7.0	7.0	9.0	6.0	9.0	9.0	--	12.0	--
Min	0.0	1.0	-1.0	-1.0	0.0	-1.0	0.0	1.0	1.0	0.0	0.0	2.0	1.0	0.0	0.0	-1.0	1.0	0.0	1.0	1.0	2.0	1.0	0.0	1.0	--	--	-1.0

-- Indicates Invalid Data

SAROAD for Resolution, West_Plant

"Component, Channel: Table126, conc_PM10_µg/m^3 STP"

Month: Jul 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	28.3	21.5	19.2	22.6	22.6	46.2	61.0	72.7	36.7	56.5	54.4	40.7	51.3	92.4	80.8	86.7	52.5	34.9	50.0	33.6	34.7	48.4	33.3	42.5	46.8	92.4	19.2
2	126.0	131.0	110.0	110.0	64.7	22.3	26.7	25.7	60.7	19.2	19.3	20.6	12.6	25.4	42.8	138.0	34.7	36.9	56.3	49.4	156.0	19.1	6.7	63.8	57.4	156.0	6.7
3	42.6	19.1	10.1	7.9	7.9	10.1	10.1	16.9	8.0	9.2	12.6	31.2	31.3	50.1	66.3	57.1	67.7	37.3	44.2	31.3	35.9	35.9	40.4	36.7	30.0	67.7	7.9
4	28.6	25.1	22.8	28.5	23.9	31.8	74.6	37.5	21.7	28.5	20.6	28.7	28.9	37.1	53.5	65.1	40.7	54.7	67.4	41.7	34.6	42.7	42.6	49.3	38.8	74.6	20.6
5	52.6	43.3	43.2	38.7	40.9	39.7	69.1	37.4	43.0	32.5	23.6	19.2	25.0	27.4	20.7	27.7	18.4	19.6	31.0	28.6	36.4	29.5	29.5	26.1	33.5	69.1	18.4
6	27.2	32.8	28.2	40.6	29.4	23.7	30.4	27.2	28.4	34.4	36.8	30.1	25.6	33.8	38.6	47.9	28.0	31.5	31.4	23.2	24.3	28.8	46.7	52.1	32.5	52.1	23.2
7	29.5	12.5	22.7	20.4	15.8	23.8	24.9	13.6	22.9	20.7	17.4	15.1	19.9	20.0	20.0	20.0	23.5	23.5	17.5	25.6	26.7	32.4	33.3	112.0	25.6	112.0	12.5
8	47.9	17.2	8.0	4.6	35.2	13.6	17.0	22.7	13.7	11.5	11.5	11.6	9.4	36.2	25.7	27.0	19.9	--	--	--	12.4	11.3	10.2	9.1	17.9	47.9	4.6
9	9.0	10.2	10.1	14.6	13.5	21.3	24.6	40.3	40.3	55.1	54.3	55.7	43.3	54.9	47.0	40.2	34.5	39.0	44.6	29.7	36.5	35.3	35.2	46.5	34.8	55.7	9.0
10	30.5	28.2	96.4	395.0	140.0	164.0	196.0	205.0	116.0	73.1	45.3	36.4	44.6	45.9	50.6	48.3	44.9	42.5	49.3	51.4	249.0	186.0	79.0	37.2	102.0	395.0	28.2
11	30.4	42.3	14.3	17.7	11.1	11.1	11.1	16.6	16.7	15.6	16.8	16.9	18.0	18.1	22.7	22.8	30.7	31.8	28.3	23.7	20.3	21.4	19.1	18.0	20.6	42.3	11.1
12	24.6	15.7	14.5	12.3	11.2	13.4	17.9	16.8	18.0	16.9	13.5	14.6	16.9	14.4	12.3	10.1	5.7	6.8	20.4	19.2	76.5	14.6	15.7	14.6	17.4	76.5	5.7
13	13.4	10.1	6.7	9.0	18.9	10.0	12.3	13.4	10.1	10.2	10.2	9.1	11.5	11.5	10.4	17.3	24.3	13.9	25.4	27.6	20.6	20.6	17.1	23.9	14.9	27.6	6.7
14	25.0	15.9	21.5	16.9	18.1	25.9	18.0	22.7	20.5	17.1	17.2	25.3	26.6	16.3	18.6	14.0	19.8	18.6	17.4	11.5	9.2	6.9	10.3	12.5	17.7	26.6	6.9
15	12.5	10.2	9.1	7.9	4.5	7.9	12.4	11.3	17.1	--	--	--	38.2	--	16.2	10.5	9.3	17.5	233.0	19.5	29.7	27.3	54.5	12.2	28.1	233.0	4.5
16	7.8	4.5	5.6	3.3	5.6	5.6	2.2	4.5	4.5	3.4	10.1	10.1	6.7	6.8	6.8	6.8	7.9	7.9	5.6	6.8	9.0	11.2	12.2	11.1	6.9	12.2	2.2
17	6.7	4.5	4.5	3.3	5.6	8.9	6.7	5.6	7.9	12.4	11.4	6.9	10.3	12.6	24.1	11.5	13.8	18.3	22.8	15.9	35.0	15.8	13.5	9.0	12.0	35.0	3.3
18	5.6	6.7	7.8	10.1	14.5	14.5	16.7	22.4	14.6	13.6	11.4	11.4	14.9	13.8	6.9	6.9	8.1	4.6	2.3	1.1	1.1	5.6	9.0	6.8	9.6	22.4	1.1
19	9.0	7.9	3.4	3.4	3.4	3.4	3.4	6.7	6.7	6.8	5.7	5.7	6.9	9.2	11.5	6.9	1.2	2.3	5.8	11.4	23.7	18.0	20.2	20.2	8.4	23.7	1.2
20	19.0	3.4	8.9	13.4	12.3	11.1	12.3	11.2	16.8	9.0	10.2	10.2	11.4	9.1	6.8	10.3	12.6	10.4	25.6	7.7	7.8	11.1	11.1	8.9	11.3	25.6	3.4
21	8.9	8.9	11.1	6.7	7.8	13.3	18.8	14.4	12.3	10.1	11.3	10.0	6.6	3.3	1.1	3.3	4.5	3.4	3.4	5.6	11.2	12.2	7.8	3.3	8.3	18.8	1.1
22	8.9	12.2	6.6	5.5	6.6	4.4	5.5	11.1	7.8	11.1	13.4	18.0	7.9	38.4	18.1	31.3	60.5	67.3	61.7	49.3	45.8	42.4	37.9	42.2	25.6	67.3	4.4
23	18.9	21.1	25.5	29.9	31.0	37.6	27.7	31.2	23.5	20.2	25.9	22.6	29.5	38.7	22.8	24.0	24.1	21.8	20.6	18.2	27.2	29.4	21.4	27.0	25.8	38.7	18.2
24	25.9	15.7	21.3	20.2	13.4	13.4	21.2	20.2	7.9	7.9	10.2	22.8	17.2	14.9	20.7	23.0	16.1	14.9	21.8	16.0	25.0	24.8	10.1	12.4	17.4	25.9	7.9
25	21.4	19.1	13.5	19.0	12.3	19.0	20.1	12.3	10.1	11.3	14.7	--	13.5	12.5	13.6	21.1	11.1	21.2	12.3	19.0	23.4	17.9	15.6	14.5	16.0	23.4	10.1
26	22.3	18.9	15.6	14.5	14.4	20.0	13.3	21.1	11.1	16.7	12.3	13.5	14.7	11.3	11.3	18.1	13.6	11.3	18.1	14.7	16.9	12.3	9.0	11.2	14.8	22.3	9.0
27	13.4	12.3	15.6	20.0	14.5	14.5	13.4	12.3	11.2	9.0	10.2	14.8	14.8	14.9	23.0	13.8	14.9	13.7	13.8	14.8	14.8	14.8	20.4	21.5	14.8	23.0	9.0
28	14.5	14.6	14.6	11.2	11.2	14.5	14.5	14.6	18.1	14.8	14.8	17.2	1.2	4.6	8.1	9.3	10.4	13.9	13.9	15.0	12.6	12.6	30.7	30.6	14.1	30.7	1.2
29	24.8	22.5	21.4	16.8	12.3	14.5	15.6	13.5	12.4	13.6	11.4	9.1	9.1	10.3	10.3	6.9	10.4	9.2	10.3	14.9	11.4	7.9	7.9	7.9	12.7	24.8	6.9
30	9.0	7.9	17.9	6.7	8.9	26.7	54.5	19.1	10.2	11.3	14.8	13.7	19.5	24.2	18.5	12.7	17.3	20.8	19.6	21.8	18.3	23.9	15.9	19.2	18.0	54.5	6.7
31	10.2	19.1	11.2	11.2	11.3	13.5	22.5	21.4	17.0	21.7	17.1	22.9	19.5	25.4	34.7	18.5	48.6	28.8	29.9	22.9	10.3	11.4	12.5	11.3	19.7	48.6	10.2
Avg	24.3	20.5	20.7	30.4	20.7	22.6	28.2	26.5	21.5	19.8	18.6	19.5	19.6	24.4	24.7	27.6	23.5	22.6	33.5	22.4	35.4	26.8	23.5	26.2	24.3	--	--
Max	126.0	131.0	110.0	395.0	140.0	164.0	196.0	205.0	116.0	73.1	54.4	55.7	51.3	92.4	80.8	138.0	67.7	67.3	233.0	51.4	249.0	186.0	79.0	112.0	--	395.0	--
Min	5.6	3.4	3.4	3.3	3.4	3.4	2.2	4.5	4.5	3.4	5.7	5.7	1.2	3.3	1.1	3.3	1.2	2.3	2.3	1.1	1.1	5.6	6.7	3.3	--	--	1.1

-- Indicates Invalid Data

SAROAD for Resolution, West_Plant

"Component, Channel: Table126, conc_PM10_µg/m^3 STP"

Month: Aug 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	11.3	19.2	18.1	4.5	5.6	9.0	12.4	12.4	11.3	9.1	6.9	8.0	10.3	14.8	14.8	12.5	12.5	12.5	19.3	11.3	11.3	18.1	9.1	9.1	11.8	19.3	4.5
2	12.4	15.8	14.6	11.2	7.9	10.1	15.7	25.8	21.4	18.2	12.6	11.5	12.6	13.7	18.3	16.0	16.0	21.6	15.8	11.3	6.8	6.8	6.8	6.8	13.7	25.8	6.8
3	7.9	4.5	5.6	6.7	10.1	13.4	13.4	14.6	13.5	10.2	11.4	14.9	20.7	17.3	22.0	20.8	12.7	18.5	20.7	17.2	17.2	20.5	30.7	11.3	14.8	30.7	4.5
4	39.7	15.9	14.7	14.7	18.0	15.7	30.3	7.9	11.3	18.2	14.8	13.7	12.5	14.8	13.7	13.7	18.4	12.6	10.3	49.1	13.7	26.1	12.5	12.5	17.7	49.1	7.9
5	11.3	22.6	13.5	11.2	11.2	13.5	40.3	22.2	17.7	2.2	3.3	6.7	7.9	20.4	26.2	16.0	18.3	16.0	21.6	18.2	11.3	12.4	21.4	25.8	16.3	40.3	2.2
6	10.1	12.2	11.1	10.0	10.0	8.8	11.0	10.9	7.7	7.7	12.0	11.0	12.1	14.3	12.2	12.3	13.4	14.5	14.5	11.1	11.1	18.8	26.5	19.8	12.6	26.5	7.7
7	20.9	26.4	20.9	25.3	18.7	24.2	17.6	13.2	12.2	13.4	15.7	30.4	26.0	30.6	19.3	22.8	33.1	22.8	22.7	20.4	16.9	18.0	16.8	17.9	21.1	33.1	12.2
8	20.1	17.9	19.0	22.3	24.5	17.9	31.3	26.9	22.5	22.7	20.5	37.8	39.0	18.4	21.9	10.4	9.2	6.9	9.2	21.7	17.1	12.5	12.4	12.4	19.8	39.0	6.9
9	14.6	13.5	16.8	14.6	12.3	13.5	16.8	11.3	13.6	29.6	12.6	68.3	12.7	17.4	30.1	17.4	11.6	13.9	27.7	12.7	18.3	35.3	18.1	24.8	19.9	68.3	11.3
10	20.3	12.4	9.0	7.8	7.8	4.5	75.7	5.6	3.4	3.4	8.0	11.4	8.0	6.9	10.4	9.2	9.2	11.5	10.3	11.4	15.9	15.9	30.6	21.4	13.8	75.7	3.4
11	24.8	19.1	15.7	17.9	22.4	15.7	21.3	18.0	18.0	15.9	13.7	13.7	17.2	17.3	18.5	15.0	12.7	18.5	21.9	24.1	11.4	9.1	11.3	13.6	17.0	24.8	9.1
12	13.6	10.2	6.8	7.9	6.8	9.0	16.9	18.0	30.6	20.5	16.1	31.1	24.3	51.1	17.4	14.0	23.2	15.1	15.0	13.8	12.6	13.6	12.5	11.3	17.1	51.1	6.8
13	12.4	9.0	20.2	13.5	11.2	11.2	32.4	24.7	26.0	21.6	32.0	39.0	11.5	33.5	31.3	26.7	13.9	19.7	18.5	14.9	25.1	30.6	17.0	19.2	21.5	39.0	9.0
14	14.7	19.2	6.8	11.3	11.3	19.1	56.4	46.2	37.3	21.5	11.4	24.0	13.9	23.2	16.2	16.3	15.1	20.9	18.5	15.0	14.9	24.1	29.6	15.9	20.9	56.4	6.8
15	19.2	11.3	11.3	16.9	10.1	11.2	12.4	11.3	11.3	11.4	17.2	13.8	20.8	19.7	22.1	19.8	17.4	80.6	9.2	12.6	11.5	6.9	3.4	4.6	16.1	80.6	3.4
16	11.4	9.1	5.7	4.5	6.8	6.8	7.9	11.4	12.6	11.5	9.3	9.3	8.1	10.5	28.0	40.4	11.5	13.9	12.7	8.0	11.4	40.9	77.9	37.3	16.9	77.9	4.5
17	27.1	32.7	28.2	29.3	30.3	31.4	39.2	31.5	32.9	36.5	33.2	26.6	22.1	24.5	22.2	15.2	15.2	19.8	24.0	13.7	25.0	11.2	11.2	7.8	24.6	39.2	7.8
18	2.2	-1.1	2.3	6.8	6.7	3.4	3.4	4.5	9.1	6.8	6.9	11.6	20.9	11.6	10.5	19.8	19.7	9.2	8.0	24.0	26.2	10.2	18.1	18.1	10.8	26.2	-1.1
19	18.1	19.2	9.1	7.9	18.1	15.8	30.4	30.4	28.3	22.7	21.7	10.3	11.6	41.7	17.4	16.3	12.8	11.6	25.5	25.4	18.4	27.5	16.0	21.7	19.9	41.7	7.9
20	17.1	19.3	15.9	14.7	15.9	28.3	18.1	20.3	19.3	25.1	20.7	23.1	70.7	30.3	50.2	25.7	30.4	29.1	24.3	114.0	37.4	18.1	19.1	10.2	29.1	114.0	10.2
21	6.8	7.9	10.1	10.1	9.0	6.7	10.1	13.5	9.0	6.8	19.1	18.1	17.0	15.9	18.3	11.5	10.3	6.9	8.0	11.4	11.3	9.1	7.9	19.1	11.4	19.1	6.7
22	7.9	9.0	10.2	9.0	18.0	15.7	14.6	12.4	10.2	10.2	13.7	26.4	25.4	38.1	35.8	17.4	28.8	17.0	13.6	10.1	47.4	75.5	66.3	59.4	24.7	75.5	7.9
23	49.3	42.5	43.6	42.5	45.9	34.8	50.3	--	36.1	34.0	30.9	23.0	26.6	84.3	32.3	67.4	23.5	12.5	10.2	9.1	10.2	12.4	11.3	10.1	32.3	84.3	9.1
24	11.2	10.0	8.9	11.1	11.1	11.1	7.8	4.5	6.7	9.0	4.5	4.5	6.8	3.4	6.9	8.0	17.1	20.4	19.2	28.2	27.0	20.1	19.0	19.0	12.3	28.2	3.4
25	2.2	5.6	8.9	7.8	7.8	7.7	4.4	4.4	7.8	6.7	5.6	9.0	10.1	9.1	8.0	5.7	6.9	10.2	11.1	13.3	8.9	4.5	6.7	7.8	7.5	13.3	2.2
26	10.0	12.2	13.3	7.8	4.5	5.6	7.8	12.2	14.5	14.5	13.5	10.3	8.0	11.5	20.8	17.9	15.8	12.5	9.1	434.0	327.0	285.0	123.0	74.4	61.1	434.0	4.5
27	99.9	87.7	109.0	89.2	47.3	36.2	27.1	28.3	21.6	19.4	12.6	12.7	11.6	10.4	17.4	22.1	12.8	12.7	11.5	11.5	12.6	9.2	6.9	9.1	30.8	109.0	6.9
28	12.5	11.3	9.1	4.5	6.8	9.0	6.8	10.2	11.4	9.1	8.0	5.7	6.9	10.4	9.3	2.3	2.3	5.7	9.2	4.6	-1.1	4.5	7.9	10.1	7.4	12.5	-1.1
29	14.5	13.4	12.2	11.1	8.9	5.6	3.3	4.5	6.7	12.3	11.2	6.7	9.0	12.3	9.0	4.5	7.9	11.3	11.3	7.8	4.5	6.7	7.8	5.6	8.7	14.5	3.3
30	5.6	8.9	8.9	6.6	6.7	8.9	11.1	17.8	11.1	13.4	11.3	5.7	7.9	14.7	12.4	9.0	10.2	13.6	22.4	11.0	8.8	5.5	2.2	1.1	9.8	22.4	1.1
31	3.3	6.7	8.9	10.0	8.9	7.8	7.7	8.9	11.1	11.2	11.2	9.0	6.8	21.6	17.1	12.6	18.3	3.4	8.0	7.9	17.0	4.5	9.0	25.9	10.7	25.9	3.3
Avg	17.8	16.9	16.4	15.1	14.2	13.9	21.1	16.1	16.3	15.3	14.2	17.7	16.7	21.4	19.7	17.4	15.5	16.6	15.6	32.2	26.0	26.2	21.6	18.2	18.5	--	--
Max	99.9	87.7	109.0	89.2	47.3	36.2	75.7	46.2	37.3	36.5	33.2	68.3	70.7	84.3	50.2	67.4	33.1	80.6	27.7	434.0	327.0	285.0	123.0	74.4	--	434.0	--
Min	2.2	-1.1	2.3	4.5	4.5	3.4	3.3	4.4	3.4	2.2	3.3	4.5	6.8	3.4	6.9	2.3	2.3	3.4	8.0	4.6	-1.1	4.5	2.2	1.1	--	--	-1.1

-- Indicates Invalid Data

SAROAD for Resolution, West_Plant

"Component, Channel: Table126, conc_PM10_µg/m^3 STP"

Month: Sep 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	13.5	22.4	13.4	13.4	12.3	10.0	19.0	11.2	12.4	10.2	9.1	6.9	6.9	5.8	9.2	12.7	8.1	8.1	21.8	41.2	27.4	10.2	11.4	11.3	13.7	41.2	5.8
2	7.9	9.0	10.1	11.3	29.3	23.6	37.1	11.3	13.6	17.0	14.8	29.6	20.6	16.1	23.0	20.7	39.0	24.1	26.4	18.3	15.9	40.8	11.3	12.4	20.1	40.8	7.9
3	16.9	9.0	9.0	9.0	10.1	19.2	49.5	79.2	19.4	19.4	19.6	30.0	33.7	35.9	10.3	19.4	6.8	10.2	12.5	11.4	12.5	13.6	13.5	13.5	20.2	79.2	6.8
4	10.1	11.2	11.2	10.1	7.9	22.4	16.8	23.6	20.4	18.2	14.9	15.0	15.1	13.9	11.7	10.5	9.3	8.1	10.4	11.5	10.3	11.5	12.6	13.7	13.4	23.6	7.9
5	22.8	17.1	9.1	9.1	7.9	10.2	12.4	--	--	18.3	17.3	15.0	15.1	15.1	14.0	10.5	12.7	13.9	13.8	12.7	10.3	14.9	16.0	11.4	13.6	22.8	7.9
6	9.1	12.5	12.5	17.0	15.9	19.3	23.8	18.2	--	24.1	13.8	15.0	23.2	26.8	20.8	25.9	12.5	13.7	13.7	12.5	13.6	15.8	29.1	20.1	17.8	29.1	9.1
7	22.3	14.4	25.5	36.6	37.7	34.3	28.8	31.0	36.6	41.2	31.3	24.7	16.8	27.0	15.8	12.5	5.7	6.8	10.2	12.4	14.6	15.7	14.6	9.0	21.9	41.2	5.7
8	5.6	4.5	-1.1	-2.2	3.3	3.3	0.0	2.2	4.5	6.7	8.9	7.8	4.4	7.8	12.4	10.2	7.9	5.6	6.7	3.4	1.1	3.4	3.4	5.6	4.8	12.4	-2.2
9	6.7	7.8	3.3	2.2	6.7	6.7	4.4	4.4	5.5	6.6	6.6	5.5	4.4	2.2	6.6	11.1	11.2	9.0	8.9	8.9	8.9	7.8	6.7	4.4	6.5	11.2	2.2
10	5.5	6.6	8.8	9.9	7.7	5.5	1.1	2.2	6.7	4.5	1.1	4.5	5.6	6.8	11.3	13.5	12.4	18.0	9.0	10.0	12.2	14.4	15.5	15.4	8.7	18.0	1.1
11	13.2	11.0	12.1	12.1	7.7	7.7	9.9	19.8	13.3	12.2	11.2	9.0	6.8	10.2	21.6	7.9	9.1	9.1	11.3	13.5	13.4	14.5	13.4	16.6	11.9	21.6	6.8
12	2.2	5.5	11.1	11.1	8.8	9.9	11.0	11.1	28.0	7.9	10.2	10.2	10.3	18.4	24.1	11.5	11.5	8.0	10.3	11.4	26.0	11.3	10.2	6.8	12.0	28.0	2.2
13	7.9	7.9	4.5	4.5	5.6	6.7	7.9	7.9	10.2	6.8	2.3	3.4	3.4	5.8	18.2	17.8	16.9	10.2	4.6	3.4	3.4	6.8	10.2	14.7	8.0	18.2	2.3
14	10.2	4.5	6.8	10.1	11.2	11.2	11.2	12.4	13.5	11.3	11.4	9.2	6.9	9.2	6.9	9.3	8.1	3.5	8.0	11.4	6.8	5.7	6.8	5.7	8.8	13.5	3.5
15	5.7	9.0	9.0	7.9	10.1	11.2	13.5	10.1	10.2	11.3	9.1	6.9	5.8	4.6	5.8	5.8	11.6	10.4	4.6	6.9	9.1	8.0	5.7	6.8	8.3	13.5	4.6
16	8.0	9.1	10.2	9.1	12.4	13.5	13.5	13.6	11.3	11.4	12.6	12.6	10.4	12.7	17.4	12.7	7.0	8.1	6.9	8.0	12.6	11.4	10.2	9.1	11.0	17.4	6.9
17	6.8	18.1	14.7	22.6	11.3	12.4	18.0	18.1	11.3	11.4	12.6	13.8	11.5	7.0	8.1	11.6	8.1	4.6	9.3	12.7	11.5	8.0	9.2	10.3	11.8	22.6	4.6
18	8.0	8.0	11.3	11.3	10.2	10.2	12.4	12.5	4.6	2.3	8.1	6.9	8.1	27.8	35.9	8.1	10.4	13.9	25.3	14.9	18.3	--	24.8	22.5	13.7	35.9	2.3
19	25.8	39.3	41.5	35.9	26.9	38.1	45.8	71.9	24.9	20.5	19.5	14.9	31.2	22.0	22.0	15.1	11.6	19.6	10.3	12.5	12.5	10.2	10.2	11.3	24.7	71.9	10.2
20	12.4	7.9	5.6	19.1	9.0	10.1	13.5	18.0	15.9	21.7	6.9	23.1	34.7	34.6	31.2	19.7	9.3	12.7	12.6	25.1	14.8	15.9	48.7	35.0	19.1	48.7	5.6
21	11.3	13.5	11.2	6.7	5.6	5.6	7.8	7.8	6.8	10.2	11.4	10.3	11.5	8.1	6.9	6.9	6.9	11.5	14.9	24.0	8.0	9.1	19.3	15.9	10.5	24.0	5.6
22	14.7	13.5	18.0	15.7	19.0	13.4	12.3	13.4	13.4	18.9	24.6	19.2	32.9	51.1	118.0	109.0	79.1	64.2	46.0	34.6	25.6	17.7	13.2	13.2	33.4	118.0	12.3
23	17.6	21.9	13.2	13.2	18.7	29.6	41.6	18.7	42.1	19.0	13.5	20.3	11.3	30.7	36.4	13.7	19.3	28.3	30.3	26.9	26.7	20.0	21.0	13.3	22.8	42.1	11.3
24	12.2	13.2	13.3	10.0	9.9	11.0	11.1	10.0	6.7	10.1	13.6	12.5	22.8	12.6	27.5	11.5	13.7	24.0	26.1	28.2	23.6	25.8	22.3	19.0	16.3	28.2	6.7
25	18.9	15.6	24.4	20.0	19.9	34.2	65.1	26.6	15.7	18.0	13.6	14.8	14.9	12.6	19.6	43.7	23.0	17.2	19.3	23.7	25.9	19.1	17.9	7.8	22.1	65.1	7.8
26	8.9	8.9	5.6	3.3	2.2	23.3	23.2	65.5	65.2	124.0	8.0	22.8	52.7	138.0	190.0	107.0	64.1	41.0	44.3	42.9	58.4	28.0	34.6	35.6	49.9	190.0	2.2
27	34.4	27.7	21.0	22.1	20.9	25.3	25.3	71.2	--	--	26.5	42.1	38.9	33.4	34.5	27.9	21.2	22.2	24.3	15.4	21.9	17.5	18.5	12.0	27.5	71.2	12.0
28	10.9	9.9	7.7	4.4	7.7	8.8	3.3	3.3	6.6	5.5	4.5	5.6	7.8	10.1	10.1	11.3	11.3	10.1	10.0	12.2	16.5	7.7	7.7	11.0	8.5	16.5	3.3
29	13.2	17.6	7.7	7.7	28.4	7.7	6.6	21.9	34.2	7.8	24.7	32.6	19.2	12.4	13.6	10.2	10.2	15.8	15.7	34.5	12.2	12.2	34.2	23.1	17.6	34.5	6.6
30	51.7	12.1	12.1	13.2	21.9	52.5	54.7	37.4	20.0	14.5	24.7	14.6	20.3	22.7	21.6	22.7	11.3	19.2	21.3	17.9	14.5	14.4	16.6	33.1	23.5	54.7	11.3
Avg	13.8	13.0	12.1	12.5	13.5	16.6	20.0	22.6	17.5	17.6	13.5	15.3	16.9	21.4	26.8	21.0	16.3	15.7	16.3	17.4	16.3	14.2	16.3	14.7	16.7	--	--
Max	51.7	39.3	41.5	36.6	37.7	52.5	65.1	79.2	65.2	124.0	31.3	42.1	52.7	138.0	190.0	109.0	79.1	64.2	46.0	42.9	58.4	40.8	48.7	35.6	--	190.0	--
Min	2.2	4.5	-1.1	-2.2	2.2	3.3	0.0	2.2	4.5	2.3	1.1	3.4	3.4	2.2	5.8	5.8	5.7	3.5	4.6	3.4	1.1	3.4	3.4	4.4	--	--	-2.2

-- Indicates Invalid Data

SAROAD for Resolution, West_Plant

"Component, Channel: Table126, conc_PM25_µg/m^3 Actual"

Month: Jul 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	9.0	8.0	8.0	7.0	8.0	9.0	8.0	8.0	9.0	11.0	12.0	11.0	10.0	10.0	11.0	12.0	14.0	12.0	11.0	11.0	10.0	7.0	9.0	12.0	9.9	14.0	7.0
2	17.0	17.0	17.0	63.0	28.0	47.0	17.0	69.0	4.0	3.0	20.0	3.0	16.0	17.0	8.0	10.0	11.0	11.0	13.0	14.0	51.0	34.0	3.0	20.0	21.4	69.0	3.0
3	11.0	6.0	4.0	9.0	22.0	16.0	3.0	7.0	41.0	35.0	2.0	4.0	9.0	34.0	9.0	9.0	10.0	10.0	9.0	10.0	10.0	8.0	11.0	13.0	12.6	41.0	2.0
4	10.0	7.0	6.0	6.0	6.0	7.0	16.0	12.0	10.0	6.0	4.0	5.0	6.0	6.0	9.0	13.0	12.0	8.0	10.0	12.0	14.0	11.0	9.0	12.0	9.0	16.0	4.0
5	11.0	12.0	11.0	9.0	26.0	10.0	11.0	22.0	11.0	11.0	10.0	11.0	10.0	6.0	3.0	3.0	20.0	7.0	10.0	11.0	8.0	6.0	6.0	8.0	10.5	26.0	3.0
6	7.0	5.0	6.0	10.0	11.0	11.0	12.0	11.0	9.0	6.0	8.0	9.0	9.0	8.0	9.0	10.0	9.0	10.0	9.0	8.0	8.0	9.0	10.0	11.0	9.0	12.0	5.0
7	11.0	12.0	11.0	10.0	12.0	11.0	8.0	6.0	10.0	10.0	7.0	6.0	5.0	5.0	6.0	6.0	5.0	9.0	9.0	9.0	10.0	8.0	7.0	7.0	8.3	12.0	5.0
8	8.0	5.0	3.0	4.0	5.0	3.0	3.0	4.0	3.0	3.0	4.0	3.0	3.0	5.0	6.0	5.0	6.0	--	--	--	4.0	2.0	1.0	3.0	4.0	8.0	1.0
9	4.0	3.0	5.0	4.0	5.0	19.0	11.0	10.0	10.0	23.0	8.0	10.0	10.0	25.0	21.0	17.0	8.0	10.0	14.0	13.0	12.0	11.0	10.0	11.0	11.4	25.0	3.0
10	7.0	7.0	9.0	35.0	13.0	12.0	15.0	13.0	13.0	9.0	6.0	6.0	7.0	8.0	7.0	5.0	8.0	9.0	9.0	7.0	22.0	18.0	16.0	5.0	11.1	35.0	5.0
11	3.0	4.0	4.0	3.0	2.0	3.0	4.0	4.0	5.0	4.0	4.0	5.0	3.0	4.0	5.0	3.0	1.0	3.0	5.0	6.0	7.0	5.0	6.0	5.0	4.1	7.0	1.0
12	5.0	7.0	6.0	4.0	2.0	4.0	6.0	4.0	3.0	5.0	7.0	5.0	6.0	4.0	1.0	0.0	-1.0	5.0	7.0	6.0	11.0	10.0	7.0	7.0	5.0	11.0	-1.0
13	4.0	4.0	4.0	3.0	3.0	4.0	3.0	0.0	0.0	2.0	2.0	1.0	2.0	3.0	4.0	6.0	4.0	3.0	6.0	9.0	8.0	6.0	6.0	5.0	3.8	9.0	0.0
14	5.0	7.0	7.0	7.0	6.0	5.0	3.0	3.0	3.0	2.0	5.0	8.0	8.0	3.0	4.0	4.0	5.0	6.0	4.0	4.0	6.0	4.0	3.0	3.0	4.8	8.0	2.0
15	3.0	3.0	3.0	5.0	6.0	5.0	4.0	1.0	1.0	--	--	--	--	--	7.0	7.0	4.0	3.0	27.0	6.0	6.0	7.0	5.0	3.0	5.6	27.0	1.0
16	2.0	2.0	2.0	3.0	6.0	3.0	-1.0	0.0	1.0	0.0	0.0	1.0	1.0	-1.0	-2.0	2.0	1.0	0.0	0.0	1.0	2.0	2.0	4.0	3.0	1.3	6.0	-2.0
17	2.0	3.0	4.0	4.0	4.0	5.0	5.0	3.0	4.0	6.0	6.0	3.0	-1.0	1.0	2.0	1.0	3.0	5.0	6.0	6.0	7.0	5.0	2.0	2.0	3.7	7.0	-1.0
18	1.0	1.0	1.0	2.0	3.0	4.0	3.0	0.0	-1.0	0.0	1.0	0.0	1.0	2.0	0.0	1.0	2.0	2.0	4.0	2.0	2.0	1.0	2.0	1.0	1.5	4.0	-1.0
19	-2.0	-2.0	-4.0	-1.0	4.0	2.0	1.0	1.0	1.0	1.0	2.0	1.0	-3.0	-2.0	0.0	-2.0	0.0	3.0	3.0	2.0	5.0	5.0	4.0	4.0	1.0	5.0	-4.0
20	4.0	5.0	4.0	3.0	3.0	4.0	7.0	6.0	2.0	2.0	4.0	4.0	4.0	6.0	5.0	1.0	2.0	0.0	1.0	2.0	1.0	4.0	3.0	3.0	3.3	7.0	0.0
21	2.0	2.0	4.0	3.0	1.0	1.0	5.0	5.0	1.0	0.0	1.0	0.0	0.0	-2.0	-2.0	2.0	1.0	0.0	1.0	0.0	-1.0	-1.0	-1.0	1.0	1.0	5.0	-2.0
22	0.0	-2.0	-1.0	0.0	1.0	2.0	1.0	-1.0	1.0	2.0	3.0	5.0	5.0	6.0	10.0	7.0	6.0	8.0	5.0	5.0	6.0	7.0	6.0	6.0	3.7	10.0	-2.0
23	6.0	9.0	8.0	7.0	8.0	8.0	10.0	11.0	9.0	7.0	4.0	2.0	5.0	10.0	9.0	6.0	6.0	6.0	8.0	9.0	6.0	6.0	6.0	6.0	7.2	11.0	2.0
24	7.0	6.0	6.0	4.0	5.0	6.0	6.0	6.0	4.0	2.0	3.0	4.0	4.0	6.0	5.0	5.0	6.0	5.0	5.0	6.0	4.0	4.0	3.0	4.0	4.8	7.0	2.0
25	5.0	4.0	4.0	4.0	3.0	4.0	7.0	9.0	10.0	9.0	7.0	--	2.0	1.0	7.0	7.0	4.0	5.0	2.0	2.0	6.0	5.0	6.0	6.0	5.2	10.0	1.0
26	5.0	6.0	4.0	2.0	2.0	1.0	3.0	5.0	5.0	3.0	3.0	6.0	3.0	2.0	3.0	4.0	4.0	5.0	5.0	3.0	5.0	6.0	6.0	7.0	4.1	7.0	1.0
27	6.0	5.0	5.0	5.0	6.0	6.0	4.0	5.0	4.0	4.0	3.0	3.0	4.0	3.0	3.0	6.0	5.0	5.0	5.0	5.0	5.0	6.0	4.0	2.0	4.5	6.0	2.0
28	3.0	3.0	3.0	3.0	3.0	4.0	4.0	5.0	5.0	4.0	3.0	3.0	2.0	1.0	2.0	1.0	2.0	1.0	1.0	2.0	4.0	5.0	5.0	5.0	3.1	5.0	1.0
29	8.0	5.0	0.0	2.0	3.0	4.0	5.0	3.0	-1.0	-1.0	1.0	0.0	0.0	2.0	3.0	3.0	1.0	0.0	0.0	4.0	5.0	1.0	1.0	5.0	2.3	8.0	-1.0
30	5.0	5.0	3.0	1.0	1.0	3.0	6.0	3.0	1.0	2.0	0.0	0.0	3.0	4.0	2.0	2.0	3.0	2.0	4.0	8.0	10.0	9.0	7.0	7.0	3.8	10.0	0.0
31	6.0	4.0	4.0	4.0	3.0	3.0	6.0	5.0	3.0	4.0	4.0	4.0	3.0	4.0	7.0	7.0	7.0	7.0	7.0	6.0	5.0	4.0	3.0	5.0	4.8	7.0	3.0
Avg	5.7	5.3	4.9	7.3	6.8	7.3	6.3	7.7	5.8	5.8	4.8	4.2	4.6	6.0	5.3	5.3	5.5	5.3	6.7	6.3	8.4	6.9	5.5	6.2	6.0	--	--
Max	17.0	17.0	17.0	63.0	28.0	47.0	17.0	69.0	41.0	35.0	20.0	11.0	16.0	34.0	21.0	17.0	20.0	12.0	27.0	14.0	51.0	34.0	16.0	20.0	--	69.0	--
Min	-2.0	-2.0	-4.0	-1.0	1.0	1.0	-1.0	-1.0	-1.0	-1.0	0.0	0.0	-3.0	-2.0	-2.0	-2.0	-1.0	0.0	0.0	0.0	-1.0	-1.0	-1.0	1.0	--	--	-4.0

-- Indicates Invalid Data

SAROAD for Resolution, West_Plant

"Component, Channel: Table126, conc_PM25_µg/m^3 Actual"

Month: Aug 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	3.0	1.0	4.0	3.0	2.0	0.0	-1.0	1.0	--	--	--	--	--	--	--	--	6.0	4.0	1.0	3.0	3.0	0.0	2.0	4.0	--	6.0	-1.0
2	4.0	3.0	3.0	6.0	7.0	5.0	1.0	3.0	4.0	2.0	2.0	4.0	2.0	0.0	6.0	8.0	6.0	4.0	2.0	1.0	4.0	6.0	3.0	-2.0	3.5	8.0	-2.0
3	0.0	4.0	5.0	3.0	1.0	0.0	2.0	5.0	4.0	3.0	3.0	4.0	4.0	3.0	0.0	2.0	5.0	5.0	7.0	6.0	6.0	7.0	6.0	3.0	3.7	7.0	0.0
4	5.0	6.0	4.0	2.0	3.0	4.0	2.0	1.0	0.0	1.0	1.0	0.0	0.0	2.0	3.0	4.0	4.0	3.0	3.0	4.0	6.0	5.0	5.0	4.0	3.0	6.0	0.0
5	1.0	2.0	4.0	5.0	5.0	6.0	6.0	5.0	6.0	6.0	5.0	5.0	1.0	1.0	4.0	3.0	2.0	5.0	6.0	7.0	6.0	6.0	8.0	6.0	4.6	8.0	1.0
6	5.0	5.0	5.0	5.0	6.0	7.0	6.0	3.0	4.0	4.0	1.0	0.0	2.0	3.0	6.0	7.0	5.0	4.0	5.0	5.0	5.0	9.0	10.0	10.0	5.1	10.0	0.0
7	10.0	9.0	9.0	11.0	12.0	17.0	7.0	8.0	6.0	5.0	4.0	4.0	2.0	3.0	5.0	5.0	5.0	7.0	8.0	9.0	8.0	6.0	7.0	11.0	7.4	17.0	2.0
8	9.0	6.0	5.0	5.0	7.0	6.0	5.0	5.0	6.0	4.0	1.0	2.0	4.0	4.0	3.0	3.0	5.0	3.0	1.0	4.0	3.0	2.0	3.0	3.0	4.1	9.0	1.0
9	3.0	3.0	5.0	6.0	3.0	4.0	6.0	6.0	4.0	5.0	5.0	3.0	2.0	1.0	1.0	2.0	1.0	2.0	6.0	8.0	7.0	7.0	5.0	5.0	4.2	8.0	1.0
10	6.0	5.0	3.0	3.0	2.0	1.0	4.0	3.0	1.0	0.0	-1.0	-1.0	0.0	2.0	0.0	0.0	3.0	5.0	5.0	5.0	3.0	3.0	9.0	10.0	3.0	10.0	-1.0
11	4.0	4.0	6.0	5.0	8.0	10.0	9.0	7.0	2.0	2.0	4.0	3.0	3.0	5.0	5.0	5.0	6.0	6.0	8.0	7.0	3.0	2.0	4.0	5.0	5.1	10.0	2.0
12	5.0	3.0	3.0	6.0	7.0	4.0	3.0	4.0	5.0	4.0	2.0	1.0	3.0	5.0	5.0	3.0	4.0	4.0	3.0	4.0	2.0	4.0	6.0	4.0	3.9	7.0	1.0
13	3.0	2.0	2.0	3.0	4.0	5.0	5.0	5.0	5.0	4.0	3.0	4.0	5.0	3.0	3.0	4.0	5.0	5.0	3.0	4.0	6.0	6.0	6.0	6.0	4.2	6.0	2.0
14	4.0	3.0	4.0	6.0	4.0	5.0	8.0	9.0	7.0	5.0	4.0	3.0	4.0	1.0	2.0	3.0	5.0	7.0	6.0	5.0	4.0	5.0	6.0	5.0	4.8	9.0	1.0
15	6.0	4.0	1.0	1.0	1.0	2.0	2.0	1.0	1.0	0.0	-2.0	-1.0	2.0	3.0	4.0	4.0	5.0	7.0	6.0	2.0	1.0	1.0	4.0	5.0	2.5	7.0	-2.0
16	2.0	-1.0	1.0	1.0	0.0	2.0	3.0	4.0	2.0	1.0	-2.0	-2.0	0.0	3.0	4.0	4.0	4.0	3.0	1.0	7.0	9.0	19.0	29.0	7.0	4.2	29.0	-2.0
17	7.0	4.0	5.0	8.0	5.0	3.0	6.0	5.0	3.0	4.0	2.0	3.0	7.0	8.0	5.0	4.0	3.0	2.0	7.0	8.0	3.0	3.0	4.0	2.0	4.6	8.0	2.0
18	1.0	-1.0	1.0	2.0	1.0	1.0	3.0	5.0	3.0	0.0	-2.0	0.0	4.0	3.0	1.0	2.0	7.0	8.0	7.0	7.0	6.0	6.0	8.0	6.0	3.3	8.0	-2.0
19	4.0	3.0	3.0	1.0	1.0	5.0	6.0	6.0	6.0	6.0	4.0	3.0	2.0	3.0	4.0	3.0	4.0	4.0	5.0	5.0	6.0	5.0	7.0	8.0	4.3	8.0	1.0
20	8.0	8.0	6.0	6.0	6.0	5.0	4.0	3.0	3.0	3.0	4.0	5.0	5.0	4.0	7.0	10.0	10.0	7.0	5.0	11.0	13.0	8.0	4.0	5.0	6.3	13.0	3.0
21	5.0	1.0	1.0	4.0	7.0	5.0	5.0	4.0	3.0	1.0	1.0	3.0	3.0	1.0	2.0	1.0	2.0	2.0	2.0	3.0	5.0	5.0	4.0	5.0	3.1	7.0	1.0
22	1.0	-1.0	2.0	5.0	6.0	5.0	4.0	3.0	3.0	3.0	2.0	2.0	2.0	3.0	6.0	8.0	9.0	11.0	9.0	9.0	9.0	7.0	8.0	9.0	5.2	11.0	-1.0
23	5.0	2.0	4.0	4.0	4.0	6.0	7.0	--	-3.0	-5.0	-5.0	-11.0	-3.0	3.0	-6.0	-4.0	20.0	-13.0	-1.0	6.0	0.0	-1.0	1.0	3.0	0.6	20.0	-13.0
24	6.0	5.0	3.0	1.0	-1.0	0.0	0.0	1.0	0.0	0.0	2.0	2.0	-3.0	-3.0	2.0	2.0	1.0	2.0	2.0	2.0	2.0	2.0	5.0	3.0	1.5	6.0	-3.0
25	2.0	1.0	-2.0	0.0	1.0	0.0	2.0	2.0	2.0	1.0	0.0	0.0	-1.0	2.0	-1.0	-3.0	0.0	4.0	4.0	-1.0	0.0	3.0	-1.0	-2.0	0.5	4.0	-3.0
26	2.0	1.0	1.0	3.0	2.0	2.0	1.0	0.0	0.0	3.0	5.0	1.0	-3.0	-2.0	3.0	6.0	6.0	4.0	3.0	40.0	20.0	23.0	13.0	12.0	6.1	40.0	-3.0
27	9.0	7.0	7.0	9.0	9.0	9.0	8.0	2.0	1.0	3.0	1.0	2.0	6.0	3.0	2.0	3.0	5.0	3.0	2.0	6.0	5.0	2.0	1.0	-1.0	4.3	9.0	-1.0
28	0.0	0.0	0.0	1.0	3.0	1.0	0.0	2.0	2.0	-1.0	-2.0	0.0	2.0	0.0	-1.0	3.0	3.0	-1.0	-2.0	-1.0	-1.0	-1.0	-2.0	-1.0	0.2	3.0	-2.0
29	0.0	0.0	0.0	-3.0	-1.0	1.0	0.0	-2.0	-1.0	2.0	-2.0	0.0	5.0	4.0	2.0	1.0	2.0	2.0	-1.0	-1.0	0.0	0.0	-2.0	-2.0	0.2	5.0	-3.0
30	1.0	1.0	-1.0	-1.0	0.0	0.0	1.0	1.0	1.0	0.0	-1.0	-3.0	-2.0	1.0	-1.0	1.0	-2.0	-2.0	-1.0	0.0	1.0	-1.0	-1.0	-2.0	-0.4	1.0	-3.0
31	-1.0	1.0	1.0	1.0	2.0	0.0	1.0	3.0	0.0	-2.0	-1.0	1.0	0.0	0.0	-1.0	-2.0	-2.0	-3.0	-1.0	0.0	0.0	2.0	3.0	1.0	0.1	3.0	-3.0
Avg	3.9	2.9	3.1	3.6	3.8	3.9	3.7	3.5	2.7	2.1	1.3	1.2	1.9	2.3	2.5	3.1	4.5	3.4	3.6	5.7	4.7	4.9	5.3	4.3	3.4	--	--
Max	10.0	9.0	9.0	11.0	12.0	17.0	9.0	9.0	7.0	6.0	5.0	5.0	7.0	8.0	7.0	10.0	20.0	11.0	9.0	40.0	20.0	23.0	29.0	12.0	--	40.0	--
Min	-1.0	-1.0	-2.0	-3.0	-1.0	0.0	-1.0	-2.0	-3.0	-5.0	-5.0	-11.0	-3.0	-3.0	-6.0	-4.0	-2.0	-13.0	-2.0	-1.0	-1.0	-1.0	-2.0	-2.0	--	--	-13.0

-- Indicates Invalid Data

SAROAD for Resolution, West_Plant

"Component, Channel: Table126, conc_PM25_µg/m^3 Actual"

Month: Sep 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	1.0	3.0	2.0	0.0	1.0	-1.0	-2.0	-2.0	-3.0	-1.0	0.0	-1.0	-3.0	-3.0	-1.0	0.0	1.0	1.0	1.0	2.0	5.0	4.0	2.0	-1.0	0.2	5.0	-3.0
2	-1.0	1.0	0.0	0.0	1.0	1.0	4.0	4.0	3.0	3.0	1.0	0.0	2.0	0.0	-1.0	1.0	2.0	2.0	0.0	2.0	3.0	3.0	4.0	3.0	1.6	4.0	-1.0
3	5.0	2.0	2.0	6.0	3.0	3.0	4.0	3.0	6.0	5.0	3.0	3.0	7.0	8.0	9.0	10.0	8.0	4.0	5.0	6.0	4.0	3.0	7.0	6.0	5.1	10.0	2.0
4	5.0	4.0	3.0	5.0	5.0	6.0	6.0	6.0	5.0	3.0	4.0	7.0	8.0	4.0	3.0	2.0	4.0	4.0	4.0	6.0	7.0	6.0	2.0	1.0	4.6	8.0	1.0
5	3.0	4.0	3.0	3.0	3.0	2.0	2.0	0.0	--	1.0	3.0	3.0	5.0	5.0	5.0	4.0	6.0	6.0	4.0	4.0	4.0	4.0	5.0	6.0	3.7	6.0	0.0
6	7.0	3.0	2.0	4.0	4.0	5.0	6.0	6.0	3.0	3.0	2.0	0.0	0.0	1.0	4.0	9.0	8.0	-1.0	1.0	5.0	2.0	6.0	8.0	6.0	3.9	9.0	-1.0
7	5.0	3.0	5.0	6.0	5.0	4.0	2.0	0.0	3.0	7.0	6.0	5.0	6.0	5.0	7.0	6.0	0.0	0.0	1.0	1.0	0.0	-2.0	-1.0	2.0	3.2	7.0	-2.0
8	3.0	2.0	2.0	1.0	2.0	1.0	-2.0	2.0	2.0	-2.0	-1.0	-3.0	-3.0	0.0	2.0	4.0	2.0	1.0	1.0	0.0	0.0	2.0	1.0	1.0	0.8	4.0	-3.0
9	0.0	1.0	3.0	1.0	0.0	-3.0	-1.0	2.0	1.0	-2.0	-2.0	3.0	2.0	-1.0	-2.0	-2.0	-1.0	2.0	3.0	1.0	-1.0	1.0	4.0	3.0	0.5	4.0	-3.0
10	0.0	1.0	2.0	-1.0	-1.0	1.0	2.0	1.0	1.0	-1.0	-1.0	-1.0	-3.0	-2.0	1.0	1.0	1.0	5.0	5.0	1.0	1.0	1.0	2.0	1.0	0.7	5.0	-3.0
11	2.0	4.0	3.0	1.0	1.0	5.0	2.0	0.0	-1.0	0.0	0.0	-2.0	-2.0	-2.0	-1.0	2.0	3.0	2.0	1.0	4.0	4.0	2.0	1.0	2.0	1.3	5.0	-2.0
12	1.0	1.0	4.0	4.0	1.0	3.0	5.0	3.0	3.0	3.0	2.0	3.0	2.0	1.0	0.0	-1.0	0.0	3.0	3.0	3.0	6.0	6.0	4.0	1.0	2.5	6.0	-1.0
13	0.0	1.0	0.0	1.0	2.0	1.0	0.0	-2.0	0.0	0.0	-2.0	-3.0	1.0	1.0	1.0	2.0	1.0	3.0	4.0	4.0	1.0	2.0	3.0	2.0	1.0	4.0	-3.0
14	1.0	1.0	5.0	3.0	1.0	2.0	1.0	0.0	3.0	5.0	3.0	1.0	-1.0	0.0	1.0	-1.0	-2.0	1.0	3.0	1.0	1.0	2.0	2.0	2.0	1.5	5.0	-2.0
15	1.0	3.0	5.0	3.0	3.0	4.0	1.0	1.0	3.0	5.0	2.0	2.0	2.0	-1.0	-1.0	0.0	1.0	1.0	5.0	3.0	0.0	0.0	1.0	3.0	2.0	5.0	-1.0
16	0.0	-2.0	1.0	4.0	2.0	1.0	1.0	2.0	4.0	3.0	-1.0	-2.0	1.0	-1.0	-1.0	0.0	-1.0	0.0	4.0	6.0	4.0	3.0	2.0	3.0	1.4	6.0	-2.0
17	4.0	4.0	3.0	3.0	4.0	3.0	2.0	3.0	1.0	-1.0	-2.0	-2.0	-1.0	-1.0	-1.0	0.0	4.0	5.0	3.0	0.0	1.0	0.0	-2.0	0.0	1.3	5.0	-2.0
18	0.0	1.0	0.0	-2.0	-2.0	-1.0	2.0	1.0	-1.0	-2.0	-2.0	-1.0	-2.0	-3.0	0.0	3.0	4.0	3.0	2.0	2.0	1.0	130.0	-1.0	2.0	5.6	130.0	-3.0
19	5.0	6.0	5.0	3.0	5.0	4.0	6.0	8.0	6.0	3.0	0.0	1.0	1.0	2.0	2.0	2.0	2.0	3.0	5.0	4.0	3.0	4.0	2.0	2.0	3.5	8.0	0.0
20	1.0	2.0	3.0	1.0	-2.0	-1.0	3.0	4.0	3.0	1.0	0.0	-2.0	-2.0	1.0	1.0	2.0	2.0	2.0	5.0	4.0	3.0	2.0	2.0	2.0	1.5	5.0	-2.0
21	2.0	2.0	0.0	-1.0	2.0	2.0	0.0	1.0	1.0	1.0	-3.0	-5.0	-2.0	1.0	-1.0	-3.0	0.0	2.0	1.0	3.0	3.0	2.0	2.0	3.0	0.5	3.0	-5.0
22	4.0	5.0	6.0	6.0	5.0	4.0	4.0	5.0	2.0	2.0	6.0	6.0	3.0	2.0	6.0	8.0	6.0	4.0	7.0	7.0	5.0	3.0	2.0	4.0	4.7	8.0	2.0
23	3.0	2.0	3.0	3.0	2.0	2.0	3.0	2.0	2.0	0.0	1.0	4.0	0.0	-3.0	0.0	2.0	1.0	3.0	7.0	5.0	2.0	4.0	4.0	7.0	2.5	7.0	-3.0
24	7.0	5.0	3.0	3.0	5.0	3.0	2.0	3.0	1.0	1.0	1.0	-1.0	1.0	2.0	1.0	2.0	4.0	5.0	3.0	4.0	5.0	4.0	3.0	5.0	3.0	7.0	-1.0
25	4.0	2.0	6.0	6.0	2.0	4.0	6.0	4.0	2.0	2.0	1.0	-2.0	0.0	2.0	2.0	3.0	1.0	-2.0	0.0	3.0	3.0	4.0	3.0	2.0	2.4	6.0	-2.0
26	-1.0	1.0	2.0	0.0	2.0	1.0	2.0	2.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.0	-1.0
27	--	--	--	--	--	--	--	--	--	--	1.0	2.0	4.0	5.0	4.0	3.0	3.0	3.0	1.0	0.0	2.0	3.0	3.0	2.0	--	5.0	0.0
28	2.0	1.0	-1.0	-1.0	-1.0	0.0	-1.0	0.0	0.0	-1.0	-2.0	-1.0	-2.0	-3.0	-2.0	0.0	-2.0	-1.0	2.0	2.0	2.0	2.0	0.0	0.0	-0.3	2.0	-3.0
29	4.0	5.0	2.0	1.0	3.0	1.0	1.0	0.0	-1.0	-3.0	-3.0	-1.0	0.0	0.0	-1.0	1.0	1.0	2.0	2.0	2.0	3.0	4.0	3.0	1.0	1.1	5.0	-3.0
30	3.0	3.0	-1.0	0.0	3.0	4.0	6.0	5.0	2.0	-1.0	-2.0	1.0	2.0	-1.0	0.0	1.0	2.0	4.0	4.0	4.0	4.0	0.0	-1.0	1.0	1.8	6.0	-2.0
Avg	2.5	2.5	2.5	2.2	2.1	2.1	2.3	2.2	1.9	1.2	0.5	0.5	0.9	0.7	1.3	2.1	2.1	2.3	3.0	3.1	2.7	7.1	2.3	2.5	2.2	--	--
Max	7.0	6.0	6.0	6.0	5.0	6.0	6.0	8.0	6.0	7.0	6.0	7.0	8.0	8.0	9.0	10.0	8.0	6.0	7.0	7.0	7.0	130.0	8.0	7.0	--	130.0	--
Min	-1.0	-2.0	-1.0	-2.0	-2.0	-3.0	-2.0	-2.0	-3.0	-3.0	-3.0	-5.0	-3.0	-3.0	-2.0	-3.0	-2.0	-2.0	0.0	0.0	-1.0	-2.0	-2.0	-1.0	--	--	-5.0

-- Indicates Invalid Data

Appendix E: NO_2, SO_2, O_3 Data – East Plant – Hourly

SAROAD for Resolution, East_Plant
"Component, Channel: TableAmbient_Hourly, NO2_ppb"
Month: Jul 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	1.5	--	1.7	1.8	2.3	2.7	3.5	3.1	3.0	2.2	1.8	1.2	2.5	2.2	1.2	1.0	0.8	4.4	6.5	3.9	3.4	4.1	4.4	5.1	2.8	6.5	0.8
2	4.8	--	1.5	1.4	1.5	1.8	3.7	4.4	2.8	2.4	2.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2	0.2	0.2	0.5	0.7	0.9	2.0	-0.2	--	--	--
23	-0.4	--	0.1	0.1	-0.1	-0.2	-0.2	0.0	0.4	0.3	0.1	0.0	0.0	0.0	0.0	0.4	-0.1	-0.4	-0.5	-0.6	-0.5	0.1	1.0	0.7	0.0	1.0	-0.6
24	0.2	--	0.9	0.7	1.3	0.6	1.6	2.7	1.1	2.2	0.7	-0.2	0.1	-0.1	-0.3	-0.4	-0.5	-0.6	-0.2	-0.2	-0.5	-0.7	-0.3	-0.2	0.3	2.7	-0.7
25	-0.5	--	0.1	1.8	3.5	0.7	3.7	4.4	1.5	0.6	0.4	0.3	1.4	0.9	-0.5	-0.5	0.3	2.0	0.7	1.5	3.3	3.9	2.2	1.8	1.5	4.4	-0.5
26	1.7	--	-0.8	1.8	2.8	2.6	1.9	1.6	2.6	1.7	0.6	0.5	0.0	0.0	0.0	0.1	-0.4	3.5	-0.7	1.5	3.3	2.8	1.2	1.0	1.3	3.5	-0.8
27	2.2	--	0.8	-0.1	-0.2	0.9	1.5	0.5	0.0	0.2	0.3	0.1	0.0	-0.3	-0.2	-0.6	-0.6	-0.9	-1.1	-1.1	-0.9	0.2	3.0	1.7	0.2	3.0	-1.1
28	-0.6	--	-0.6	-1.0	-0.8	-0.4	1.3	1.2	0.4	1.5	0.2	0.0	-0.3	-0.8	-0.9	-1.0	-1.1	-1.4	-1.5	-1.4	-0.3	-1.0	-1.3	-1.6	-0.5	1.5	-1.6
29	-1.6	--	-1.6	-1.8	-1.8	-1.8	1.1	-0.5	-1.3	-1.3	-1.1	-1.2	-1.3	-1.1	-1.1	-1.4	-1.5	-1.6	-1.7	-1.7	0.1	0.1	-0.2	-0.5	-1.1	1.1	-1.8
30	-0.9	--	-1.0	-1.2	-1.3	1.8	-0.4	-0.3	-1.2	-0.4	-0.9	-1.2	-1.1	-1.2	-1.1	-1.4	-1.3	-1.2	-1.3	-1.0	-0.9	-1.1	-1.1	-1.1	-0.9	1.8	-1.4
31	-0.8	--	-0.9	-0.7	-1.0	-0.4	-0.3	1.2	0.1	-0.2	-0.6	-0.4	-0.4	0.2	-1.0	-1.0	-0.8	-0.9	-0.6	-1.2	-0.1	-1.1	-0.7	-0.3	-0.5	1.2	-1.2
Avg	0.5	--	0.0	0.3	0.6	0.7	1.6	1.7	0.8	0.8	0.3	-0.1	0.1	0.0	-0.4	-0.5	-0.5	0.3	0.0	0.0	0.7	0.8	0.9	0.6	0.3	--	--
Max	4.8	--	1.7	1.8	3.5	2.7	3.7	4.4	3.0	2.4	2.1	1.2	2.5	2.2	1.2	1.0	0.8	4.4	6.5	3.9	3.4	4.1	4.4	5.1	--	6.5	--
Min	-1.6	--	-1.6	-1.8	-1.8	-1.8	-0.4	-0.5	-1.3	-1.3	-1.1	-1.2	-1.3	-1.2	-1.1	-1.4	-1.5	-1.6	-1.7	-1.7	-0.9	-1.1	-1.3	-1.6	--	--	-1.8

-- Indicates Invalid Data

SAROAD for Resolution, East_Plant
"Component, Channel: TableAmbient_Hourly, NO2_ppb"
Month: Aug 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	0.9	--	-0.2	-0.4	0.2	0.6	0.7	1.3	1.2	-0.4	-0.7	-1.1	-0.4	-0.7	-1.2	-1.3	-1.5	-1.4	-1.6	-0.1	1.2	1.2	0.4	-0.7	-0.2	1.3	-1.6
2	-0.2	--	1.6	0.1	3.7	5.8	5.8	6.1	3.9	-0.6	-0.9	-0.3	-1.0	--	--	-2.8	-2.8	-2.5	-2.5	-2.4	-1.9	-2.0	-1.8	-1.8	0.2	6.1	-2.8
3	-2.0	--	-2.0	-2.1	-2.0	-1.6	-1.5	-1.5	-1.7	-2.4	-2.5	-2.3	-2.4	-2.4	-2.6	-2.6	-2.8	-2.8	-3.0	-2.9	-3.0	-2.9	-2.0	-1.8	-2.3	-1.5	-3.0
4	-2.4	--	-2.9	-2.9	-2.8	-2.3	-1.1	0.7	4.2	-0.1	-1.9	-2.5	-2.6	-2.0	-2.6	-2.6	-2.7	-2.9	-2.9	-3.0	-3.0	-2.0	-1.8	-1.9	-1.9	4.2	-3.0
5	-1.9	--	-2.8	-2.8	-2.3	-1.4	1.3	-1.5	-1.7	-2.0	-1.8	-0.8	-1.1	-1.0	-1.7	-2.1	-2.3	-2.7	-2.8	-2.7	-2.8	-2.3	-0.6	-2.3	-1.8	1.3	-2.8
6	-2.5	--	-2.7	-2.4	-2.6	-2.2	-1.2	-1.1	-0.9	-0.8	-0.8	-0.6	-1.2	-1.3	-1.1	-1.5	-1.5	-1.3	-1.2	-0.6	0.2	1.8	5.1	0.1	-0.9	5.1	-2.7
7	1.3	--	0.8	1.0	-0.2	-0.2	0.7	1.2	-0.1	-0.1	-0.9	-1.3	-1.1	-1.3	-1.6	-1.7	-1.7	-1.7	-2.1	-2.1	-1.9	-1.7	-1.6	7.0	-0.4	7.0	-2.1
8	-0.7	--	0.2	-1.8	-0.8	-1.1	0.3	1.7	-0.7	-0.5	-0.8	-0.8	-2.0	-2.2	-2.2	-2.5	-2.6	-2.9	-2.9	-2.9	-2.3	-1.6	-2.4	-2.3	-1.5	1.7	-2.9
9	-2.3	--	-2.6	-2.2	-2.6	-1.8	-0.2	0.6	-1.9	-2.4	-2.4	-2.0	-2.5	-2.3	-2.7	-2.6	-2.6	-2.7	-2.8	-2.9	-2.4	-1.9	-1.5	-1.2	-2.1	0.6	-2.9
10	-2.3	--	-2.9	-3.1	-3.1	-2.3	-2.5	-1.6	-1.8	-2.6	-3.0	-2.8	-2.6	-2.6	-2.5	-2.9	-2.8	-3.0	-3.1	-3.0	-2.6	-2.6	-2.3	-1.7	-2.6	-1.6	-3.1
11	-1.1	--	-1.5	-1.3	-1.4	-0.9	-0.9	-1.6	-1.9	1.8	2.5	-2.0	-2.0	-2.0	-2.2	-2.4	-2.6	-2.7	-2.9	-2.8	-2.8	-2.8	-2.2	-2.4	-1.7	2.5	-2.9
12	-1.9	--	-0.2	0.3	-0.1	-0.4	-0.2	-0.6	-0.1	-0.4	-1.0	-1.7	-1.7	-2.3	-2.2	-2.2	-2.6	-2.8	0.2	-2.8	-2.8	-2.1	-1.7	-1.2	-1.3	0.3	-2.8
13	-1.7	--	-2.2	-2.3	-2.1	-2.1	-1.4	0.0	-0.4	-1.4	-2.2	-1.8	-2.0	-2.7	-2.8	-2.7	-2.9	-2.8	-1.9	-1.0	0.5	-0.9	2.7	-1.0	-1.5	2.7	-2.9
14	-1.1	--	-1.8	-1.8	-2.0	-2.3	-1.5	0.1	2.2	-0.3	-0.2	-1.5	-1.7	-1.8	-2.3	-2.3	-2.4	-2.4	-2.2	-2.1	-1.9	-0.9	-1.4	-2.2	-1.5	2.2	-2.4
15	-1.9	--	-0.9	-1.1	-1.4	-0.5	-0.1	-0.8	-0.8	-1.1	-1.5	-1.5	-1.6	-1.9	-2.1	-2.2	-2.5	-2.1	-1.3	-1.4	-0.7	-0.4	-0.9	-1.5	-1.3	-0.1	-2.5
16	-1.1	--	-1.5	-1.3	-1.0	-0.4	0.3	0.6	-0.1	-0.8	-1.7	-1.1	-1.3	-1.5	--	-2.5	-2.1	-2.5	-2.3	-1.2	-0.3	-1.1	2.2	-1.5	-1.0	2.2	-2.5
17	-1.7	--	-2.1	-2.0	-2.0	-2.0	-1.2	-0.8	-1.3	-1.4	-1.0	-1.2	-1.3	-1.6	-2.0	-2.4	-2.4	-2.0	-2.2	-2.1	-2.2	-2.0	-2.1	-2.5	-1.8	-0.8	-2.5
18	-2.0	--	-1.6	-1.4	-1.4	-1.2	-0.3	0.3	0.1	14.8	0.8	-1.5	-1.6	-1.7	-1.8	-2.3	-2.2	-2.3	-2.5	-1.7	-1.7	-1.7	-2.4	-2.7	-0.8	14.8	-2.7
19	-2.5	--	-1.0	-1.6	-0.4	-1.0	-0.2	0.3	1.0	0.0	-0.9	-1.3	-2.0	-1.9	-2.3	-2.4	-2.6	-2.8	-2.8	-2.7	-2.5	-1.5	-0.9	-1.6	-1.5	1.0	-2.8
20	-1.2	--	-1.9	-1.7	0.1	1.4	-0.1	-1.1	-1.0	-0.8	-1.7	-1.7	-2.2	-2.1	-2.2	-2.4	-2.5	-2.6	-1.9	-1.8	-2.3	-1.5	-1.4	-2.3	-1.5	1.4	-2.6
21	-1.9	--	-1.3	0.2	1.5	0.5	1.5	-0.3	-0.4	-0.8	-0.3	3.6	-1.8	-2.3	-1.3	0.7	-2.0	-1.8	-2.9	-2.8	-2.4	-0.9	-2.0	-2.1	-0.8	3.6	-2.9
22	-1.6	--	-1.7	-1.7	-1.9	-1.5	-0.6	-1.0	-1.4	-1.7	-1.7	-1.1	-1.7	-1.9	-2.3	-2.2	-2.5	-1.8	-0.9	-0.1	0.9	-1.5	-1.4	-1.6	-1.4	0.9	-2.5
23	-0.3	--	-0.7	-0.2	-1.4	-1.1	1.6	1.3	0.6	0.1	2.8	0.0	2.1	-1.6	-1.6	-1.8	-1.8	-1.0	-0.5	1.2	0.2	-0.1	0.0	1.8	0.0	2.8	-1.8
24	0.8	--	-2.2	-1.3	-2.0	-2.4	-2.3	-2.0	-1.9	-1.5	-1.4	-1.3	-1.7	-1.9	-1.7	-2.2	-1.2	-0.2	0.0	2.7	-0.6	-1.3	-2.1	-1.3	-1.3	2.7	-2.4
25	-2.2	--	-1.6	-1.8	-1.6	-1.0	-1.3	-0.9	-0.6	-1.1	-1.5	-1.8	-1.7	-1.5	-1.5	-1.7	-2.0	-2.2	-1.8	-2.2	-2.1	-1.5	-1.8	-1.5	-1.6	-0.6	-2.2
26	-1.8	--	-1.9	-2.2	-1.9	-1.3	-0.7	-1.4	-1.5	-0.2	-0.8	-1.4	-1.6	-1.4	-1.7	-2.1	-1.5	-1.5	-1.4	-0.5	-1.7	-1.9	-0.9	-1.2	-1.4	-0.2	-2.2
27	-1.2	--	-1.3	-1.3	-1.1	-0.9	-0.5	-0.2	-0.7	-1.9	-1.6	-2.0	-1.8	-2.1	-2.2	-2.2	-2.5	-2.3	-1.8	-1.5	-1.2	-0.7	-1.8	-2.1	-1.5	-0.2	-2.5
28	-2.1	--	-1.2	-1.6	-1.2	-1.2	-1.2	-1.6	-2.2	-2.2	-2.4	-2.4	-2.2	-2.0	-2.4	-1.7	-1.8	-0.6	-2.8	-2.9	-2.9	-2.9	-2.9	-2.4	-2.1	-0.6	-2.9
29	-1.0	--	-1.1	-0.6	-0.7	-0.5	-0.7	-1.2	-1.9	-1.8	-1.6	-1.4	-1.9	-1.8	-2.1	-1.9	-2.3	-2.7	-2.9	-2.8	-2.8	-3.0	-1.8	-2.0	-1.8	-0.5	-3.0
30	-1.4	--	2.0	1.4	0.2	3.8	5.4	0.6	-0.4	-0.9	-1.0	--	-2.1	-1.8	-1.6	-1.6	-2.4	-2.5	-2.3	-2.3	-2.0	-2.2	-2.2	-0.6	-0.6	5.4	-2.5
31	2.0	--	-1.3	-0.4	-0.8	-0.2	2.4	3.2	1.4	0.6	-0.9	-1.6	-1.3	-1.6	-1.5	-1.5	-2.0	-2.0	-2.5	-2.7	-2.6	-2.8	-2.5	-2.3	-0.9	3.2	-2.8
Avg	-1.3	--	-1.3	-1.3	-1.1	-0.7	0.0	0.0	-0.4	-0.4	-1.1	-1.3	-1.6	-1.8	-2.0	-2.1	-2.3	-2.2	-2.1	-1.8	-1.7	-1.5	-1.2	-1.3	-1.3	--	--
Max	2.0	--	2.0	1.4	3.7	5.8	5.8	6.1	4.2	14.8	2.8	3.6	2.1	-0.7	-1.1	0.7	-1.2	-0.2	0.2	2.7	1.2	1.8	5.1	7.0	--	14.8	--
Min	-2.5	--	-2.9	-3.1	-3.1	-2.4	-2.5	-2.0	-2.2	-2.6	-3.0	-2.8	-2.6	-2.7	-2.8	-2.9	-2.9	-3.0	-3.1	-3.0	-3.0	-3.0	-2.9	-2.7	--	--	-3.1

-- Indicates Invalid Data

SAROAD for Resolution, East_Plant
"Component, Channel: TableAmbient_Hourly, NO2_ppb"
Month: Sep 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	-1.6	--	-0.5	-0.8	-1.7	-1.0	-1.4	-1.0	-1.6	-2.0	-2.0	-1.9	-2.0	-2.0	-2.1	-2.1	-2.2	-2.3	-2.3	-2.2	-2.2	-2.1	-2.3	-2.2	-1.8	-0.5	-2.3
2	-1.8	--	-1.7	-1.8	-1.7	-1.3	-0.6	-0.7	0.3	-1.3	-1.0	-1.7	-0.5	0.3	-1.6	-1.6	-1.5	-2.0	-2.0	-1.4	-1.4	-1.5	-1.7	-1.2	-1.3	0.3	-2.0
3	-1.3	--	-1.8	-1.8	-1.3	-1.5	-1.3	-1.1	-0.7	0.7	-0.3	-0.9	-1.4	-1.9	0.0	-2.1	-2.3	-1.1	-0.7	-0.6	-1.3	-0.8	-1.6	-1.2	-1.1	0.7	-2.3
4	-0.7	--	0.6	-0.7	-0.5	-0.6	-0.1	0.5	0.3	0.6	0.6	-1.3	-1.8	-2.1	-2.4	-2.5	-2.6	-2.2	-2.7	-2.1	-1.6	-0.8	-0.7	-1.6	-1.1	0.6	-2.7
5	-1.7	--	-0.2	-0.9	0.0	-0.6	-0.2	0.3	-0.6	-2.2	-1.9	-1.8	-2.1	-2.5	-2.3	-2.4	-2.6	-2.6	-3.0	-2.9	-2.7	-2.3	-2.2	-1.2	-1.7	0.3	-3.0
6	-1.9	--	0.1	-0.3	-0.5	-0.8	1.2	-0.6	-0.7	-0.7	-1.7	-1.6	-2.0	-2.3	-2.5	-2.3	-1.4	-0.2	0.3	-0.1	-0.8	-1.7	-1.6	-2.0	-1.0	1.2	-2.5
7	-2.3	--	-2.2	-2.2	-0.9	-1.7	-1.5	-0.5	0.5	-0.7	-1.0	-1.0	0.4	-0.1	-1.3	-1.6	-2.0	-2.2	-0.3	0.5	0.7	2.2	-1.1	-2.4	-0.9	2.2	-2.4
8	-2.3	--	-2.0	-1.8	-1.0	-1.7	-2.1	-2.2	-2.5	-2.0	-0.1	-2.1	-1.8	-1.7	-1.4	-1.8	-2.0	-1.9	-1.7	-1.6	0.2	-2.3	-2.0	-1.9	-1.7	0.2	-2.5
9	-1.1	--	-1.1	2.8	-0.1	-2.2	-0.9	-0.9	-0.6	-0.4	-1.3	-2.4	-2.4	-0.5	-1.7	-1.3	-1.1	-1.1	-0.1	-1.0	-1.5	-0.8	-0.9	0.4	-0.9	2.8	-2.4
10	-0.6	--	-1.8	-1.4	-1.6	-2.1	-0.2	-0.6	-1.4	-0.8	-1.3	-1.6	-2.0	-2.0	-2.1	-2.2	-2.2	-2.5	-2.5	-2.2	-1.2	-2.3	-2.8	-2.6	-1.7	-0.2	-2.8
11	-2.6	--	2.9	-1.1	-1.1	-2.2	-1.7	0.5	-1.2	-1.7	-1.7	-1.6	-1.8	-2.0	-2.1	-2.1	-2.2	-2.5	-2.6	-2.5	-2.5	-1.3	-1.9	-2.1	-1.6	2.9	-2.6
12	-1.8	--	-2.0	-0.6	-1.8	-1.9	-1.1	-0.9	-1.8	-1.7	-0.6	-0.9	-1.6	-2.0	--	-2.0	-2.5	-2.7	-2.8	-2.8	-2.4	-1.3	0.3	-1.5	-1.7	0.3	-2.8
13	-2.3	--	-2.4	-2.3	-2.3	-1.8	-1.8	-2.1	-1.6	-1.9	-1.9	-2.1	-2.3	-2.5	-2.4	-2.8	-1.2	-1.9	-1.8	-0.6	-0.8	0.8	0.3	-2.1	-1.7	0.8	-2.8
14	-2.3	--	-2.2	-2.0	-1.7	-1.8	-1.8	-1.6	-1.8	-1.5	-1.5	-1.8	-1.8	-2.0	-1.5	-2.2	-2.3	-2.0	-2.5	-2.5	-2.3	-1.5	-2.0	-2.2	-1.9	-1.5	-2.5
15	-1.0	--	-1.5	-1.9	-1.7	10.5	-1.3	-1.7	-1.5	-1.2	-1.5	-2.0	-2.0	-2.4	-2.4	-2.5	-2.6	-2.8	-2.8	-2.3	-2.6	-2.8	-2.9	-2.0	-1.5	10.5	-2.9
16	-1.3	--	-2.1	-1.0	-1.8	-2.2	-1.8	-1.6	-1.5	-2.0	-2.4	-2.4	-2.4	-2.3	-1.9	-2.6	-2.8	-2.9	-1.8	-2.2	-2.5	-2.6	-2.3	-2.5	-2.1	-1.0	-2.9
17	-2.6	--	-2.3	-2.4	-2.4	-2.0	-1.9	-1.8	-1.5	-2.0	-2.5	-2.4	-2.4	-2.5	-2.6	-2.6	-2.8	-3.0	-3.0	-2.8	-3.1	-3.1	-3.1	-3.1	-2.5	-1.5	-3.1
18	-2.8	--	-2.4	-1.9	-1.8	-2.0	-0.7	-0.6	-2.1	-2.4	-2.6	-2.9	-3.0	-2.8	-2.9	-3.0	-3.1	-3.1	-3.1	-3.1	-3.1	-2.7	-2.4	-1.8	-2.4	-0.6	-3.1
19	-2.1	--	-2.9	-2.7	-3.1	-3.1	-3.1	-0.5	-0.1	-2.4	-2.4	-2.4	-1.4	-2.3	-2.5	-2.8	-3.1	-3.0	-2.7	-2.1	-1.9	-2.1	-2.5	-2.8	-2.4	-0.1	-3.1
20	-2.8	--	-2.0	-1.0	0.9	0.2	-0.7	-1.0	-0.2	-0.1	-0.6	-1.9	-2.0	-2.4	-2.4	-2.6	-2.7	-2.8	-2.7	-1.7	-0.8	-0.9	-2.2	-2.8	-1.5	0.9	-2.8
21	-2.6	--	-2.8	-2.2	-1.9	-1.8	-2.1	-2.0	-2.0	-2.5	-2.4	-2.3	-2.0	-2.2	-2.5	-2.6	-2.7	-2.9	-3.0	-3.0	-2.7	-2.0	-1.8	-2.2	-2.3	-1.8	-3.0
22	-2.3	--	-2.6	-2.8	-2.7	-2.7	-3.0	-3.0	-2.7	-2.6	-2.4	-2.3	-2.4	-2.5	-2.4	-2.4	-2.5	-2.7	-2.7	-2.7	-2.4	-1.6	-1.7	-1.3	-2.5	-1.3	-3.0
23	-1.8	--	-2.3	-1.4	-0.3	-0.6	-0.9	-1.0	-2.1	-2.1	-0.8	-1.3	-2.2	-2.0	-2.4	-2.6	-2.6	-2.8	-2.7	-0.7	-2.1	-0.7	-2.7	-2.6	-1.8	-0.3	-2.8
24	-2.5	--	-1.7	-1.5	-1.9	-1.6	-1.2	-1.1	-1.4	-1.5	-2.7	-2.5	-2.4	-2.7	-1.9	-2.9	-3.0	-3.0	-2.9	-2.7	-2.4	-2.1	-1.6	-2.3	-2.2	-1.1	-3.0
25	-1.6	--	-1.4	-1.2	-2.0	-2.8	-1.7	0.5	-1.7	-2.2	-2.3	-2.5	-2.7	-2.9	-3.1	-3.1	-3.2	-3.2	-3.3	-3.2	-3.2	-3.1	-3.2	-3.3	-2.4	0.5	-3.3
26	-3.1	--	-3.2	-3.3	-3.3	-2.8	-1.7	-1.6	-2.7	-2.9	-2.7	-2.4	-2.9	-3.1	-3.1	-3.1	-3.2	-3.1	-3.1	-3.0	-1.8	-0.6	-1.7	-2.4	-2.6	-0.6	-3.3
27	-1.6	--	-2.7	-2.2	-2.2	-2.1	-1.7	0.1	-0.9	-2.2	-2.2	-2.5	-2.5	-2.7	-2.5	-2.7	-2.0	-1.6	-1.6	-1.4	-1.6	-1.7	-1.7	-1.6	-1.9	0.1	-2.7
28	-1.4	--	-1.3	-1.4	-2.4	-3.0	-3.0	-3.0	-2.8	-2.4	-2.0	-2.3	-2.5	-2.7	-2.8	-2.7	-2.6	-2.9	-2.7	-2.5	-2.2	-2.0	-1.9	-2.1	-2.4	-1.3	-3.0
29	-1.4	--	-2.0	-1.8	-2.4	-2.3	-2.3	-2.6	-2.7	-2.1	-2.1	-2.6	-2.5	-2.6	-2.7	-2.7	-2.8	-2.8	-2.6	-2.3	-2.3	-1.7	-1.9	-2.2	-2.3	-1.4	-2.8
30	-2.1	--	-2.5	-2.5	-2.7	-2.8	-2.8	-2.0	-2.1	--	-2.0	-2.7	-2.7	-2.7	-2.7	-2.8	-2.6	-2.4	-2.2	-2.1	-1.9	-1.4	-1.2	-1.4	-2.3	-1.2	-2.8
Avg	-1.9	--	-1.7	-1.5	-1.6	-1.4	-1.4	-1.1	-1.4	-1.6	-1.7	-2.0	-2.0	-2.1	-2.2	-2.4	-2.4	-2.4	-2.3	-2.0	-1.9	-1.6	-1.8	-2.0	-1.8	--	--
Max	-0.6	--	2.9	2.8	0.9	10.5	1.2	0.5	0.5	0.7	0.6	-0.9	0.4	0.3	0.0	-1.3	-1.1	-0.2	0.3	0.5	0.7	2.2	0.3	0.4	--	10.5	--
Min	-3.1	--	-3.2	-3.3	-3.3	-3.1	-3.1	-3.0	-2.8	-2.9	-2.7	-2.9	-3.0	-3.1	-3.1	-3.1	-3.2	-3.2	-3.3	-3.2	-3.2	-3.1	-3.2	-3.3	--	--	-3.3

-- Indicates Invalid Data

SAROAD for Resolution, East_Plant
"Component, Channel: TableAmbient_Hourly, SO2_ppb"
Month: Jul 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	--	0.9	0.8	0.9	0.9	0.9	0.9	1.1	1.1	1.0	1.0	1.0	1.0	0.9	0.9	0.7	0.9	0.8	1.0	1.0	0.9	0.9	0.8	0.9	0.9	1.1	0.7
2	--	1.8	0.9	0.8	0.9	0.8	0.7	0.8	0.8	0.8	0.7	--	0.8	0.9	1.0	1.0	1.0	1.1	1.0	0.9	0.8	0.8	0.8	0.8	0.9	1.8	0.7
3	--	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.7	0.6	0.7	0.8	0.9	0.9	1.0	1.0	1.0	1.0	1.0	0.9	1.0	1.1	1.1	1.1	0.9	1.1	0.6
4	--	0.9	1.0	0.9	0.9	1.6	4.3	4.5	1.4	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.3	4.5	0.9
5	--	1.2	1.0	1.1	1.1	1.1	1.1	1.0	1.1	1.0	1.0	1.1	1.1	1.1	1.0	0.8	0.8	0.9	0.9	1.0	0.9	0.9	1.4	2.5	1.1	2.5	0.8
6	--	2.5	2.1	2.4	3.4	2.4	2.4	2.2	2.1	2.0	2.1	2.3	2.0	1.6	1.3	1.1	1.1	1.0	0.9	1.0	1.1	1.6	1.4	1.0	1.8	3.4	0.9
7	--	0.7	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.8	0.9	0.9	1.6	1.1	0.9	0.9	1.6	0.7
8	--	0.8	0.8	1.4	2.4	7.9	6.4	1.5	0.8	0.8	0.8	0.9	1.0	1.0	1.0	1.0	0.9	0.8	0.8	0.8	0.7	0.8	1.1	1.8	1.6	7.9	0.7
9	--	1.5	1.3	1.9	2.7	3.5	4.4	2.2	1.1	1.0	1.0	1.0	1.0	1.0	1.1	1.2	1.2	1.1	1.2	1.1	1.1	1.1	1.1	1.0	1.5	4.4	1.0
10	--	0.9	0.8	0.8	0.9	0.8	0.8	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.7	1.4	0.9	1.4	0.7
11	--	1.0	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.8	0.8	0.8	0.8	0.7	0.8	0.8	0.8	0.8	0.8	0.9	0.8	1.0	0.7
12	--	0.8	0.8	0.8	0.9	0.8	0.8	1.2	1.3	1.5	1.5	1.2	1.3	0.9	0.8	0.8	0.7	0.8	0.8	0.8	0.7	0.8	0.8	1.5	1.0	1.5	0.7
13	--	0.8	0.8	0.8	0.8	0.7	0.6	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.9	0.8	0.7	0.8	0.8	0.8	0.8	0.8	1.0	0.8	1.0	0.6
14	--	0.9	0.9	1.0	1.4	1.8	1.5	2.1	2.9	3.0	2.4	2.6	2.4	1.3	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.9	0.8	0.9	1.4	3.0	0.8
15	--	0.7	0.8	0.8	0.8	0.8	0.8	0.9	1.0	1.0	1.1	1.0	0.9	0.9	0.8	0.8	0.8	0.9	0.9	0.8	0.9	0.9	0.8	1.0	0.9	1.1	0.7
16	--	0.9	0.8	0.7	0.8	0.8	0.8	0.7	0.8	0.3	0.5	0.7	0.7	0.7	0.8	0.7	0.8	0.8	1.0	0.9	0.9	1.2	1.2	1.2	0.8	1.2	0.3
17	--	1.2	1.3	1.7	1.7	2.1	1.8	1.5	--	--	--	--	--	--	--	--	--	--	--	0.8	0.6	0.5	0.4	0.5	--	--	--
18	--	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.2	0.3	0.4	-0.2	0.2	0.4	0.3	0.3	0.3	0.3	0.4	-0.2
19	--	0.7	0.8	0.4	0.4	0.4	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.4	0.4	0.3	0.2	0.4	0.8	0.2
20	--	0.3	0.4	1.3	0.8	0.7	0.6	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.3	0.3	0.3	0.2	0.2	0.3	0.4	1.3	0.2
21	--	0.4	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.4	0.2
22	--	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.3	0.2	0.2	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.4	0.1
23	--	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.4	0.4	0.4	0.3	0.0	0.3	0.2	0.3	0.4	0.0
24	--	0.2	0.3	0.3	1.7	0.9	0.6	0.5	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.3	0.3	0.4	0.5	1.7	0.2
25	--	1.1	1.3	1.3	0.9	1.0	0.7	0.5	0.8	1.1	1.0	0.5	0.4	0.3	0.4	0.4	0.4	0.3	0.3	0.4	0.3	0.3	0.3	0.4	0.6	1.3	0.3
26	--	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.7	2.0	1.7	1.1	0.9	0.5	2.0	0.2
27	--	0.4	0.6	0.4	0.3	0.3	0.5	0.6	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.5	0.4	0.3	0.5	0.4	0.6	0.3
28	--	0.5	0.5	0.3	0.4	0.5	0.6	0.6	1.3	2.1	2.1	2.5	3.2	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.3	0.4	0.8	3.2	0.3
29	--	0.2	0.2	0.3	0.4	0.3	0.3	0.2	0.2	0.4	-0.2	0.2	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.5	0.4	0.3	0.3	0.4	0.3	0.5	-0.2
30	--	0.4	0.4	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.5	0.2
31	--	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.4	0.5	0.5	0.5	0.5	0.4	0.4	0.5	0.4	0.9	0.3	0.4	0.4	0.4	0.9	0.3
Avg	--	0.8	0.7	0.8	0.9	1.1	1.1	0.9	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.6	0.7	0.7	0.6	0.7	0.7	0.7	0.7	0.8	0.8	--	--
Max	--	2.5	2.1	2.4	3.4	7.9	6.4	4.5	2.9	3.0	2.4	2.6	3.2	1.6	1.3	1.2	1.2	1.1	1.2	1.1	2.0	1.7	1.4	2.5	--	7.9	--
Min	--	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	-0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	-0.2	0.2	0.2	0.0	0.2	0.2	--	--	-0.2

-- Indicates Invalid Data

SAROAD for Resolution, East_Plant
"Component, Channel: TableAmbient_Hourly, SO2_ppb"
Month: Aug 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	--	2.6	0.5	0.4	0.3	0.3	0.2	0.2	0.3	0.2	0.3	0.3	0.5	0.8	0.3	0.3	0.4	0.4	0.3	0.4	0.6	0.9	0.9	0.8	0.5	2.6	0.2
2	--	1.2	6.3	4.2	8.8	8.9	7.7	8.2	5.7	1.8	2.4	2.7	2.0	1.4	--	0.6	0.6	0.5	0.4	0.4	0.3	0.4	0.4	0.4	3.0	8.9	0.3
3	--	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.7	0.6	0.9	1.6	2.0	1.3	0.7	0.4	0.4	0.5	0.4	0.5	0.4	0.4	0.4	0.5	0.6	2.0	0.3
4	--	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.5	0.7	1.0	0.5	0.7	0.7	0.8	0.8	0.8	0.7	0.7	0.7	0.6	0.5	0.4	0.5	0.6	1.0	0.3
5	--	0.4	0.4	0.4	0.4	0.4	1.4	2.5	1.2	0.5	0.4	1.1	0.9	0.8	0.6	0.6	0.7	0.7	0.6	0.6	0.6	0.5	0.6	0.6	0.7	2.5	0.4
6	--	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.5	0.2
7	--	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.2	0.4	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.6	0.4	0.6	0.2
8	--	0.5	0.5	0.5	0.4	0.4	0.4	0.4	1.0	2.3	4.6	6.0	2.7	1.0	0.5	0.5	0.6	0.5	0.5	0.5	0.4	0.4	0.5	0.6	1.1	6.0	0.4
9	--	0.5	0.5	0.5	0.5	0.7	1.0	0.8	1.4	1.1	0.9	1.0	1.1	1.0	0.7	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.8	0.7	1.4	0.4
10	--	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.7	1.2	1.6	0.6	0.3	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.5	1.6	0.3
11	--	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.5	0.6	0.6	0.7	0.9	1.0	0.8	0.6	1.2	0.5	0.3	0.4	0.5	0.5	1.2	0.3
12	--	0.3	0.4	0.5	0.9	1.6	2.2	1.7	1.5	0.9	0.5	0.4	0.7	1.4	1.4	0.6	0.5	0.5	0.6	0.5	0.3	0.4	0.6	0.7	0.8	2.2	0.3
13	--	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.5	0.7	0.9	0.9	0.8	0.7	0.7	0.7	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.6	0.9	0.4
14	--	0.5	0.4	0.5	0.6	0.6	0.7	0.6	0.6	0.8	0.8	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.4	0.6	0.6	0.8	0.4
15	--	0.7	0.4	0.4	0.4	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.7	0.6	0.6	0.7	0.7	0.3	0.4	0.4	0.6	1.2	0.9	0.5	0.5	1.2	0.3
16	--	0.4	0.4	0.5	0.6	2.2	4.5	6.2	3.0	1.0	0.5	0.1	0.3	0.6	--	0.1	-0.1	-0.4	-0.3	0.1	0.0	0.1	0.5	0.1	0.9	6.2	-0.4
17	--	-0.2	-0.2	-0.1	-0.1	-0.3	-0.2	-0.2	0.4	0.5	0.6	1.8	1.9	1.2	1.4	1.1	0.6	0.1	-0.1	-0.1	-0.2	-0.2	-0.1	-0.1	0.3	1.9	-0.3
18	--	-0.2	-0.2	-0.2	-0.2	-0.3	-0.2	0.0	-0.1	0.2	-0.1	-0.2	0.1	0.9	0.3	0.2	1.0	0.0	0.2	0.5	0.1	-0.1	-0.2	-0.2	0.1	1.0	-0.3
19	--	-0.2	-0.2	-0.2	-0.2	-0.2	-0.1	-0.2	-0.2	-0.2	1.4	-0.2	-0.2	-0.1	0.1	-0.1	-0.1	-0.2	-0.2	0.1	0.0	-0.2	-0.2	-0.2	-0.1	1.4	-0.2
20	--	-0.2	-0.3	-0.3	-0.2	1.7	1.7	0.4	0.2	0.1	0.0	0.1	0.0	-0.1	-0.2	0.0	0.0	0.0	-0.1	-0.1	-0.2	-0.2	-0.3	-0.2	0.1	1.7	-0.3
21	--	-0.2	-0.3	-0.2	-0.2	-0.2	-0.1	-0.4	-0.3	-0.3	-0.3	-0.2	-0.3	-0.3	-0.3	-0.2	-0.3	-0.2	-0.2	-0.2	-0.2	-0.3	-0.2	-0.1	-0.2	-0.1	-0.4
22	--	-0.2	-0.2	-0.3	-0.3	-0.2	-0.2	-0.3	-0.3	0.1	0.2	1.0	1.7	1.2	1.7	1.3	0.5	0.0	0.0	-0.2	-0.1	-0.2	-0.2	-0.2	0.2	1.7	-0.3
23	--	-0.1	-0.3	-0.2	-0.2	-0.2	-0.1	-0.2	-0.2	-0.2	-0.2	-0.1	0.0	0.0	-0.1	0.1	-0.2	-0.1	-0.2	-0.2	-0.1	0.4	0.6	1.1	0.0	1.1	-0.3
24	--	2.3	0.3	-0.1	-0.2	-0.3	-0.2	-0.2	-0.3	0.0	0.7	0.3	-0.1	0.0	-0.1	-0.2	0.7	1.0	1.0	2.5	1.0	1.0	-0.1	0.0	0.4	2.5	-0.3
25	--	-0.2	-0.3	-0.2	-0.2	-0.2	-0.2	-0.2	-0.3	-0.3	-0.5	-0.3	-0.1	-0.2	-0.2	-0.1	0.1	-0.1	-0.1	-0.2	-0.2	0.1	0.7	0.6	-0.1	0.7	-0.5
26	--	-0.2	-0.2	-0.2	-0.2	-0.1	0.2	0.3	0.5	0.7	0.4	-0.2	-0.2	-0.1	0.0	0.0	0.3	0.1	0.1	0.2	-0.1	-0.1	-0.3	0.0	0.0	0.7	-0.3
27	--	-0.2	-0.2	-0.2	-0.1	1.2	1.2	0.2	-0.1	-0.1	-0.2	-0.1	-0.2	-0.2	-0.1	0.3	-0.1	-0.1	-0.2	-0.2	-0.1	-0.2	-0.2	-0.1	0.0	1.2	-0.2
28	--	-0.1	-0.1	-0.3	-0.2	-0.2	-0.2	-0.2	-0.2	-0.3	-0.2	-0.3	-0.3	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.3	-0.2	-0.1	-0.2	-0.1	-0.3
29	--	-0.3	-0.3	-0.3	-0.2	-0.2	-0.3	-0.3	-0.3	0.3	0.0	0.7	0.4	-0.1	-0.1	-0.1	0.0	-0.2	-0.3	-0.3	-0.3	-0.2	-0.3	-0.2	-0.1	0.7	-0.3
30	--	-0.4	-0.2	-0.1	-0.1	0.0	0.1	0.3	0.4	0.2	0.0	--	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.1	-0.2	-0.1	-0.2	-0.2	-0.1	0.0	0.4	-0.4
31	--	-0.2	-0.2	-0.1	-0.1	-0.2	0.9	1.8	3.5	2.5	1.1	0.2	-0.1	-0.1	-0.2	-0.2	-0.2	-0.1	-0.2	-0.1	-0.2	-0.2	-0.1	0.0	0.3	3.5	-0.2
Avg	--	0.3	0.3	0.2	0.4	0.6	0.7	0.8	0.7	0.5	0.6	0.7	0.6	0.5	0.4	0.4	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.3	0.4	--	--
Max	--	2.6	6.3	4.2	8.8	8.9	7.7	8.2	5.7	2.5	4.6	6.0	2.7	1.4	1.7	1.3	1.0	1.0	1.0	2.5	1.0	1.2	0.9	1.1	--	8.9	--
Min	--	-0.4	-0.3	-0.3	-0.3	-0.3	-0.3	-0.4	-0.3	-0.3	-0.5	-0.3	-0.3	-0.3	-0.3	-0.2	-0.3	-0.4	-0.3	-0.3	-0.3	-0.3	-0.3	-0.2	--	--	-0.5

-- Indicates Invalid Data

SAROAD for Resolution, East_Plant
"Component, Channel: TableAmbient_Hourly, SO2_ppb"
Month: Sep 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	--	-0.2	-0.2	-0.2	-0.1	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0.0	-0.1	0.0	-0.2
2	--	-0.1	-0.1	-0.2	-0.2	-0.2	-0.1	-0.2	1.5	3.4	1.0	0.2	0.1	0.1	0.0	0.0	0.0	-0.1	0.0	0.0	-0.1	-0.1	-0.1	-0.1	0.2	3.4	-0.2
3	--	-0.2	-0.2	-0.2	-0.2	-0.1	0.0	0.4	0.1	0.7	-0.9	-1.3	-1.4	-1.5	-1.4	-1.4	-1.5	-1.6	-1.5	-1.5	-1.5	-1.4	-1.4	-1.1	-0.8	0.7	-1.6
4	--	-1.5	-1.5	-1.5	-1.4	-0.7	0.8	-0.4	-1.0	-1.4	-1.4	-1.4	-1.5	-1.4	-1.6	-1.5	-1.4	-1.0	-0.3	-0.9	-1.5	-1.4	-1.4	-1.4	-1.2	0.8	-1.6
5	--	-1.5	-1.5	-1.4	-1.5	-1.5	-1.5	-1.4	-1.4	-1.5	-1.4	-1.5	-1.4	-1.4	-1.4	-1.3	-0.8	-0.7	-1.3	-1.4	-1.4	-1.5	-1.5	-1.4	-1.4	-0.7	-1.5
6	--	-1.5	-1.5	-1.4	-1.5	-1.4	-1.3	-0.8	-1.0	-1.2	-1.3	-1.3	-1.3	-1.3	-1.3	-1.4	-1.4	-1.4	-1.4	0.0	0.0	-1.0	-1.4	-1.3	-1.2	0.0	-1.5
7	--	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.6	-1.5	-1.5	-1.5	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.5	-1.5	-1.3	-1.5	-1.3	-1.6
8	--	-1.5	-1.4	-1.4	-1.4	-1.4	-1.5	-1.6	-1.6	-1.5	-1.4	-1.5	-1.5	-1.4	-1.3	-1.4	-1.4	-1.4	-1.3	-1.4	-1.4	-1.5	-1.5	-1.3	-1.4	-1.3	-1.6
9	--	-1.4	-1.5	-1.5	-1.4	-1.4	-1.4	-1.5	-1.5	-1.5	-1.5	-1.5	-1.4	-1.5	-1.5	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.3	-1.3	-1.4	-1.3	-1.5
10	--	-1.5	-1.5	-1.5	-1.5	-1.4	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.4	-1.5	-1.4	-1.4	-1.4	-1.5	-1.5	-1.5	-1.5	-1.4	-1.5	-1.4	-1.5
11	--	-1.5	-1.4	-1.4	-1.4	-1.4	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.6	-1.5	-1.5	-1.5	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.5	-1.4	-1.6
12	--	-1.5	-1.5	-1.4	-1.5	-1.4	-1.4	-1.5	-1.4	-1.4	-1.4	-1.4	-1.3	-1.3	0.5	--	-1.3	-1.3	-1.4	-1.4	-1.4	-1.1	-0.8	-1.2	-1.3	0.5	-1.5
13	--	-1.5	-1.4	-1.4	-1.4	-1.4	-1.4	-1.5	-1.5	-1.4	-1.4	-1.5	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.0	0.4	-1.0	-1.2	-1.3	0.4	-1.5
14	--	-1.3	-1.4	-1.5	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.5	-1.5	-1.4	-1.3	-1.4	-1.3	-1.2	-1.3	-1.3	-1.3	-1.3	-1.0	-0.5	-0.1	-1.3	-0.1	-1.5
15	--	-1.3	-1.3	-1.3	-1.2	-0.8	-1.1	-1.4	-1.4	-1.4	-1.4	-1.4	-1.3	-1.3	-1.4	-1.4	-1.3	-1.4	-1.4	-1.3	-1.4	-1.4	-1.4	-1.2	-1.3	-0.8	-1.4
16	--	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.5	-1.5	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.5
17	--	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.3	-1.1	-1.1	-0.6	-0.8	-1.3	-1.3	-1.0	-0.7	-1.3	-0.6	-1.4
18	--	-0.8	-1.2	-1.2	-1.2	-1.3	-1.3	-1.1	-1.0	-1.2	-0.9	-0.5	-1.2	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3	-1.2	-1.2	-1.2	-1.2	-0.5	-1.3
19	--	-1.1	-1.1	-1.1	-1.2	-1.2	-1.3	-1.2	-1.1	-1.3	-1.3	-1.2	-1.1	-0.8	-0.9	-1.2	-1.2	-1.2	-1.2	-1.3	-1.3	-1.3	-1.3	-1.3	-1.2	-0.8	-1.3
20	--	-1.3	-1.3	-0.5	2.4	1.7	-0.3	-0.8	-0.1	-0.4	-0.9	-1.1	-1.2	-0.6	-0.6	-0.8	-0.9	-0.9	-1.1	-1.1	-1.1	-0.8	-0.5	-1.3	-0.6	2.4	-1.3
21	--	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.3	-0.5	-0.7	-1.1	-1.1	-1.2	-1.3	-1.2	-0.7	-0.8	-1.0	-1.0	-1.2	-0.5	-1.4
22	--	-1.0	-1.1	-1.2	-1.3	-1.2	-1.2	-1.2	-1.3	-1.3	-1.3	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.3	-1.2	-1.3	-1.3	-1.3	-1.3	-1.2	-1.2	-1.0	-1.3
23	--	-1.3	-1.3	-1.3	-1.4	-1.3	-1.3	-1.3	-1.4	-1.3	-1.1	-0.4	-0.5	-0.4	-0.6	-0.4	-0.2	0.0	-0.1	-0.3	-0.5	-0.6	-0.7	-0.6	-0.8	0.0	-1.4
24	--	-1.1	-1.2	-1.3	-1.3	-1.3	-1.3	-1.3	-1.1	-1.1	-0.7	-1.0	-0.9	-0.3	-0.3	-0.2	0.1	-0.5	-0.7	-0.8	-0.9	-0.9	-1.0	-1.0	-0.9	0.1	-1.3
25	--	-1.0	-1.2	-1.2	-1.1	-1.3	-1.2	-1.2	-1.2	-0.8	-0.4	-0.5	-1.2	-1.3	-1.3	-1.3	-1.3	-1.2	-1.1	-1.1	-1.2	-1.3	-1.3	-1.2	-1.1	-0.4	-1.3
26	--	-1.3	-1.3	-1.3	-1.3	-1.0	-0.5	0.1	0.6	0.5	-0.7	-1.2	-1.3	-1.3	-1.3	-1.3	-1.3	-1.1	-1.2	-1.2	-1.2	-1.2	-1.2	-1.3	-1.0	0.6	-1.3
27	--	-1.3	-1.2	-1.2	-1.2	-1.2	-1.3	-1.3	-1.3	-1.4	-1.4	-1.3	-1.4	-1.3	-1.2	-1.2	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3	-1.4	-1.3	-1.3	-1.2	-1.4
28	--	-1.0	-0.1	-0.6	-0.7	-1.2	-1.4	-1.3	-1.4	-1.3	-1.3	-1.2	-0.1	-0.6	-1.3	-1.2	-1.2	-1.2	-1.3	-1.4	-1.4	-1.3	-1.3	-0.1	-1.0	-0.1	-1.4
29	--	1.8	-0.4	-0.9	-0.8	-0.7	-1.2	-1.3	-1.5	-1.2	-1.1	-0.9	-0.6	-0.3	-0.5	-0.4	-0.6	-0.8	-1.0	-1.0	-1.1	-1.1	-1.2	-1.2	-0.8	1.8	-1.5
30	--	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3	-1.4	-1.3	--	-1.3	-1.3	-1.1	-0.8	-0.6	-1.0	-1.2	-1.2	-1.2	-1.3	-1.3	-1.4	-1.3	-1.3	-1.2	-0.6	-1.4
Avg	--	-1.1	-1.2	-1.2	-1.1	-1.1	-1.1	-1.1	-1.1	-1.0	-1.1	-1.2	-1.1	-1.1	-1.0	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	-1.1	--	--
Max	--	1.8	-0.1	-0.2	2.4	1.7	0.8	0.4	1.5	3.4	1.0	0.2	0.1	0.1	0.5	0.0	0.1	0.0	0.0	0.0	0.0	0.4	-0.1	0.0	--	3.4	--
Min	--	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.6	-1.6	-1.5	-1.5	-1.5	-1.6	-1.5	-1.6	-1.5	-1.5	-1.6	-1.5	-1.5	-1.5	-1.5	-1.5	-1.4	--	--	-1.6

-- Indicates Invalid Data

SAROAD for Resolution, East_Plant, rolling 8-hour average
"Component, Channel: TableAmbient_Hourly, O3_ppm"
Month: Jul 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	0.034	0.035	0.036	0.037	0.039	0.041	0.043	0.045	0.048	0.050	0.051	0.052	0.053	0.053	0.052	0.050	0.048	0.044	0.043	0.041	0.040	0.040	0.041	0.041	0.044	0.053	0.034
2	0.041	0.043	0.044	0.045	0.045	0.046	0.047	0.049	0.050	0.052	0.055	0.059	0.060	0.059	0.059	0.058	0.058	0.056	0.053	0.049	0.046	0.045	0.045	0.045	0.050	0.060	0.041
3	0.045	0.046	0.047	0.048	0.050	0.051	0.052	0.053	0.054	0.055	0.056	0.056	0.058	0.058	0.059	0.059	0.059	0.058	0.057	0.056	0.052	0.048	0.045	0.041	0.053	0.059	0.041
4	0.039	0.038	0.038	0.039	0.040	0.041	0.043	0.046	0.048	0.051	0.053	0.054	0.055	0.056	0.056	0.055	0.053	0.051	0.049	0.048	0.046	0.044	0.043	0.043	0.047	0.056	0.038
5	0.042	0.042	0.042	0.041	0.041	0.040	0.041	0.042	0.043	0.043	0.044	0.046	0.047	0.047	0.047	0.044	0.041	0.039	0.036	0.035	0.031	0.028	0.026	0.025	0.040	0.047	0.025
6	0.026	0.028	0.031	0.033	0.037	0.041	0.045	0.048	0.050	0.051	0.051	0.051	0.051	0.051	0.050	0.050	0.049	0.048	0.046	0.045	0.043	0.042	0.041	0.040	0.044	0.051	0.026
7	0.039	0.038	0.039	0.040	0.042	0.044	0.046	0.048	0.051	0.053	0.055	0.057	0.058	0.057	0.057	0.056	0.056	0.055	0.054	0.053	0.051	0.051	0.049	0.048	0.050	0.058	0.038
8	0.048	0.048	0.048	0.050	0.051	0.053	0.055	0.057	0.059	0.059	0.060	0.059	0.057	0.055	0.052	0.050	0.048	0.045	0.043	0.041	0.040	0.038	0.036	0.035	0.049	0.060	0.035
9	0.033	0.030	0.029	0.029	0.030	0.032	0.034	0.036	0.039	0.043	0.046	0.048	0.049	0.050	0.050	0.049	0.046	0.044	0.042	0.040	0.038	0.037	0.036	0.035	0.039	0.050	0.029
10	0.034	0.034	0.035	0.035	0.035	0.036	0.037	0.040	0.044	0.047	0.050	0.052	0.055	0.056	0.055	0.053	0.050	0.049	0.047	0.045	0.043	0.041	0.040	0.041	0.044	0.056	0.034
11	0.040	0.039	0.039	0.040	0.042	0.044	0.045	0.046	0.048	0.051	0.053	0.055	0.057	0.057	0.057	0.057	0.055	0.053	0.050	0.048	0.044	0.041	0.039	0.035	0.047	0.057	0.035
12	0.034	0.034	0.035	0.036	0.038	0.040	0.041	0.043	0.045	0.047	0.048	0.048	0.048	0.047	0.047	0.047	0.046	0.044	0.042	0.042	0.041	0.040	0.040	0.039	0.042	0.048	0.034
13	0.039	0.040	0.042	0.043	0.045	0.047	0.049	0.051	0.053	0.055	0.056	0.057	0.059	0.061	0.061	0.060	0.059	0.056	0.054	0.053	0.049	0.045	0.041	0.038	0.051	0.061	0.038
14	0.037	0.038	0.039	0.041	0.042	0.044	0.046	0.049	0.050	0.052	0.052	0.052	0.052	0.051	0.051	0.051	0.050	0.049	0.047	0.047	0.045	0.044	0.043	0.043	0.047	0.052	0.037
15	0.042	0.042	0.041	0.042	0.043	0.044	0.045	0.047	0.048	0.049	0.053	0.054	0.055	0.055	0.054	0.054	0.053	0.052	0.048	0.047	0.045	0.043	0.042	0.040	0.047	0.055	0.040
16	0.039	0.038	0.039	0.039	0.039	0.040	0.041	0.042	0.043	0.044	0.045	0.046	0.047	0.047	0.047	0.046	0.045	0.044	0.042	0.041	0.041	0.040	0.040	0.040	0.042	0.047	0.038
17	0.041	0.042	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.061	0.061	0.061	0.059	0.057	0.054	0.051	0.054	0.061	0.041
18	0.048	0.045	0.043	0.044	0.044	0.045	0.047	0.049	0.051	0.052	0.052	0.051	0.050	0.048	0.046	0.044	0.042	0.040	0.038	0.037	0.036	0.034	0.032	0.031	0.044	0.052	0.031
19	0.031	0.030	0.031	0.032	0.033	0.035	0.038	0.040	0.042	0.044	0.045	0.046	0.047	0.047	0.047	0.046	0.045	0.045	0.043	0.042	0.040	0.038	0.036	0.035	0.040	0.047	0.030
20	0.034	0.034	0.036	0.037	0.039	0.042	0.044	0.047	0.049	0.050	0.052	0.053	0.052	0.051	0.050	0.047	0.044	0.041	0.038	0.036	0.034	0.032	0.030	0.031	0.042	0.053	0.030
21	0.031	0.032	0.032	0.033	0.034	0.035	0.037	0.038	0.039	0.039	0.039	0.039	0.038	0.037	0.036	0.036	0.035	0.033	0.032	0.031	0.030	0.030	0.029	0.028	0.034	0.039	0.028
22	0.029	0.030	0.032	0.033	0.035	0.036	0.038	0.042	0.043	0.045	0.046	0.047	0.048	0.048	0.048	0.047	0.047	0.046	0.045	0.045	0.044	0.043	0.043	0.044	0.042	0.048	0.029
23	0.043	0.042	0.042	0.042	0.042	0.043	0.044	0.045	0.048	0.051	0.053	0.055	0.056	0.057	0.057	0.056	0.053	0.051	0.048	0.046	0.044	0.042	0.040	0.039	0.047	0.057	0.039
24	0.038	0.037	0.037	0.038	0.039	0.040	0.042	0.044	0.048	0.050	0.053	0.054	0.055	0.056	0.056	0.055	0.052	0.050	0.047	0.046	0.042	0.039	0.037	0.036	0.045	0.056	0.036
25	0.035	0.036	0.036	0.037	0.039	0.041	0.043	0.045	0.046	0.046	0.045	0.044	0.042	0.039	0.035	0.032	0.029	0.027	0.027	0.026	0.027	0.028	0.029	0.029	0.036	0.046	0.026
26	0.030	0.032	0.032	0.034	0.036	0.039	0.042	0.044	0.046	0.048	0.049	0.049	0.048	0.047	0.045	0.044	0.042	0.040	0.038	0.036	0.034	0.033	0.032	0.031	0.040	0.049	0.030
27	0.032	0.033	0.034	0.035	0.038	0.039	0.042	0.044	0.046	0.047	0.048	0.048	0.047	0.047	0.045	0.043	0.040	0.039	0.038	0.036	0.035	0.035	0.035	0.034	0.040	0.048	0.032
28	0.034	0.033	0.034	0.034	0.034	0.035	0.035	0.037	0.039	0.040	0.041	0.042	0.042	0.041	0.040	0.039	0.038	0.037	0.036	0.035	0.035	0.035	0.036	0.035	0.037	0.042	0.033
29	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.036	0.037	0.037	0.037	0.038	0.038	0.038	0.037	0.036	0.035	0.034	0.033	0.032	0.031	0.030	0.029	0.028	0.035	0.038	0.028
30	0.027	0.026	0.026	0.026	0.026	0.027	0.028	0.029	0.031	0.033	0.036	0.038	0.042	0.045	0.047	0.049	0.050	0.049	0.047	0.047	0.043	0.040	0.036	0.034	0.037	0.050	0.026
31	0.032	0.030	0.030	0.032	0.033	0.035	0.036	0.038	0.040	0.043	0.044	0.045	0.045	0.045	0.046	0.046	0.045	0.044	0.043	0.043	0.042	0.041	0.040	0.040	0.040	0.046	0.030
Avg	0.036	0.036	0.037	0.038	0.039	0.040	0.042	0.044	0.046	0.048	0.049	0.050	0.050	0.050	0.050	0.049	0.047	0.046	0.044	0.043	0.041	0.040	0.038	0.037	0.043	--	--
Max	0.048	0.048	0.048	0.050	0.051	0.053	0.055	0.057	0.059	0.059	0.060	0.059	0.060	0.061	0.061	0.060	0.059	0.061	0.061	0.061	0.059	0.057	0.054	0.051	--	0.061	--
Min	0.026	0.026	0.026	0.026	0.026	0.027	0.028	0.029	0.031	0.033	0.036	0.038	0.038	0.037	0.035	0.032	0.029	0.027	0.027	0.026	0.027	0.028	0.026	0.025	--	--	0.025

-- Indicates Invalid Data

SAROAD for Resolution, East_Plant, rolling 8-hour average
"Component, Channel: TableAmbient_Hourly, O3_ppm"
Month: Aug 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	0.040	0.040	0.042	0.043	0.045	0.046	0.047	0.048	0.047	0.046	0.045	0.044	0.042	0.041	0.040	0.040	0.040	0.040	0.040	0.040	0.039	0.038	0.036	0.034	0.042	0.048	0.034
2	0.032	0.031	0.031	0.032	0.033	0.034	0.035	0.037	0.039	0.039	0.039	0.040	0.040	0.041	0.041	0.041	0.042	0.043	0.043	0.043	0.043	0.043	0.042	0.042	0.039	0.043	0.031
3	0.041	0.041	0.041	0.041	0.041	0.041	0.042	0.042	0.043	0.043	0.044	0.045	0.045	0.045	0.046	0.045	0.045	0.044	0.044	0.044	0.044	0.045	0.044	0.044	0.043	0.046	0.041
4	0.043	0.042	0.041	0.041	0.040	0.039	0.039	0.040	0.041	0.042	0.043	0.043	0.043	0.044	0.043	0.043	0.043	0.042	0.042	0.041	0.041	0.041	0.040	0.040	0.042	0.044	0.039
5	0.040	0.040	0.041	0.042	0.042	0.042	0.043	0.045	0.046	0.046	0.047	0.047	0.048	0.048	0.048	0.047	0.046	0.044	0.043	0.042	0.040	0.038	0.037	0.036	0.043	0.048	0.036
6	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.035	0.036	0.037	0.038	0.038	0.038	0.038	0.037	0.036	0.035	0.033	0.032	0.032	0.030	0.030	0.030	0.031	0.034	0.038	0.030
7	0.031	0.032	0.033	0.035	0.037	0.038	0.040	0.043	0.045	0.048	0.050	0.052	0.053	0.054	0.056	0.056	0.055	0.054	0.052	0.051	0.050	0.048	0.046	0.044	0.046	0.056	0.031
8	0.043	0.043	0.044	0.044	0.044	0.044	0.045	0.045	0.047	0.047	0.048	0.048	0.048	0.048	0.047	0.047	0.046	0.045	0.045	0.044	0.043	0.043	0.043	0.043	0.045	0.048	0.043
9	0.042	0.042	0.042	0.043	0.043	0.044	0.045	0.046	0.047	0.048	0.049	0.049	0.049	0.048	0.047	0.046	0.044	0.043	0.041	0.039	0.038	0.037	0.036	0.036	0.044	0.049	0.036
10	0.035	0.035	0.035	0.036	0.036	0.037	0.039	0.040	0.042	0.043	0.044	0.045	0.044	0.043	0.043	0.042	0.042	0.040	0.039	0.038	0.037	0.036	0.035	0.034	0.039	0.045	0.034
11	0.034	0.035	0.035	0.036	0.037	0.038	0.040	0.041	0.042	0.043	0.043	0.044	0.044	0.044	0.044	0.043	0.043	0.043	0.043	0.042	0.041	0.040	0.040	0.039	0.041	0.044	0.034
12	0.038	0.038	0.038	0.039	0.040	0.041	0.043	0.044	0.045	0.046	0.046	0.046	0.046	0.045	0.045	0.044	0.043	0.042	0.040	0.040	0.038	0.037	0.036	0.036	0.041	0.046	0.036
13	0.035	0.035	0.036	0.036	0.037	0.038	0.039	0.041	0.042	0.044	0.046	0.048	0.051	0.054	0.057	0.058	0.058	0.058	0.057	0.056	0.053	0.049	0.046	0.044	0.047	0.058	0.035
14	0.043	0.041	0.040	0.041	0.041	0.042	0.043	0.045	0.047	0.049	0.052	0.054	0.057	0.057	0.057	0.056	0.055	0.053	0.051	0.049	0.045	0.042	0.040	0.039	0.047	0.057	0.039
15	0.039	0.039	0.039	0.040	0.042	0.043	0.045	0.047	0.048	0.050	0.050	0.049	0.048	0.047	0.046	0.044	0.043	0.041	0.039	0.039	0.038	0.037	0.037	0.036	0.043	0.050	0.036
16	0.036	0.036	0.037	0.038	0.040	0.042	0.044	0.046	0.048	0.049	0.050	0.050	0.049	0.048	0.047	0.047	0.046	0.045	0.044	0.044	0.043	0.043	0.042	0.041	0.044	0.050	0.036
17	0.039	0.039	0.039	0.040	0.042	0.044	0.046	0.049	0.051	0.053	0.053	0.054	0.053	0.051	0.050	0.049	0.048	0.047	0.046	0.046	0.045	0.045	0.044	0.043	0.046	0.054	0.039
18	0.041	0.041	0.039	0.040	0.042	0.043	0.045	0.047	0.049	0.051	0.053	0.054	0.053	0.053	0.051	0.050	0.049	0.048	0.047	0.046	0.045	0.044	0.043	0.042	0.047	0.054	0.039
19	0.041	0.041	0.042	0.043	0.044	0.045	0.047	0.048	0.049	0.051	0.052	0.053	0.053	0.054	0.053	0.052	0.051	0.051	0.051	0.050	0.049	0.047	0.046	0.045	0.048	0.054	0.041
20	0.044	0.042	0.040	0.041	0.041	0.042	0.043	0.044	0.046	0.048	0.050	0.052	0.052	0.052	0.051	0.051	0.050	0.049	0.046	0.044	0.042	0.040	0.039	0.037	0.045	0.052	0.037
21	0.036	0.036	0.036	0.037	0.037	0.038	0.039	0.041	0.042	0.042	0.043	0.043	0.044	0.044	0.043	0.043	0.043	0.042	0.041	0.041	0.040	0.040	0.039	0.039	0.040	0.044	0.036
22	0.039	0.039	0.041	0.041	0.043	0.045	0.046	0.047	0.049	0.050	0.051	0.052	0.051	0.050	0.050	0.049	0.047	0.045	0.043	0.042	0.040	0.040	0.038	0.037	0.045	0.052	0.037
23	0.037	0.038	0.039	0.041	0.043	0.046	0.048	0.051	0.054	0.056	0.056	0.056	0.055	0.053	0.051	0.050	0.047	0.045	0.044	0.044	0.044	0.043	0.043	0.043	0.047	0.056	0.037
24	0.044	0.044	0.044	0.044	0.045	0.046	0.047	0.048	0.049	0.049	0.048	0.048	0.046	0.045	0.044	0.044	0.042	0.042	0.041	0.042	0.041	0.040	0.038	0.036	0.044	0.049	0.036
25	0.035	0.034	0.033	0.034	0.035	0.036	0.038	0.039	0.040	0.042	0.042	0.042	0.041	0.040	0.038	0.037	0.036	0.035	0.034	0.033	0.033	0.033	0.032	0.031	0.036	0.042	0.031
26	0.030	0.029	0.029	0.030	0.031	0.032	0.034	0.037	0.039	0.040	0.042	0.042	0.042	0.043	0.042	0.041	0.040	0.040	0.040	0.039	0.039	0.039	0.038	0.038	0.037	0.043	0.029
27	0.038	0.038	0.038	0.039	0.039	0.040	0.041	0.042	0.043	0.045	0.045	0.046	0.045	0.045	0.044	0.043	0.042	0.041	0.039	0.038	0.037	0.037	0.036	0.035	0.041	0.046	0.035
28	0.034	0.034	0.035	0.035	0.036	0.037	0.037	0.038	0.039	0.039	0.038	0.037	0.036	0.035	0.034	0.033	0.031	0.030	0.029	0.028	0.027	0.025	0.024	0.023	0.033	0.039	0.023
29	0.023	0.022	0.023	0.024	0.025	0.027	0.029	0.031	0.032	0.034	0.034	0.034	0.034	0.033	0.031	0.030	0.028	0.025	0.023	0.022	0.021	0.019	0.018	0.016	0.027	0.034	0.016
30	0.016	0.017	0.018	0.020	0.021	0.022	0.024	0.026	0.028	0.029	0.030	0.030	0.031	0.032	0.033	0.034	0.034	0.033	0.032	0.032	0.031	0.030	0.027	0.025	0.027	0.034	0.016
31	0.023	0.023	0.024	0.025	0.026	0.027	0.029	0.032	0.036	0.038	0.041	0.041	0.042	0.041	0.040	0.040	0.038	0.037	0.034	0.033	0.032	0.031	0.029	0.028	0.033	0.042	0.023
Avg	0.036	0.036	0.036	0.037	0.038	0.039	0.041	0.042	0.044	0.045	0.046	0.046	0.046	0.046	0.045	0.045	0.044	0.043	0.041	0.041	0.040	0.039	0.038	0.037	0.041	--	--
Max	0.044	0.044	0.044	0.044	0.045	0.046	0.048	0.051	0.054	0.056	0.056	0.056	0.057	0.057	0.057	0.058	0.058	0.058	0.057	0.056	0.053	0.049	0.046	0.045	--	0.058	--
Min	0.016	0.017	0.018	0.020	0.021	0.022	0.024	0.026	0.028	0.029	0.030	0.030	0.031	0.032	0.031	0.030	0.028	0.025	0.023	0.022	0.021	0.019	0.018	0.016	--	--	0.016

SAROAD for Resolution, East_Plant, rolling 8-hour average
"Component, Channel: TableAmbient_Hourly, O3_ppm"
Month: Sep 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	0.026	0.026	0.027	0.027	0.029	0.030	0.032	0.034	0.037	0.039	0.041	0.044	0.046	0.047	0.048	0.048	0.048	0.046	0.044	0.043	0.041	0.039	0.037	0.035	0.038	0.048	0.026
2	0.033	0.032	0.033	0.034	0.035	0.036	0.038	0.040	0.042	0.044	0.045	0.046	0.045	0.044	0.043	0.042	0.041	0.040	0.039	0.038	0.039	0.039	0.039	0.039	0.040	0.046	0.032
3	0.040	0.041	0.042	0.043	0.044	0.046	0.047	0.048	0.049	0.050	0.050	0.050	0.049	0.048	0.047	0.046	0.045	0.043	0.042	0.042	0.040	0.040	0.039	0.038	0.045	0.050	0.038
4	0.038	0.038	0.039	0.040	0.042	0.043	0.044	0.046	0.047	0.048	0.049	0.049	0.048	0.047	0.046	0.045	0.044	0.043	0.042	0.041	0.041	0.040	0.040	0.040	0.043	0.049	0.038
5	0.040	0.040	0.040	0.041	0.041	0.042	0.043	0.043	0.044	0.044	0.044	0.044	0.044	0.043	0.043	0.042	0.041	0.040	0.039	0.038	0.037	0.037	0.036	0.036	0.041	0.044	0.036
6	0.037	0.038	0.041	0.042	0.044	0.046	0.047	0.049	0.050	0.050	0.049	0.048	0.046	0.045	0.044	0.042	0.041	0.041	0.042	0.042	0.043	0.042	0.042	0.042	0.044	0.050	0.037
7	0.041	0.039	0.038	0.038	0.038	0.039	0.039	0.040	0.042	0.043	0.044	0.044	0.043	0.043	0.041	0.040	0.039	0.038	0.037	0.037	0.037	0.037	0.037	0.037	0.040	0.044	0.037
8	0.037	0.036	0.036	0.035	0.035	0.036	0.036	0.037	0.038	0.039	0.040	0.041	0.040	0.040	0.039	0.039	0.037	0.035	0.034	0.033	0.031	0.029	0.029	0.028	0.036	0.041	0.028
9	0.027	0.027	0.027	0.027	0.028	0.029	0.029	0.030	0.031	0.031	0.032	0.032	0.031	0.030	0.029	0.028	0.027	0.026	0.026	0.025	0.026	0.026	0.028	0.028	0.028	0.032	0.025
10	0.029	0.031	0.033	0.035	0.037	0.039	0.041	0.044	0.047	0.049	0.050	0.051	0.051	0.051	0.051	0.051	0.050	0.050	0.048	0.048	0.046	0.045	0.044	0.042	0.044	0.051	0.029
11	0.040	0.039	0.040	0.041	0.043	0.044	0.045	0.046	0.049	0.050	0.051	0.052	0.053	0.054	0.053	0.053	0.052	0.051	0.049	0.049	0.046	0.043	0.042	0.040	0.047	0.054	0.039
12	0.038	0.037	0.037	0.038	0.039	0.041	0.043	0.046	0.047	0.050	0.051	0.052	0.052	0.051	0.049	0.046	0.044	0.042	0.038	0.036	0.033	0.030	0.028	0.027	0.041	0.052	0.027
13	0.026	0.026	0.026	0.027	0.028	0.029	0.030	0.032	0.033	0.034	0.034	0.034	0.034	0.034	0.033	0.032	0.031	0.030	0.030	0.029	0.029	0.029	0.029	0.029	0.030	0.034	0.026
14	0.029	0.029	0.029	0.030	0.031	0.032	0.034	0.036	0.038	0.040	0.042	0.043	0.044	0.044	0.043	0.042	0.041	0.040	0.039	0.038	0.037	0.037	0.036	0.036	0.037	0.044	0.029
15	0.035	0.036	0.037	0.037	0.038	0.039	0.041	0.042	0.044	0.045	0.045	0.046	0.045	0.045	0.045	0.044	0.044	0.043	0.042	0.042	0.041	0.040	0.039	0.037	0.041	0.046	0.035
16	0.037	0.036	0.036	0.036	0.036	0.037	0.037	0.037	0.038	0.039	0.039	0.039	0.038	0.038	0.037	0.037	0.036	0.035	0.034	0.034	0.034	0.033	0.033	0.032	0.036	0.039	0.032
17	0.032	0.031	0.031	0.031	0.032	0.032	0.033	0.034	0.035	0.036	0.036	0.036	0.036	0.036	0.036	0.035	0.034	0.033	0.032	0.032	0.031	0.031	0.030	0.030	0.033	0.036	0.030
18	0.029	0.029	0.030	0.031	0.033	0.035	0.037	0.039	0.041	0.043	0.044	0.044	0.044	0.043	0.042	0.040	0.039	0.038	0.037	0.037	0.037	0.037	0.037	0.038	0.038	0.044	0.029
19	0.038	0.038	0.039	0.039	0.039	0.040	0.040	0.041	0.041	0.041	0.042	0.042	0.043	0.043	0.042	0.042	0.042	0.042	0.041	0.040	0.039	0.038	0.037	0.037	0.040	0.043	0.037
20	0.036	0.035	0.034	0.035	0.034	0.035	0.036	0.037	0.039	0.041	0.042	0.044	0.046	0.047	0.046	0.045	0.044	0.044	0.043	0.042	0.039	0.037	0.036	0.036	0.040	0.047	0.034
21	0.036	0.036	0.037	0.037	0.037	0.038	0.039	0.039	0.040	0.041	0.041	0.042	0.042	0.042	0.042	0.041	0.041	0.040	0.038	0.037	0.036	0.034	0.034	0.033	0.039	0.042	0.033
22	0.032	0.032	0.031	0.031	0.031	0.032	0.032	0.033	0.034	0.036	0.038	0.040	0.041	0.043	0.044	0.044	0.043	0.043	0.042	0.041	0.040	0.039	0.038	0.038	0.037	0.044	0.031
23	0.037	0.038	0.039	0.040	0.041	0.043	0.045	0.047	0.049	0.051	0.052	0.052	0.053	0.053	0.052	0.051	0.050	0.049	0.048	0.047	0.046	0.044	0.043	0.042	0.046	0.053	0.037
24	0.041	0.041	0.041	0.041	0.042	0.043	0.043	0.044	0.045	0.046	0.047	0.047	0.047	0.048	0.047	0.047	0.047	0.047	0.047	0.047	0.046	0.046	0.045	0.045	0.045	0.048	0.041
25	0.043	0.042	0.041	0.042	0.042	0.042	0.041	0.041	0.042	0.041	0.041	0.040	0.041	0.041	0.042	0.042	0.043	0.043	0.042	0.043	0.041	0.039	0.037	0.036	0.041	0.043	0.036
26	0.034	0.033	0.033	0.033	0.032	0.031	0.031	0.030	0.030	0.029	0.029	0.029	0.028	0.029	0.030	0.032	0.034	0.035	0.037	0.038	0.040	0.041	0.041	0.041	0.033	0.041	0.028
27	0.041	0.041	0.042	0.042	0.042	0.042	0.043	0.044	0.046	0.048	0.050	0.051	0.053	0.055	0.055	0.055	0.054	0.052	0.050	0.049	0.046	0.044	0.041	0.040	0.047	0.055	0.040
28	0.039	0.038	0.038	0.038	0.038	0.039	0.040	0.041	0.042	0.044	0.045	0.046	0.047	0.047	0.047	0.046	0.046	0.045	0.044	0.044	0.042	0.042	0.041	0.041	0.043	0.047	0.038
29	0.040	0.040	0.041	0.041	0.042	0.043	0.044	0.045	0.047	0.048	0.048	0.049	0.050	0.050	0.051	0.051	0.051	0.051	0.050	0.050	0.049	0.049	0.048	0.047	0.047	0.051	0.040
30	0.046	0.045	0.045	0.045	0.045	0.046	0.046	0.047	0.048	0.049	0.050	0.051	0.052	0.053	0.053	0.053	0.054	0.053	0.052	0.051	0.050	0.049	0.049	0.049	0.049	0.054	0.045
Avg	0.036	0.036	0.036	0.037	0.037	0.038	0.039	0.040	0.042	0.043	0.044	0.044	0.044	0.044	0.044	0.043	0.043	0.042	0.041	0.040	0.039	0.039	0.038	0.037	0.040	--	--
Max	0.046	0.045	0.045	0.045	0.045	0.046	0.047	0.049	0.050	0.051	0.052	0.052	0.053	0.055	0.055	0.055	0.054	0.053	0.052	0.051	0.050	0.049	0.049	0.049	--	0.055	--
Min	0.026	0.026	0.026	0.027	0.028	0.029	0.029	0.030	0.030	0.029	0.029	0.029	0.028	0.029	0.029	0.028	0.027	0.026	0.026	0.025	0.026	0.026	0.028	0.027	--	--	0.025

SAROAD for Resolution, East_Plant
"Component, Channel: TableAmbient_Hourly, O3_ppm"
Month: Jul 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	0.037	0.036	--	0.034	0.031	0.032	0.033	0.036	0.040	0.045	0.047	0.048	0.047	0.047	0.052	0.057	0.063	0.050	0.058	0.050	0.045	0.039	0.039	0.039	0.044	0.063	0.031
2	0.037	0.039	--	0.045	0.043	0.043	0.040	0.041	0.047	0.051	0.054	--	--	0.050	0.049	0.050	0.056	0.071	0.076	0.067	0.050	0.049	0.047	0.045	0.050	0.076	0.037
3	0.044	0.044	--	0.044	0.045	0.046	0.046	0.045	0.051	0.053	0.055	0.057	0.056	0.056	0.053	0.054	0.056	0.057	0.062	0.066	0.062	0.058	0.057	0.055	0.053	0.066	0.044
4	0.051	0.044	--	0.036	0.036	0.034	0.035	0.038	0.041	0.044	0.046	0.047	0.048	0.048	0.054	0.059	0.062	0.059	0.057	0.053	0.052	0.050	0.048	0.046	0.047	0.062	0.034
5	0.043	0.042	--	0.041	0.042	0.042	0.042	0.043	0.043	0.040	0.035	0.038	0.040	0.044	0.049	0.051	0.050	0.049	0.048	0.047	0.041	0.039	0.029	0.030	0.042	0.051	0.029
6	0.029	0.028	--	0.021	0.022	0.021	0.027	0.035	0.044	0.048	0.051	0.051	0.052	0.051	0.050	0.051	0.052	0.053	0.053	0.050	0.049	0.045	0.046	0.044	0.042	0.053	0.021
7	0.042	0.040	--	0.039	0.038	0.038	0.037	0.037	0.039	0.044	0.049	0.052	0.054	0.053	0.057	0.058	0.059	0.060	0.061	0.059	0.051	0.052	0.051	0.051	0.049	0.061	0.037
8	0.054	0.052	--	0.049	0.045	0.042	0.043	0.048	0.054	0.057	0.059	0.060	0.060	0.060	0.060	0.059	0.060	0.060	0.053	0.042	0.045	0.038	0.041	0.042	0.051	0.060	0.038
9	0.042	0.039	--	0.034	0.032	0.024	0.030	0.027	0.025	0.028	0.034	0.041	0.043	0.043	0.048	0.051	0.052	0.053	0.054	0.050	0.045	0.045	0.041	0.033	0.040	0.054	0.024
10	0.034	0.033	--	0.035	0.038	0.035	0.034	0.028	0.036	0.038	0.039	0.038	0.040	0.048	0.056	0.063	0.060	0.059	0.057	0.055	0.049	0.044	0.038	0.042	0.043	0.063	0.028
11	0.047	0.042	--	0.037	0.036	0.040	0.042	0.037	0.040	0.044	0.045	0.049	0.051	0.051	0.053	0.054	0.060	0.062	0.062	0.060	0.054	0.052	0.052	0.042	0.048	0.062	0.036
12	0.037	0.039	--	0.035	0.033	0.034	0.026	0.033	0.040	0.045	0.047	0.047	0.048	0.042	0.042	0.051	0.055	0.052	0.047	0.046	0.042	0.042	0.042	0.042	0.042	0.055	0.026
13	0.039	0.039	--	0.039	0.041	0.038	0.037	0.043	0.045	0.050	0.053	0.055	0.054	0.054	0.057	0.060	0.061	0.058	0.060	0.070	0.066	0.058	0.050	0.046	0.051	0.070	0.037
14	0.042	0.042	--	0.039	0.035	0.036	0.028	0.039	0.046	0.049	0.053	0.052	0.052	0.051	0.049	0.051	0.056	0.054	0.052	0.051	0.048	0.048	0.046	0.045	0.046	0.056	0.028
15	0.045	0.045	--	0.041	0.041	0.040	0.040	0.043	0.042	0.041	0.047	0.048	0.050	0.051	0.051	0.052	0.057	0.066	0.057	0.053	0.051	0.047	0.048	0.045	0.048	0.066	0.040
16	0.044	0.040	--	0.043	0.037	0.035	0.037	0.038	0.040	0.042	0.041	0.041	0.044	0.045	0.046	0.047	0.048	0.047	0.050	0.049	0.045	0.045	0.040	0.038	0.043	0.050	0.035
17	0.036	0.037	--	0.046	0.043	0.040	0.040	0.045	--	--	--	--	--	--	--	--	--	--	--	0.061	0.061	0.061	0.060	0.062	--	--	--
18	0.062	0.059	--	0.051	0.045	0.040	0.039	0.039	0.041	0.045	0.049	0.054	0.054	0.056	0.053	0.052	0.050	0.047	0.045	0.042	0.041	0.038	0.036	0.033	0.047	0.062	0.033
19	0.034	0.035	--	0.032	0.029	0.028	0.028	0.028	0.032	0.037	0.040	0.044	0.046	0.046	0.047	0.047	0.048	0.047	0.047	0.050	0.047	0.043	0.037	0.045	0.040	0.050	0.028
20	0.041	0.033	--	0.036	0.031	0.030	0.027	0.041	0.043	0.044	0.047	0.050	0.052	0.047	0.051	0.055	0.057	0.058	0.051	0.049	0.043	0.038	0.029	0.030	0.043	0.058	0.027
21	0.030	0.035	--	0.035	0.029	0.026	0.033	0.032	0.033	0.039	0.041	0.039	0.039	0.040	0.039	0.039	0.038	0.039	0.036	0.036	0.033	0.033	0.032	0.029	0.035	0.041	0.026
22	0.025	0.030	--	0.029	0.030	0.029	0.022	0.036	0.037	0.040	0.043	0.042	0.043	0.044	0.048	0.047	0.052	0.051	0.049	0.048	0.047	0.045	0.038	0.045	0.040	0.052	0.022
23	0.047	0.045	--	0.041	0.042	0.044	0.044	0.041	0.040	0.043	0.043	0.044	0.046	0.049	0.057	0.064	0.061	0.059	0.060	0.057	0.053	0.049	0.043	0.041	0.048	0.064	0.040
24	0.043	0.038	--	0.040	0.037	0.037	0.034	0.036	0.039	0.040	0.044	0.046	0.047	0.049	0.054	0.062	0.060	0.058	0.056	0.057	0.052	0.051	0.044	0.041	0.046	0.062	0.034
25	0.039	0.037	--	0.034	0.030	0.038	0.035	0.036	0.040	0.041	0.044	0.050	0.046	0.050	0.051	0.047	0.040	0.036	0.035	0.029	0.022	0.019	0.027	0.025	0.037	0.051	0.019
26	0.025	0.038	--	0.032	0.028	0.026	0.027	0.035	0.036	0.042	0.049	0.050	0.050	0.047	0.047	0.049	0.051	0.047	0.051	0.046	0.039	0.035	0.037	0.035	0.040	0.051	0.025
27	0.031	0.033	--	0.032	0.031	0.029	0.030	0.036	0.039	0.042	0.046	0.048	0.047	0.047	0.049	0.049	0.048	0.047	0.047	0.045	0.041	0.035	0.029	0.030	0.040	0.049	0.029
28	0.040	0.034	--	0.038	0.037	0.035	0.027	0.027	0.036	0.035	0.038	0.040	0.039	0.040	0.041	0.043	0.044	0.044	0.042	0.041	0.034	0.034	0.033	0.036	0.037	0.044	0.027
29	0.036	0.036	--	0.037	0.037	0.036	0.031	0.033	0.035	0.036	0.036	0.037	0.038	0.037	0.037	0.038	0.039	0.039	0.039	0.039	0.034	0.031	0.030	0.029	0.036	0.039	0.029
30	0.033	0.031	--	0.030	0.028	0.022	0.023	0.023	0.026	0.028	0.029	0.030	0.032	0.032	0.033	0.037	0.042	0.050	0.052	0.056	0.055	0.052	0.047	0.043	0.036	0.056	0.022
31	0.039	0.035	--	0.031	0.031	0.030	0.029	0.027	0.032	0.035	0.039	0.043	0.042	0.040	0.044	0.048	0.052	0.046	0.045	0.043	0.045	0.044	0.045	0.044	0.039	0.052	0.027
Avg	0.040	0.039	--	0.037	0.036	0.034	0.034	0.036	0.039	0.042	0.045	0.046	0.047	0.047	0.049	0.052	0.053	0.053	0.052	0.050	0.047	0.044	0.041	0.040	0.043	--	--
Max	0.062	0.059	--	0.051	0.045	0.046	0.046	0.048	0.054	0.057	0.059	0.060	0.060	0.060	0.060	0.064	0.063	0.071	0.076	0.070	0.066	0.061	0.060	0.062	--	0.076	--
Min	0.025	0.028	--	0.021	0.022	0.021	0.022	0.023	0.025	0.028	0.029	0.030	0.032	0.032	0.033	0.037	0.038	0.036	0.035	0.029	0.022	0.019	0.027	0.025	--	--	0.019

-- Indicates Invalid Data

SAROAD for Resolution, East_Plant
"Component, Channel: TableAmbient_Hourly, O3_ppm"
Month: Aug 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	0.041	0.037	--	0.038	0.038	0.039	0.041	0.044	0.046	0.050	0.051	0.051	0.050	0.046	0.044	0.040	0.039	0.042	0.040	0.040	0.040	0.039	0.039	0.042	0.042	0.051	0.037
2	0.041	0.038	--	0.037	0.029	0.027	0.026	0.026	0.032	0.038	0.041	0.041	0.039	0.040	--	0.039	0.037	0.040	0.042	0.045	0.044	0.043	0.042	0.043	0.038	0.045	0.026
3	0.043	0.042	--	0.043	0.041	0.041	0.041	0.040	0.041	0.040	0.041	0.043	0.044	0.044	0.044	0.044	0.045	0.046	0.047	0.047	0.047	0.046	0.042	0.039	0.043	0.047	0.039
4	0.042	0.046	--	0.049	0.048	0.043	0.039	0.034	0.033	0.041	0.044	0.042	0.041	0.043	0.042	0.042	0.045	0.045	0.044	0.046	0.045	0.040	0.038	0.039	0.042	0.049	0.033
5	0.040	0.042	--	0.044	0.041	0.038	0.035	0.042	0.041	0.046	0.046	0.044	0.045	0.047	0.048	0.048	0.048	0.048	0.048	0.049	0.049	0.044	0.041	0.040	0.044	0.049	0.035
6	0.035	0.036	--	0.036	0.037	0.034	0.032	0.032	0.033	0.034	0.035	0.036	0.037	0.038	0.038	0.039	0.038	0.039	0.039	0.037	0.035	0.032	0.026	0.029	0.035	0.039	0.026
7	0.029	0.032	--	0.029	0.032	0.033	0.031	0.032	0.038	0.040	0.043	0.045	0.046	0.048	0.051	0.052	0.057	0.059	0.056	0.056	0.057	0.058	0.054	0.042	0.044	0.059	0.029
8	0.047	0.043	--	0.050	0.044	0.044	0.039	0.037	0.047	0.046	0.046	0.050	0.045	0.046	0.046	0.049	0.051	0.047	0.050	0.050	0.045	0.042	0.044	0.043	0.046	0.051	0.037
9	0.043	0.045	--	0.043	0.044	0.041	0.040	0.040	0.044	0.045	0.046	0.048	0.048	0.048	0.047	0.050	0.052	0.052	0.048	0.046	0.043	0.041	0.038	0.036	0.045	0.052	0.036
10	0.036	0.037	--	0.038	0.037	0.033	0.033	0.030	0.035	0.038	0.040	0.043	0.045	0.044	0.044	0.044	0.045	0.046	0.045	0.041	0.038	0.040	0.041	0.038	0.040	0.046	0.030
11	0.035	0.033	--	0.034	0.033	0.033	0.034	0.037	0.039	0.038	0.040	0.042	0.044	0.045	0.044	0.043	0.044	0.045	0.045	0.044	0.043	0.042	0.041	0.043	0.040	0.045	0.033
12	0.042	0.042	--	0.037	0.037	0.037	0.036	0.038	0.039	0.043	0.046	0.047	0.047	0.046	0.046	0.045	0.046	0.048	0.045	0.044	0.044	0.039	0.039	0.036	0.042	0.048	0.036
13	0.038	0.037	--	0.035	0.035	0.035	0.034	0.034	0.038	0.039	0.042	0.042	0.042	0.044	0.045	0.046	0.049	0.055	0.059	0.067	0.071	0.065	0.053	0.048	0.046	0.071	0.034
14	0.046	0.046	--	0.043	0.043	0.044	0.040	0.036	0.038	0.039	0.041	0.047	0.051	0.053	0.053	0.053	0.056	0.060	0.064	0.063	0.059	0.052	0.043	0.043	0.048	0.064	0.036
15	0.041	0.040	--	0.037	0.038	0.037	0.038	0.039	0.041	0.044	0.047	0.049	0.050	0.050	0.051	0.053	0.052	0.048	0.042	0.041	0.040	0.039	0.038	0.040	0.043	0.053	0.037
16	0.038	0.037	--	0.035	0.035	0.034	0.034	0.036	0.040	0.045	0.048	0.050	0.051	0.050	--	0.050	0.051	0.050	0.047	0.045	0.043	0.045	0.043	0.046	0.043	0.051	0.034
17	0.043	0.043	--	0.039	0.039	0.038	0.035	0.035	0.042	0.045	0.048	0.053	0.058	0.056	0.054	0.054	0.054	0.052	0.048	0.048	0.046	0.046	0.046	0.048	0.046	0.058	0.035
18	0.046	0.043	--	0.042	0.042	0.041	0.038	0.039	0.041	0.034	0.047	0.051	0.054	0.057	0.057	0.055	0.053	0.052	0.051	0.048	0.049	0.046	0.046	0.047	0.047	0.057	0.034
19	0.046	0.039	--	0.041	0.041	0.042	0.041	0.040	0.041	0.045	0.049	0.051	0.052	0.053	0.052	0.052	0.052	0.053	0.056	0.057	0.055	0.048	0.045	0.046	0.048	0.057	0.039
20	0.050	0.051	--	0.049	0.042	0.038	0.039	0.040	0.036	0.039	0.047	0.049	0.049	0.049	0.047	0.049	0.053	0.055	0.067	0.048	0.046	0.044	0.045	0.045	0.047	0.067	0.036
21	0.040	0.038	--	0.036	0.034	0.034	0.034	0.037	0.039	0.040	0.041	0.038	0.043	0.044	0.045	0.044	0.045	0.044	0.044	0.044	0.041	0.041	0.043	0.041	0.040	0.045	0.034
22	0.040	0.037	--	0.037	0.038	0.040	0.039	0.042	0.044	0.045	0.047	0.051	0.050	0.049	0.051	0.053	0.054	0.053	0.049	0.045	0.042	0.048	0.044	0.042	0.045	0.054	0.037
23	0.036	0.035	--	0.034	0.039	0.039	0.036	0.038	0.043	0.046	0.050	0.057	0.060	0.059	0.059	0.057	0.060	0.051	0.047	0.045	0.046	0.047	0.044	0.038	0.046	0.060	0.034
24	0.044	0.045	--	0.042	0.043	0.045	0.043	0.044	0.044	0.045	0.047	0.050	0.050	0.051	0.051	0.051	0.044	0.043	0.041	0.038	0.041	0.045	0.047	0.040	0.045	0.051	0.038
25	0.041	0.039	--	0.036	0.032	0.032	0.032	0.033	0.033	0.035	0.038	0.041	0.043	0.044	0.044	0.045	0.042	0.041	0.037	0.033	0.032	0.033	0.036	0.035	0.037	0.045	0.032
26	0.034	0.032	–	0.029	0.030	0.029	0.026	0.029	0.030	0.029	0.035	0.039	0.042	0.045	0.046	0.044	0.040	0.042	0.042	0.040	0.043	0.042	0.039	0.037	0.037	0.046	0.026
27	0.037	0.038	--	0.038	0.038	0.038	0.037	0.036	0.038	0.041	0.042	0.044	0.044	0.045	0.047	0.047	0.048	0.046	0.045	0.040	0.040	0.038	0.042	0.039	0.041	0.048	0.036
28	0.036	0.034	--	0.034	0.034	0.034	0.033	0.034	0.036	0.038	0.039	0.039	0.039	0.039	0.039	0.039	0.037	0.031	0.033	0.033	0.032	0.029	0.028	0.028	0.035	0.039	0.028
29	0.028	0.021	--	0.022	0.022	0.021	0.022	0.023	0.026	0.028	0.030	0.032	0.034	0.036	0.036	0.037	0.036	0.033	0.031	0.027	0.026	0.026	0.021	0.021	0.028	0.037	0.021
30	0.018	0.017	--	0.015	0.016	0.015	0.012	0.020	0.023	0.028	0.030	--	0.029	0.027	0.029	0.031	0.033	0.033	0.033	0.034	0.035	0.039	0.036	0.031	0.027	0.039	0.012
31	0.027	0.023	--	0.026	0.025	0.023	0.020	0.020	0.024	0.027	0.032	0.035	0.037	0.039	0.043	0.049	0.044	0.049	0.037	0.036	0.034	0.033	0.036	0.036	0.033	0.049	0.020
Avg	0.039	0.038	--	0.037	0.036	0.036	0.034	0.035	0.038	0.040	0.043	0.045	0.045	0.046	0.046	0.047	0.047	0.047	0.046	0.044	0.044	0.042	0.041	0.039	0.041	--	--
Max	0.050	0.051	--	0.050	0.048	0.045	0.043	0.044	0.047	0.050	0.051	0.057	0.060	0.059	0.059	0.057	0.060	0.060	0.067	0.067	0.071	0.065	0.054	0.048	--	0.071	--
Min	0.018	0.017	--	0.015	0.016	0.015	0.012	0.020	0.023	0.027	0.030	0.032	0.029	0.027	0.029	0.031	0.033	0.031	0.031	0.027	0.026	0.026	0.021	0.021	--	--	0.012

-- Indicates Invalid Data

SAROAD for Resolution, East_Plant
"Component, Channel: TableAmbient_Hourly, O3_ppm"
Month: Sep 2013

Hour of day

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Avg	Max	Min
1	0.033	0.026	--	0.025	0.026	0.024	0.025	0.024	0.029	0.032	0.032	0.035	0.037	0.040	0.043	0.044	0.048	0.050	0.051	0.051	0.049	0.047	0.044	0.041	0.037	0.051	0.024
2	0.038	0.033	--	0.034	0.034	0.033	0.030	0.031	0.033	0.037	0.039	0.044	0.045	0.046	0.047	0.047	0.046	0.046	0.044	0.040	0.038	0.038	0.039	0.038	0.039	0.047	0.030
3	0.038	0.036	--	0.042	0.039	0.040	0.042	0.042	0.043	0.045	0.050	0.050	0.052	0.051	0.050	0.052	0.053	0.046	0.044	0.046	0.045	0.042	0.044	0.041	0.045	0.053	0.036
4	0.040	0.034	--	0.038	0.039	0.038	0.039	0.038	0.039	0.043	0.049	0.051	0.049	0.048	0.049	0.048	0.049	0.049	0.049	0.045	0.039	0.038	0.040	0.042	0.043	0.051	0.034
5	0.044	0.042	--	0.039	0.038	0.039	0.040	0.039	0.042	0.044	0.045	0.044	0.043	0.044	0.044	0.045	0.044	0.044	0.044	0.042	0.040	0.039	0.038	0.038	0.042	0.045	0.038
6	0.037	0.033	--	0.035	0.036	0.037	0.039	0.044	0.045	0.049	0.049	0.051	0.051	0.052	0.052	0.050	0.045	0.041	0.041	0.039	0.041	0.042	0.039	0.042	0.043	0.052	0.033
7	0.047	0.046	--	0.042	0.039	0.040	0.038	0.033	0.033	0.038	0.042	0.044	0.042	0.045	0.046	0.046	0.044	0.042	0.041	0.040	0.036	0.033	0.037	0.037	0.040	0.047	0.033
8	0.040	0.037	--	0.038	0.036	0.036	0.035	0.036	0.036	0.033	0.034	0.038	0.036	0.040	0.041	0.043	0.043	0.043	0.041	0.036	0.035	0.035	0.034	0.031	0.037	0.043	0.031
9	0.028	0.029	--	0.024	0.024	0.030	0.027	0.027	0.028	0.029	0.029	0.031	0.033	0.030	0.033	0.032	0.032	0.033	0.029	0.027	0.027	0.023	0.024	0.020	0.028	0.033	0.020
10	0.023	0.031	--	0.030	0.031	0.033	0.026	0.029	0.040	0.042	0.045	0.047	0.049	0.051	0.051	0.053	0.054	0.053	0.052	0.049	0.048	0.048	0.049	0.050	0.043	0.054	0.023
11	0.050	0.040	--	0.039	0.041	0.040	0.038	0.033	0.044	0.048	0.048	0.049	0.049	0.050	0.051	0.053	0.055	0.054	0.055	0.055	0.057	0.047	0.047	0.046	0.047	0.057	0.033
12	0.046	0.044	--	0.040	0.036	0.034	0.033	0.033	0.039	0.042	0.046	0.051	0.051	0.052	0.052	--	0.053	0.052	0.052	0.049	0.045	0.040	0.032	0.033	0.043	0.053	0.032
13	0.030	0.025	--	0.025	0.025	0.025	0.025	0.026	0.028	0.030	0.032	0.033	0.033	0.037	0.038	0.037	0.032	0.033	0.033	0.030	0.031	0.028	0.028	0.029	0.030	0.038	0.025
14	0.029	0.029	--	0.030	0.029	0.029	0.028	0.029	0.030	0.032	0.034	0.036	0.040	0.043	0.043	0.047	0.046	0.045	0.044	0.042	0.040	0.037	0.039	0.039	0.036	0.047	0.028
15	0.036	0.034	--	0.035	0.036	0.031	0.037	0.038	0.038	0.040	0.042	0.044	0.045	0.047	0.046	0.046	0.047	0.046	0.045	0.042	0.043	0.043	0.044	0.041	0.041	0.047	0.031
16	0.040	0.038	--	0.035	0.036	0.036	0.035	0.035	0.036	0.037	0.038	0.038	0.038	0.039	0.039	0.040	0.040	0.040	0.036	0.034	0.034	0.034	0.034	0.034	0.037	0.040	0.034
17	0.035	0.033	--	0.032	0.032	0.031	0.030	0.030	0.030	0.033	0.034	0.034	0.035	0.036	0.037	0.038	0.038	0.037	0.036	0.034	0.033	0.033	0.032	0.031	0.034	0.038	0.030
18	0.029	0.030	--	0.031	0.030	0.030	0.027	0.029	0.030	0.033	0.042	0.044	0.044	0.046	0.047	0.045	0.043	0.042	0.041	0.040	0.039	0.038	0.035	0.035	0.037	0.047	0.027
19	0.037	0.035	--	0.039	0.040	0.040	0.039	0.034	0.037	0.041	0.041	0.043	0.044	0.044	0.041	0.040	0.039	0.042	0.046	0.046	0.044	0.041	0.039	0.038	0.040	0.046	0.034
20	0.037	0.035	--	0.039	0.038	0.035	0.034	0.030	0.030	0.033	0.037	0.039	0.041	0.045	0.045	0.044	0.043	0.045	0.049	0.053	0.052	0.040	0.036	0.037	0.040	0.053	0.030
21	0.038	0.038	--	0.035	0.033	0.036	0.037	0.037	0.038	0.039	0.039	0.039	0.041	0.041	0.041	0.042	0.044	0.043	0.043	0.043	0.039	0.037	0.037	0.038	0.039	0.044	0.033
22	0.035	0.032	--	0.031	0.030	0.031	0.033	0.033	0.031	0.030	0.030	0.032	0.033	0.035	0.038	0.043	0.045	0.045	0.045	0.045	0.045	0.043	0.041	0.038	0.037	0.045	0.030
23	0.038	0.039	--	0.038	0.036	0.037	0.037	0.037	0.042	0.045	0.046	0.049	0.051	0.054	0.055	0.054	0.052	0.052	0.054	0.052	0.050	0.047	0.048	0.045	0.046	0.055	0.036
24	0.044	0.043	--	0.042	0.041	0.040	0.039	0.039	0.040	0.043	0.046	0.046	0.047	0.046	0.046	0.046	0.047	0.047	0.049	0.051	0.048	0.045	0.042	0.048	0.045	0.051	0.039
25	0.049	0.048	--	0.044	0.044	0.042	0.039	0.035	0.041	0.044	0.044	0.044	0.044	0.042	0.039	0.038	0.038	0.039	0.041	0.045	0.049	0.046	0.045	0.041	0.043	0.049	0.035
26	0.038	0.036	--	0.035	0.035	0.033	0.031	0.030	0.032	0.032	0.032	0.032	0.030	0.028	0.028	0.027	0.028	0.028	0.029	0.029	0.034	0.039	0.042	0.041	0.033	0.042	0.027
27	0.039	0.041	--	0.043	0.042	0.041	0.041	0.038	0.042	0.045	0.044	0.042	0.042	0.049	0.051	0.054	0.057	0.059	0.058	0.056	0.054	0.053	0.050	0.044	0.047	0.059	0.038
28	0.045	0.041	--	0.036	0.038	0.038	0.038	0.038	0.038	0.038	0.039	0.042	0.044	0.045	0.046	0.048	0.049	0.049	0.048	0.050	0.046	0.041	0.041	0.043	0.043	0.050	0.036
29	0.044	0.040	--	0.042	0.041	0.039	0.037	0.038	0.043	0.045	0.046	0.046	0.047	0.048	0.049	0.049	0.050	0.051	0.052	0.052	0.052	0.050	0.049	0.051	0.046	0.052	0.037
30	0.051	0.046	--	0.046	0.045	0.045	0.045	0.042	0.046	--	0.046	0.047	0.049	0.049	0.049	0.051	0.053	0.056	0.056	0.056	0.054	0.051	0.051	0.053	0.049	0.056	0.042
Avg	0.039	0.036	--	0.036	0.036	0.035	0.035	0.034	0.037	0.039	0.041	0.042	0.043	0.044	0.045	0.045	0.045	0.045	0.045	0.044	0.043	0.041	0.040	0.040	0.040	--	--
Max	0.051	0.048	--	0.046	0.045	0.045	0.045	0.044	0.046	0.049	0.050	0.051	0.052	0.054	0.055	0.054	0.057	0.059	0.058	0.056	0.057	0.053	0.051	0.053	--	0.059	--
Min	0.023	0.025	--	0.024	0.024	0.024	0.025	0.024	0.028	0.029	0.029	0.031	0.030	0.028	0.028	0.027	0.028	0.028	0.029	0.027	0.027	0.023	0.024	0.020	--	--	0.020

-- Indicates Invalid Data

Appendix F: West Plant Meteorological Site Check Forms

AIR SCIENCES INC.

WEST PLANT
MET SITE CHECK FORM
Resolution
PROJECT NO. 262-1

Date: 07·02·2013 Time: 10:29 Operator: K. Ballard

YES	NO **		
✓		1.	The tower is intact and upright.
✓		2.	The anemometer propeller and the wind direction vane are turning freely.
✓		3.	All temperature shields are intact, and the probes are inside their shields.
✓		4.	The aspirator fans are operating.
✓		5.	The solar radiation sensor is level and has been cleaned.
✓		6.	The solar panel is facing south and is clean.
✓		7.	The precipitation gauge is clean and free of bugs and dust.
✓		8.	The data logger is reading the correct time and day.
✓		9.	The site has been visually inspected for unusual wildlife occurrences (dead birds, etc.).
✓		10.	Estimate and document the parameters below.

AIR SCIENCES INC. DENVER • PORTLAND

RPA REVIEWED BY 7/11/13 DATE

KJD AUDITED BY 7/11/13 DATE

Parameter	Estimated	Logger	Audit
Speed 10m (m/s)	2 m/s	2.44	2.257
Direction* 10m (deg)		191.49	237.6
Ambient Temperature (°C)	34	32.7	32.49
Relative Humidity (%)	20%	25.29	26.81
Aspirated Temp 2m	34	31.79	31.83
Aspirated Temp 10m	32	30.90	30.74
Delta Temperature (°C)	N/A	-1.0	-1.088
Solar Radiation (w/m²)	Sunny Partly cloudy Cloudy	863.57	847.0
Barometric Pressure (mmHg)	N/A	684.80	684.8
Battery Voltage (V)	N/A	12.70	12.70
Time (MST)	N/A	10:31	10:30 L.T.
Date	N/A	07·02·2013	7/2/13

10:00 - 261.7
10:15 - 239.4
10:45 - 218.2
11:00 - 262.9

*Direction wind is from

Comments/Unusual Occurrences or Weather: Refilled evap. pan. Tipped precip. gauge

When form is completed, please fax to Air Sciences Inc. @ 303-279-3796 (no cover sheet is necessary).

No precip was recorded during the time the gauge was tipped. Site operator was notified. -KJD

Site Operator Signature: Kara McCaid

AIR SCIENCES INC.

WEST PLANT
MET SITE CHECK FORM
Resolution
PROJECT NO. 262-1

Date: 7/10/2013 Time: 9:51 AM Operator: * Mary Morissette

YES	NO **		
✓		1.	The tower is intact and upright.
✓		2.	The anemometer propeller and the wind direction vane are turning freely.
✓		3.	All temperature shields are intact, and the probes are inside their shields.
✓		4.	The aspirator fans are operating.
✓		5.	The solar radiation sensor is level and has been cleaned.
✓		6.	The solar panel is facing south and is clean.
✓		7.	The precipitation gauge is clean and free of bugs and dust.
✓		8.	The data logger is reading the correct time and day.
✓		9.	The site has been visually inspected for unusual wildlife occurrences (dead birds, etc.).
✓		10.	Estimate and document the parameters below.

AIR SCIENCES INC. DENVER - PORTLAND
REVIEWED BY RPA DATE 7/11/13
AUDITED BY KJD DATE 7/11/13

Parameter	Estimated	Logger	Audit
Speed 10m (m/s)	1.00	.71	1.199
Direction* 10m (deg)	W	288.5	269.0
Ambient Temperature (°C)	28	29.84	29.78
Relative Humidity (%)	39	46.32	45.35
Aspirated Temp 2m	28	29.92	29.04
Aspirated Temp 10m	26	28.20	28.33
Delta Temperature (°C)	N/A	-1.00	-0.704
Solar Radiation (w/m²)	(Sunny) Partly cloudy Cloudy	* —	772.5
Barometric Pressure (mmHg)	N/A	684.246	684.2
Battery Voltage (V)	N/A	12.72	12.72
Time (MST)	N/A	9:54 AM	10:00 L.T.
Date	N/A	7/10/2013	7/10/13

*Direction wind is from

Comments/Unusual Occurrences or Weather: * Back-up site operator forgot to note the Solar Rad Logger Value - RPA

When form is completed, please fax to Air Sciences Inc. @ 303-279-3796 (no cover sheet is necessary).

Site Operator Signature: Mary Morissette

AIR SCIENCES INC.

WEST PLANT
MET SITE CHECK FORM
Resolution
PROJECT NO. 262-1

Date: 7/25/2013 Time: 11:42 Operator: Kami Pollard

YES	NO **		
✓		1.	The tower is intact and upright.
✓		2.	The anemometer propeller and the wind direction vane are turning freely.
✓		3.	All temperature shields are intact, and the probes are inside their shields.
✓		4.	The aspirator fans are operating.
✓		5.	The solar radiation sensor is level and has been cleaned.
✓		6.	The solar panel is facing south and is clean.
✓		7.	The precipitation gauge is clean and free of bugs and dust.
✓		8.	The data logger is reading the correct time and day.
✓		9.	The site has been visually inspected for unusual wildlife occurrences (dead birds, etc.).
✓		10.	Estimate and document the parameters below.

AIR SCIENCES INC. DENVER • PORTLAND
REVIEWED BY JR DATE 8/22/13
AUDITED BY KJD DATE 9/17/13

Parameter	Estimated	Logger	Audit
Speed 10m (m/s)	3 m/s	2.2	1.35
Direction* 10m (deg)	NW	69.45	60.5
Ambient Temperature (°C)	30°	31.03°	31
Relative Humidity (%)	45%	44.77	44.1
Aspirated Temp 2m	30°	31.03°	30.8
Aspirated Temp 10m	29°	29.99	30.1
Delta Temperature (°C)	N/A	-1.00	-0.685
Solar Radiation (w/m²)	Sunny (Partly cloudy) Cloudy	175.75	173
Barometric Pressure (mmHg)	N/A	684.12	684
Battery Voltage (V)	N/A	12.72	12.7
Time (MST)	N/A	11:44	11:45
Date	N/A	07/25/2013	07/25/2013

*Direction wind is from

Comments/Unusual Occurrences or Weather: Tipped precip. gauge.

When form is completed, please fax to Air Sciences Inc. @ 303-279-3796 (no cover sheet is necessary).

Invalidated precip. at 11:45 L.T. due to site operator maintenance.
-KJD

Site Operator Signature: Kami Pollard

AIR SCIENCES INC.

WEST PLANT
MET SITE CHECK FORM
Resolution
PROJECT NO. 262-1

Date: 08.01.2013 Time: 14:14 Operator: Kara BeCock

YES	NO **		
✓		1.	The tower is intact and upright.
✓		2.	The anemometer propeller and the wind direction vane are turning freely.
✓		3.	All temperature shields are intact, and the probes are inside their shields.
✓		4.	The aspirator fans are operating.
✓		5.	The solar radiation sensor is level and has been cleaned.
✓		6.	The solar panel is facing south and is clean.
✓		7.	The precipitation gauge is clean and free of bugs and dust.
✓		8.	The data logger is reading the correct time and day.
✓		9.	The site has been visually inspected for unusual wildlife occurrences (dead birds, etc.).
✓		10.	Estimate and document the parameters below.

AIR SCIENCES INC. DENVER • PORTLAND
REVIEWED BY JR DATE 8/22/13
AUDITED BY KJD DATE 9/17/13

Parameter	Estimated	Logger	Audit
Speed 10m (m/s)	4 m/s	4.3 m/s	4.03
Direction* 10m (deg)		114.09	156
Ambient Temperature (°C)	30°	31.22	31.2
Relative Humidity (%)	30%	34.48	35.6
Aspirated Temp 2m	30°	31.28	31.3
Aspirated Temp 10m	30°	30.62	30.3
Delta Temperature (°C)	N/A	-0.669	-0.963
Solar Radiation (w/m²)	Sunny Partly cloudy Cloudy	298.51	282
Barometric Pressure (mmHg)	N/A	683.65	684
Battery Voltage (V)	N/A	12.71	12.7
Time (MST)	N/A	14:15	14:15 L.T.
Date	N/A	08.01.2013	8/1/2013

13:45 166
14:00 163
14:30 163
14:45 145

*Direction wind is from

Comments/Unusual Occurrences or Weather: _____

When form is completed, please fax to Air Sciences Inc. @ 303-279-3796 (no cover sheet is necessary).

Site Operator Signature: K Bc

AIR SCIENCES INC.

WEST PLANT
MET SITE CHECK FORM
Resolution
PROJECT NO. 262-1

Date: 08/09/2013 Time: 7:47 Operator: Kami Ballard

YES	NO **		
✓		1.	The tower is intact and upright.
✓		2.	The anemometer propeller and the wind direction vane are turning freely.
✓		3.	All temperature shields are intact, and the probes are inside their shields.
✓		4.	The aspirator fans are operating.
✓		5.	The solar radiation sensor is level and has been cleaned.
✓		6.	The solar panel is facing south and is clean.
✓		7.	The precipitation gauge is clean and free of bugs and dust.
✓		8.	The data logger is reading the correct time and day.
✓		9.	The site has been visually inspected for unusual wildlife occurrences (dead birds, etc.).
✓		10.	Estimate and document the parameters below.

AIR SCIENCES INC. DENVER • PORTLAND

REVIEWED BY gr DATE 8/22/13

AUDITED BY KJD DATE 9/17/13

Parameter	Estimated	Logger	Audit
Speed 10m (m/s)	3m/s	2.41	3.64
Direction* 10m (deg)	W	90.51	87.9
Ambient Temperature (°C)	30°	29.98	29.3
Relative Humidity (%)	15%	16.09%	15.9
Aspirated Temp 2m	30°	29.63	29
Aspirated Temp 10m	29°	28.82	28.5
Delta Temperature (°C)	N/A	-.801	-0.502
Solar Radiation (w/m²)	(Sunny) Partly cloudy Cloudy	383.498	339
Barometric Pressure (mmHg)	N/A	681.951	682
Battery Voltage (V)	N/A	12.77	12.8
Time (MST)	N/A	7:49	7:45 L.T.
Date	N/A	08/09/2013	8/9/2013

*Direction wind is from

Comments/Unusual Occurrences or Weather: Tipped precip gauge & refilled evap pan

When form is completed, please fax to Air Sciences Inc. @ 303-279-3796 (no cover sheet is necessary).

Invalidated precip at 8:00 L.T. due to site operator maintenance. -gr

Site Operator Signature: Kami Ballard

AIR SCIENCES INC.

WEST PLANT
MET SITE CHECK FORM
Resolution
PROJECT NO. 262-1

Date: 08.15.2013 Time: 3:37 Operator: Kim Ballard

YES	NO **		
✓		1.	The tower is intact and upright.
✓		2.	The anemometer propeller and the wind direction vane are turning freely.
✓		3.	All temperature shields are intact, and the probes are inside their shields.
✓		4.	The aspirator fans are operating.
✓		5.	The solar radiation sensor is level and has been cleaned.
✓		6.	The solar panel is facing south and is clean.
✓		7.	The precipitation gauge is clean and free of bugs and dust.
✓		8.	The data logger is reading the correct time and day.
✓		9.	The site has been visually inspected for unusual wildlife occurrences (dead birds, etc.).
✓		10.	Estimate and document the parameters below.

AIR SCIENCES INC. DENVER • PORTLAND
REVIEWED BY gjr DATE 8/22/13
AUDITED BY KJD DATE 9/17/13

Parameter	Estimated	Logger	Audit
Speed 10m (m/s)	2 m/s	1.84	2.79
Direction* 10m (deg)	WNW.	242.97	294
Ambient Temperature (°C)	97	38.27	37.7
Relative Humidity (%)	15%	16.6%	16.4
Aspirated Temp 2m	97°	38.04	37.7
Aspirated Temp 10m	36°	37.33	36.8
Delta Temperature (°C)	N/A	-0.77	~~-0.843~~ -0.96
Solar Radiation (w/m²)	Sunny Partly cloudy Cloudy	610.74	458
Barometric Pressure (mmHg)	N/A	681.36	682
Battery Voltage (V)	N/A	12.65	12.65
Time (MST)	N/A	3:39	15:30 L.T.
Date	N/A	08.15.2013	8/15/2013

15:00 593
15:15 612
15:45 620
16:00 554

*Direction wind is from

Comments/Unusual Occurrences or Weather: Tipped precip gauge

When form is completed, please fax to Air Sciences Inc. @ 303-279-3796 (no cover sheet is necessary).

Invalidated precip at 15:45 L.T. due to site operator maintenance. -gjr

Site Operator Signature: Kim Ballard

AIR SCIENCES INC.

WEST PLANT
MET SITE CHECK FORM
Resolution
PROJECT NO. 262-1

Date: 08.23.2013 Time: 7:39 Operator: Kara Ballard

YES	NO **		
✓		1.	The tower is intact and upright.
✓		2.	The anemometer propeller and the wind direction vane are turning freely.
✓		3.	All temperature shields are intact, and the probes are inside their shields.
✓		4.	The aspirator fans are operating.
✓		5.	The solar radiation sensor is level and has been cleaned.
✓		6.	The solar panel is facing south and is clean.
✓		7.	The precipitation gauge is clean and free of bugs and dust.
✓		8.	The data logger is reading the correct time and day.
✓		9.	The site has been visually inspected for unusual wildlife occurrences (dead birds, etc.).
✓		10.	Estimate and document the parameters below.

AIR SCIENCES INC. DENVER • PORTLAND
RPA 9-17-13
REVIEWED BY KJD DATE 9/17/13
AUDITED BY DATE

Parameter	Estimated	Logger	Audit
Speed 10m (m/s)	1 ms	.97	1.092
Direction* 10m (deg)	SW	258.09	285.5
Ambient Temperature (°C)	29°	27.73	27.64
Relative Humidity (%)	40%	39.55	40.11
Aspirated Temp 2m	29°	27.07	26.97
Aspirated Temp 10m	28°	26.75	26.65
Delta Temperature (°C)	N/A	-0.27	-0.321
Solar Radiation (w/m²)	(Sunny) Partly cloudy Cloudy	288.42	275.7
Barometric Pressure (mmHg)	N/A	681.67	681.7
Battery Voltage (V)	N/A	12.77	12.78
Time (MST)	N/A	7:41	7:45 L.T.
Date	N/A	08.23.2013	8/23/13

7:15 - 42.18
7:30 - 313.8
8:00 - 286.2
8:15 - 233.5

*Direction wind is from

Comments/Unusual Occurrences or Weather: filled evap pan & topped precip. gauge

When form is completed, please fax to Air Sciences Inc. @ 303-279-3796 (no cover sheet is necessary).

Invalidated precip @ 7:45 L.T. due to site operator maintenance. -KJD

Site Operator Signature: Kara Ballard

AIR SCIENCES INC.

WEST PLANT
MET SITE CHECK FORM
Resolution
PROJECT NO. 262-1

Date: 08/28/2013 Time: 8:03 Operator: Kami Ballard

YES	NO **		
✓		1.	The tower is intact and upright.
✓		2.	The anemometer propeller and the wind direction vane are turning freely.
✓		3.	All temperature shields are intact, and the probes are inside their shields.
✓		4.	The aspirator fans are operating.
✓		5.	The solar radiation sensor is level and has been cleaned.
✓		6.	The solar panel is facing south and is clean.
✓		7.	The precipitation gauge is clean and free of bugs and dust.
✓		8.	The data logger is reading the correct time and day.
✓		9.	The site has been visually inspected for unusual wildlife occurrences (dead birds, etc.).
✓		10.	Estimate and document the parameters below.

AIR SCIENCES INC. DENVER • PORTLAND
RPA 9/17/13
REVIEWED BY DATE
KJD 9/17/13
AUDITED BY DATE

Parameter	Estimated	Logger	Audit
Speed 10m (m/s)	.5	1.02	~~0.708~~ 0.708
Direction* 10m (deg)	SW	221.3	208.5
Ambient Temperature (°C)	26°	26.57	26.53
Relative Humidity (%)	60%	58.14	58.26
Aspirated Temp 2m	26°	25.88	25.97
Aspirated Temp 10m	25°	25.51	25.47
Delta Temperature (°C)	N/A	-0.39	-0.497
Solar Radiation (w/m²)	Sunny Partly cloudy (Cloudy)	176.53	154.2
Barometric Pressure (mmHg)	N/A	685.84	685.9
Battery Voltage (V)	N/A	12.78	12.78
Time (MST)	N/A	8:05	08~~0~~9 L.T.
Date	N/A	8/30/2013	8/30/13

*Direction wind is from

Comments/Unusual Occurrences or Weather: Ripped precip gauge.

When form is completed, please fax to Air Sciences Inc. @ 303-279-3796 (no cover sheet is necessary).

Invalidated precip. @ 8:15 L.T. due to site operator maintenance. -KJD

Site Operator Signature: Kami Ball

AIR SCIENCES INC.

WEST PLANT
MET SITE CHECK FORM
Resolution
PROJECT NO. 262-1

Date: 09.05.2013 Time: 7:47 Operator: Kami Ballard

YES	NO **		
✓		1.	The tower is intact and upright.
✓		2.	The anemometer propeller and the wind direction vane are turning freely.
✓		3.	All temperature shields are intact, and the probes are inside their shields.
✓		4.	The aspirator fans are operating.
✓		5.	The solar radiation sensor is level and has been cleaned.
✓		6.	The solar panel is facing south and is clean.
✓		7.	The precipitation gauge is clean and free of bugs and dust.
✓		8.	The data logger is reading the correct time and day.
✓		9.	The site has been visually inspected for unusual wildlife occurrences (dead birds, etc.).
✓		10.	Estimate and document the parameters below.

AIR SCIENCES INC. DENVER • PORTLAND
RPA — REVIEWED BY — DATE 9/17/13
KJD — AUDITED BY — DATE 9/17/13

Parameter	Estimated	Logger	Audit
Speed 10m (m/s)	6 m/s	8.75	4.962
Direction* 10m (deg)	NE	65.52	64.03
Ambient Temperature (°C)	30°	31.6	31.89
Relative Humidity (%)	18%	20.7	20.65
Aspirated Temp 2m	30°	31.3	31.56
Aspirated Temp 10m	29°	30.9	30.94
Delta Temperature (°C)	N/A	-.47	-0.627
Solar Radiation (w/m²)	(Sunny) Partly cloudy Cloudy	321.45	330.9
Barometric Pressure (mmHg)	N/A	683.4	683.5
Battery Voltage (V)	N/A	12.72	12.72
Time (MST)	N/A	7:50	08:00 L.T.
Date	N/A	09/05/2013	9/5/13

7:30 - 4.499
7:45 - 5.348
8:15 - 5.414
8:30 - 4.972

*Direction wind is from

Comments/Unusual Occurrences or Weather: No precip tips during this site check. -KJD

When form is completed, please fax to Air Sciences Inc. @ 303-279-3796 (no cover sheet is necessary).

Site Operator Signature: Kami Ballard

AIR SCIENCES INC.

WEST PLANT
MET SITE CHECK FORM
Resolution
PROJECT NO. 262-1

Date: 09/13/2013 Time: 3:43 Operator: Kara Bell

YES	NO **	
✓		1. The tower is intact and upright.
✓		2. The anemometer propeller and the wind direction vane are turning freely.
✓		3. All temperature shields are intact, and the probes are inside their shields.
✓		4. The aspirator fans are operating.
✓		5. The solar radiation sensor is level and has been cleaned.
✓		6. The solar panel is facing south and is clean.
✓		7. The precipitation gauge is clean and free of bugs and dust.
✓		8. The data logger is reading the correct time and day.
✓		9. The site has been visually inspected for unusual wildlife occurrences (dead birds, etc.).
✓		10. Estimate and document the parameters below.

AIR SCIENCES INC. DENVER • PORTLAND

RPA 9/17/13
REVIEWED BY DATE

KJD 9/17/13
AUDITED BY DATE

Parameter	Estimated	Logger	Audit
Speed 10m (m/s)	3 m/s	2.9	3.197
Direction* 10m (deg)	NE	34.37	47.16
Ambient Temperature (°C)	24	23.3	22.67
Relative Humidity (%)	75%	74.6	78.85
Aspirated Temp 2m	24	23.6	22.8
Aspirated Temp 10m	23	23.9	23.12
Delta Temperature (°C)	N/A	.41	0.322
Solar Radiation (w/m²)	Sunny Partly cloudy (Cloudy)	59.06	39.37
Barometric Pressure (mmHg)	N/A	677.11	677.2
Battery Voltage (V)	N/A	12.36	12.33
Time (MST)	N/A	3:44	15:44 L.T.
Date	N/A	09/13/2013	9/13/13

*Direction wind is from

Comments/Unusual Occurrences or Weather: Raining — Iced evap. pan

When form is completed, please fax to Air Sciences Inc. @ 303-279-3796 (no cover sheet is necessary).

Site Operator Signature: Kara Bell

AIR SCIENCES INC.

WEST PLANT
MET SITE CHECK FORM
Resolution
PROJECT NO. 262-1

Date: 9-20-13 Time: 13:20 Operator: K. Baak

YES	NO **		
✓		1.	The tower is intact and upright.
✓		2.	The anemometer propeller and the wind direction vane are turning freely.
✓		3.	All temperature shields are intact, and the probes are inside their shields.
✓		4.	The aspirator fans are operating.
✓		5.	The solar radiation sensor is level and has been cleaned.
✓		6.	The solar panel is facing south and is clean.
✓		7.	The precipitation gauge is clean and free of bugs and dust.
✓		8.	The data logger is reading the correct time and day.
✓		9.	The site has been visually inspected for unusual wildlife occurrences (dead birds, etc.).
✓		10.	Estimate and document the parameters below.

AIR SCIENCES INC. DENVER · PORTLAND
RPA 10-25-13
REVIEWED BY DATE
KJD 10/2/13
AUDITED BY DATE

Parameter	Estimated	Logger	Audit
Speed 10m (m/s)	2 mph	3.12	4.289
Direction* 10m (deg)	NW	234.78°	254.7
Ambient Temperature (°C)	96°F	34.14°C	34.55
Relative Humidity (%)	18%	19%	18.99
Aspirated Temp 2m	96°F	33.96°C	34.51
Aspirated Temp 10m	95°F	33.15°C	~~33~~.53
Delta Temperature (°C)	N/A	-.87°C	-0.984
Solar Radiation (w/m²)	(Sunny) Partly cloudy Cloudy	115.69	295.2
Barometric Pressure (mmHg)	N/A	679.41	679.4
Battery Voltage (V)	N/A	12.67	12.67
Time (MST)	N/A	1:24 pm	13:30 L.T.
Date	N/A	9-20-13	9/20/13

13:00 895
13:15 924
13:45 ~~458~~.4
14:00 434.5

*Direction wind is from

Comments/Unusual Occurrences or Weather: filled evap pan, poured H_2O in precip gauge
Invalidated precip at 1330 hrs L.T. due to site oper. maintenance. - KJD

When form is completed, please fax to Air Sciences Inc. @ 303-279-3796 (no cover sheet is necessary).

Site Operator Signature: Kaci Baak

AIR SCIENCES INC.

WEST PLANT
MET SITE CHECK FORM
Resolution
PROJECT NO. 262-1

Date: 09.27.2013 Time: 8:57 Operator: Kane Bellard

YES	NO **		
✓		1.	The tower is intact and upright.
✓		2.	The anemometer propeller and the wind direction vane are turning freely.
✓		3.	All temperature shields are intact, and the probes are inside their shields.
✓		4.	The aspirator fans are operating.
✓		5.	The solar radiation sensor is level and has been cleaned.
✓		6.	The solar panel is facing south and is clean.
✓		7.	The precipitation gauge is clean and free of bugs and dust.
✓		8.	The data logger is reading the correct time and day.
✓		9.	The site has been visually inspected for unusual wildlife occurrences (dead birds, etc.).
✓		10.	Estimate and document the parameters below.

AIR SCIENCES INC
DENVER • PORTLAND
REVIEWED BY: RPA 10-25-13
AUDITED BY: KJD DATE: 10/2/13

Parameter	Estimated	Logger	Audit
Speed 10m (m/s)	1m/s	1.72	2.24
Direction* 10m (deg)		327.57	301.4
Ambient Temperature (°C)	20°	19.79	19.71
Relative Humidity (%)	18%	20.14	19.78
Aspirated Temp 2m	20°	19.76	19.64
Aspirated Temp 10m	19°	19.1	19.17
Delta Temperature (°C)	N/A	-0.62	-0.836
Solar Radiation (w/m²)	Sunny Partly cloudy (Cloudy)	202.78	162.3
Barometric Pressure (mmHg)	N/A	680.63	680.6
Battery Voltage (V)	N/A	12.89	12.87
Time (MST)	N/A	9:00 am	0900 L.T.
Date	N/A	09.27.2013	9/27/13

8:30 291
8:45 316.7
9:15 292.8
9:30 274.9

*Direction wind is from

Comments/Unusual Occurrences or Weather: Tipped precip. gauge
Invalidated precip. at 0900 hrs L.T. due to site operator maintenance. -KJD

When form is completed, please fax to Air Sciences Inc. @ 303-279-3796 (no cover sheet is necessary).

Site Operator Signature: Kane BeCard

Appendix G: West Plant PM_{10} and $PM_{2.5}$ Site Check Forms and Flow Audits

WEST PLANT

BAM PM10 WEEKLY SITE CHECK FORM
RESOLUTION MONITORING PROJECT
PROJECT NO. 262-1

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 07.02.2013 Time: 10:26 Operator: Kara Ballard

I. **BAM SAMPLER** – Weekly Checks.

YES	NO		
✓		1.	The sampler is intact and the inlet head is unobstructed.
✓		2.	The vacuum pump is running and sounds normal.
✓		3.	The temperature shield is intact, and the sensor is inside of it.
✓		4.	The BAM is reading the correct time and day.
✓		5.	The tape is in the proper position and does not need to be changed (tape should be changed every 2 months).
✓		6.	Error log was checked (F3), and errors followed up on (see manual). 6/27 - Maintenance
✓		7.	Climate control appears operational (If it's cold out the shelter should feel warm, if it's hot out the shelter should feel cool)

II. **BAM SAMPLER** – Routine Maintenance (monthly). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓	1.	Inlet Flow check Performed
	✓	2.	Visual inspection and dust removal
	✓	3.	Leak check performed
	✓	4.	PM10 particle trap cleaned
	✓	5.	Inlet nozzle and nozzle are cleaned

KJD

AIR SCIENCES INC.
DENVER • PORTLAND

RPA — 7/11/13
REVIEWED BY — DATE
KJD — 7/11/13
AUDITED BY — DATE

II. **BAM SAMPLER** – Routine Maintenance (every 2 months). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓	1.	Filter tape replaced
	✓	2.	Ran the Self-Test function

KJD

III. **BAM SAMPLER** – Routine Maintenance (semiannual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓	1.	Replaced muffler on the pump (*Work performed by Air Sciences)
	✓	2.	Complete calibration of flow system (*Work performed by Air Sciences)

KJD

IV. **BAM SAMPLER** – Routine Maintenance (annual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓	1.	Carbon vanes in pump checked/replaced (*Work performed by Air Sciences)
	✓	2.	Inlet system cleaned (*Work performed by Air Sciences)

KJD

*Comments/Unusual Occurrences: _____

Signature: Kara Ballard

WEST PLANT

BAM PM10 WEEKLY SITE CHECK FORM
RESOLUTION MONITORING PROJECT
PROJECT NO. 262-1

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 7/10/2013 Time: 9:59 Operator: Mary Morissette

I. BAM SAMPLER – Weekly Checks.

YES	NO		
✓		1.	The sampler is intact and the inlet head is unobstructed.
✓		2.	The vacuum pump is running and sounds normal.
✓		3.	The temperature shield is intact, and the sensor is inside of it.
✓		4.	The BAM is reading the correct time and day.
✓		5.	The tape is in the proper position and does not need to be changed (tape should be changed every 2 months).
✓		6.	Error log was checked (F3), and errors followed up on (see manual).
✓		7.	Climate control appears operational (If it's cold out the shelter should feel warm, if it's hot out the shelter should feel cool)

II. BAM SAMPLER – Routine Maintenance (monthly). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓	1.	Inlet Flow check Performed
	✓	2.	Visual inspection and dust removal
	✓	3.	Leak check performed
	✓	4.	PM10 particle trap cleaned
	✓	5.	Inlet nozzle and nozzle are cleaned

AIR SCIENCES INC.
DENVER • PORTLAND
REVIEWED BY RPA DATE 7/11/13
AUDITED BY KJD DATE 7/11/13

II. BAM SAMPLER – Routine Maintenance (every 2 months). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
✓	✓	1.	Filter tape replaced
✓		2.	Ran the Self-Test function

III. BAM SAMPLER – Routine Maintenance (semiannual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Replaced muffler on the pump (*Work performed by Air Sciences)
		2.	Complete calibration of flow system (*Work performed by Air Sciences)

IV. BAM SAMPLER – Routine Maintenance (annual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Carbon vanes in pump checked/replaced (*Work performed by Air Sciences)
		2.	Inlet system cleaned (*Work performed by Air Sciences)

*Comments/Unusual Occurrences: _____

Signature: Mary Morissette

WEST PLANT

BAM PM10 WEEKLY SITE CHECK FORM
RESOLUTION MONITORING PROJECT
PROJECT NO. 262-1

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 7·25·2013 Time: 11:45 Operator: Kami Ballard

I. **BAM SAMPLER** – Weekly Checks.

YES	NO		
✓		1.	The sampler is intact and the inlet head is unobstructed.
✓		2.	The vacuum pump is running and sounds normal.
✓		3.	The temperature shield is intact, and the sensor is inside of it.
✓		4.	The BAM is reading the correct time and day.
✓		5.	The tape is in the proper position and does not need to be changed (tape should be changed every 2 months).
✓		6.	Error log was checked (F3), and errors followed up on (see manual). 7/15 → Maintenance
✓		7.	Climate control appears operational (If it's cold out the shelter should feel warm, if it's hot out the shelter should feel cool)

II. **BAM SAMPLER** – Routine Maintenance (monthly). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
✓		1.	Inlet Flow check Performed
✓		2.	Visual inspection and dust removal
✓		3.	Leak check performed
	✓	4.	PM10 particle trap cleaned
✓		5.	Inlet nozzle and nozzle are cleaned

AIR SCIENCES INC.
DENVER • PORTLAND
REVIEWED BY JR DATE 8/22/13
AUDITED BY KJD DATE 9/17/13

II. **BAM SAMPLER** – Routine Maintenance (every 2 months). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓	1.	Filter tape replaced
✓		2.	Ran the Self-Test function

III. **BAM SAMPLER** – Routine Maintenance (semiannual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Replaced muffler on the pump (*Work performed by Air Sciences) JR
		2.	Complete calibration of flow system (*Work performed by Air Sciences)

IV. **BAM SAMPLER** – Routine Maintenance (annual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Carbon vanes in pump checked/replaced (*Work performed by Air Sciences) JR
		2.	Inlet system cleaned (*Work performed by Air Sciences)

*Comments/Unusual Occurrences: _____

Signature: Kami Ballard

AIR SCIENCES INC.

Monthly Flow Verification PM_{10}

West Plant
PARTICULATE MONITORING PROJECT
PROJECT NO. 262-1

Met One BAM 1020 PM_{10}: S/N: H8712
Firmware:
Calibrator: Delta Cal S/N:

Date of Flow Audit: 7.25.2013
Time of Flow Audit: 11:47

	BAM	STD
Ambient Temperature (AT) °c	29.6	29.5
Berometric Pressure mmHg	684	684.5

	Set Point (lpm)	BAM	% Diff (1)	STD Flow Meter	% Diff (2)
(1) Actual Flow	15	15.0	0.0%	14.93	0.5%
Acceptable		*14.700 - 15.300*	*+/- 2%*	*14.250 - 15.750*	*+/- 5%*
Differential					
(2) Actual Flow	18.4	18.4	0.0%	18.33	0.4%
Acceptable		*18.032 - 18.768*	*+/- 2%*	*17.480 - 19.320*	*+/- 5%*
Differential					
(3) Actual Flow	16.7	16.7	0.0%	16.59	0.7%
Acceptable		*16.336 - 17.034*	*+/- 2%*	*15.865 - 17.535*	*+/- 5%*
Differential					

Calculations:
(1) % Diff = [(BAM - Set Point)/Set Point]*100 (+/- 2%)
(2) % Diff = [(BAM - Calibrator)/Calibrator]*100 (+/- 5%)

	BAM	
(2) Leak Test	.1	**Should be < 1.0 LPM**

AIR SCIENCES INC.
DENVER • PORTLAND
REVIEWED BY JR DATE 8/22/13
AUDITED BY KJD DATE 9/17/13

Comments/Abnormalities: Ran Slip Test - "PASSED"

Signature:

Upon completion of this form, fax to Air Sciences at 303-279-3796

Performed by K. Ballard - KJD

WEST PLANT

BAM PM10 WEEKLY SITE CHECK FORM
RESOLUTION MONITORING PROJECT
PROJECT NO. 262-1

AIR SCIENCES INC.

Date: 08.01.2013 Time: 14:16 Operator: Kam Bal

I. **BAM SAMPLER** – Weekly Checks.

YES	NO		
✓		1.	The sampler is intact and the inlet head is unobstructed.
✓		2.	The vacuum pump is running and sounds normal.
✓		3.	The temperature shield is intact, and the sensor is inside of it.
✓		4.	The BAM is reading the correct time and day.
✓		5.	The tape is in the proper position and does not need to be changed (tape should be changed every 2 months).
✓		6.	Error log was checked (F3), and errors followed up on (see manual). 7/25 → Delta Pressure
✓		7.	Climate control appears operational (If it's cold out the shelter should feel warm, if it's hot out the shelter should feel cool)

II. **BAM SAMPLER** – Routine Maintenance (monthly). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓	1.	Inlet Flow check Performed
	✓	2.	Visual inspection and dust removal
	✓	3.	Leak check performed
	✓	4.	PM10 particle trap cleaned
	✓	5.	Inlet nozzle and nozzle are cleaned

GR

AIR SCIENCES INC.
DENVER • PORTLAND

GR 8/22/13
REVIEWED BY DATE
KJD 9/17/13
AUDITED BY DATE

II. **BAM SAMPLER** – Routine Maintenance (every 2 months). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓	1.	Filter tape replaced
	✓	2.	Ran the Self-Test function

GR

III. **BAM SAMPLER** – Routine Maintenance (semiannual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓	1.	Replaced muffler on the pump (*Work performed by Air Sciences)
	✓	2.	Complete calibration of flow system (*Work performed by Air Sciences)

GR

IV. **BAM SAMPLER** – Routine Maintenance (annual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓	1.	Carbon vanes in pump checked/replaced (*Work performed by Air Sciences)
	✓	2.	Inlet system cleaned (*Work performed by Air Sciences)

GR

**Comments/Unusual Occurrences: _____

Signature: Kam Bal

WEST PLANT

BAM PM10 WEEKLY SITE CHECK FORM
RESOLUTION MONITORING PROJECT
PROJECT NO. 262-1

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 08/09/2013 Time: 7:51 Operator: Kam Ballard

I. **BAM SAMPLER** – Weekly Checks.

YES	NO	
✓		1. The sampler is intact and the inlet head is unobstructed.
✓		2. The vacuum pump is running and sounds normal.
✓		3. The temperature shield is intact, and the sensor is inside of it.
✓		4. The BAM is reading the correct time and day.
✓		5. The tape is in the proper position and does not need to be changed (tape should be changed every 2 months).
✓		6. Error log was checked (F3), and errors followed up on (see manual). N/A
✓		7. Climate control appears operational (If it's cold out the shelter should feel warm, if it's hot out the shelter should feel cool)

II. **BAM SAMPLER** – Routine Maintenance (monthly). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO	
		1. Inlet Flow check Performed
		2. Visual inspection and dust removal
		3. Leak check performed
		4. PM10 particle trap cleaned
		5. Inlet nozzle and nozzle are cleaned

AIR SCIENCES INC.
DENVER • PORTLAND
REVIEWED BY JR DATE 8/22/13
AUDITED BY KJD DATE 9/17/13

II. **BAM SAMPLER** – Routine Maintenance (every 2 months). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO	
		1. Filter tape replaced
		2. Ran the Self-Test function

III. **BAM SAMPLER** – Routine Maintenance (semiannual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO	
		1. Replaced muffler on the pump (*Work performed by Air Sciences)
		2. Complete calibration of flow system (*Work performed by Air Sciences)

IV. **BAM SAMPLER** – Routine Maintenance (annual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO	
		1. Carbon vanes in pump checked/replaced (*Work performed by Air Sciences)
		2. Inlet system cleaned (*Work performed by Air Sciences)

**Comments/Unusual Occurrences: _____

Signature: K. B

WEST PLANT

BAM PM10 WEEKLY SITE CHECK FORM
RESOLUTION MONITORING PROJECT
PROJECT NO. 262-1

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 08/15/2013 Time: 3:39 Operator: Kaw Ballard

I. **BAM SAMPLER** – Weekly Checks.

YES	NO		
✓		1.	The sampler is intact and the inlet head is unobstructed.
✓		2.	The vacuum pump is running and sounds normal.
✓		3.	The temperature shield is intact, and the sensor is inside of it.
✓		4.	The BAM is reading the correct time and day.
✓		5.	The tape is in the proper position and does not need to be changed (tape should be changed every 2 months).
✓		6.	Error log was checked (F3), and errors followed up on (see manual).
✓		7.	Climate control appears operational (If it's cold out the shelter should feel warm, if it's hot out the shelter should feel cool)

II. **BAM SAMPLER** – Routine Maintenance (monthly). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Inlet Flow check Performed
		2.	Visual inspection and dust removal
		3.	Leak check performed
		4.	PM10 particle trap cleaned
		5.	Inlet nozzle and nozzle are cleaned

AIR SCIENCES INC.
DENVER • PORTLAND
REVIEWED BY: KJD DATE: 9/17/13
ENTERED BY: DATE: 8/22/13

II. **BAM SAMPLER** – Routine Maintenance (every 2 months). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Filter tape replaced
		2.	Ran the Self-Test function

III. **BAM SAMPLER** – Routine Maintenance (semiannual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Replaced muffler on the pump (*Work performed by Air Sciences)
		2.	Complete calibration of flow system (*Work performed by Air Sciences)

IV. **BAM SAMPLER** – Routine Maintenance (annual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Carbon vanes in pump checked/replaced (*Work performed by Air Sciences)
		2.	Inlet system cleaned (*Work performed by Air Sciences)

**Comments/Unusual Occurrences: _____

Signature: _____

WEST PLANT

BAM PM10 WEEKLY SITE CHECK FORM
RESOLUTION MONITORING PROJECT
PROJECT NO. 262-1

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 08·23·2013 Time: 7:44 Operator: Kane Bullard

I. BAM SAMPLER – Weekly Checks.

YES	NO		
✓		1.	The sampler is intact and the inlet head is unobstructed.
✓		2.	The vacuum pump is running and sounds normal.
✓		3.	The temperature shield is intact, and the sensor is inside of it.
✓		4.	The BAM is reading the correct time and day.
✓		5.	The tape is in the proper position and does not need to be changed (tape should be changed every 2 months).
✓		6.	Error log was checked (F3), and errors followed up on (see manual). 7/25 → Delta Pressure
✓		7.	Climate control appears operational (If it's cold out the shelter should feel warm, if it's hot out the shelter should feel cool)

II. BAM SAMPLER – Routine Maintenance (monthly). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓	1.	Inlet Flow check Performed
	✓	2.	Visual inspection and dust removal
	✓	3.	Leak check performed
	✓	4.	PM10 particle trap cleaned
✓		5.	Inlet nozzle and nozzle are cleaned

AIR SCIENCES INC.
DENVER • PORTLAND
RPA 9/17/13
REVIEWED BY DATE
KJD 9/17/13
SUBMITTED BY DATE

II. BAM SAMPLER – Routine Maintenance (every 2 months). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
✓		1.	Filter tape replaced
✓		2.	Ran the Self-Test function

III. BAM SAMPLER – Routine Maintenance (semiannual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Replaced muffler on the pump (*Work performed by Air Sciences) KJD
		2.	Complete calibration of flow system (*Work performed by Air Sciences)

IV. BAM SAMPLER – Routine Maintenance (annual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Carbon vanes in pump checked/replaced (*Work performed by Air Sciences) KJD
		2.	Inlet system cleaned (*Work performed by Air Sciences)

Comments/Unusual Occurrences: _____

Signature: Kane Bullard

WEST PLANT

BAM PM10 WEEKLY SITE CHECK FORM
RESOLUTION MONITORING PROJECT
PROJECT NO. 262-1

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 8/30/2013 Time: 8:04 Operator: Kami Ballard

I. BAM SAMPLER – Weekly Checks.

YES	NO		
✓		1.	The sampler is intact and the inlet head is unobstructed.
✓		2.	The vacuum pump is running and sounds normal.
✓		3.	The temperature shield is intact, and the sensor is inside of it.
✓		4.	The BAM is reading the correct time and day.
✓		5.	The tape is in the proper position and does not need to be changed (tape should be changed every 2 months).
✓		6.	Error log was checked (F3), and errors followed up on (see manual). 08/23 → tape break
✓		7.	Climate control appears operational (If it's cold out the shelter should feel warm, if it's hot out the shelter should feel cool)

II. BAM SAMPLER – Routine Maintenance (monthly). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	KJD	1.	Inlet Flow check Performed
		2.	Visual inspection and dust removal
		3.	Leak check performed
		4.	PM10 particle trap cleaned
		5.	Inlet nozzle and nozzle are cleaned

AIR SCIENCES INC.
DENVER • PORTLAND

RPA 9/17/13
REVIEWED BY DATE

KJD 9/17/13
AUDITED BY DATE

II. BAM SAMPLER – Routine Maintenance (every 2 months). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	KJD	1.	Filter tape replaced
		2.	Ran the Self-Test function

III. BAM SAMPLER – Routine Maintenance (semiannual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	KJD	1.	Replaced muffler on the pump (*Work performed by Air Sciences)
		2.	Complete calibration of flow system (*Work performed by Air Sciences)

IV. BAM SAMPLER – Routine Maintenance (annual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	KJD	1.	Carbon vanes in pump checked/replaced (*Work performed by Air Sciences)
		2.	Inlet system cleaned (*Work performed by Air Sciences)

**Comments/Unusual Occurrences: _____

Signature: Kami Ballard

WEST PLANT

BAM PM10 WEEKLY SITE CHECK FORM
RESOLUTION MONITORING PROJECT
PROJECT NO. 262-1

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 9/5/2013 Time: 7:57 Operator: Kane Ballard

I. **BAM SAMPLER** – Weekly Checks.

YES	NO		
✓		1.	The sampler is intact and the inlet head is unobstructed.
✓		2.	The vacuum pump is running and sounds normal.
✓		3.	The temperature shield is intact, and the sensor is inside of it.
✓		4.	The BAM is reading the correct time and day.
✓		5.	The tape is in the proper position and does not need to be changed (tape should be changed every 2 months).
✓		6.	Error log was checked (F3), and errors followed up on (see manual). 08/23 → Tape break
✓		7.	Climate control appears operational (If it's cold out the shelter should feel warm, if it's hot out the shelter should feel cool)

II. **BAM SAMPLER** – Routine Maintenance (monthly). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

AIR SCIENCES INC.
DENVER • PORTLAND
RPA 9/17/13
REVIEWED BY DATE
KJD 9/17/13
UPDATED BY DATE

YES	NO		
✓		1.	Inlet Flow check Performed
✓		2.	Visual inspection and dust removal
✓		3.	Leak check performed
	✓	4.	PM10 particle trap cleaned
	✓	5.	Inlet nozzle and nozzle are cleaned (Done when tape was changed 08/28)

II. **BAM SAMPLER** – Routine Maintenance (every 2 months). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓	1.	Filter tape replaced
✓		2.	Ran the Self-Test function

III. **BAM SAMPLER** – Routine Maintenance (semiannual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	KJD	1.	Replaced muffler on the pump (*Work performed by Air Sciences)
		2.	Complete calibration of flow system (*Work performed by Air Sciences)

IV. **BAM SAMPLER** – Routine Maintenance (annual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	KJD	1.	Carbon vanes in pump checked/replaced (*Work performed by Air Sciences)
		2.	Inlet system cleaned (*Work performed by Air Sciences)

*Comments/Unusual Occurrences: _____

Signature: Kane Ballard

AIR SCIENCES INC.
DENVER • PORTLAND

Monthly Flow Verification PM_{10}

West Plant
PARTICULATE MONITORING PROJECT
PROJECT NO. 262-1

Met One BAM 1020 PM_{10}: S/N:
Firmware:
Calibrator: Delta Cal S/N:

Date of Flow Audit: 09/05/2013
Time of Flow Audit: 7:53

	BAM	STD
Ambient Temperature (AT) °c	32.6	31.6
Berometric Pressure mmHg	684	683.5

	Set Point (lpm)	BAM	% Diff (1)	STD Flow Meter	% Diff (2)
(1) Actual Flow	15	15.0	0.000	15.06	-0.398
Acceptable Differential		*14.700 - 15.300*	*+/- 2%*	*14.250 - 15.750*	*+/- 5%*
(2) Actual Flow	18.4	18.3	-0.543	18.35	-0.272
Acceptable Differential		*18.032 - 18.768*	*+/- 2%*	*17.480 - 19.320*	*+/- 5%*
(3) Actual Flow	16.7	16.7	0.000	16.67	0.180
Acceptable Differential		*16.336 - 17.034*	*+/- 2%*	*15.865 - 17.535*	*+/- 5%*

Calculations:
(1) % Diff = [(BAM - Set Point)/Set Point]*100 (+/- 2%)
(2) % Diff = [(BAM - Calibrator)/Calibrator]*100 (+/- 5%)

AIR SCIENCES INC.
DENVER • PORTLAND
REVIEWED BY RPA DATE 9/17/13
AUDITED BY ICJD DATE 9/17/13

	BAM	
(2) Leak Test	.0	**Should be < 1.0 LPM**

Comments/Abnormalities: Ran Self Test "Passed"

Signature: Karen Ballard

Upon completion of this form, fax to Air Sciences at 303-279-3796

WEST PLANT

BAM PM10 WEEKLY SITE CHECK FORM
RESOLUTION MONITORING PROJECT
PROJECT NO. 262-1

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 09/13/2013 Time: 15:46 Operator: Karen Ballard

I. **BAM SAMPLER** – Weekly Checks.

YES	NO		
✓		1.	The sampler is intact and the inlet head is unobstructed.
✓		2.	The vacuum pump is running and sounds normal.
✓		3.	The temperature shield is intact, and the sensor is inside of it.
✓		4.	The BAM is reading the correct time and day.
✓		5.	The tape is in the proper position and does not need to be changed (tape should be changed every 2 months).
✓		6.	Error log was checked (F3), and errors followed up on (see manual). 09/04 count faulted
✓		7.	Climate control appears operational (If it's cold out the shelter should feel warm, if it's hot out the shelter should feel cool)

II. **BAM SAMPLER** – Routine Maintenance (monthly). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓ KJD	1.	Inlet Flow check Performed
	✓	2.	Visual inspection and dust removal
	✓	3.	Leak check performed
	✓	4.	PM10 particle trap cleaned
	✓	5.	Inlet nozzle and nozzle are cleaned

AIR SCIENCES INC.
DENVER • PORTLAND

RPA 9/17/13
REVIEWED BY DATE

KJD 9/17/13
AUDITED BY DATE

II. **BAM SAMPLER** – Routine Maintenance (every 2 months). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓ KJD	1.	Filter tape replaced
	✓	2.	Ran the Self-Test function

III. **BAM SAMPLER** – Routine Maintenance (semiannual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓ KJD	1.	Replaced muffler on the pump (*Work performed by Air Sciences)
	✓	2.	Complete calibration of flow system (*Work performed by Air Sciences)

IV. **BAM SAMPLER** – Routine Maintenance (annual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓ KJD	1.	Carbon vanes in pump checked/replaced (*Work performed by Air Sciences)
	✓	2.	Inlet system cleaned (*Work performed by Air Sciences)

*Comments/Unusual Occurrences: _____

Signature: Karen Ballard

WEST PLANT

BAM PM10 WEEKLY SITE CHECK FORM
RESOLUTION MONITORING PROJECT
PROJECT NO. 262-1

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 9-20-13 Time: 13:25 Operator: K. Baak

I. BAM SAMPLER – Weekly Checks.

YES	NO		
✓		1.	The sampler is intact and the inlet head is unobstructed.
✓		2.	The vacuum pump is running and sounds normal.
✓		3.	The temperature shield is intact, and the sensor is inside of it.
✓		4.	The BAM is reading the correct time and day.
✓		5.	The tape is in the proper position and does not need to be changed (tape should be changed every 2 months).
✓		6.	Error log was checked (F3), and errors followed up on (see manual). 9-18 Bam Cal Membrane 5%.
✓		7.	Climate control appears operational (If it's cold out the shelter should feel warm, if it's hot out the shelter should feel cool)

II. BAM SAMPLER – Routine Maintenance (monthly). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓ KJD	1.	Inlet Flow check Performed
	✓	2.	Visual inspection and dust removal
	✓	3.	Leak check performed
	✓	4.	PM10 particle trap cleaned
	✓	5.	Inlet nozzle and nozzle are cleaned

AIR SCIENCES INC.
DENVER • PORTLAND

REVIEWED BY: RPA DATE: 10-25-13

AUDITED BY: KJD DATE: 10/2/13

II. BAM SAMPLER – Routine Maintenance (every 2 months). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓ KJD	1.	Filter tape replaced
	✓	2.	Ran the Self-Test function

III. BAM SAMPLER – Routine Maintenance (semiannual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓ KJD	1.	Replaced muffler on the pump (*Work performed by Air Sciences)
	✓	2.	Complete calibration of flow system (*Work performed by Air Sciences)

IV. BAM SAMPLER – Routine Maintenance (annual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓ KJD	1.	Carbon vanes in pump checked/replaced (*Work performed by Air Sciences)
	✓	2.	Inlet system cleaned (*Work performed by Air Sciences)

**Comments/Unusual Occurrences: _____

Signature: Kevin Baak

WEST PLANT

BAM PM10 WEEKLY SITE CHECK FORM
RESOLUTION MONITORING PROJECT
PROJECT NO. 262-1

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 09/27/2013 Time: 9:01 Operator: Kami Ballard

I. **BAM SAMPLER** – Weekly Checks.

YES	NO		
✓		1.	The sampler is intact and the inlet head is unobstructed.
✓		2.	The vacuum pump is running and sounds normal.
✓		3.	The temperature shield is intact, and the sensor is inside of it.
✓		4.	The BAM is reading the correct time and day.
✓		5.	The tape is in the proper position and does not need to be changed (tape should be changed every 2 months).
✓		6.	Error log was checked (F3), and errors followed up on (see manual). 9/23 - 9/27 → BAM Cal Membrane 5%
✓		7.	Climate control appears operational (If it's cold out the shelter should feel warm, if it's hot out the shelter should feel cool)

II. **BAM SAMPLER** – Routine Maintenance (monthly). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
✓		1.	Inlet Flow check Performed
✓		2.	Visual inspection and dust removal
✓		3.	Leak check performed
	✓	4.	PM10 particle trap cleaned
✓		5.	Inlet nozzle and nozzle are cleaned

AIR SCIENCES INC.
DENVER • PORTLAND
RPA 10-25-13
PRINTED DATE
KJD 10/2/13
DATE

II. **BAM SAMPLER** – Routine Maintenance (every 2 months). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓ KJD	1.	Filter tape replaced
	✓	2.	Ran the Self-Test function

III. **BAM SAMPLER** – Routine Maintenance (semiannual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓ KJD	1.	Replaced muffler on the pump (*Work performed by Air Sciences)
	✓	2.	Complete calibration of flow system (*Work performed by Air Sciences)

IV. **BAM SAMPLER** – Routine Maintenance (annual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓ KJD	1.	Carbon vanes in pump checked/replaced (*Work performed by Air Sciences)
	✓	2.	Inlet system cleaned (*Work performed by Air Sciences)

*Comments/Unusual Occurrences: Cleaned reference membrane. Self Test – "PASSED"

Signature: Kami Ballard

AIR SCIENCES INC.

Monthly Flow Verification PM_{10}

West Plant
PARTICULATE MONITORING PROJECT
PROJECT NO. 262-1

AIR SCIENCES INC
DENVER PORTLAND
REVIEWED BY RPA DATE 10-25-13
AUDITED BY KJD DATE 10/2/13

Met One BAM 1020 PM_{10}: S/N: M3712
Firmware:
Calibrator: Delta Cal S/N: 1034 RPA

Date of Flow Audit: 9/27/2013
Time of Flow Audit: 9:19

	BAM	STD
Ambient Temperature (AT) °c	20.0	20.7
Berometric Pressure mmHg	679	681

	Set Point (lpm)	BAM	% Diff (1)	STD Flow Meter	% Diff (2)
(1) Actual Flow	15	15.0	0.0	15.02	-0.133
Acceptable Differential		*14.700 - 15.300*	*+/- 2%*	*14.250 - 15.750*	*+/- 5%*
(2) Actual Flow	18.4	18.4	0.0	18.51	-0.594
Acceptable Differential		*18.032 - 18.768*	*+/- 2%*	*17.480 - 19.320*	*+/- 5%*
(3) Actual Flow	16.7	16.7	0.0	16.75	-0.299
Acceptable Differential		*16.336 - 17.034*	*+/- 2%*	*15.865 - 17.535*	*+/- 5%*

Calculations:
(1) % Diff = [(BAM - Set Point)/Set Point]*100 (+/- 2%)
(2) % Diff = [(BAM - Calibrator)/Calibrator]*100 (+/- 5%)

	BAM	
(2) Leak Test	0.2	**Should be < 1.0 LPM**

Comments/Abnormalities: Self Test "PASSED"

Signature: Karen BeCard

Upon completion of this form, fax to Air Sciences at 303-279-3796

WEST PLANT

BAM PM 2.5 WEEKLY SITE CHECK FORM
RESOLUTION MONITORING PROJECT
PROJECT NO. 262-1

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 07-02-2013 Time: 10:25 Operator: Karen BaCard

I. **BAM SAMPLER** – Weekly Checks.

YES	NO		
✓		1.	The sampler is intact and the inlet head is unobstructed.
✓		2.	The vacuum pump is running and sounds normal.
✓		3.	The temperature shield is intact, and the sensor is inside of it.
✓		4.	The BAM is reading the correct time and day.
✓		5.	The tape is in the proper position and does not need to be changed (tape should be changed every 2 months).
✓		6.	Error log was checked (F3), and errors followed up on (see manual). 6/27 → Maintenance
✓		7.	Climate control appears operational (If it's cold out the shelter should feel warm, if it's hot out the shelter should feel cool)

II. **BAM SAMPLER** – Routine Maintenance (monthly). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	KJD	1.	Inlet Flow check Performed
		2.	Visual inspection and dust removal
		3.	Leak check performed
		4.	PM10 and 2.5 cyclone particle trap cleaned
		5.	Inlet nozzle and nozzle are cleaned

AIR SCIENCES INC.
DENVER • PORTLAND

REVIEWED BY RPA DATE 7/11/13

AUDITED BY KJD DATE 7/11/13

II. **BAM SAMPLER** – Routine Maintenance (every 2 months). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	KJD	1.	Filter tape replaced
		2.	Ran the Self-Test function

III. **BAM SAMPLER** – Routine Maintenance (semiannual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	KJD	1.	Replaced muffler on the pump (*Work performed by Air Sciences)
		2.	Complete calibration of flow system (*Work performed by Air Sciences)

IV. **BAM SAMPLER** – Routine Maintenance (annual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	KJD	1.	Carbon vanes in pump checked/replaced (*Work performed by Air Sciences)
		2.	Inlet system cleaned (*Work performed by Air Sciences)

**Comments/Unusual Occurrences: _____

Signature: Karen BaCard

**Fax completed form to Air Sciences at 303-279-3796

WEST PLANT

BAM PM 2.5 WEEKLY SITE CHECK FORM
RESOLUTION MONITORING PROJECT
PROJECT NO. 262-1

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 7/10/2013 Time: 9:57 Operator: Mary Morisseth

I. **BAM SAMPLER** – Weekly Checks.

YES	NO		
✓		1.	The sampler is intact and the inlet head is unobstructed.
✓		2.	The vacuum pump is running and sounds normal.
✓		3.	The temperature shield is intact, and the sensor is inside of it.
✓		4.	The BAM is reading the correct time and day.
✓		5.	The tape is in the proper position and does not need to be changed (tape should be changed every 2 months).
✓		6.	Error log was checked (F3), and errors followed up on (see manual).
✓		7.	Climate control appears operational (If it's cold out the shelter should feel warm, if it's hot out the shelter should feel cool)

II. **BAM SAMPLER** – Routine Maintenance (monthly). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓	1.	Inlet Flow check Performed
	✓	2.	Visual inspection and dust removal
	✓	3.	Leak check performed
	✓	4.	PM10 and 2.5 cyclone particle trap cleaned
	✓	5.	Inlet nozzle and nozzle are cleaned

AIR SCIENCES INC
DENVER • PORTLAND

RPA 7/11/13
REVIEWED BY DATE

KJD 7/11/13
AUDITED BY DATE

II. **BAM SAMPLER** – Routine Maintenance (every 2 months). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓	1.	Filter tape replaced
✓		2.	Ran the Self-Test function

III. **BAM SAMPLER** – Routine Maintenance (semiannual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Replaced muffler on the pump (*Work performed by Air Sciences)
		2.	Complete calibration of flow system (*Work performed by Air Sciences)

IV. **BAM SAMPLER** – Routine Maintenance (annual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Carbon vanes in pump checked/replaced (*Work performed by Air Sciences)
		2.	Inlet system cleaned (*Work performed by Air Sciences)

**Comments/Unusual Occurrences: _____

Signature: Mary Morisseth

**Fax completed form to Air Sciences at 303-279-3796

WEST PLANT

BAM PM 2.5 WEEKLY SITE CHECK FORM
RESOLUTION MONITORING PROJECT
PROJECT NO. 262-1

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 7/25/2013 Time: 11:47 Operator: ~~Kim~~ BaCad

I. **BAM SAMPLER** – Weekly Checks.

YES	NO		
✓		1.	The sampler is intact and the inlet head is unobstructed.
✓		2.	The vacuum pump is running and sounds normal.
✓		3.	The temperature shield is intact, and the sensor is inside of it.
✓		4.	The BAM is reading the correct time and day.
✓		5.	The tape is in the proper position and does not need to be changed (tape should be changed every 2 months).
✓		6.	Error log was checked (F3), and errors followed up on (see manual). 7/15 → Maintenance
✓		7.	Climate control appears operational (If it's cold out the shelter should feel warm, if it's hot out the shelter should feel cool)

II. **BAM SAMPLER** – Routine Maintenance (monthly). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
✓		1.	Inlet Flow check Performed
✓		2.	Visual inspection and dust removal
✓		3.	Leak check performed
	✓	4.	PM10 and 2.5 cyclone particle trap cleaned
✓		5.	Inlet nozzle and nozzle are cleaned

AIR SCIENCES INC.
DENVER • PORTLAND
REVIEWED BY JR DATE 8/22/13
AUDITED BY KJD DATE 9/17/13

II. **BAM SAMPLER** – Routine Maintenance (every 2 months). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓	1.	Filter tape replaced
✓		2.	Ran the Self-Test function

III. **BAM SAMPLER** – Routine Maintenance (semiannual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Replaced muffler on the pump (*Work performed by Air Sciences)
		2.	Complete calibration of flow system (*Work performed by Air Sciences)

IV. **BAM SAMPLER** – Routine Maintenance (annual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Carbon vanes in pump checked/replaced (*Work performed by Air Sciences)
		2.	Inlet system cleaned (*Work performed by Air Sciences)

**Comments/Unusual Occurrences: _____

Signature: Kim BaCad

**Fax completed form to Air Sciences at 303-279-3796

AIR SCIENCES INC.

Monthly Flow Verification $PM_{2.5}$

West Plant
PARTICULATE MONITORING PROJECT
PROJECT NO. 262-1

Met One BAM 1020 $PM_{2.5}$: S/N: M8193
Firmware:
Calibrator: Delta Cal S/N:

Date of Flow Audit: ~~M8193~~ 7-25-2013
Time of Flow Audit: 11:50

	BAM	STD
Ambient Temperature (AT) °c	28.6	28.5
Berometric Pressure mmHg	685	685

	Set Point (lpm)	BAM	% Diff (1)	STD Flow Meter	% Diff (2)
(1) Actual Flow	15	15.1	0.7%	14.72	2.6%
Acceptable Differential		*14.700 - 15.300*	*+/- 2%*	*14.250 - 15.750*	*+/- 5%*
(2) Actual Flow	18.4	18.4	0.0%	18.3	0.5%
Acceptable Differential		*18.032 - 18.768*	*+/- 2%*	*17.480 - 19.320*	*+/- 5%*
(3) Actual Flow	16.7	16.7	0.0%	16.46	1.5%
Acceptable Differential		*16.336 - 17.034*	*+/- 2%*	*15.865 - 17.535*	*+/- 5%*

Calculations:
(1) % Diff = [(BAM - Set Point)/Set Point]*100 (+/- 2%)
(2) % Diff = [(BAM - Calibrator)/Calibrator]*100 (+/- 5%)

	BAM	
(2) Leak Test	.3	**Should be < 1.0 LPM**

AIR SCIENCES INC.
DENVER • PORTLAND

JR 8/22/13
REVIEWED BY DATE

KJD 9/17/13
AUDITED BY DATE

Comments/Abnormalities: Ran Self Test "Passed

Signature:

Upon completion of this form, fax to Air Sciences at 303-279-3796

Performed by K. Ballard.
-KJD

WEST PLANT

BAM PM 2.5 WEEKLY SITE CHECK FORM
RESOLUTION MONITORING PROJECT
PROJECT NO. 262-1

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 08.01.2013 Time: 14:18 Operator: Kara BeCard

I. **BAM SAMPLER** – Weekly Checks.

YES	NO		
✓		1.	The sampler is intact and the inlet head is unobstructed.
✓		2.	The vacuum pump is running and sounds normal.
✓		3.	The temperature shield is intact, and the sensor is inside of it.
✓		4.	The BAM is reading the correct time and day.
✓		5.	The tape is in the proper position and does not need to be changed (tape should be changed every 2 months).
✓		6.	Error log was checked (F3), and errors followed up on (see manual). 08/01 → Tape Break; 07/25 → Delta Pressure
✓		7.	Climate control appears operational (If it's cold out the shelter should feel warm, if it's hot out the shelter should feel cool)

II. **BAM SAMPLER** – Routine Maintenance (monthly). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓	1.	Inlet Flow check Performed
	✓	2.	Visual inspection and dust removal
	✓	3.	Leak check performed
	✓	4.	PM10 and 2.5 cyclone particle trap cleaned
✓		5.	Inlet nozzle and nozzle are cleaned

AIR SCIENCES INC.
DENVER • PORTLAND
REVIEWED BY: KJD DATE: 9/17/13
ENTERED BY: DATE: 8/22/13

II. **BAM SAMPLER** – Routine Maintenance (every 2 months). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓	1.	Filter tape replaced
✓		2.	Ran the Self-Test function

III. **BAM SAMPLER** – Routine Maintenance (semiannual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Replaced muffler on the pump (*Work performed by Air Sciences)
		2.	Complete calibration of flow system (*Work performed by Air Sciences)

IV. **BAM SAMPLER** – Routine Maintenance (annual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Carbon vanes in pump checked/replaced (*Work performed by Air Sciences)
		2.	Inlet system cleaned (*Work performed by Air Sciences)

**Comments/Unusual Occurrences: Filter tape Error – Respooled Tape, ran Tape test (Passed) Issue Resolved. Nozzle Cleaned.

Signature: K. BeCard

**Fax completed form to Air Sciences at 303-279-3796

WEST PLANT

BAM PM 2.5 WEEKLY SITE CHECK FORM
RESOLUTION MONITORING PROJECT
PROJECT NO. 262-1

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 08/09/2013 Time: 7:50 Operator: Kim Ballard

I. **BAM SAMPLER** – Weekly Checks.

YES	NO		
✓		1.	The sampler is intact and the inlet head is unobstructed.
✓		2.	The vacuum pump is running and sounds normal.
✓		3.	The temperature shield is intact, and the sensor is inside of it.
✓		4.	The BAM is reading the correct time and day.
✓		5.	The tape is in the proper position and does not need to be changed (tape should be changed every 2 months).
✓		6.	Error log was checked (F3), and errors followed up on (see manual). 08/01 ⇒ Tape Break
✓		7.	Climate control appears operational (If it's cold out the shelter should feel warm, if it's hot out the shelter should feel cool)

II. **BAM SAMPLER** – Routine Maintenance (monthly). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓	1.	Inlet Flow check Performed
	✓	2.	Visual inspection and dust removal
	✓	3.	Leak check performed
	✓	4.	PM10 and 2.5 cyclone particle trap cleaned
	✓	5.	Inlet nozzle and nozzle are cleaned

AIR SCIENCES INC.
DENVER • PORTLAND
REVIEWED BY JR DATE 8/22/13
AUDITED BY KJD DATE 9/17/13

II. **BAM SAMPLER** – Routine Maintenance (every 2 months). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓	1.	Filter tape replaced
	✓	2.	Ran the Self-Test function

III. **BAM SAMPLER** – Routine Maintenance (semiannual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓	1.	Replaced muffler on the pump (*Work performed by Air Sciences)
	✓	2.	Complete calibration of flow system (*Work performed by Air Sciences)

IV. **BAM SAMPLER** – Routine Maintenance (annual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓	1.	Carbon vanes in pump checked/replaced (*Work performed by Air Sciences)
	✓	2.	Inlet system cleaned (*Work performed by Air Sciences)

**Comments/Unusual Occurrences: _____

Signature: Kim Ballard

**Fax completed form to Air Sciences at 303-279-3796

WEST PLANT

BAM PM 2.5 WEEKLY SITE CHECK FORM
RESOLUTION MONITORING PROJECT
PROJECT NO. 262-1

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 08·23·2013 Time: 7:49 Operator: Karen Ballard

I. **BAM SAMPLER** – Weekly Checks.

YES	NO	
✓		1. The sampler is intact and the inlet head is unobstructed.
✓		2. The vacuum pump is running and sounds normal.
✓		3. The temperature shield is intact, and the sensor is inside of it.
✓		4. The BAM is reading the correct time and day.
✓		5. The tape is in the proper position and does not need to be changed (tape should be changed every 2 months).
✓		6. Error log was checked (F3), and errors followed up on (see manual). 08·01 → Tape Break
✓		7. Climate control appears operational (If it's cold out the shelter should feel warm, if it's hot out the shelter should feel cool)

II. **BAM SAMPLER** – Routine Maintenance (monthly). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO	
	✓	1. Inlet Flow check Performed
	✓	2. Visual inspection and dust removal
	✓	3. Leak check performed
	✓	4. PM10 and 2.5 cyclone particle trap cleaned
✓		5. Inlet nozzle and nozzle are cleaned

AIR SCIENCES INC.
DENVER • PORTLAND
RPA 9/17/13
REVIEWED BY DATE
KJD 9/17/13
AUDITED BY DATE

II. **BAM SAMPLER** – Routine Maintenance (every 2 months). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO	
✓		1. Filter tape replaced
✓		2. Ran the Self-Test function

III. **BAM SAMPLER** – Routine Maintenance (semiannual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO	
		1. Replaced muffler on the pump (*Work performed by Air Sciences) KJD
		2. Complete calibration of flow system (*Work performed by Air Sciences)

IV. **BAM SAMPLER** – Routine Maintenance (annual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO	
		1. Carbon vanes in pump checked/replaced (*Work performed by Air Sciences) KJD
		2. Inlet system cleaned (*Work performed by Air Sciences)

**Comments/Unusual Occurrences: _____

Signature: Karen Ballard

**Fax completed form to Air Sciences at 303-279-3796

WEST PLANT

BAM PM 2.5 WEEKLY SITE CHECK FORM
RESOLUTION MONITORING PROJECT
PROJECT NO. 262-1

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 08/30/2013 Time: 8:05 Operator: Kami BaClard

I. BAM SAMPLER – Weekly Checks.

YES	NO		
✓		1.	The sampler is intact and the inlet head is unobstructed.
✓		2.	The vacuum pump is running and sounds normal.
✓		3.	The temperature shield is intact, and the sensor is inside of it.
✓		4.	The BAM is reading the correct time and day.
✓		5.	The tape is in the proper position and does not need to be changed (tape should be changed every 2 months).
✓		6.	Error log was checked (F3), and errors followed up on (see manual). 8/23 ⇒ Tape break
✓		7.	Climate control appears operational (If it's cold out the shelter should feel warm, if it's hot out the shelter should feel cool)

II. BAM SAMPLER – Routine Maintenance (monthly). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Inlet Flow check Performed
		2.	Visual Inspection and dust removal
		3.	Leak check performed
		4.	PM10 and 2.5 cyclone particle trap cleaned
		5.	Inlet nozzle and nozzle are cleaned

KJD

AIR SCIENCES INC.
DENVER • PORTLAND

RPA 9/17/13
REVIEWED BY DATE

KJD 9/17/13
AUDITED BY DATE

II. BAM SAMPLER – Routine Maintenance (every 2 months). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Filter tape replaced
		2.	Ran the Self-Test function

KJD

III. BAM SAMPLER – Routine Maintenance (semiannual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Replaced muffler on the pump (*Work performed by Air Sciences)
		2.	Complete calibration of flow system (*Work performed by Air Sciences)

KJD

IV. BAM SAMPLER – Routine Maintenance (annual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Carbon vanes in pump checked/replaced (*Work performed by Air Sciences)
		2.	Inlet system cleaned (*Work performed by Air Sciences)

KJD

**Comments/Unusual Occurrences: _____

Signature: Kami Bc

**Fax completed form to Air Sciences at 303-279-3796

WEST PLANT

BAM PM 2.5 WEEKLY SITE CHECK FORM
RESOLUTION MONITORING PROJECT
PROJECT NO. 262-1

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 09/05/2013 Time: 7:07 Operator: Kami Ballard

I. **BAM SAMPLER** – Weekly Checks.

YES	NO		
✓		1.	The sampler is intact and the inlet head is unobstructed.
✓		2.	The vacuum pump is running and sounds normal.
✓		3.	The temperature shield is intact, and the sensor is inside of it.
✓		4.	The BAM is reading the correct time and day.
✓		5.	The tape is in the proper position and does not need to be changed (tape should be changed every 2 months).
✓		6.	Error log was checked (F3), and errors followed up on (see manual). 8/23 → Maintenance
✓		7.	Climate control appears operational (if it's cold out the shelter should feel warm, if it's hot out the shelter should feel cool)

II. **BAM SAMPLER** – Routine Maintenance (monthly). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

AIR SCIENCES INC.
DENVER • PORTLAND
RPA 9/17/13
REVIEWED BY DATE
KJD 9/17/13
AUDITED BY DATE

YES	NO		
✓		1.	Inlet Flow check Performed
✓		2.	Visual inspection and dust removal
✓		3.	Leak check performed
	✓	4.	PM10 and 2.5 cyclone particle trap cleaned
	✓	5.	Inlet nozzle and nozzle are cleaned (Done when tape was changed 08/28)

II. **BAM SAMPLER** – Routine Maintenance (every 2 months). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓	1.	Filter tape replaced
✓		2.	Ran the Self-Test function

III. **BAM SAMPLER** – Routine Maintenance (semiannual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓ KJD	1.	Replaced muffler on the pump (*Work performed by Air Sciences)
	✓	2.	Complete calibration of flow system (*Work performed by Air Sciences)

IV. **BAM SAMPLER** – Routine Maintenance (annual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓ KJD	1.	Carbon vanes in pump checked/replaced (*Work performed by Air Sciences)
	✓	2.	Inlet system cleaned (*Work performed by Air Sciences)

**Comments/Unusual Occurrences: _____

Signature: Kami Ballard

**Fax completed form to Air Sciences at 303-279-3796

August 2013

AIR SCIENCES INC.

Monthly Flow Verification $PM_{2.5}$

West Plant
PARTICULATE MONITORING PROJECT
PROJECT NO. 262-1

Met One BAM 1020 $PM_{2.5}$: S/N:
Firmware:
Calibrator: Delta Cal S/N:

Date of Flow Audit: 9/05/2013
Time of Flow Audit: 8:05

	BAM	STD	
Ambient Temperature (AT) °c	33.5	~~33~~	32.5
Berometric Pressure mmHg	685	~~685~~	

	Set Point (lpm)	BAM	% Diff (1)	STD Flow Meter	% Diff (2)
(1) Actual Flow	15	15.0	0.000	14.63	2.529
Acceptable Differential		*14.700 - 15.300*	*+/- 2%*	*14.250 - 15.750*	*+/- 5%*
(2) Actual Flow	18.4	18.4	0.000	18.14	1.433
Acceptable Differential		*18.032 - 18.768*	*+/- 2%*	*17.480 - 19.320*	*+/- 5%*
(3) Actual Flow	16.7	16.7	0.000	16.35	2.141
Acceptable Differential		*16.336 - 17.034*	*+/- 2%*	*15.865 - 17.535*	*+/- 5%*

Calculations:
(1) % Diff = [(BAM - Set Point)/Set Point]*100 (+/- 2%)
(2) % Diff = [(BAM - Calibrator)/Calibrator]*100 (+/- 5%)

AIR SCIENCES INC. DENVER • PORTLAND
REVIEWED BY RPA DATE 9/17/13
ADDITED BY JCJD DATE 9/17/13

	BAM	
(2) Leak Test	.5	**Should be < 1.0 LPM**

Comments/Abnormalities: Flow during leak test never stabilizes. It bounces around between 0.1 & 2.0.
Self Test "Passed"
Signature: Kami Ballard

Upon completion of this form, fax to Air Sciences at 303-279-3796

WEST PLANT

BAM PM 2.5 WEEKLY SITE CHECK FORM
RESOLUTION MONITORING PROJECT
PROJECT NO. 262-1

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 09/18/2013 Time: 15:44 Operator: Kam Ballard

I. **BAM SAMPLER** – Weekly Checks.

YES	NO		
✓		1.	The sampler is intact and the inlet head is unobstructed.
✓		2.	The vacuum pump is running and sounds normal.
✓		3.	The temperature shield is intact, and the sensor is inside of it.
✓		4.	The BAM is reading the correct time and day.
✓		5.	The tape is in the proper position and does not need to be changed (tape should be changed every 2 months).
✓		6.	Error log was checked (F3), and errors followed up on (see manual). 09/05 Maintenance
✓		7.	Climate control appears operational (If it's cold out the shelter should feel warm, if it's hot out the shelter should feel cool)

II. **BAM SAMPLER** – Routine Maintenance (monthly). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓ KJD	1.	Inlet Flow check Performed
	✓	2.	Visual inspection and dust removal
	✓	3.	Leak check performed
	✓	4.	PM10 and 2.5 cyclone particle trap cleaned
	✓	5.	Inlet nozzle and nozzle are cleaned

AIR SCIENCES INC.
DENVER • PORTLAND

RPA 9/17/13
REVIEWED BY DATE

KJD 9/17/13
AUDITED BY DATE

II. **BAM SAMPLER** – Routine Maintenance (every 2 months). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓ KJD	1.	Filter tape replaced
	✓	2.	Ran the Self-Test function

III. **BAM SAMPLER** – Routine Maintenance (semiannual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓ KJD	1.	Replaced muffler on the pump (*Work performed by Air Sciences)
	✓	2.	Complete calibration of flow system (*Work performed by Air Sciences)

IV. **BAM SAMPLER** – Routine Maintenance (annual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓ KJD	1.	Carbon vanes in pump checked/replaced (*Work performed by Air Sciences)
	✓	2.	Inlet system cleaned (*Work performed by Air Sciences)

**Comments/Unusual Occurrences: _____

Signature: Kam Ballard

**Fax completed form to Air Sciences at 303-279-3796

WEST PLANT

BAM PM 2.5 WEEKLY SITE CHECK FORM
RESOLUTION MONITORING PROJECT
PROJECT NO. 262-1

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 9-20-13 Time: 13:25 Operator: K. Baak

I. **BAM SAMPLER** – Weekly Checks.

YES	NO		
✓		1.	The sampler is intact and the inlet head is unobstructed.
✓		2.	The vacuum pump is running and sounds normal.
✓		3.	The temperature shield is intact, and the sensor is inside of it.
✓		4.	The BAM is reading the correct time and day.
✓		5.	The tape is in the proper position and does not need to be changed (tape should be changed every 2 months).
✓		6.	Error log was checked (F3), and errors followed up on (see manual).
✓		7.	Climate control appears operational (If it's cold out the shelter should feel warm, if it's hot out the shelter should feel cool)

II. **BAM SAMPLER** – Routine Maintenance (monthly). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓ KJD	1.	Inlet Flow check Performed
	✓	2.	Visual inspection and dust removal
	✓	3.	Leak check performed
	✓	4.	PM10 and 2.5 cyclone particle trap cleaned
	✓	5.	Inlet nozzle and nozzle are cleaned

AIR SCIENCES INC.
DENVER • PORTLAND
RPA 10-25-13
REVIEWED BY DATE
KJD 10/2/13
AUDITED BY DATE

II. **BAM SAMPLER** – Routine Maintenance (every 2 months). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓ KJD	1.	Filter tape replaced
	✓	2.	Ran the Self-Test function

III. **BAM SAMPLER** – Routine Maintenance (semiannual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓ KJD	1.	Replaced muffler on the pump (*Work performed by Air Sciences)
	✓	2.	Complete calibration of flow system (*Work performed by Air Sciences)

IV. **BAM SAMPLER** – Routine Maintenance (annual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓ KJD	1.	Carbon vanes in pump checked/replaced (*Work performed by Air Sciences)
	✓	2.	Inlet system cleaned (*Work performed by Air Sciences)

**Comments/Unusual Occurrences: _____

Signature: Kacie Baak

**Fax completed form to Air Sciences at 303-279-3796

WEST PLANT

BAM PM 2.5 WEEKLY SITE CHECK FORM
RESOLUTION MONITORING PROJECT
PROJECT NO. 262-1

AIR SCIENCES INC.

Date: 9/27/2013 Time: 9:00 Operator: Kame Ballard

I. BAM SAMPLER – Weekly Checks.

YES	NO	
✓		1. The sampler is intact and the inlet head is unobstructed.
✓		2. The vacuum pump is running and sounds normal.
✓		3. The temperature shield is intact, and the sensor is inside of it.
✓		4. The BAM is reading the correct time and day.
✓		5. The tape is in the proper position and does not need to be changed (tape should be changed every 2 months).
✓		6. Error log was checked (F3), and errors followed up on (see manual). 9/25 9/25 → BAM Cal Membrane 5% 9/27 → Filter Tape Error
✓		7. Climate control appears operational (If it's cold out the shelter should feel warm, if it's hot out the shelter should feel cool)

II. BAM SAMPLER – Routine Maintenance (monthly). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO	
✓		1. Inlet Flow check Performed
✓		2. Visual inspection and dust removal
✓		3. Leak check performed
	✓	4. PM10 and 2.5 cyclone particle trap cleaned
✓		5. Inlet nozzle and nozzle are cleaned

AIR SCIENCES INC.
DENVER • PORTLAND
RPA 10-25-13
REVIEWED BY DATE
KJD 10/2/13
AUDITED BY DATE

II. BAM SAMPLER – Routine Maintenance (every 2 months). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO	
	✓	1. Filter tape replaced
✓		2. Ran the Self-Test function

III. BAM SAMPLER – Routine Maintenance (semiannual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO	
		1. Replaced muffler on the pump (*Work performed by Air Sciences)
		2. Complete calibration of flow system (*Work performed by Air Sciences)

KJD

IV. BAM SAMPLER – Routine Maintenance (annual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO	
		1. Carbon vanes in pump checked/replaced (*Work performed by Air Sciences)
		2. Inlet system cleaned (*Work performed by Air Sciences)

KJD

**Comments/Unusual Occurrences: Filter tape error – Removed tape, cleaned nozzle ran self test function. Cleaned Reference Membrane Self Test "PASSED"

Signature: Kame Ballard

**Fax completed form to Air Sciences at 303-279-3796

AIR SCIENCES INC.

Monthly Flow Verification $PM_{2.5}$

West Plant

PARTICULATE MONITORING PROJECT

PROJECT NO. 262-1

AIR SCIENCES INC. DENVER, COLORADO
REVIEWED BY RPA 10-25-13 DATE
REVIEWED BY KJD 10/2/13 DATE

Met One BAM 1020 $PM_{2.5}$: S/N: M8193

Firmware:

Calibrator: Delta Cal S/N: 1034 RPA

Date of Flow Audit: 9/27/2013

Time of Flow Audit: 9:10

	BAM	STD
Ambient Temperature (AT) °c	23.9	23.7
Berometric Pressure mmHg	683	681

	Set Point (lpm)	BAM	% Diff (1)	STD Flow Meter	% Diff (2)
(1) Actual Flow	15	15.0	0.0	14.85	1.010
Acceptable Differential		*14.700 - 15.300*	*+/- 2%*	*14.250 - 15.750*	*+/- 5%*
(2) Actual Flow	18.4	18.4	0.0	18.35	0.272
Acceptable Differential		*18.032 - 18.768*	*+/- 2%*	*17.480 - 19.320*	*+/- 5%*
(3) Actual Flow	16.7	16.7	0.0	16.60	0.602
Acceptable Differential		*16.336 - 17.034*	*+/- 2%*	*15.865 - 17.535*	*+/- 5%*

Calculations:

(1) % Diff = [(BAM - Set Point)/Set Point]*100 (+/- 2%)

(2) % Diff = [(BAM - Calibrator)/Calibrator]*100 (+/- 5%)

	BAM	
(2) Leak Test	0.8	**Should be < 1.0 LPM**

Comments/Abnormalities:

Signature: Karen Bacon

Upon completion of this form, fax to Air Sciences at 303-279-3796

Appendix H: East Plant Meteorological Site Check Forms

AIR SCIENCES INC. DENVER • PORTLAND

REVIEWED BY [signature] DATE 8-1-13

AUDITED BY RPA DATE 7-8-13

AIR SCIENCES INC.

EAST PLANT
MET SITE CHECK FORM
Resolution
PROJECT NO. 262-1

Date: 07·02·2013 Time: 11:10 Operator: Kara BaCarel

YES	NO **		
✓		1.	The tower is intact and upright.
✓		2.	The anemometer propeller and the wind direction vane are turning freely.
✓		3.	All temperature shields are intact, and the probes are inside their shields.
✓		4.	The aspirator fans are operating.
✓		5.	The solar radiation sensor is level and has been cleaned.
✓		6.	The solar panel is facing south and is clean.
✓		7.	The precipitation gauge is clean and free of bugs and dust.
✓		8.	The data logger is reading the correct time and day.
✓		9.	The site has been visually inspected for unusual wildlife occurrences (dead birds, etc.).
✓		10.	Estimate and document the parameters below.

Parameter	Estimated	Logger	Audit
Speed 10m (m/s)	3 m/s	2.45	2.84
Direction* 10m (deg)	* MISSING	225.39	245.7
Ambient Temperature (°C)	32°	31.3	30.1
Relative Humidity (%)	25%	25.63	27.78
Aspirated Temp 2m	32°	30.01	29.22
Aspirated Temp 10m	31°	28.43	28.19
Delta Temperature (°C)	N/A	-1.1	-1.02
Solar Radiation (w/m²)	(Sunny) Partly cloudy Cloudy	978.98	975.0
Barometric Pressure (mmHg)	N/A	655.93	655.9
Battery Voltage (V)	N/A	12.62	12.62
Time (MST)	N/A	01:13	1115 HRS
Date	N/A	07·02·2013	7-2-13

*Direction wind is from

Comments/Unusual Occurrences or Weather: Tipped precip. gauge
INVALIDATED 0.016" OF PRECIP RECORDED @ 1115 HRS ON 7-2-13 -RPA

When form is completed, please fax to Air Sciences Inc. @ 303-279-3796 (no cover sheet is necessary).

Site Operator Signature: Kara BaCarel

AIR SCIENCES INC.
DENVER • PORTLAND

REVIEWED BY RPA DATE 8-1-13
AUDITED BY DATE 7-11-13

AIR SCIENCES INC.

EAST PLANT
MET SITE CHECK FORM
Resolution
PROJECT NO. 262-1

Date: 7/10/2013 Time: 10:16 AM * Operator: Mary Morissette

YES	NO **		
✓		1.	The tower is intact and upright.
✓		2.	The anemometer propeller and the wind direction vane are turning freely.
✓		3.	All temperature shields are intact, and the probes are inside their shields.
✓		4.	The aspirator fans are operating.
✓		5.	The solar radiation sensor is level and has been cleaned.
✓		6.	The solar panel is facing south and is clean.
✓		7.	The precipitation gauge is clean and free of bugs and dust.
✓		8.	The data logger is reading the correct time and day.
✓		9.	The site has been visually inspected for unusual wildlife occurrences (dead birds, etc.).
✓		10.	Estimate and document the parameters below.

Parameter	Estimated	Logger	Audit
Speed 10m (m/s)	3.00	5.42	2.69
Direction* 10m (deg)	SW	241.51	240.0
Ambient Temperature (°C)	29	27.78	27.62
Relative Humidity (%)	32	49.55	50.1
Aspirated Temp 2m	27	27.36	26.39
Aspirated Temp 10m	26	25.87	25.52
Delta Temperature (°C)	N/A	-1.35	-0.434
Solar Radiation (w/m²)	~~Sunny~~ Partly cloudy Cloudy	* —	859.0
Barometric Pressure (mmHg)	N/A	655.37	655.4
Battery Voltage (V)	N/A	12.44	12.67
Time (MST)	N/A	10:18 AM	1015 Hrs
Date	N/A	7/10/2013	7-10-13

*Direction wind is from

Comments/Unusual Occurrences or Weather: * BACK-UP SITE OPERATOR MISSED THE SRAD LOGGER VALUE - RPA

When form is completed, please fax to Air Sciences Inc. @ 303-279-3796 (no cover sheet is necessary).

Site Operator Signature: Mary Morissette

AIR SCIENCES INC.

EAST PLANT
MET SITE CHECK FORM
Resolution
PROJECT NO. 262-1

Date: 7·26·2013 Time: 10:12 Operator: Kami BaCard

YES	NO **		
✓		1.	The tower is intact and upright.
✓		2.	The anemometer propeller and the wind direction vane are turning freely.
✓		3.	All temperature shields are intact, and the probes are inside their shields.
✓		4.	The aspirator fans are operating.
✓		5.	The solar radiation sensor is level and has been cleaned.
✓		6.	The solar panel is facing south and is clean.
✓		7.	The precipitation gauge is clean and free of bugs and dust.
✓		8.	The data logger is reading the correct time and day.
✓		9.	The site has been visually inspected for unusual wildlife occurrences (dead birds, etc.).
✓		10.	Estimate and document the parameters below.

AIR SCIENCES INC. DENVER • PORTLAND
REVIEWED BY RHA DATE 8-13-13
AUDITED BY DATE 8-13-13

Parameter	Estimated	Logger	Audit
Speed 10m (m/s)	3 m/s	2.4 m/s	2.11
Direction* 10m (deg)	SE	289.97	271.6
Ambient Temperature (°C)	28°	27.14	27.07
Relative Humidity (%)	50%	54.77	55.25
Aspirated Temp 2m	28°	25.51	25.98
Aspirated Temp 10m	27°	25.06	25.45
Delta Temperature (°C)	N/A	-0.37	-0.53
Solar Radiation (w/m^2)	Sunny (Partly cloudy) Cloudy	297.68	375.4
Barometric Pressure (mmHg)	N/A	655.64	655.6
Battery Voltage (V)	N/A	12.166	12.66
Time (MST)	N/A	10:15 am	1015 hrs
Date	N/A	07·25·2013	7/25/13

*Direction wind is from

Comments/Unusual Occurrences or Weather: _____

When form is completed, please fax to Air Sciences Inc. @ 303-279-3796 (no cover sheet is necessary).

Site Operator Signature: Kami BaCard

AIR SCIENCES INC.
DENVER • PORTLAND

REVIEWED BY [signature] DATE 8-13-13

AUDITED BY APA DATE 8-13-13

AIR SCIENCES INC.

EAST PLANT
MET SITE CHECK FORM
Resolution
PROJECT NO. 262-1

Date: 08/02/2013 Time: 13:39 Operator: K. Ba Cla d

YES	NO **		
✓		1.	The tower is intact and upright.
✓		2.	The anemometer propeller and the wind direction vane are turning freely.
✓		3.	All temperature shields are intact, and the probes are inside their shields.
✓		4.	The aspirator fans are operating.
✓		5.	The solar radiation sensor is level and has been cleaned.
✓		6.	The solar panel is facing south and is clean.
✓		7.	The precipitation gauge is clean and free of bugs and dust.
✓		8.	The data logger is reading the correct time and day.
✓		9.	The site has been visually inspected for unusual wildlife occurrences (dead birds, etc.).
✓		10.	Estimate and document the parameters below.

Parameter	Estimated	Logger	Audit
Speed 10m (m/s)	2m/s	3.072	3.53
Direction* 10m (deg)		217.22	199.1
Ambient Temperature (°C)	30°	29.75	29.19
Relative Humidity (%)	30%	37.51	~~29.19~~ 38.88
Aspirated Temp 2m	30°	29.42	29.05
Aspirated Temp 10m	29°	28.14	27.89
Delta Temperature (°C)	N/A	-1.08	-1.15
Solar Radiation (w/m^2)	Sunny (Partly cloudy) Cloudy	389.76	387.8
Barometric Pressure (mmHg)	N/A	653.84	653.9
Battery Voltage (V)	N/A	12.64	12.64
Time (MST)	N/A	13:41	1345
Date	N/A	08.02.2013	8-2-13

*Direction wind is from

Comments/Unusual Occurrences or Weather: _____

When form is completed, please fax to Air Sciences Inc. @ 303-279-3796 (no cover sheet is necessary).

Site Operator Signature: [signature]

AIR SCIENCES INC.

EAST PLANT
MET SITE CHECK FORM
Resolution
PROJECT NO. 262-1

Date: 08·08·2013 Time: 10:10 Operator: Kim BCCd

YES	NO **		
✓		1.	The tower is intact and upright.
✓		2.	The anemometer propeller and the wind direction vane are turning freely.
✓		3.	All temperature shields are intact, and the probes are inside their shields.
✓		4.	The aspirator fans are operating.
✓		5.	The solar radiation sensor is level and has been cleaned.
✓		6.	The solar panel is facing south and is clean.
✓		7.	The precipitation gauge is clean and free of bugs and dust.
✓		8.	The data logger is reading the correct time and day.
✓		9.	The site has been visually inspected for unusual wildlife occurrences (dead birds, etc.).
✓		10.	Estimate and document the parameters below.

AIR SCIENCES INC. DENVER • PORTLAND
REVIEWED BY [signature] DATE 8-13-13
AUDITED BY RPA DATE 8-13-13

Parameter	Estimated	Logger	Audit
Speed 10m (m/s)	0 m/s	1.9 m/s	1.88
Direction* 10m (deg)	SSW	284.24	252.3
Ambient Temperature (°C)	92°	29.4	29.58
Relative Humidity (%)	25%	28.4%	27.2
Aspirated Temp 2m	32°	27.9	27.04
Aspirated Temp 10m	31°	27.1	27.72
Delta Temperature (°C)	N/A	-.98	-0.677
Solar Radiation (w/m²)	(Sunny) Partly cloudy Cloudy	872.76	828.0
Barometric Pressure (mmHg)	N/A	654.62	654.6
Battery Voltage (V)	N/A	12.65	12.65
Time (MST)	N/A	10:11	1000
Date	N/A	08/08/13	8-8-13

- 239.7
- 251.7
- 220.4
- 232.0

*Direction wind is from

Comments/Unusual Occurrences or Weather: Solid evap & tipped precip gauge. INVALIDATED 0.012" TRIGGERED AND RECORDED @ 1015 hrs

When form is completed, please fax to Air Sciences Inc. @ 303-279-3796 (no cover sheet is necessary).

Site Operator Signature: Kim BCCd

AIR SCIENCES INC.
REVIEWED BY [signature] DATE 8-29-13
AUDITED BY RPA DATE 8-19-13

AIR SCIENCES INC.

EAST PLANT
MET SITE CHECK FORM
Resolution
PROJECT NO. 262-1

Date: 08/16/2013 Time: 14:08 Operator: Kami Ballard

YES	NO **		
✓		1.	The tower is intact and upright.
✓		2.	The anemometer propeller and the wind direction vane are turning freely.
✓		3.	All temperature shields are intact, and the probes are inside their shields.
✓		4.	The aspirator fans are operating.
✓		5.	The solar radiation sensor is level and has been cleaned.
✓		6.	The solar panel is facing south and is clean.
✓		7.	The precipitation gauge is clean and free of bugs and dust.
✓		8.	The data logger is reading the correct time and day.
✓		9.	The site has been visually inspected for unusual wildlife occurrences (dead birds, etc.).
✓		10.	Estimate and document the parameters below.

Parameter	Estimated	Logger	Audit
Speed 10m (m/s)	2 m/s	1.74	1.48
Direction* 10m (deg)	ENE	88.62	111.4
Ambient Temperature (°C)	35°	35.39	35.87
Relative Humidity (%)	20%	19.58	19.22
Aspirated Temp 2m	35°	35.02	35.41
Aspirated Temp 10m	34°	33.82	34.16
Delta Temperature (°C)	N/A	-1.12	-1.25
Solar Radiation (w/m²)	Sunny (Partly cloudy) Cloudy	334.72	644.1
Barometric Pressure (mmHg)	N/A	654.14	654.0
Battery Voltage (V)	N/A	12.58	12.58
Time (MST)	N/A	14:10	1415 hrs
Date	N/A	08-16-2013	8-16-13

*Direction wind is from

Comments/Unusual Occurrences or Weather: Tipped precip. gauge. INVALIDATED 0.004" PRECIP RECORDED @ 1415 hrs — RPA

When form is completed, please fax to Air Sciences Inc. @ 303-279-3796 (no cover sheet is necessary).

Site Operator Signature: Kami Ballard

AIR SCIENCES INC.
DENVER • PORTLAND
REVIEWED BY RPA DATE 8-29-2013
AUDITED BY DATE 8-26-13

AIR SCIENCES INC.

EAST PLANT
MET SITE CHECK FORM
Resolution
PROJECT NO. 262-1

Date: 08-23-2013 Time: 8:20 Operator: Kara B Clark

YES	NO **		
✓		1.	The tower is intact and upright.
✓		2.	The anemometer propeller and the wind direction vane are turning freely.
✓		3.	All temperature shields are intact, and the probes are inside their shields.
✓		4.	The aspirator fans are operating.
✓		5.	The solar radiation sensor is level and has been cleaned.
✓		6.	The solar panel is facing south and is clean.
✓		7.	The precipitation gauge is clean and free of bugs and dust.
✓		8.	The data logger is reading the correct time and day.
✓		9.	The site has been visually inspected for unusual wildlife occurrences (dead birds, etc.).
✓		10.	Estimate and document the parameters below.

Parameter	Estimated	Logger	Audit
Speed 10m (m/s)	2m/s	103.98	2.56
Direction* 10m (deg)	E	1.43	127.0
Ambient Temperature (°C)	29°	27.5	27.02
Relative Humidity (%)	40%	40%	41.75
Aspirated Temp 2m	29°	26.5	25.75
Aspirated Temp 10m	28°	25.9	25.27
Delta Temperature (°C)	N/A	-0.66	-0.48
Solar Radiation (w/m²)	Sunny / Partly cloudy / Cloudy	493.321	498
Barometric Pressure (mmHg)	N/A	653.14	653.2
Battery Voltage (V)	N/A	12.7	12.7
Time (MST)	N/A	8:22	0830
Date	N/A	08/23/2013	8-23-2013

→ 100.5, 64.04, 255.8, 356.2

*Direction wind is from

Comments/Unusual Occurrences or Weather: Fluid evap tank

When form is completed, please fax to Air Sciences Inc. @ 303-279-3796 (no cover sheet is necessary).

Site Operator Signature: Kara B Clark

AIR SCIENCES INC.
DENVER • PORTLAND

REVIEWED BY: [signature] DATE: 9-3-13
AUDITED BY: RPA DATE: 9-3-13

AIR SCIENCES INC.

EAST PLANT
MET SITE CHECK FORM
Resolution
PROJECT NO. 262-1

Date: 08/30/2013 Time: 10:59 Operator: Kane Ballard

YES	NO **		
✓		1.	The tower is intact and upright.
✓		2.	The anemometer propeller and the wind direction vane are turning freely.
✓		3.	All temperature shields are intact, and the probes are inside their shields.
✓		4.	The aspirator fans are operating.
✓		5.	The solar radiation sensor is level and has been cleaned.
✓		6.	The solar panel is facing south and is clean.
✓		7.	The precipitation gauge is clean and free of bugs and dust.
✓		8.	The data logger is reading the correct time and day.
✓		9.	The site has been visually inspected for unusual wildlife occurrences (dead birds, etc.).
✓		10.	Estimate and document the parameters below.

Parameter	Estimated	Logger	Audit
Speed 10m (m/s)	1 m/s	1.89	2.37
Direction* 10m (deg)		285.89	254.4
Ambient Temperature (°C)	29°	28.18	28.22
Relative Humidity (%)	55%	50.05	50.67
Aspirated Temp 2m	29°	26.21	26.38
Aspirated Temp 10m	28°	25.19	25.54
Delta Temperature (°C)	N/A	-1.004	-0.84
Solar Radiation (w/m²)	Sunny (Partly cloudy) Cloudy	1101.48	868
Barometric Pressure (mmHg)	N/A	656.83	656.8
Battery Voltage (V)	N/A	12.65	12.65
Time (MST)	N/A	11:01	1100
Date	N/A	08/30/2013	8-30-13

114.9
113.7
259.6
241.5

*Direction wind is from

Comments/Unusual Occurrences or Weather: _____

When form is completed, please fax to Air Sciences Inc. @ 303-279-3796 (no cover sheet is necessary).

Site Operator Signature: Kane Ballard

AIR SCIENCES INC.
DENVER • PORTLAND

WR 9/25/13
REVIEWED BY DATE
RPA 9-16-13
AUDITED BY DATE

AIR SCIENCES INC.

EAST PLANT
MET SITE CHECK FORM
Resolution
PROJECT NO. 262-1

Date: 09/06/2013 Time: 1:47 Operator: Kami Ballard

YES	NO **	
✓		1. The tower is intact and upright.
✓		2. The anemometer propeller and the wind direction vane are turning freely.
✓		3. All temperature shields are intact, and the probes are inside their shields.
✓		4. The aspirator fans are operating.
✓		5. The solar radiation sensor is level and has been cleaned.
✓		6. The solar panel is facing south and is clean.
✓		7. The precipitation gauge is clean and free of bugs and dust.
✓		8. The data logger is reading the correct time and day.
✓		9. The site has been visually inspected for unusual wildlife occurrences (dead birds, etc.).
✓		10. Estimate and document the parameters below.

Parameter	Estimated	Logger	Audit
Speed 10m (m/s)	5 m/s	4.6	4.6
Direction* 10m (deg)	N	33.5	34.45
Ambient Temperature (°C)	35°	33.8	33.79
Relative Humidity (%)	15%	17.9%	17.86
Aspirated Temp 2m	35°	33.9	33.88
Aspirated Temp 10m	34°	32.2	32.18
Delta Temperature (°C)	N/A	-1.69	-1.69
Solar Radiation (w/m²)	Sunny (Partly cloudy) Cloudy	576.8	576.6
Barometric Pressure (mmHg)	N/A	653.7	653.7
Battery Voltage (V)	N/A	12.59	12.59
Time (MST)	N/A	1:49	1345 hrs
Date	N/A	09/06/2013	9-6-13

*Direction wind is from

Comments/Unusual Occurrences or Weather: _____

When form is completed, please fax to Air Sciences Inc. @ 303-279-3796 (no cover sheet is necessary).

Site Operator Signature: Kami Ballard

AIR SCIENCES INC.

EAST PLANT
MET SITE CHECK FORM
Resolution
PROJECT NO. 262-1

Date: 09/12/2013 Time: 2:24 Operator: K. Ballard

YES	NO **		
✓		1.	The tower is intact and upright.
✓		2.	The anemometer propeller and the wind direction vane are turning freely.
✓		3.	All temperature shields are intact, and the probes are inside their shields.
✓		4.	The aspirator fans are operating.
✓		5.	The solar radiation sensor is level and has been cleaned.
✓		6.	The solar panel is facing south and is clean.
✓		7.	The precipitation gauge is clean and free of bugs and dust.
✓		8.	The data logger is reading the correct time and day.
✓		9.	The site has been visually inspected for unusual wildlife occurrences (dead birds, etc.).
✓		10.	Estimate and document the parameters below.

AIR SCIENCES INC. DENVER • PORTLAND
WR 9/25/13
REVIEWED BY RPA DATE 9-16-13
AUDITED BY DATE

Parameter	Estimated	Logger	Audit
Speed 10m (m/s)	1m/s	1.3	1.65
Direction* 10m (deg)	6E	162.49	162.5
Ambient Temperature (°C)	29	28.81	29.21
Relative Humidity (%)	25%	29.19	28.08
Aspirated Temp 2m	29	28.24	28.8
Aspirated Temp 10m	28	27.64	28.0
Delta Temperature (°C)	N/A	-.54	-0.8
Solar Radiation (w/m²)	Sunny (Partly cloudy) Cloudy	193.11	687.2
Barometric Pressure (mmHg)	N/A	651.51	651.4
Battery Voltage (V)	N/A	12.65	12.65
Time (MST)	N/A	2:28	1430 hrs
Date	N/A	09/12/2013	9-12-13

*Direction wind is from

Comments/Unusual Occurrences or Weather: filled evap pan & topped precip gauge. INVALIDATED 0.004" PRECIP @ 1445 hrs on 9-12-13 - RPA

When form is completed, please fax to Air Sciences Inc. @ 303-279-3796 (no cover sheet is necessary).

Site Operator Signature: K. Ballard

AIR SCIENCES INC.
DENVER • PORTLAND

WR 9-25-13
REVIEWED BY DATE

RPA 9.24.13
AUDITED BY DATE

AIR SCIENCES INC.

EAST PLANT
MET SITE CHECK FORM
Resolution
PROJECT NO. 262-1

Date: 9/19/13 Time: 1:50 pm Operator: K. Baak

YES	NO **		
✓		1.	The tower is intact and upright.
✓		2.	The anemometer propeller and the wind direction vane are turning freely.
✓		3.	All temperature shields are intact, and the probes are inside their shields.
✓		4.	The aspirator fans are operating.
✓		5.	The solar radiation sensor is level and has been cleaned.
✓		6.	The solar panel is facing south and is clean.
✓		7.	The precipitation gauge is clean and free of bugs and dust.
✓		8.	The data logger is reading the correct time and day.
✓		9.	The site has been visually inspected for unusual wildlife occurrences (dead birds, etc.).
✓		10.	Estimate and document the parameters below.

Parameter	Estimated	Logger	Audit
Speed 10m (m/s)	8 mph	2.5	3.47
Direction* 10m (deg)	West	270°	257.8
Ambient Temperature (°C)	95°F /	31.67°C	31.28
Relative Humidity (%)	15%	15.83%	16.48
Aspirated Temp 2m	95°F /	30.79°C	30.51
Aspirated Temp 10m	92°F /	29.81°C	29.7
Delta Temperature (°C)	N/A	-.97	-0.974
Solar Radiation (w/m^2)	(Sunny) Partly cloudy Cloudy	802.11	812
Barometric Pressure (mmHg)	N/A	650.21	650.2
Battery Voltage (V)	N/A	12.63	12.63
Time (~~MST~~) pacific	N/A	1:57	1400 Hrs
Date	N/A	9-19-13	9-19-13

*Direction wind is from

Comments/Unusual Occurrences or Weather: filled evap pan, poured H_2O in precip gauge. INVALIDATED 0.002" OF RECORDED PRECIP @ 1400 Hrs – RPA

When form is completed, please fax to Air Sciences Inc. @ 303-279-3796 (no cover sheet is necessary).

Site Operator Signature: Kaeli Baak

AIR SCIENCES INC.

EAST PLANT
MET SITE CHECK FORM
Resolution
PROJECT NO. 262-1

Date: 09·30·2013 Time: 5:05 Operator: Kara Ballard

YES	NO**		
✓		1.	The tower is intact and upright.
✓		2.	The anemometer propeller and the wind direction vane are turning freely.
✓		3.	All temperature shields are intact, and the probes are inside their shields.
✓		4.	The aspirator fans are operating.
✓		5.	The solar radiation sensor is level and has been cleaned.
✓		6.	The solar panel is facing south and is clean.
✓		7.	The precipitation gauge is clean and free of bugs and dust.
✓		8.	The data logger is reading the correct time and day.
✓		9.	The site has been visually inspected for unusual wildlife occurrences (dead birds, etc.).
✓		10.	Estimate and document the parameters below.

AIR SCIENCES INC. DENVER • PORTLAND
WR 10-3-13
REVIEWED BY DATE
RPA 10-1-13
AUDITED BY DATE

Parameter	Estimated	Logger	Audit
Speed 10m (m/s)	1 m/s	1.07 m/s	0.912
Direction* 10m (deg)	S	171.46	175.0
Ambient Temperature (°C)	22°	21.8	21.7
Relative Humidity (%)	15%	21%	22.1
Aspirated Temp 2m	22°	21.0°	20.8
Aspirated Temp 10m	21°	20.7°	20.4
Delta Temperature (°C)	N/A	-0.38	-0.312
Solar Radiation (w/m²)	(Sunny) Partly cloudy Cloudy	434.3	413
Barometric Pressure (mmHg)	N/A	654.07	654
Battery Voltage (V)	N/A	12.81	12.8
Time (MST)	N/A	08:13	0815 HRS
Date	N/A	09/30/2013	9·30·13

*Direction wind is from

Comments/Unusual Occurrences or Weather: Tipped precip. gauge. INVALIDATED) 0.083" OF PRECIP RECORDED @ 1000 HRS — RPA

When form is completed, please fax to Air Sciences Inc. @ 303-279-3796 (no cover sheet is necessary).

Site Operator Signature: Kara Ballard

Appendix I: East Plant PM_{10} and $PM_{2.5}$ Site Check Forms and Flow Audits

EAST PLANT

BAM PM10 WEEKLY SITE CHECK FORM
RESOLUTION MONITORING PROJECT
PROJECT NO. 262-1

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 07.02.2013 Time: 11:14 Operator: Kami BaClard

I. BAM SAMPLER – Weekly Checks.

YES	NO		
✓		1.	The sampler is intact and the inlet head is unobstructed.
✓		2.	The vacuum pump is running and sounds normal.
✓		3.	The temperature shield is intact, and the sensor is inside of it.
✓		4.	The BAM is reading the correct time and day.
✓		5.	The tape is in the proper position and does not need to be changed (tape should be changed every 2 months).
✓		6.	Error log was checked (F3), and errors followed up on (see manual). 06/30 → Power Fail
✓		7.	Climate control appears operational (If it's cold out the shelter should feel warm, if it's hot out the shelter should feel cool)

II. BAM SAMPLER – Routine Maintenance (monthly). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Inlet Flow check Performed
		2.	Visual inspection and dust removal
		3.	Leak check performed
		4.	PM10 particle trap cleaned
		5.	Inlet nozzle and nozzle are cleaned

RPA

AIR SCIENCES INC. DENVER • PORTLAND
REVIEWED BY RPA DATE 8-1-13
AUDITED BY DATE 7-8-13

II. BAM SAMPLER – Routine Maintenance (every 2 months). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Filter tape replaced
		2.	Ran the Self-Test function

RPA

III. BAM SAMPLER – Routine Maintenance (semiannual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Replaced muffler on the pump (*Work performed by Air Sciences)
		2.	Complete calibration of flow system (*Work performed by Air Sciences)

RPA

IV. BAM SAMPLER – Routine Maintenance (annual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Carbon vanes in pump checked/replaced (*Work performed by Air Sciences)
		2.	Inlet system cleaned (*Work performed by Air Sciences)

RPA

*Comments/Unusual Occurrences: Unscheduled power outage on 6-30-13 from 0900-1000 Hrs — RPA

Signature: Kami BaC

EAST PLANT

BAM PM10 WEEKLY SITE CHECK FORM
RESOLUTION MONITORING PROJECT
PROJECT NO. 262-1

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 7/10/2013 Time: 10:23 AM Operator: Mary Morissette

I. **BAM SAMPLER** – Weekly Checks.

YES	NO		
✓		1.	The sampler is intact and the inlet head is unobstructed.
✓		2.	The vacuum pump is running and sounds normal.
✓		3.	The temperature shield is intact, and the sensor is inside of it.
✓		4.	The BAM is reading the correct time and day.
✓		5.	The tape is in the proper position and does not need to be changed (tape should be changed every 2 months).
✓		6.	Error log was checked (F3), and errors followed up on (see manual).
✓		7.	Climate control appears operational (If it's cold out the shelter should feel warm, if it's hot out the shelter should feel cool)

II. **BAM SAMPLER** – Routine Maintenance (monthly). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓	1.	Inlet Flow check Performed
	✓	2.	Visual inspection and dust removal
	✓	3.	Leak check performed
	✓	4.	PM10 particle trap cleaned
	✓	5.	Inlet nozzle and nozzle are cleaned

AIR SCIENCES INC.
DENVER • PORTLAND
REVIEWED BY RPA DATE 8-1-13
AUDITED BY DATE 7-11-13

II. **BAM SAMPLER** – Routine Maintenance (every 2 months). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓	1.	Filter tape replaced
✓		2.	Ran the Self-Test function

III. **BAM SAMPLER** – Routine Maintenance (semiannual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Replaced muffler on the pump (*Work performed by Air Sciences)
		2.	Complete calibration of flow system (*Work performed by Air Sciences)

IV. **BAM SAMPLER** – Routine Maintenance (annual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Carbon vanes in pump checked/replaced (*Work performed by Air Sciences)
		2.	Inlet system cleaned (*Work performed by Air Sciences)

**Comments/Unusual Occurrences: _____

Signature: Mary Morissette

EAST PLANT

BAM PM10 WEEKLY SITE CHECK FORM
RESOLUTION MONITORING PROJECT
PROJECT NO. 262-1

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 7·25·2013 Time: 10:16 Operator: Kane BaCCol

I. BAM SAMPLER – Weekly Checks.

YES	NO		
✓		1.	The sampler is intact and the inlet head is unobstructed.
✓		2.	The vacuum pump is running and sounds normal.
✓		3.	The temperature shield is intact, and the sensor is inside of it.
✓		4.	The BAM is reading the correct time and day.
✓		5.	The tape is in the proper position and does not need to be changed (tape should be changed every 2 months).
✓		6.	Error log was checked (F3), and errors followed up on (see manual). 7/16 → Maintenance
✓		7.	Climate control appears operational (If it's cold out the shelter should feel warm, if it's hot out the shelter should feel cool)

II. BAM SAMPLER – Routine Maintenance (monthly). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
✓		1.	Inlet Flow check Performed
✓		2.	Visual inspection and dust removal
✓		3.	Leak check performed
	✓	4.	PM10 particle trap cleaned
✓		5.	Inlet nozzle and nozzle are cleaned

AIR SCIENCES INC.
DENVER • PORTLAND
REVIEWED BY RPA DATE 8-13-13
AUDITED BY DATE 8-17-13

II. BAM SAMPLER – Routine Maintenance (every 2 months). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓	1.	Filter tape replaced
✓		2.	Ran the Self-Test function

III. BAM SAMPLER – Routine Maintenance (semiannual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓ RPA	1.	Replaced muffler on the pump (*Work performed by Air Sciences)
	✓	2.	Complete calibration of flow system (*Work performed by Air Sciences)

IV. BAM SAMPLER – Routine Maintenance (annual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓ RPA	1.	Carbon vanes in pump checked/replaced (*Work performed by Air Sciences)
	✓	2.	Inlet system cleaned (*Work performed by Air Sciences)

*Comments/Unusual Occurrences: _____

Signature: Kane BaCCol

AIR SCIENCES INC.
DENVER • PORTLAND

REVIEWED BY RPA DATE 8-13-13

AUDITED BY DATE

AIR SCIENCES INC.

Monthly Flow Verification PM_{10}

East Plant

PARTICULATE MONITORING PROJECT

PROJECT NO. 262-1

Met One PM_{10}: S/N: M8714

Firmware:

Calibrator: Della Cal S/N:

Date of Flow Audit: 7.25.2013

Time of Flow Audit: 10:24

	BAM	STD
Ambient Temperature (AT) °c	27.0	26.8
Berometric Pressure mmHg	659	656.0

	Set Point (lpm)	BAM	% Diff (1)	STD Flow Meter	% Diff (2)
(1) Actual Flow	15	15.0	0.0	15.18	-1.2
Acceptable Differential		*14.700 - 15.300*	*+/- 2%*	*14.250 - 15.750*	*+/- 5%*
(2) Actual Flow	18.4	18.3	-0.5	18.55	-1.3
Acceptable Differential		*18.032 - 18.768*	*+/- 2%*	*17.480 - 19.320*	*+/- 5%*
(3) Actual Flow	16.7	16.7	0.0	16.91	-1.2
Acceptable Differential		*16.336 - 17.034*	*+/- 2%*	*15.865 - 17.535*	*+/- 5%*

Calculations:

(1) % Diff = [(BAM - Set Point)/Set Point]*100 (+/- 2%)

(2) % Diff = [(BAM - Calibrator)/Calibrator]*100 (+/- 5%)

	BAM
(2) Leak Test	.2

Should be < 1.0 LPM

Comments/Abnormalities: Ran Self Test "PASSED"

* NEED S/N # - RPA

Signature: Ryan McCord

Upon completion of this form, fax to Air Sciences at 303-279-3796

EAST PLANT

BAM PM10 WEEKLY SITE CHECK FORM
RESOLUTION MONITORING PROJECT
PROJECT NO. 262-1

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 08/02/2013 Time: 13:43 Operator: K. Ball

I. **BAM SAMPLER** – Weekly Checks.

YES	NO		
✓		1.	The sampler is intact and the inlet head is unobstructed.
✓		2.	The vacuum pump is running and sounds normal.
✓		3.	The temperature shield is intact, and the sensor is inside of it.
✓		4.	The BAM is reading the correct time and day.
✓		5.	The tape is in the proper position and does not need to be changed (tape should be changed every 2 months).
✓		6.	Error log was checked (F3), and errors followed up on (see manual). 7/25 → Delta Pressure
✓		7.	Climate control appears operational (If it's cold out the shelter should feel warm, if it's hot out the shelter should feel cool)

II. **BAM SAMPLER** – Routine Maintenance (monthly). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Inlet Flow check Performed
		2.	Visual inspection and dust removal
		3.	Leak check performed
		4.	PM10 particle trap cleaned
		5.	Inlet nozzle and nozzle are cleaned

RPA

AIR SCIENCES INC.
DENVER • PORTLAND
REVIEWED BY RPA DATE 8-13-13
AUDITED BY DATE 8-13-13

II. **BAM SAMPLER** – Routine Maintenance (every 2 months). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Filter tape replaced
		2.	Ran the Self-Test function

RPA

III. **BAM SAMPLER** – Routine Maintenance (semiannual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Replaced muffler on the pump (*Work performed by Air Sciences)
		2.	Complete calibration of flow system (*Work performed by Air Sciences)

RPA

IV. **BAM SAMPLER** – Routine Maintenance (annual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Carbon vanes in pump checked/replaced (*Work performed by Air Sciences)
		2.	Inlet system cleaned (*Work performed by Air Sciences)

RPA

*Comments/Unusual Occurrences: _____

Signature: _____

EAST PLANT

BAM PM10 WEEKLY SITE CHECK FORM
RESOLUTION MONITORING PROJECT
PROJECT NO. 262-1

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 08.08.2013 Time: 10:13 Operator: K Ba[illegible]

I. **BAM SAMPLER** – Weekly Checks.

YES	NO	
✓		1. The sampler is intact and the inlet head is unobstructed.
✓		2. The vacuum pump is running and sounds normal.
✓		3. The temperature shield is intact, and the sensor is inside of it.
✓		4. The BAM is reading the correct time and day.
✓		5. The tape is in the proper position and does not need to be changed (tape should be changed every 2 months).
✓		6. Error log was checked (F3), and errors followed up on (see manual). N/A
✓		7. Climate control appears operational (If it's cold out the shelter should feel warm, if it's hot out the shelter should feel cool)

II. **BAM SAMPLER** – Routine Maintenance (monthly). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO	
	✓	1. Inlet Flow check Performed
	✓	2. Visual inspection and dust removal
	✓	3. Leak check performed
	✓	4. PM10 particle trap cleaned
✓	✓	5. Inlet nozzle and nozzle are cleaned

AIR SCIENCES INC.
DENVER • PORTLAND
REVIEWED BY [signature] DATE 8-13-13
AUDITED BY RPA DATE 8-13-13

II. **BAM SAMPLER** – Routine Maintenance (every 2 months). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO	
✓		1. Filter tape replaced
✓		2. Ran the Self-Test function

III. **BAM SAMPLER** – Routine Maintenance (semiannual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO	
		1. Replaced muffler on the pump (*Work performed by Air Sciences)
		2. Complete calibration of flow system (*Work performed by Air Sciences)

RPA

IV. **BAM SAMPLER** – Routine Maintenance (annual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO	
		1. Carbon vanes in pump checked/replaced (*Work performed by Air Sciences)
		2. Inlet system cleaned (*Work performed by Air Sciences)

RPA

**Comments/Unusual Occurrences: _____

Signature: Kim Ba[illegible]

EAST PLANT

BAM PM10 WEEKLY SITE CHECK FORM
RESOLUTION MONITORING PROJECT
PROJECT NO. 262-1

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 08/16/2013 Time: 1409 Operator: Karen Ballard

I. **BAM SAMPLER** – Weekly Checks.

YES	NO		
✓		1.	The sampler is intact and the inlet head is unobstructed.
✓		2.	The vacuum pump is running and sounds normal.
✓		3.	The temperature shield is intact, and the sensor is inside of it.
✓		4.	The BAM is reading the correct time and day.
✓		5.	The tape is in the proper position and does not need to be changed (tape should be changed every 2 months).
✓		6.	Error log was checked (F3), and errors followed up on (see manual). 08/08 ⇒ Maintenance
✓		7.	Climate control appears operational (If it's cold out the shelter should feel warm, if it's hot out the shelter should feel cool)

II. **BAM SAMPLER** – Routine Maintenance (monthly). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓	1.	Inlet Flow check Performed
	✓	2.	Visual inspection and dust removal
	✓	3.	Leak check performed
	✓	4.	PM10 particle trap cleaned
	✓	5.	Inlet nozzle and nozzle are cleaned

RPA

AIR SCIENCES INC.
DENVER • PORTLAND
REVIEWED BY RAA DATE 8-19-13
AUDITED BY DATE 8-29-203

II. **BAM SAMPLER** – Routine Maintenance (every 2 months). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓	1.	Filter tape replaced
	✓	2.	Ran the Self-Test function

RPA

III. **BAM SAMPLER** – Routine Maintenance (semiannual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓	1.	Replaced muffler on the pump (*Work performed by Air Sciences)
	✓	2.	Complete calibration of flow system (*Work performed by Air Sciences)

RPA

IV. **BAM SAMPLER** – Routine Maintenance (annual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓	1.	Carbon vanes in pump checked/replaced (*Work performed by Air Sciences)
	✓	2.	Inlet system cleaned (*Work performed by Air Sciences)

RPA

Comments/Unusual Occurrences: _____

Signature: Karen Ballard

EAST PLANT

BAM PM10 WEEKLY SITE CHECK FORM
RESOLUTION MONITORING PROJECT
PROJECT NO. 262-1

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 08/23/2013 Time: 8:20 Operator: Kara Bell

I. **BAM SAMPLER** – Weekly Checks.

YES	NO		
✓		1.	The sampler is intact and the inlet head is unobstructed.
✓		2.	The vacuum pump is running and sounds normal.
✓		3.	The temperature shield is intact, and the sensor is inside of it.
✓		4.	The BAM is reading the correct time and day.
✓		5.	The tape is in the proper position and does not need to be changed (tape should be changed every 2 months).
✓		6.	Error log was checked (F3), and errors followed up on (see manual). 08/19 ⇒ Count Failed
✓		7.	Climate control appears operational (If it's cold out the shelter should feel warm, if it's hot out the shelter should feel cool)

II. **BAM SAMPLER** – Routine Maintenance (monthly). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓ RPA	1.	Inlet Flow check Performed
	✓	2.	Visual inspection and dust removal
	✓	3.	Leak check performed
	✓	4.	PM10 particle trap cleaned
	✓	5.	Inlet nozzle and nozzle are cleaned

AIR SCIENCES INC.
DENVER • PORTLAND
REVIEWED BY RPA DATE 8-29-2013
AUDITED BY DATE 8-26-13

II. **BAM SAMPLER** – Routine Maintenance (every 2 months). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓ RPA	1.	Filter tape replaced
	✓	2.	Ran the Self-Test function

III. **BAM SAMPLER** – Routine Maintenance (semiannual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓ RPA	1.	Replaced muffler on the pump (*Work performed by Air Sciences)
	✓	2.	Complete calibration of flow system (*Work performed by Air Sciences)

IV. **BAM SAMPLER** – Routine Maintenance (annual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓ RPA	1.	Carbon vanes in pump checked/replaced (*Work performed by Air Sciences)
	✓	2.	Inlet system cleaned (*Work performed by Air Sciences)

Comments/Unusual Occurrences: _____

Signature: Kara Bell

EAST PLANT

BAM PM10 WEEKLY SITE CHECK FORM
RESOLUTION MONITORING PROJECT
PROJECT NO. 262-1

AIR SCIENCES INC.

Date: 08/30/2013 Time: 11:03 Operator: Kami McCord

I. **BAM SAMPLER** – Weekly Checks.

YES	NO		
✓		1.	The sampler is intact and the inlet head is unobstructed.
✓		2.	The vacuum pump is running and sounds normal.
✓		3.	The temperature shield is intact, and the sensor is inside of it.
✓		4.	The BAM is reading the correct time and day.
✓		5.	The tape is in the proper position and does not need to be changed (tape should be changed every 2 months).
✓		6.	Error log was checked (F3), and errors followed up on (see manual). 8/19 → count failed
✓		7.	Climate control appears operational (If it's cold out the shelter should feel warm, if it's hot out the shelter should feel cool)

II. **BAM SAMPLER** – Routine Maintenance (monthly). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO	RPA	
	✓		1. Inlet Flow check Performed
	✓		2. Visual inspection and dust removal
	✓		3. Leak check performed
	✓		4. PM10 particle trap cleaned
	✓		5. Inlet nozzle and nozzle are cleaned

AIR SCIENCES INC
DENVER • PORTLAND
REVIEWED BY RPA DATE 9-3-13
AUDITED BY DATE 9-3-13

II. **BAM SAMPLER** – Routine Maintenance (every 2 months). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO	RPA	
	✓		1. Filter tape replaced
	✓		2. Ran the Self-Test function

III. **BAM SAMPLER** – Routine Maintenance (semiannual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO	RPA	
	✓		1. Replaced muffler on the pump (*Work performed by Air Sciences)
	✓		2. Complete calibration of flow system (*Work performed by Air Sciences)

IV. **BAM SAMPLER** – Routine Maintenance (annual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO	RPA	
	✓		1. Carbon vanes in pump checked/replaced (*Work performed by Air Sciences)
	✓		2. Inlet system cleaned (*Work performed by Air Sciences)

*Comments/Unusual Occurrences: Monitor was inadvertantly left in the wrong menue screen on 8.16.13 @ 1500 hrs to 8.19.13 @ 1200 hrs. 8.19.13 "count fail" results to the moniter being corrected. RPA

Signature: Kami Bc

EAST PLANT

BAM PM10 WEEKLY SITE CHECK FORM
RESOLUTION MONITORING PROJECT
PROJECT NO. 262-1

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 09/06/2013 Time: 1:50 Operator: Kam Bullard

I. BAM SAMPLER – Weekly Checks.

YES	NO		
✓		1.	The sampler is intact and the inlet head is unobstructed.
✓		2.	The vacuum pump is running and sounds normal.
✓		3.	The temperature shield is intact, and the sensor is inside of it.
✓		4.	The BAM is reading the correct time and day.
✓		5.	The tape is in the proper position and does not need to be changed (tape should be changed every 2 months)
✓		6.	Error log was checked (F3), and errors followed up on (see manual).
✓		7.	Climate control appears operational (If it's cold out the shelter should feel warm, if it's hot out the shelter should feel cool)

II. BAM SAMPLER – Routine Maintenance (monthly). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Inlet Flow check Performed
		2.	Visual inspection and dust removal
		3.	Leak check performed
		4.	PM10 particle trap cleaned
		5.	Inlet nozzle and nozzle are cleaned

RPA

AIR SCIENCES INC.
DENVER • PORTLAND

REVIEWED BY WR DATE 9/25/13

AUDITED BY RPA DATE 9-16-13

II. BAM SAMPLER – Routine Maintenance (every 2 months). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Filter tape replaced
		2.	Ran the Self-Test function

III. BAM SAMPLER – Routine Maintenance (semiannual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Replaced muffler on the pump (*Work performed by Air Sciences)
		2.	Complete calibration of flow system (*Work performed by Air Sciences)

IV. BAM SAMPLER – Routine Maintenance (annual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Carbon vanes in pump checked/replaced (*Work performed by Air Sciences)
		2.	Inlet system cleaned (*Work performed by Air Sciences)

"Comments/Unusual Occurrences: _____

Signature: K. Bullard

AIR SCIENCES INC.
DENVER • PORTLAND

REVIEWED BY WR DATE 9/25/13

AUDITED BY RPA DATE 9-16-13

AIR SCIENCES INC.

Monthly Flow Verification PM_{10}

East Plant

PARTICULATE MONITORING PROJECT

PROJECT NO. 262-1

Met One PM_{10}: S/N: 8714

Firmware:

Calibrator: Delta Cal S/N: 1034 22 AUG -13

Date of Flow Audit: 09/04/2013

Time of Flow Audit: 18:20

	BAM	STD	Cal
Ambient Temperature (AT) °c	33.4	33.4	
Berometric Pressure mmHg	663	654.5	654.0

	Set Point (lpm)	BAM	% Diff (1)	STD Flow Meter	% Diff (2)
(1) Actual Flow	15	15.0	0.0	15.21	-1.4
Acceptable Differential		*14.700 - 15.300*	*+/- 2%*	*14.250 - 15.750*	*+/- 5%*
(2) Actual Flow	18.4	18.4	0.0	18.61	-1.1
Acceptable Differential		*18.032 - 18.768*	*+/- 2%*	*17.480 - 19.320*	*+/- 5%*
(3) Actual Flow	16.7	16.7	0.0	16.86	-0.9
Acceptable Differential		*16.336 - 17.034*	*+/- 2%*	*15.865 - 17.535*	*+/- 5%*

Calculations:

(1) % Diff = [(BAM - Set Point)/Set Point]*100 (+/- 2%)

(2) % Diff = [(BAM - Calibrator)/Calibrator]*100 (+/- 5%)

	BAM	
(2) Leak Test	.2	**Should be < 1.0 LPM**

Comments/Abnormalities: Self Test "PASSED"

Signature: K. Ballard

Upon completion of this form, fax to Air Sciences at 303-279-3796

EAST PLANT

BAM PM10 WEEKLY SITE CHECK FORM
RESOLUTION MONITORING PROJECT
PROJECT NO. 262-1

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 9/12/2013 Time: 2:30 Operator: K. Ballard

I. BAM SAMPLER – Weekly Checks.

YES	NO		
✓		1.	The sampler is intact and the inlet head is unobstructed.
✓		2.	The vacuum pump is running and sounds normal.
✓		3.	The temperature shield is intact, and the sensor is inside of it.
✓		4.	The BAM is reading the correct time and day.
✓		5.	The tape is in the proper position and does not need to be changed (tape should be changed every 2 months).
✓		6.	Error log was checked (F3), and errors followed up on (see manual). 09/04 → Pressure - Delta Pressure
✓		7.	Climate control appears operational (If it's cold out the shelter should feel warm, if it's hot out the shelter should feel cool)

II. BAM SAMPLER – Routine Maintenance (monthly). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO	RPA	
		1.	Inlet Flow check Performed
		2.	Visual inspection and dust removal
		3.	Leak check performed
		4.	PM10 particle trap cleaned
		5.	Inlet nozzle and nozzle are cleaned

AIR SCIENCES INC.
DENVER • PORTLAND

WR 9/25/13
REVIEWED BY DATE
RPA 9-16-13
AUDITED BY DATE

II. BAM SAMPLER – Routine Maintenance (every 2 months). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO	RPA	
		1.	Filter tape replaced
		2.	Ran the Self-Test function

III. BAM SAMPLER – Routine Maintenance (semiannual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO	RPA	
		1.	Replaced muffler on the pump (*Work performed by Air Sciences)
		2.	Complete calibration of flow system (*Work performed by Air Sciences)

IV. BAM SAMPLER – Routine Maintenance (annual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO	RPA	
		1.	Carbon vanes in pump checked/replaced (*Work performed by Air Sciences)
		2.	Inlet system cleaned (*Work performed by Air Sciences)

**Comments/Unusual Occurrences: _____

Signature: _____

EAST PLANT

BAM PM10 WEEKLY SITE CHECK FORM
RESOLUTION MONITORING PROJECT
PROJECT NO. 262-1

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 9-19-13 Time: 14:03 Operator: 9-19-1 K. Baak

I. BAM SAMPLER – Weekly Checks.

YES	NO		
✓		1.	The sampler is intact and the inlet head is unobstructed.
✓		2.	The vacuum pump is running and sounds normal.
✓		3.	The temperature shield is intact, and the sensor is inside of it.
✓		4.	The BAM is reading the correct time and day.
✓		5.	The tape is in the proper position and does not need to be changed (tape should be changed every 2 months).
✓		6.	Error log was checked (F3), and errors followed up on (see manual).
✓		7.	Climate control appears operational (If it's cold out the shelter should feel warm, if it's hot out the shelter should feel cool)

II. BAM SAMPLER – Routine Maintenance (monthly). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO	RPA		
			1.	Inlet Flow check Performed
			2.	Visual inspection and dust removal
			3.	Leak check performed
			4.	PM10 particle trap cleaned
			5.	Inlet nozzle and nozzle are cleaned

AIR SCIENCES INC.
DENVER • PORTLAND

WR 9-25-13
REVIEWED BY DATE
RPA 9-14-13
AUDITED BY DATE
24 BR

II. BAM SAMPLER – Routine Maintenance (every 2 months). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO	RPA		
			1.	Filter tape replaced
			2.	Ran the Self-Test function

III. BAM SAMPLER – Routine Maintenance (semiannual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO	RPA		
			1.	Replaced muffler on the pump (*Work performed by Air Sciences)
			2.	Complete calibration of flow system (*Work performed by Air Sciences)

IV. BAM SAMPLER – Routine Maintenance (annual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO	RPA		
			1.	Carbon vanes in pump checked/replaced (*Work performed by Air Sciences)
			2.	Inlet system cleaned (*Work performed by Air Sciences)

Comments/Unusual Occurrences: _____

Signature: Karen Baak

EAST PLANT

BAM PM10 WEEKLY SITE CHECK FORM
RESOLUTION MONITORING PROJECT
PROJECT NO. 262-1

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 09/30/2013 Time: 08:17 Operator: K. BaCord

I. **BAM SAMPLER** – Weekly Checks.

YES	NO		
✓		1.	The sampler is intact and the inlet head is unobstructed.
✓		2.	The vacuum pump is running and sounds normal.
✓		3.	The temperature shield is intact, and the sensor is inside of it.
✓		4.	The BAM is reading the correct time and day.
✓		5.	The tape is in the proper position and does not need to be changed (tape should be changed every 2 months).
✓		6.	Error log was checked (F3), and errors followed up on (see manual). 9/30 → Power Fail
✓		7.	Climate control appears operational (If it's cold out the shelter should feel warm, if it's hot out the shelter should feel cool)

II. **BAM SAMPLER** – Routine Maintenance (monthly). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
✓		1.	Inlet Flow check Performed
✓		2.	Visual inspection and dust removal
✓		3.	Leak check performed
	✓	4.	PM10 particle trap cleaned
	✓	5.	Inlet nozzle and nozzle are cleaned

AIR SCIENCES INC.
DENVER • PORTLAND
REVIEWED BY WR DATE 10-3-13
AUDITED BY RPA DATE 10-1-13

II. **BAM SAMPLER** – Routine Maintenance (every 2 months). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓	1.	Filter tape replaced
✓		2.	Ran the Self-Test function

III. **BAM SAMPLER** – Routine Maintenance (semiannual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO	RPA	
		1.	Replaced muffler on the pump (*Work performed by Air Sciences)
		2.	Complete calibration of flow system (*Work performed by Air Sciences)

IV. **BAM SAMPLER** – Routine Maintenance (annual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO	RPA	
		1.	Carbon vanes in pump checked/replaced (*Work performed by Air Sciences)
		2.	Inlet system cleaned (*Work performed by Air Sciences)

**Comments/Unusual Occurrences: POWER FAIL @ OR DURING THE 0600 HRS SAMPLE PERIOD ON 9-30-13; INVALIDATED THE 0900 HRS CONCENTRATION DUE TO MONTHLY FLOW VERIFICATIONS – RPA

Signature: Kam BaCord

AIR SCIENCES INC.
DENVER • PORTLAND

WR 10-3-13
REVIEWED BY DATE
ZPA 10-1-13
AUDITED BY DATE

AIR SCIENCES INC.

Monthly Flow Verification PM_{10}

East Plant
PARTICULATE MONITORING PROJECT
PROJECT NO. 262-1

Met One PM_{10}: S/N: 8714
Firmware:
Calibrator: Delta Cal S/N:

Date of Flow Audit: 09/30/2013
Time of Flow Audit: 08:34

	BAM	STD	Cal BP
Ambient Temperature (AT) °c	26.2	25.3	↓
Berometric Pressure mmHg	647.	654.5	654

	Set Point (lpm)	BAM	% Diff (1)	STD Flow Meter	% Diff (2)
(1) Actual Flow	15	15.0	0.0	15.18	-1.2
Acceptable Differential		*14.700 - 15.300*	*+/- 2%*	*14.250 - 15.750*	*+/- 5%*
(2) Actual Flow	18.4	18.4	0.0	18.6	-1.1
Acceptable Differential		*18.032 - 18.768*	*+/- 2%*	*17.480 - 19.320*	*+/- 5%*
(3) Actual Flow	16.7	16.7	0.0	16.86	-0.9
Acceptable Differential		*16.336 - 17.034*	*+/- 2%*	*15.865 - 17.535*	*+/- 5%*

Calculations:
(1) % Diff = [(BAM - Set Point)/Set Point]*100 (+/- 2%)
(2) % Diff = [(BAM - Calibrator)/Calibrator]*100 (+/- 5%)

	BAM	
(2) Leak Test	.3	**Should be < 1.0 LPM**

Comments/Abnormalities: Self Test "PASSED"

Signature: Kami Bellard

Upon completion of this form, fax to Air Sciences at 303-279-3796

EAST PLANT

BAM PM 2.5 WEEKLY SITE CHECK FORM
RESOLUTION MONITORING PROJECT
PROJECT NO. 262-1

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 07.02.2013 Time: 11:15 Operator: Kami B.C.

I. **BAM SAMPLER** – Weekly Checks.

YES	NO		
✓		1.	The sampler is intact and the inlet head is unobstructed.
✓		2.	The vacuum pump is running and sounds normal.
✓		3.	The temperature shield is intact, and the sensor is inside of it.
✓		4.	The BAM is reading the correct time and day.
✓		5.	The tape is in the proper position and does not need to be changed (tape should be changed every 2 months).
✓		6.	Error log was checked (F3), and errors followed up on (see manual). 07/02 → BAM Cal 5%
✓		7.	Climate control appears operational (if it's cold out the shelter should feel warm, if it's hot out the shelter should feel cool)

II. **BAM SAMPLER** – Routine Maintenance (monthly). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	RPA	1.	Inlet Flow check Performed
		2.	Visual inspection and dust removal
		3.	Leak check performed
		4.	PM10 and 2.5 cyclone particle trap cleaned
		5.	Inlet nozzle and nozzle are cleaned

AIR SCIENCES INC. DENVER • PORTLAND
REVIEWED BY RPA DATE 8-1-13
AUDITED BY DATE 7-8-13

II. **BAM SAMPLER** – Routine Maintenance (every 2 months). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	RPA	1.	Filter tape replaced
		2.	Ran the Self-Test function

III. **BAM SAMPLER** – Routine Maintenance (semiannual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	RPA	1.	Replaced muffler on the pump (*Work performed by Air Sciences)
		2.	Complete calibration of flow system (*Work performed by Air Sciences)

IV. **BAM SAMPLER** – Routine Maintenance (annual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	RPA	1.	Carbon vanes in pump checked/replaced (*Work performed by Air Sciences)
		2.	Inlet system cleaned (*Work performed by Air Sciences)

**Comments/Unusual Occurrences: Unscheduled power outage on 6-30-13 from 0900 - 1000 Hrs - RPA

Signature: Kami B.C.

**Fax completed form to Air Sciences at 303-279-3796

EAST PLANT

BAM PM 2.5 WEEKLY SITE CHECK FORM
RESOLUTION MONITORING PROJECT
PROJECT NO. 262-1

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 7/10/2013 Time: 10:20 AM Operator: Mary Morissette

I. **BAM SAMPLER** – Weekly Checks.

YES	NO		
✓		1.	The sampler is intact and the inlet head is unobstructed.
✓		2.	The vacuum pump is running and sounds normal.
✓		3.	The temperature shield is intact, and the sensor is inside of it.
✓		4.	The BAM is reading the correct time and day.
✓		5.	The tape is in the proper position and does not need to be changed (tape should be changed every 2 months).
✓		6.	Error log was checked (F3), and errors followed up on (see manual).
✓		7.	Climate control appears operational (If it's cold out the shelter should feel warm, if it's hot out the shelter should feel cool)

II. **BAM SAMPLER** – Routine Maintenance (monthly). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓	1.	Inlet Flow check Performed
	✓	2.	Visual inspection and dust removal
	✓	3.	Leak check performed
	✓	4.	PM10 and 2.5 cyclone particle trap cleaned
	✓	5.	Inlet nozzle and nozzle are cleaned

AIR SCIENCES INC.
DENVER • PORTLAND
REVIEWED BY RPA DATE 8-1-13
AUDITED BY DATE 7-11-13

II. **BAM SAMPLER** – Routine Maintenance (every 2 months). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓	1.	Filter tape replaced
✓		2.	Ran the Self-Test function

III. **BAM SAMPLER** – Routine Maintenance (semiannual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Replaced muffler on the pump (*Work performed by Air Sciences)
		2.	Complete calibration of flow system (*Work performed by Air Sciences)

RPA

IV. **BAM SAMPLER** – Routine Maintenance (annual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Carbon vanes in pump checked/replaced (*Work performed by Air Sciences)
		2.	Inlet system cleaned (*Work performed by Air Sciences)

RPA

**Comments/Unusual Occurrences: _____

Signature: Mary Morissette

**Fax completed form to Air Sciences at 303-279-3796

EAST PLANT

BAM PM 2.5 WEEKLY SITE CHECK FORM
RESOLUTION MONITORING PROJECT
PROJECT NO. 262-1

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 7·25·2013 Time: 10:18 Operator: Kara McCloud

I. **BAM SAMPLER** – Weekly Checks.

YES	NO		
✓		1.	The sampler is intact and the inlet head is unobstructed.
✓		2.	The vacuum pump is running and sounds normal.
✓		3.	The temperature shield is intact, and the sensor is inside of it.
✓		4.	The BAM is reading the correct time and day.
✓		5.	The tape is in the proper position and does not need to be changed (tape should be changed every 2 months).
✓		6.	Error log was checked (F3), and errors followed up on (see manual). 7/16 → Maintenance
✓		7.	Climate control appears operational (If it's cold out the shelter should feel warm, if it's hot out the shelter should feel cool)

II. **BAM SAMPLER** – Routine Maintenance (monthly). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
✓		1.	Inlet Flow check Performed
✓		2.	Visual inspection and dust removal
✓		3.	Leak check performed
	✓	4.	PM10 and 2.5 cyclone particle trap cleaned
✓		5.	Inlet nozzle and nozzle are cleaned

AIR SCIENCES INC.
DENVER • PORTLAND
REVIEWED BY RPA DATE 8-13-13
AUDITED BY DATE 8.13.13

II. **BAM SAMPLER** – Routine Maintenance (every 2 months). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓	1.	Filter tape replaced
✓		2.	Ran the Self-Test function

III. **BAM SAMPLER** – Routine Maintenance (semiannual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Replaced muffler on the pump (*Work performed by Air Sciences)
		2.	Complete calibration of flow system (*Work performed by Air Sciences)

RPA

IV. **BAM SAMPLER** – Routine Maintenance (annual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Carbon vanes in pump checked/replaced (*Work performed by Air Sciences)
		2.	Inlet system cleaned (*Work performed by Air Sciences)

RPA

**Comments/Unusual Occurrences: _____

Signature: Kara McCloud

**Fax completed form to Air Sciences at 303-279-3796

AIR SCIENCES INC.
DENVER • PORTLAND

REVIEWED BY RPA DATE 8-13-13

AUDITED BY DATE 8-13-13

AIR SCIENCES INC.

Monthly Flow Verification $PM_{2.5}$

East Plant

PARTICULATE MONITORING PROJECT

PROJECT NO. 262-1

Met One $PM_{2.5}$: S/N: M6464

Firmware:

Calibrator: DeHa Cal S/N:

Date of Flow Audit: 7.25.2013

Time of Flow Audit: 10:31

	BAM	STD
Ambient Temperature (AT) °c	27.1	27.2
Berometric Pressure mmHg	657	656.0

	Set Point (lpm)	BAM	% Diff (1)	STD Flow Meter	% Diff (2)
(1) Actual Flow	15	15.0	0.0	15.42	-2.7
Acceptable		*14.700 - 15.300*	*+/- 2%*	*14.250 - 15.750*	*+/- 5%*
Differential					
(2) Actual Flow	18.4	18.4	0.0	18.94	-2.9
Acceptable		*18.032 - 18.768*	*+/- 2%*	*17.480 - 19.320*	*+/- 5%*
Differential					
(3) Actual Flow	16.7	16.7	0.0	17.16	-2.7
Acceptable		*16.336 - 17.034*	*+/- 2%*	*15.865 - 17.535*	*+/- 5%*
Differential					

Calculations:

(1) % Diff = [(BAM - Set Point)/Set Point]*100 (+/- 2%)

(2) % Diff = [(BAM - Calibrator)/Calibrator]*100 (+/- 5%)

	BAM
(2) Leak Test	.3

Should be < 1.0 LPM

Comments/Abnormalities: Ran Self Test "PASSED"

& NEED S/N # - RPA

Signature: Kara BaCard

Upon completion of this form, fax to Air Sciences at 303-279-3796

EAST PLANT

BAM PM 2.5 WEEKLY SITE CHECK FORM
RESOLUTION MONITORING PROJECT
PROJECT NO. 262-1

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 08/02/2013 Time: 13:45 Operator: K. Bond

I. BAM SAMPLER – Weekly Checks.

YES	NO		
✓		1.	The sampler is intact and the inlet head is unobstructed.
✓		2.	The vacuum pump is running and sounds normal.
✓		3.	The temperature shield is intact, and the sensor is inside of it.
✓		4.	The BAM is reading the correct time and day.
✓		5.	The tape is in the proper position and does not need to be changed (tape should be changed every 2 months).
✓		6.	Error log was checked (F3), and errors followed up on (see manual). 7/25 - Delta Pressure
✓		7.	Climate control appears operational (If it's cold out the shelter should feel warm, if it's hot out the shelter should feel cool)

II. BAM SAMPLER – Routine Maintenance (monthly). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓	1.	Inlet Flow check Performed
	✓	2.	Visual inspection and dust removal
	✓	3.	Leak check performed
	✓	4.	PM10 and 2.5 cyclone particle trap cleaned
	✓	5.	Inlet nozzle and nozzle are cleaned

AIR SCIENCES INC.
DENVER • PORTLAND
REVIEWED BY RPA DATE 8-13-13
AUDITED BY DATE

II. BAM SAMPLER – Routine Maintenance (every 2 months). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓	1.	Filter tape replaced
	✓	2.	Ran the Self-Test function

III. BAM SAMPLER – Routine Maintenance (semiannual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓	1.	Replaced muffler on the pump (*Work performed by Air Sciences)
	✓	2.	Complete calibration of flow system (*Work performed by Air Sciences)

IV. BAM SAMPLER – Routine Maintenance (annual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓	1.	Carbon vanes in pump checked/replaced (*Work performed by Air Sciences)
	✓	2.	Inlet system cleaned (*Work performed by Air Sciences)

**Comments/Unusual Occurrences: _____

Signature: Kim Bond

**Fax completed form to Air Sciences at 303-279-3796

EAST PLANT

BAM PM 2.5 WEEKLY SITE CHECK FORM
RESOLUTION MONITORING PROJECT
PROJECT NO. 262-1

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 08.08.2013 Time: 10:15 Operator: Kara BcCla

I. BAM SAMPLER – Weekly Checks.

YES	NO		
✓		1.	The sampler is intact and the inlet head is unobstructed.
✓		2.	The vacuum pump is running and sounds normal.
✓		3.	The temperature shield is intact, and the sensor is inside of it.
✓		4.	The BAM is reading the correct time and day.
✓		5.	The tape is in the proper position and does not need to be changed (tape should be changed every 2 months).
✓		6.	Error log was checked (F3), and errors followed up on (see manual). N/A
✓		7.	Climate control appears operational (If it's cold out the shelter should feel warm, if it's hot out the shelter should feel cool)

II. BAM SAMPLER – Routine Maintenance (monthly). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓	1.	Inlet Flow check Performed
	✓	2.	Visual inspection and dust removal
	✓	3.	Leak check performed
	✓	4.	PM10 and 2.5 cyclone particle trap cleaned
✓		5.	Inlet nozzle and nozzle are cleaned

AIR SCIENCES INC.
DENVER • PORTLAND
REVIEWED BY RPA DATE 8-13-13
AUDITED BY DATE 8.13.13

II. BAM SAMPLER – Routine Maintenance (every 2 months). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
✓		1.	Filter tape replaced
✓		2.	Ran the Self-Test function

III. BAM SAMPLER – Routine Maintenance (semiannual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓ RPA	1.	Replaced muffler on the pump (*Work performed by Air Sciences)
	✓	2.	Complete calibration of flow system (*Work performed by Air Sciences)

IV. BAM SAMPLER – Routine Maintenance (annual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓ RPA	1.	Carbon vanes in pump checked/replaced (*Work performed by Air Sciences)
	✓	2.	Inlet system cleaned (*Work performed by Air Sciences)

**Comments/Unusual Occurrences: _____

Signature: Kara BcCla

**Fax completed form to Air Sciences at 303-279-3796

EAST PLANT

BAM PM 2.5 WEEKLY SITE CHECK FORM
RESOLUTION MONITORING PROJECT
PROJECT NO. 262-1

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 08·16·2013 Time: 14:04 Operator: Kara Ballard

I. BAM SAMPLER – Weekly Checks.

YES	NO		
✓		1.	The sampler is intact and the inlet head is unobstructed.
✓		2.	The vacuum pump is running and sounds normal.
✓		3.	The temperature shield is intact, and the sensor is inside of it.
✓		4.	The BAM is reading the correct time and day.
✓		5.	The tape is in the proper position and does not need to be changed (tape should be changed every 2 months).
✓		6.	Error log was checked (F3), and errors followed up on (see manual). 8/13 - 8/16 ⇒ BAM Cal Mem Brand 6%
✓		7.	Climate control appears operational (If it's cold out the shelter should feel warm, if it's hot out the shelter should feel cool)

II. BAM SAMPLER – Routine Maintenance (monthly). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Inlet Flow check Performed
		2.	Visual inspection and dust removal
		3.	Leak check performed
		4.	PM10 and 2.5 cyclone particle trap cleaned
		5.	Inlet nozzle and nozzle are cleaned

RPA

AIR SCIENCES INC.
DENVER • PORTLAND

REVIEWED BY RPA DATE 8-24-13

AUDITED BY DATE 8-19-13

II. BAM SAMPLER – Routine Maintenance (every 2 months). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Filter tape replaced
		2.	Ran the Self-Test function

RPA

III. BAM SAMPLER – Routine Maintenance (semiannual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Replaced muffler on the pump (*Work performed by Air Sciences)
		2.	Complete calibration of flow system (*Work performed by Air Sciences)

RPA

IV. BAM SAMPLER – Routine Maintenance (annual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Carbon vanes in pump checked/replaced (*Work performed by Air Sciences)
		2.	Inlet system cleaned (*Work performed by Air Sciences)

RPA

**Comments/Unusual Occurrences: _____

Signature: Kara Ballard

**Fax completed form to Air Sciences at 303-279-3796

EAST PLANT

BAM PM 2.5 WEEKLY SITE CHECK FORM
RESOLUTION MONITORING PROJECT
PROJECT NO. 262-1

AIR SCIENCES INC.

Date: 08/23/2013 Time: 8:19 Operator: Kami Ballard

I. **BAM SAMPLER** – Weekly Checks.

YES	NO	
✓		1. The sampler is intact and the inlet head is unobstructed.
✓		2. The vacuum pump is running and sounds normal.
✓		3. The temperature shield is intact, and the sensor is inside of it.
✓		4. The BAM is reading the correct time and day.
✓		5. The tape is in the proper position and does not need to be changed (tape should be changed every 2 months).
✓		6. Error log was checked (F3), and errors followed up on (see manual). 08/18 → 08/23 — BAM Cal Membrane 5%
✓		7. Climate control appears operational (If it's cold out the shelter should feel warm, if it's hot out the shelter should feel cool)

II. **BAM SAMPLER** – Routine Maintenance (monthly). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO	RPA	
			1. Inlet Flow check Performed
			2. Visual inspection and dust removal
			3. Leak check performed
			4. PM10 and 2.5 cyclone particle trap cleaned
			5. Inlet nozzle and nozzle are cleaned

AIR SCIENCES INC.
DENVER • PORTLAND
REVIEWED BY [signature] DATE 8-29-2013
AUDITED BY RPA DATE 8-26-13

II. **BAM SAMPLER** – Routine Maintenance (every 2 months). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO	RPA	
			1. Filter tape replaced
			2. Ran the Self-Test function

III. **BAM SAMPLER** – Routine Maintenance (semiannual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO	RPA	
			1. Replaced muffler on the pump (*Work performed by Air Sciences)
			2. Complete calibration of flow system (*Work performed by Air Sciences)

IV. **BAM SAMPLER** – Routine Maintenance (annual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO	RPA	
			1. Carbon vanes in pump checked/replaced (*Work performed by Air Sciences)
			2. Inlet system cleaned (*Work performed by Air Sciences)

**Comments/Unusual Occurrences: _____

Signature: Kami B[illegible]

**Fax completed form to Air Sciences at 303-279-3796

EAST PLANT

BAM PM 2.5 WEEKLY SITE CHECK FORM
RESOLUTION MONITORING PROJECT
PROJECT NO. 262-1

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 08/30/2013 Time: 11:06 Operator: Kam Bellard

I. BAM SAMPLER – Weekly Checks.

YES	NO		
✓		1.	The sampler is intact and the inlet head is unobstructed.
✓		2.	The vacuum pump is running and sounds normal.
✓		3.	The temperature shield is intact, and the sensor is inside of it.
✓		4.	The BAM is reading the correct time and day.
✓		5.	The tape is in the proper position and does not need to be changed (tape should be changed every 2 months).
✓		6.	Error log was checked (F3), and errors followed up on (see manual). 8/26 → 8/30 Bam Cal Membrane 56
✓		7.	Climate control appears operational (if it's cold out the shelter should feel warm, if it's hot out the shelter should feel cool)

II. BAM SAMPLER – Routine Maintenance (monthly). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Inlet Flow check Performed
		2.	Visual inspection and dust removal
		3.	Leak check performed
		4.	PM10 and 2.5 cyclone particle trap cleaned
		5.	Inlet nozzle and nozzle are cleaned

AIR SCIENCES INC. DENVER • PORTLAND
REVIEWED BY RPA DATE 9-3-13
AUDITED BY DATE 9-3-13

II. BAM SAMPLER – Routine Maintenance (every 2 months). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Filter tape replaced
		2.	Ran the Self-Test function

III. BAM SAMPLER – Routine Maintenance (semiannual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Replaced muffler on the pump (*Work performed by Air Sciences)
		2.	Complete calibration of flow system (*Work performed by Air Sciences)

IV. BAM SAMPLER – Routine Maintenance (annual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Carbon vanes in pump checked/replaced (*Work performed by Air Sciences)
		2.	Inlet system cleaned (*Work performed by Air Sciences)

**Comments/Unusual Occurrences: BP NEEDS TO VERIFIED - RPA

Signature: Kam B

**Fax completed form to Air Sciences at 303-279-3796

EAST PLANT

BAM PM 2.5 WEEKLY SITE CHECK FORM
RESOLUTION MONITORING PROJECT
PROJECT NO. 262-1

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 09/06/2013 Time: 1:52 Operator: Kam McCord

I. **BAM SAMPLER** – Weekly Checks.

YES	NO		
✓		1.	The sampler is intact and the inlet head is unobstructed.
✓		2.	The vacuum pump is running and sounds normal.
✓		3.	The temperature shield is intact, and the sensor is inside of it.
✓		4.	The BAM is reading the correct time and day.
✓		5.	The tape is in the proper position and does not need to be changed (tape should be changed every 2 months).
✓		6.	Error log was checked (F3), and errors followed up on (see manual).
✓		7.	Climate control appears operational (If it's cold out the shelter should feel warm, if it's hot out the shelter should feel cool)

II. **BAM SAMPLER** – Routine Maintenance (monthly). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO	RPA	
		1.	Inlet Flow check Performed
		2.	Visual inspection and dust removal
		3.	Leak check performed
		4.	PM10 and 2.5 cyclone particle trap cleaned
		5.	Inlet nozzle and nozzle are cleaned

AIR SCIENCES INC.
DENVER • PORTLAND
WR 9/25/13
REVIEWED BY RPA DATE 9/18/13
AUDITED BY DATE 9-18-13

II. **BAM SAMPLER** – Routine Maintenance (every 2 months). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO	RPA	
		1.	Filter tape replaced
		2.	Ran the Self-Test function

III. **BAM SAMPLER** – Routine Maintenance (semiannual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO	RPA	
		1.	Replaced muffler on the pump (*Work performed by Air Sciences)
		2.	Complete calibration of flow system (*Work performed by Air Sciences)

IV. **BAM SAMPLER** – Routine Maintenance (annual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO	RPA	
		1.	Carbon vanes in pump checked/replaced (*Work performed by Air Sciences)
		2.	Inlet system cleaned (*Work performed by Air Sciences)

**Comments/Unusual Occurrences: _____

Signature: Kam McCord

**Fax completed form to Air Sciences at 303-279-3796

AIR SCIENCES INC.
DENVER • PORTLAND

WR 9125113
REVIEWED BY DATE

RPA 9-16-13
AUDITED BY DATE

AIR SCIENCES INC.

Monthly Flow Verification $PM_{2.5}$

East Plant
PARTICULATE MONITORING PROJECT
PROJECT NO. 262-1

Met One $PM_{2.5}$: S/N: 6466
Firmware:
Calibrator: DeHa Cal S/N: ~~1034~~ 22 AUG 13

Date of Flow Audit: 09/04/2013
Time of Flow Audit: 1:31

	BAM	STD
Ambient Temperature (AT) °c	34.2	33.7
Berometric Pressure mmHg	652	654.5

	Set Point (lpm)	BAM	% Diff (1)	STD Flow Meter	% Diff (2)
(1) Actual Flow	15	15.0	0.0	15.49	-3.2
Acceptable Differential		*14.700 - 15.300*	*+/- 2%*	*14.250 - 15.750*	*+/- 5%*
(2) Actual Flow	18.4	18.3	-0.5	18.76	-2.5
Acceptable Differential		*18.032 - 18.768*	*+/- 2%*	*17.480 - 19.320*	*+/- 5%*
(3) Actual Flow	16.7	16.7	0.0	17.18	-2.8
Acceptable Differential		*16.336 - 17.034*	*+/- 2%*	*15.865 - 17.535*	*+/- 5%*

Calculations:
(1) % Diff = [(BAM - Set Point)/Set Point]*100 (+/- 2%)
(2) % Diff = [(BAM - Calibrator)/Calibrator]*100 (+/- 5%)

	BAM	
(2) Leak Test	.3	**Should be < 1.0 LPM**

Comments/Abnormalities: Self Test "Passed"

Signature: K. Ballard

Upon completion of this form, fax to Air Sciences at 303-279-3796

EAST PLANT

BAM PM 2.5 WEEKLY SITE CHECK FORM
RESOLUTION MONITORING PROJECT
PROJECT NO. 262-1

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 9/12/2013 Time: 2:32 Operator: Karen Bacon

I. **BAM SAMPLER** – Weekly Checks.

YES	NO		
✓		1.	The sampler is intact and the inlet head is unobstructed.
✓		2.	The vacuum pump is running and sounds normal.
✓		3.	The temperature shield is intact, and the sensor is inside of it.
✓		4.	The BAM is reading the correct time and day.
✓		5.	The tape is in the proper position and does not need to be changed (tape should be changed every 2 months).
✓		6.	Error log was checked (F3), and errors followed up on (see manual). 9/8 → 9/12 – BAM Cal Membrane
✓		7.	Climate control appears operational (If it's cold out the shelter should feel warm, if it's hot out the shelter should feel cool)

II. **BAM SAMPLER** – Routine Maintenance (monthly). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Inlet Flow check Performed
		2.	Visual inspection and dust removal
		3.	Leak check performed
		4.	PM10 and 2.5 cyclone particle trap cleaned
		5.	Inlet nozzle and nozzle are cleaned

RPA

AIR SCIENCES INC.
DENVER • PORTLAND

WR 9/25/13
REVIEWED BY DATE

RPA 9-16-13
AUDITED BY DATE

II. **BAM SAMPLER** – Routine Maintenance (every 2 months). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Filter tape replaced
		2.	Ran the Self-Test function

RPA

III. **BAM SAMPLER** – Routine Maintenance (semiannual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Replaced muffler on the pump (*Work performed by Air Sciences)
		2.	Complete calibration of flow system (*Work performed by Air Sciences)

RPA

IV. **BAM SAMPLER** – Routine Maintenance (annual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Carbon vanes in pump checked/replaced (*Work performed by Air Sciences)
		2.	Inlet system cleaned (*Work performed by Air Sciences)

RPA

**Comments/Unusual Occurrences: _____

Signature: Karen Bacon

**Fax completed form to Air Sciences at 303-279-3796

EAST PLANT

BAM PM 2.5 WEEKLY SITE CHECK FORM
RESOLUTION MONITORING PROJECT
PROJECT NO. 262-1

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 9-19-13 Time: 2:02 Operator: K. Baak

I. **BAM SAMPLER** – Weekly Checks.

YES	NO		
✓		1.	The sampler is intact and the inlet head is unobstructed.
✓		2.	The vacuum pump is running and sounds normal.
✓		3.	The temperature shield is intact, and the sensor is inside of it.
✓		4.	The BAM is reading the correct time and day.
✓		5.	The tape is in the proper position and does not need to be changed (tape should be changed every 2 months).
✓		6.	Error log was checked (F3), and errors followed up on (see manual). 9-15 – 9-15 BAM Cal Mem 5%.
✓		7.	Climate control appears operational (If it's cold out the shelter should feel warm, if it's hot out the shelter should feel cool)

II. **BAM SAMPLER** – Routine Maintenance (monthly). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Inlet Flow check Performed
		2.	Visual inspection and dust removal
		3.	Leak check performed
		4.	PM10 and 2.5 cyclone particle trap cleaned
		5.	Inlet nozzle and nozzle are cleaned

RPA

AIR SCIENCES INC.
DENVER • PORTLAND
WR 9-25-13
REVIEWED BY RPA DATE 9-11-13
AUDITED BY DATE 24 WR

II. **BAM SAMPLER** – Routine Maintenance (every 2 months). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Filter tape replaced
		2.	Ran the Self-Test function

RPA

III. **BAM SAMPLER** – Routine Maintenance (semiannual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Replaced muffler on the pump (*Work performed by Air Sciences)
		2.	Complete calibration of flow system (*Work performed by Air Sciences)

RPA

IV. **BAM SAMPLER** – Routine Maintenance (annual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
		1.	Carbon vanes in pump checked/replaced (*Work performed by Air Sciences)
		2.	Inlet system cleaned (*Work performed by Air Sciences)

RPA

**Comments/Unusual Occurrences: _____

Signature: Karen Baak

**Fax completed form to Air Sciences at 303-279-3796

EAST PLANT

BAM PM 2.5 WEEKLY SITE CHECK FORM
RESOLUTION MONITORING PROJECT
PROJECT NO. 262-1

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 9/30/2013 Time: 8:22 Operator: Tom White

I. **BAM SAMPLER** – Weekly Checks.

YES	NO		
✓		1.	The sampler is intact and the inlet head is unobstructed.
✓		2.	The vacuum pump is running and sounds normal.
✓		3.	The temperature shield is intact, and the sensor is inside of it.
✓		4.	The BAM is reading the correct time and day.
✓		5.	The tape is in the proper position and does not need to be changed (tape should be changed every 2 months).
✓		6.	Error log was checked (F3), and errors followed up on (see manual). 9/26 - 9/30 BAM Cal Membrane 5%
✓		7.	Climate control appears operational (If it's cold out the shelter should feel warm, if it's hot out the shelter should feel cool)

II. **BAM SAMPLER** – Routine Maintenance (monthly). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
✓		1.	Inlet Flow check Performed
✓		2.	Visual inspection and dust removal
✓		3.	Leak check performed
	✓	4.	PM10 and 2.5 cyclone particle trap cleaned
	✓	5.	Inlet nozzle and nozzle are cleaned

AIR SCIENCES INC.
DENVER • PORTLAND
REVIEWED BY: WR DATE: 10-3-13
AUDITED BY: RPA DATE: 10-1-13

II. **BAM SAMPLER** – Routine Maintenance (every 2 months). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓	1.	Filter tape replaced
✓		2.	Ran the Self-Test function

III. **BAM SAMPLER** – Routine Maintenance (semiannual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓ RPA	1.	Replaced muffler on the pump (*Work performed by Air Sciences)
	✓	2.	Complete calibration of flow system (*Work performed by Air Sciences)

IV. **BAM SAMPLER** – Routine Maintenance (annual). Check yes if maintenance was performed during this visit. *See page 56 of BAM manual.*

YES	NO		
	✓ RPA	1.	Carbon vanes in pump checked/replaced (*Work performed by Air Sciences)
	✓	2.	Inlet system cleaned (*Work performed by Air Sciences)

**Comments/Unusual Occurrences: POWER FAIL @ OR DURING THE 0600 HRS SAMPLE HOUR ON 9-30-13; INVALIDATED THE 0900 HRS CONCENTRATION & FLOW DUE TO MONTHLY FLOW VERIFICATIONS - RPA

Signature: T Lee

**Fax completed form to Air Sciences at 303-279-3796

AIR SCIENCES INC.
DENVER • PORTLAND

REVIEWED BY WR DATE 10-3-13
AUDITED BY RPA DATE 10-1-13

AIR SCIENCES INC.

Monthly Flow Verification $PM_{2.5}$

East Plant
PARTICULATE MONITORING PROJECT
PROJECT NO. 262-1

Met One $PM_{2.5}$: S/N: 6464
Firmware:
Calibrator: Delta Cal S/N:

Date of Flow Audit: 9/30/2013
Time of Flow Audit: 8:36

	BAM	STD
Ambient Temperature (AT) °c	26.2	25.2
Berometric Pressure mmHg	657	654.5

	Set Point (lpm)	BAM	% Diff (1)	STD Flow Meter	% Diff (2)
(1) Actual Flow	15	15.0	0.0	15.63	-4.0
Acceptable Differential		*14.700 - 15.300*	*+/- 2%*	*14.250 - 15.750*	*+/- 5%*
(2) Actual Flow	18.4	18.3	-0.5	19.03	-3.8
Acceptable Differential		*18.032 - 18.768*	*+/- 2%*	*17.480 - 19.320*	*+/- 5%*
(3) Actual Flow	16.7	16.9	1.2	17.51	-3.5
Acceptable Differential		*16.336 - 17.034*	*+/- 2%*	*15.865 - 17.535*	*+/- 5%*

} Close to being out of range

Calculations:
(1) % Diff = [(BAM - Set Point)/Set Point]*100 (+/- 2%)
(2) % Diff = [(BAM - Calibrator)/Calibrator]*100 (+/- 5%)

	BAM	
(2) Leak Test	.3	**Should be < 1.0 LPM**

Comments/Abnormalities: Self Test "Passed"

Signature: Karen Bacon

Upon completion of this form, fax to Air Sciences at 303-279-3796

Appendix J: East Plant SO_2, NO_x, and O_3 Site Check and Audit Forms

AIR SCIENCES INC.
DENVER • PORTLAND

REVIEWED BY RPA DATE 8-1-13

AUDITED BY DATE 7-8-13

AIR SCIENCES INC.
DENVER • PORTLAND

Resolution EAST

NO_x Monitoring Form

Site Operator: Kane Pollard Date: 07.02.2013

Sampler Make/Model		T200
Sampler SN		SN 197
Dilution Calibrator Model/SN	Primary	T700/SN 191
	Transfer	—

Instrument Check Start Time	11:16 LT
Instrument Check Stop Time	11:41 LT
Filter Replacement Y/N	No
Shelter Temp (5 to 40 °C)	21.78
Instrument Range	500 PPB
Source Gas Conc.	~~40%~~ NO PPM

Level 1 Zero/Span (once every 2 weeks)

Check the Zero/Span with the T700 Dynamic Dilution Calibrator.

Target Dilution (PPB)	NO Response (PPB)	NO_2 Response (PPB)	Nox Response (PPB)	Final NO_x Response (PPB)	Acceptance Criteria (PPB)	Adjustment Required? Y/N
Zero Air	-0.3	9.8	9.4	1.3	±3% of full Scale (±15 PPB)	Yes
100 PPB	94.0	4.1	98.2	—	≤±10% (90 to 110 PPB)	No

Check the real time Analog vs. Digital converter.

Target Dilution (PPB)	T200 Response (PPB)		CR3000 Response (PPM)		Acceptance Criteria	Adjustment Required? Y/N
Zero Air (After calibration →)	NO	0.2	NO	0	±2 PPB	No
	NO_2	1.1	NO_2	0.78		
	NO_x	1.3	NO_x	1.14		
100 PPB	NO	94.0	NO	94.05	±2 PPB	No
	NO_2	4.1	NO_2	3.96		
	NO_x	98.2	NO_x	98.38		

Verify instrument parameters:

Sample Flow (500 ± 50 cc/min)	496	*Moly Temp. (315 ± 5°C)*	314.4
Ozone Flow (80 ± 15 cc/min)	76	*HVPS (400 - 900 V)*	600
NOx Slope (1 ± 0.3)	1.396	*NO Slope (1 ± 0.3)*	1.253
NOx Offset (0 ± 100)	16.2	*NO Offset (0 ± 100)*	0.4

Operator comments/observations:

Operator Signature: Kane Pollard

T200 OUT OF CALIBRATED RANGE AFTER LEVEL 1 ZERO/SPAN PROCEDURES. REMOTE ZERO/SPAN COMPLETED ON 7/8/13 - RPA

AIR SCIENCES INC.
DENVER • PORTLAND

REVIEWED BY RPA DATE 8-13-13
AUDITED BY DATE

AIR SCIENCES INC.
DENVER • PORTLAND

Resolution EAST
NO_x Monitoring Form

Site Operator: Kami Ballard Date: 08/02/2013

Sampler Make /Model		T200
Sampler SN		SN197
Dilution Calibrator Model/SN	Primary	T700/SN191
	Transfer	—

Instrument Check Start Time	13:48
Instrument Check Stop Time	14:05
Filter Replacement Y/N	No
Shelter Temp (5 to 40 °C)	29.41
Instrument Range	500 PPB
Source Gas Conc.	~~40%~~ No 400 ppm

Level 1 Zero/Span (once every 2 weeks)
Check the Zero/Span with the T700 Dynamic Dilution Calibrator.

Target Dilution (PPB)	NO Response (PPB)	NO_2 Response (PPB)	Nox Response (PPB)	Final NO_x Response (PPB)	Acceptance Criteria (PPB)	Adjustment Required? Y/N
Zero Air	0.2	1.6	1.7	—	±3% of full Scale (±15 PPB)	~~Yes~~ NO
100 PPB	91.1	2.1	93.1	—	≤±10% (90 to 110 PPB)	No

Check the real time Analog vs. Digital converter.

Target Dilution (PPB)	T200 Response (PPB)		CR3000 Response (PPM)		Acceptance Criteria	Adjustment Required? Y/N
Zero Air	NO	0.2	NO	-0.09	± 2 PPB	No
	NO_2	1.6	NO_2	1.6		
	NO_x	1.7	NO_x	1.8		
100 PPB	NO	91.1	NO	91.08	± 2 PPB	No
	NO_2	2.1	NO_2	1.63		
	NO_x	93.1	NO_x	93.01		

Verify instrument parameters:

Sample Flow (500 ± 50 cc/min)	485	*Moly Temp. (315 ± 5°C)*	315.1
Ozone Flow (80 ± 15 cc/min)	74	*HVPS (400 - 900 V)*	601
NOx Slope (1 ± 0.3)	1.235	*NO Slope (1 ± 0.3)*	1.220
NOx Offset (0 ± 100)	5.2	*NO Offset (0 ± 100)*	0.2

Operator comments/observations:

Operator Signature: Kami Ballard

AIR SCIENCES INC.
DENVER • PORTLAND

REVIEWED BY RPA 8-29-13
AUDITED BY DATE

AIR SCIENCES INC.
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Resolution EAST
NO_x Monitoring Form

Site Operator: Kami Ballard Date: 08.16.2013

Sampler Make /Model		T200
Sampler SN		SN 197
Dilution Calibrator Model/SN	Primary	T700/SN191
	Transfer	—

Instrument Check Start Time	14:13
Instrument Check Stop Time	14:26
Filter Replacement Y/N	Yes
Shelter Temp (5 to 40 °C)	27.02
Instrument Range	500 PPB
Source Gas Conc.	40% NO 40 ppm NO

Level 1 Zero/Span (once every 2 weeks)
Check the Zero/Span with the T700 Dynamic Dilution Calibrator.

Target Dilution (PPB)	NO Response (PPB)	NO_2 Response (PPB)	Nox Response (PPB)	Final NO_x Response (PPB)	Acceptance Criteria (PPB)	Adjustment Required? Y/N
Zero Air	-0.3	0.9	0.6	—	±3% of full Scale (±15 PPB)	No
100 PPB	94.1	1.9	96.0	—	≤±10% (90 to 110 PPB)	No

Check the real time Analog vs. Digital converter.

Target Dilution (PPB)	T200 Response (PPB)		CR3000 Response (PPM)		Acceptance Criteria	Adjustment Required? Y/N
Zero Air	NO	-0.3	NO	-1.2	±2 PPB	No
	NO_2	0.9	NO_2	0.03		
	NO_x	0.6	NO_x	-0.12		
100 PPB	NO	94.1	NO	94.18	±2 PPB	No
	NO_2	1.9	NO_2	1.62		
	NO_x	96.0	NO_x	96.14		

Verify instrument parameters:

Sample Flow (500 ± 50 cc/min)	495	*Moly Temp. (315 ± 5°C)*	315.7
Ozone Flow (80 ± 15 cc/min)	76	*HVPS (400 - 900 V)*	601
NOx Slope (1 ± 0.3)	1.235	*NO Slope (1 ± 0.3)*	1.220
NOx Offset (0 ± 100)	5.2	*NO Offset (0 ± 100)*	0.2

Operator comments/observations:
*** Blinking Red Light says "OZONE GEN OAT") is red.

Operator Signature: Kami Ballard

BLINKING RED LIGHT = Instrument Fault Indication, REMOTE ACCESS OF THE T200 DID NOT SHOW ANY FAULTS - RPA

AIR SCIENCES INC.
DENVER • PORTLAND

REVIEWED BY RPA DATE 9-3-13
AUDITED BY DATE 9-3-13

AIR SCIENCES INC.
DENVER • PORTLAND

Resolution EAST
NO_x Monitoring Form

Site Operator: Kami Ballard Date: 08/20/2013

Sampler Make /Model		T200
Sampler SN		SN 197
Dilution Calibrator Model/SN	Primary	T700/SN 191
	Transfer	

Instrument Check Start Time	11:07 LT
Instrument Check Stop Time	11:25 LT
Filter Replacement Y/N	No
Shelter Temp (5 to 40 °C)	26.02
Instrument Range	500 PPB
Source Gas Conc.	~~40 PPM~~ NO 40 ppm

Level 1 Zero/Span (once every 2 weeks)

Check the Zero/Span with the T700 Dynamic Dilution Calibrator.

Target Dilution (PPB)	NO Response (PPB)	NO_2 Response (PPB)	Nox Response (PPB)	Final NO_x Response (PPB)	Acceptance Criteria (PPB)	Adjustment Required? Y/N
Zero Air	-0.0	2.4	2.4	—	±3% of full Scale (±15 PPB)	No
100 PPB	93.9	0.9	94.7	—	≤±10% (90 to 110 PPB)	No

Check the real time Analog vs. Digital converter.

Target Dilution (PPB)	T200 Response (PPB)		CR3000 Response (PPM)		Acceptance Criteria	Adjustment Required? Y/N
Zero Air	NO	-0.0	NO	-0.2	±2 PPB	No
	NO_2	2.4	NO_2	2.2		
	NO_x	2.4	NO_x	2.4		
100 PPB	NO	93.9	NO	94.1	±2 PPB	No
	NO_2	0.9	NO_2	0.8		
	NO_x	94.7	NO_x	94.9		

Verify instrument parameters:

Sample Flow (500 ± 50 cc/min)	497	*Moly Temp. (315 ± 5°C)*	314.9
Ozone Flow (80 ± 15 cc/min)	76	*HVPS (400 - 900 V)*	601
NOx Slope (1 ± 0.3)	1.235	*NO Slope (1 ± 0.3)*	1.220
NOx Offset (0 ± 100)	5.2	*NO Offset (0 ± 100)*	0.2

Operator comments/observations:
Invalidated 1200 hrs, Hourly record – RPA

Operator Signature: Kami Ballard

AIR SCIENCES INC.
DENVER • PORTLAND

WR 9/25/13
REVIEWED BY DATE
RPA 9-16-13
AUDITED BY DATE

AIR SCIENCES INC.
DENVER • PORTLAND

Resolution EAST
NO_x Monitoring Form

Site Operator: Rami Ballard Date: 9/12/2013

Sampler Make /Model		T200
Sampler SN		SN 197
Dilution Calibrator Model/SN	Primary	T700/SN191
	Transfer	—

Instrument Check Start Time	14:41 LT
Instrument Check Stop Time	14:55 LT
Filter Replacement Y/N	No
Shelter Temp (5 to 40 °C)	29.06
Instrument Range	500PPB
Source Gas Conc.	~~40%~~ NO 40 PPB

Level 1 Zero/Span (once every 2 weeks)

Check the Zero/Span with the T700 Dynamic Dilution Calibrator.

Target Dilution (PPB)	NO Response (PPB)	NO_2 Response (PPB)	Nox Response (PPB)	Final NO_x Response (PPB)	Acceptance Criteria (PPB)	Adjustment Required? Y/N
Zero Air	0.1	-0.0	0.1	—	±3% of full Scale (±15 PPB)	No
100 PPB	91.5	2.0	93.7	—	≤±10% (90 to 110 PPB)	No

Check the real time Analog vs. Digital converter.

Target Dilution (PPB)	T200 Response (PPB)		CR3000 Response (PPM)		Acceptance Criteria	Adjustment Required? Y/N
Zero Air	NO	0.1	NO	-0.1	±2 PPB	No
	NO_2	-0.0	NO_2	-0.1		
	NO_x	0.1	NO_x	0.0		
100 PPB	NO	91.5	NO	91.8	±2 PPB	No
	NO_2	2.0	NO_2	1.6		
	NO_x	93.7	NO_x	93.7		

Verify instrument parameters:

Sample Flow (500 ± 50 cc/min)	493	*Moly Temp. (315 ± 5°C)*	315.8
Ozone Flow (80 ± 15 cc/min)	75	*HVPS (400 - 900 V)*	600
NOx Slope (1 ± 0.3)	1.235	*NO Slope (1 ± 0.3)*	1.226
NOx Offset (0 ± 100)	0.2	*NO Offset (0 ± 100)*	0.2

Operator comments/observations:

Operator Signature: Rami Ballard

AIR SCIENCES INC.
DENVER • PORTLAND

REVIEWED BY WR DATE 9-25-13
AUDITED BY RPA DATE 9-16-13

AIR SCIENCES INC.
DENVER • PORTLAND

Resolution EAST
NO_x Monitoring Form

Site Operator: Kami Ballard Date: 9/12/2013

Sampler Make /Model		T200
Sampler SN		SN 197
Dilution Calibrator Model/SN	Primary	T700/SN191
	Transfer	—

Instrument Check Start Time	14:41 LT
Instrument Check Stop Time	14:55 LT
Filter Replacement Y/N	No
Shelter Temp (5 to 40 °C)	29.06
Instrument Range	500PPB
Source Gas Conc.	40% NO

Level 1 Zero/Span (once every 2 weeks)
Check the Zero/Span with the T700 Dynamic Dilution Calibrator.

Target Dilution (PPB)	NO Response (PPB)	NO_2 Response (PPB)	Nox Response (PPB)	Final NO_x Response (PPB)	Acceptance Criteria (PPB)	Adjustment Required? Y/N
Zero Air	0.1	-0.0	0.1	—	±3% of full Scale (±15 PPB)	No
100 PPB	91.5	2.0	93.7	—	≤±10% (90 to 110 PPB)	No

Check the real time Analog vs. Digital converter.

Target Dilution (PPB)	T200 Response (PPB)		CR3000 Response (PPM)		Acceptance Criteria	Adjustment Required? Y/N
Zero Air	NO	0.1	NO	-0.1	±2 PPB	No
	NO_2	-0.0	NO_2	-0.1		
	NO_x	0.1	NO_x	0.0		
100 PPB	NO	91.5	NO	91.8	±2 PPB	No
	NO_2	2.0	NO_2	1.6		
	NO_x	93.7	NO_x	93.7		

Verify instrument parameters:

Sample Flow (500 ± 50 cc/min)	493	*Moly Temp. (315 ± 5°C)*	315.8
Ozone Flow (80 ± 15 cc/min)	75	*HVPS (400 - 900 V)*	600
NOx Slope (1 ± 0.3)	1.235	*NO Slope (1 ± 0.3)*	1.226
NOx Offset (0 ± 100)	0.2	*NO Offset (0 ± 100)*	0.2

Operator comments/observations:

Operator Signature: Kami Ballard

AIR SCIENCES INC.
DENVER • PORTLAND

WR
REVIEWED BY RPA DATE 10-1-13
AUDITED BY DATE

Resolution EAST
NO_x Monitoring Form

Site Operator: Kyra Ballard Date: 09/30/2013

Sampler Make /Model		T200
Sampler SN		SN 197
Dilution Calibrator Model/SN	Primary	T700/SN191
	Transfer	

Instrument Check Start Time	8:54 LT
Instrument Check Stop Time	9:20 LT
Filter Replacement Y/N	Yes
Shelter Temp (5 to 40 °C)	25.16
Instrument Range	500 PPB
Source Gas Conc.	40% NO

Level 1 Zero/Span (once every 2 weeks)

Check the Zero/Span with the T700 Dynamic Dilution Calibrator.

Target Dilution (PPB)	NO Response (PPB)	NO_2 Response (PPB)	Nox Response (PPB)	Final NO_x Response (PPB)	Acceptance Criteria (PPB)	Adjustment Required? Y/N
Zero Air	0.1	-1.2	-1.1	—	±3% of full Scale (±15 PPB)	No
100 PPB	92.0	-0.4	91.7		≤±10% (90 to 110 PPB)	

After calibration →

Check the real time Analog vs. Digital converter.

Target Dilution (PPB)	T200 Response (PPB)		CR3000 Response (PPM)		Acceptance Criteria	Adjustment Required? Y/N
Zero Air	NO	0.1	NO	-0.1	±2 PPB	No
	NO_2	-1.2	NO_2	-1.4		
	NO_x	-1.1	NO_x	-1.1		
100 PPB	NO	92.0	NO	92.3	±2 PPB	No
	NO_2	-0.4	NO_2	-0.6		
	NO_x	91.7	NO_x	91.8		

Verify instrument parameters:

Sample Flow (500 ± 50 cc/min)	503	*Moly Temp. (315 ± 5°C)*	314.8
Ozone Flow (80 ± 15 cc/min)	76	*HVPS (400 - 900 V)*	6000
NOx Slope (1 ± 0.3)	1.235	*NO Slope (1 ± 0.3)*	1.220
NOx Offset (0 ± 100)	5.2	*NO Offset (0 ± 100)*	0.2

Operator comments/observations:

INVALIDATED HOURLY CONCENTRATIONS OF NO, NO_2 AND NOx FOR 1000 HRS ON 9-30-13 DUE TO LEVEL 1 CHECKS - RPA

Operator Signature: Kyra Ballard

1 filter left

AIR SCIENCES INC.
DENVER • PORTLAND

REVIEWED BY RPA DATE 8-1-13
AUDITED BY DATE 7-8-13

AIR SCIENCES INC.
DENVER • PORTLAND

Resolution EAST

SO_2 Monitoring Form

Site Operator: Kami Ballard Date: 07·02·2013

Sampler Make /Model		T100
Sampler SN		SN 193
Dilution Calibrator Model/SN	Primary	T700/SN 191
	Transfer	—

Instrument Check Start Time	11:42 LT
Instrument Check Stop Time	11:52 LT
Filter Replacement Y/N	No
Shelter Temp (5 to 40 °C)	22.41
Instrument Range	500 PPB
Source Gas Conc.	40% SO PPM

Level 1 Zero/Span (once every 2 weeks)
Check the Zero/Span with the T700 Dynamic Dilution Calibrator:

Target Dilution (PPB)	SO2 Response (PPB)	Final SO2 Response (PPB)	Acceptance Criteria (PPB)	Adjustment Required? Y/N
Zero Air	.325	—	± 3% of Full Scale (-15 to 15 PPB)	No
100	98.621	—	≤ ± 10% (90 to 110 PPB)	No

Check the real time Analog vs. Digital Converter:

Target Dilution (PPB)	T100 Response (PPB)	CR3000 Response (PPB)	Acceptance Criteria	Adjustment Required? Y/N
Zero Air	.325	.96	± 2 PPB	No
100 PPB	98.621	99.27	± 2 PPB	No

Verify instrument parameters:

Sample Flow (450 ± 45 cc/min)	438	*Sample Press. (Ambient ± 2 in-Hg)*	24.2
UV Lamp (1000 - 4800 mV)	2848	*Lamp Ratio (30 - 120%)*	79.4
Slope (1 ± 0.3)	1.097	*BOX Temp. (Ambient ± 5°C)*	31.1
Offset (< 250 mV)	18.1	*HVPS (400 - 900 V)*	571

Operator comments/observations:
INVALIDATED THE 1200 HRS DATA FILE FOR SO^2 ON 7-2-13 – RPA

Operator Signature: Kami Ballard

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AUDITED BY RPA DATE 8-13-13

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Resolution EAST
SO_2 Monitoring Form

Site Operator: Kami McCord Date: 08/02/2013

Sampler Make/Model		T100
Sampler SN		SN 193
Dilution Calibrator Model/SN	Primary	T700/SN 191
	Transfer	—

Instrument Check Start Time	14:07
Instrument Check Stop Time	14:15
Filter Replacement Y/N	No
Shelter Temp (5 to 40 °C)	26.9
Instrument Range	500 PPB
Source Gas Conc.	40% SO 40 ppm ns

Level 1 Zero/Span (once every 2 weeks)
Check the Zero/Span with the T700 Dynamic Dilution Calibrator:

Target Dilution (PPB)	SO2 Response (PPB)	Final SO2 Response (PPB)	Acceptance Criteria (PPB)	Adjustment Required? Y/N
Zero Air	.010	—	± 3% of Full Scale (-15 to 15 PPB)	No
100	102.07	—	≤ ± 10% (90 to 110 PPB)	No

Check the real time Analog vs. Digital Converter:

Target Dilution (PPB)	T100 Response (PPB)	CR3000 Response (PPB)	Acceptance Criteria	Adjustment Required? Y/N
Zero Air	.010	.79	± 2 PPB	No
100 PPB	102.07	102.67	± 2 PPB	No

Verify instrument parameters:

Sample Flow (450 ± 45 cc/min)	622	*Sample Press. (Ambient ± 2 in-Hg)*	23.0
UV Lamp (1000 - 4800 mV)	2811.4	*Lamp Ratio (30 - 120%)*	78.4%
Slope (1 ± 0.3)	1.170	*BOX Temp. (Ambient ± 5°C)*	31.2
Offset (< 250 mV)	19.0	*HVPS (400 - 900 V)*	571

Operator comments/observations:

Operator Signature: Kami McCord

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Resolution EAST

SO_2 Monitoring Form

Site Operator: Kami BaCle-d Date: 08.16.2013

Sampler Make /Model		T200
Sampler SN		SN 193
Dilution Calibrator Model/SN	Primary	T700/SN191
	Transfer	—

Instrument Check Start Time	14:29
Instrument Check Stop Time	14:39
Filter Replacement Y/N	Yes
Shelter Temp (5 to 40 °C)	28.27
Instrument Range	500 PPB
Source Gas Conc.	~~40%~~ SO 40 ppm

Level 1 Zero/Span (once every 2 weeks)
Check the Zero/Span with the T700 Dynamic Dilution Calibrator:

Target Dilution (PPB)	SO2 Response (PPB)	Final SO2 Response (PPB)	Acceptance Criteria (PPB)	Adjustment Required? Y/N
Zero Air	-.246	—	± 3% of Full Scale (-15 to 15 PPB)	No
100	103.691	—	≤ ± 10% (90 to 110 PPB)	No

Check the real time Analog vs. Digital Converter:

Target Dilution (PPB)	T100 Response (PPB)	CR3000 Response (PPB)	Acceptance Criteria	Adjustment Required? Y/N
Zero Air	-.246	.348	± 2 PPB	No
100 PPB	103.691	104.38	± 2 PPB	No

Verify instrument parameters: *

Sample Flow (450 ± 45 cc/min)	621 -??	*Sample Press. (Ambient ± 2 in-Hg)*	23.0
UV Lamp (1000 - 4800 mV)	2786.3	*Lamp Ratio (30 - 120%)*	77.7
Slope (1 ± 0.3)	1.177	*BOX Temp. (Ambient ± 5°C)*	30.5
Offset (< 250 mV)	20.1	*HVPS (400 - 900 V)*	571

Operator comments/observations:

Operator Signature: Kami BaCle-d

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DELIVERY DATE 8-19-13

1

* ASI will verify flow. Notifications will be composed if any errors are found.

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Resolution EAST

SO_2 Monitoring Form

Site Operator: Kami Ballard Date: 08/30/2013

Sampler Make /Model		T100
Sampler SN		SN 193
Dilution Calibrator Model/SN	Primary	T700/SN 191
	Transfer	—

Instrument Check Start Time	11:26 LT
Instrument Check Stop Time	11:40 LT
Filter Replacement Y/N	No
Shelter Temp (5 to 40 °C)	26.87
Instrument Range	500 PPB
Source Gas Conc.	~~40%~~ 80 40 ppm

Level 1 Zero/Span (once every 2 weeks)

Check the Zero/Span with the T700 Dynamic Dilution Calibrator:

Target Dilution (PPB)	SO2 Response (PPB)	Final SO2 Response (PPB)	Acceptance Criteria (PPB)	Adjustment Required? Y/N
Zero Air	-.621	—	± 3% of Full Scale (-15 to 15 PPB)	No
100	104.59	—	≤ ± 10% (90 to 110 PPB)	No

Check the real time Analog vs. Digital Converter:

Target Dilution (PPB)	T100 Response (PPB)	CR3000 Response (PPB)	Acceptance Criteria	Adjustment Required? Y/N
Zero Air	-.621	-.165	± 2 PPB	No
100 PPB	104.59	105.35	± 2 PPB	No

Verify instrument parameters:

Sample Flow (450 ± 45 cc/min)	622	*Sample Press. (Ambient ± 2 in-Hg)*	23.0
UV Lamp (1000 - 4800 mV)	2776.0	*Lamp Ratio (30 - 120%)*	77.4
Slope (1 ± 0.3)	1.177	*BOX Temp. (Ambient ± 5°C)*	31.5
Offset (< 250 mV)	20.1	*HVPS (400 - 900 V)*	571

Operator comments/observations:

Sample Flow above 450 cc/min, spanning Hilert, unable to remotely access, notified site operator to verify RJ-45 connections. — RPA

Operator Signature: Kami Ballard

[signature], will follow up.

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Resolution EAST
SO_2 Monitoring Form

Site Operator: Kami Bolland Date: 9/12/2013

Sampler Make /Model		T100
Sampler SN		SN 193
Dilution Calibrator Model/SN	Primary	T700 / SN 191
	Transfer	—

Instrument Check Start Time	14:56 CT
Instrument Check Stop Time	15:04
Filter Replacement Y/N	No
Shelter Temp (5 to 40 °C)	24.30
Instrument Range	500 PPB
Source Gas Conc.	40% 80 40 ppm

Level 1 Zero/Span (once every 2 weeks)
Check the Zero/Span with the T700 Dynamic Dilution Calibrator:

Target Dilution (PPB)	SO2 Response (PPB)	Final SO2 Response (PPB)	Acceptance Criteria (PPB)	Adjustment Required? Y/N
Zero Air	-1.3	~~###~~	± 3% of Full Scale (-15 to 15 PPB)	No
100	91.4	—	≤ ± 10% (90 to 110 PPB)	No

Check the real time Analog vs. Digital Converter:

Target Dilution (PPB)	T100 Response (PPB)	CR3000 Response (PPB)	Acceptance Criteria	Adjustment Required? Y/N
Zero Air	-1.3	-0.41	± 2 PPB	No
100 PPB	91.4	91.9	± 2 PPB	—

Verify instrument parameters:

Sample Flow (450 ± 45 cc/min)	457	*Sample Press. (Ambient ± 2 in-Hg)*	26.0
UV Lamp (1000 - 4800 mV)	2765.7	*Lamp Ratio (30 - 120%)*	77.1
Slope (1 ± 0.3)	1.177	*BOX Temp. (Ambient ± 5°C)*	30.2
Offset (< 250 mV)	20.1	*HVPS (400 - 900 V)*	571

Operator comments/observations:

Operator Signature: Kami Bolland

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Resolution EAST
SO_2 Monitoring Form

Site Operator: Kami Ballard Date: 9/30/2013

Sampler Make /Model		T100
Sampler SN		SN193
Dilution Calibrator Model/SN	Primary	T700/SN191
	Transfer	—

Instrument Check Start Time	0943
Instrument Check Stop Time	09:58
Filter Replacement Y/N	Y
Shelter Temp (5 to 40 °C)	27.1°C
Instrument Range	500 PPB
Source Gas Conc.	40% SO_2

Level 1 Zero/Span (once every 2 weeks)
Check the Zero/Span with the T700 Dynamic Dilution Calibrator:

Target Dilution (PPB)	SO2 Response (PPB)	Final SO2 Response (PPB)	Acceptance Criteria (PPB)	Adjustment Required? Y/N
Zero Air	-1.82	—	± 3% of Full Scale (-15 to 15 PPB)	N
100	91.2	—	≤ ± 10% (90 to 110 PPB)	N

Check the real time Analog vs. Digital Converter:

Target Dilution (PPB)	T100 Response (PPB)	CR3000 Response (PPB)	Acceptance Criteria	Adjustment Required? Y/N
Zero Air	-1.82	-1.7	± 2 PPB	N
100 PPB	91.2	92.0	± 2 PPB	

Verify instrument parameters:

Sample Flow (450 ± 45 cc/min)	459	*Sample Press. (Ambient ± 2 in-Hg)*	26.2
UV Lamp (1000 - 4800 mV)	2730.5	*Lamp Ratio (30 - 120%)*	76.2
Slope (1 ± 0.3)	1.177	*BOX Temp. (Ambient ± 5°C)*	29.4
Offset (< 250 mV)	20.1	*HVPS (400 - 900 V)*	571

Operator comments/observations:

Operator Signature: [signature]

2 filters left

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Resolution EAST

O_3 Monitoring Form

Site Operator: Kami Ballard Date: 07-02-2013

Sampler Make/Model		T400
Sampler SN		SN224
Dilution Calibrator Model/SN	Primary	T700/SN191
	Transfer	—

Instrument Check Start Time	11:53 LT
Instrument Check Stop Time	12:06 LT
Filter Replacement Y/N	No
Shelter Temp (5 to 40 °C)	21.71
Instrument Range	500 PPB

Level 1 Zero/Span (once every 2 weeks)
Check the Zero/Span ppb with the T700 Dynamic Dilution Calibrator.

Target Dilution (PPB)	O3 Response (PPB)	Final O3 Response (PPB)	Acceptance Criteria (PPB)	Adjustment Required? Y/N
Zero Air	-1.5	—	≤ ± 2% of Full Scale (±10 PPB)	Na
100	98.1	—	≤ ± 7% (93 to 107 PPB)	No

Check the real time Analog vs. Digital converter.

Target Dilution (PPB)	T400 Response (PPB)	CR3000 Response (PPB)	Acceptance Criteria	Adjustment Required? Y/N
Zero Air	-1.5	-.91	± 2 PPB	No
100 PPB	98.1	99.29	± 2 PPB	No

Verify instrument parameters:

Sample Flow (550 ± 55 cc/min)	570	*Sample Temp. (10 - 50 °C)*	38.4
Photo Lamp (58 ± 1 °C)	58.0	*BOX Temp. (30 ± 20 °C)*	27.1
Slope (1 ± 0.15)	.887	*O3 Measure (2500 - 4800 mV)*	3401.7
Offset (0.0 ± 5 PPB)	0.9	*O3 Reference (2500 - 4800 mV)*	3405.4

Operator comments/observations:
INVALIDATED THE 1200 AND 1300 hrs Filter for O^3 ON 7-2-13 - RPA

Operator Signature: Kami Ba

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Resolution EAST

O_3 Monitoring Form

Site Operator: Kanu Ballard Date: 08/02/2013

Sampler Make /Model		T400
Sampler SN		SN 224
Dilution Calibrator Model/SN	Primary	T700 / SN191
	Transfer	—

Instrument Check Start Time	~~14:06~~
Instrument Check Stop Time	
Filter Replacement Y/N	No
Shelter Temp (5 to 40 °C)	26.79
Instrument Range	500 PPB

Level 1 Zero/Span (once every 2 weeks)
Check the Zero/Span ppb with the T700 Dynamic Dilution Calibrator.

Target Dilution (PPB)	O3 Response (PPB)	Final O3 Response (PPB)	Acceptance Criteria (PPB)	Adjustment Required? Y/N
Zero Air	1.3	—	≤ ± 2% of Full Scale (±10 PPB)	No
100	99.0	—	≤ ± 7% (93 to 107 PPB)	No

Check the real time Analog vs. Digital converter.

Target Dilution (PPB)	T400 Response (PPB)	CR3000 Response (PPB)	Acceptance Criteria	Adjustment Required? Y/N
Zero Air	1.3	1.9	± 2 PPB	No
100 PPB	99.0	99.45	± 2 PPB	No

Verify instrument parameters:

Sample Flow (550 ± 55 cc/min)	566	*Sample Temp. (10 - 50 °C)*	38.2
Photo Lamp (58 ± 1 °C)	58	*BOX Temp. (30 ± 20 °C)*	26.8
Slope (1 ± 0.15)	0.879	*O3 Measure (2500 - 4800 mV)*	3353.7
Offset (0.0 ± 5 PPB)	2.4	*O3 Reference (2500 - 4800 mV)*	3353.7

Operator comments/observations:

Operator Signature: Kanu Ballard

4

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O_3

Resolution EAST

O_3 Monitoring Form

Site Operator: Kami BaClard Date: 08.16.2013

Sampler Make /Model		T400
Sampler SN		SN 224
Dilution Calibrator Model/SN	Primary	T700/SN 191
	Transfer	———

Instrument Check Start Time	14:40
Instrument Check Stop Time	14:56
Filter Replacement Y/N	Yes
Shelter Temp (5 to 40 °C)	28.86
Instrument Range	500 PPB

Level 1 Zero/Span (once every 2 weeks)
Check the Zero/Span ppb with the T700 Dynamic Dilution Calibrator.

Target Dilution (PPB)	O3 Response (PPB)	Final O3 Response (PPB)	Acceptance Criteria (PPB)	Adjustment Required? Y/N
Zero Air	1.1	—	≤ ± 2% of Full Scale (±10 PPB)	No
100	94.6	—	≤ ± 7% (93 to 107 PPB)	No

Check the real time Analog vs. Digital converter.

Target Dilution (PPB)	T400 Response (PPB)	CR3000 Response (PPB)	Acceptance Criteria	Adjustment Required? Y/N
Zero Air	1.1	1.8	± 2 PPB	No
100 PPB	94.6	95.04	± 2 PPB	No

Verify instrument parameters:

Sample Flow (550 ± 55 cc/min)	567	*Sample Temp. (10 - 50 °C)*	37.6
Photo Lamp (58 ± 1 °C)	58.0	*BOX Temp. (30 ± 20 °C)*	26.4
Slope (1 ± 0.15)	0.879	*O3 Measure (2500 - 4800 mV)*	3331.0
Offset (0.0 ± 5 PPB)	2.4	*O3 Reference (2500 - 4800 mV)*	3334.0

Operator comments/observations:

Operator Signature: Kami BaClard

1

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DATE

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Resolution EAST

O_3 Monitoring Form

Site Operator: Kami Ballard Date: 08/30/2013

Sampler Make /Model		T400
Sampler SN		SN 224
Dilution Calibrator Model/SN	Primary	T700/SN 191
	Transfer	—

Instrument Check Start Time	11:40 LT
Instrument Check Stop Time	12:13 LT
Filter Replacement Y/N	No
Shelter Temp (5 to 40 °C)	28.1
Instrument Range	500 PPB

Level 1 Zero/Span (once every 2 weeks)
Check the Zero/Span ppb with the T700 Dynamic Dilution Calibrator.

Target Dilution (PPB)	O3 Response (PPB)	Final O3 Response (PPB)	Acceptance Criteria (PPB)	Adjustment Required? Y/N
Zero Air	2.2	—	≤ ± 2% of Full Scale (±10 PPB)	No
100	98.2	—	≤ ± 7% (93 to 107 PPB)	No

Check the real time Analog vs. Digital converter.

Target Dilution (PPB)	T400 Response (PPB)	CR3000 Response (PPB)	Acceptance Criteria	Adjustment Required? Y/N
Zero Air	2.2	2.8	± 2 PPB	No
100 PPB	98.2	99.7	± 2 PPB	No

Verify instrument parameters:

Sample Flow (550 ± 55 cc/min)	569	*Sample Temp. (10 - 50 °C)*	38.4
Photo Lamp (58 ± 1 °C)	58.0	*BOX Temp. (30 ± 20 °C)*	26.8
Slope (1 ± 0.15)	0.879	*O3 Measure (2500 - 4800 mV)*	3312.6
Offset (0.0 ± 5 PPB)	2.4	*O3 Reference (2500 - 4800 mV)*	3312.3

Operator comments/observations:

Operator Signature: Kami Ballard

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Resolution EAST

O_3 Monitoring Form

Site Operator: Kami BoClad Date: 9/12/2013

Sampler Make /Model		T400
Sampler SN		SN 224
Dilution Calibrator Model/SN	Primary	T700/SN 191
	Transfer	—

Instrument Check Start Time	15:06 LT
Instrument Check Stop Time	15:21 LT
Filter Replacement Y/N	No
Shelter Temp (5 to 40 °C)	26.47
Instrument Range	500 PPB

Level 1 Zero/Span (once every 2 weeks)
Check the Zero/Span ppb with the T700 Dynamic Dilution Calibrator.

Target Dilution (PPB)	O3 Response (PPB)	Final O3 Response (PPB)	Acceptance Criteria (PPB)	Adjustment Required? Y/N
Zero Air	1.8	—	≤ ± 2% of Full Scale (±10 PPB)	No
100	100.1	—	≤ ± 7% (93 to 107 PPB)	No

Check the real time Analog vs. Digital converter.

Target Dilution (PPB)	T400 Response (PPB)	CR3000 Response (PPB)	Acceptance Criteria	Adjustment Required? Y/N
Zero Air	1.8	2.3	± 2 PPB	No
100 PPB	100.1	100.2	± 2 PPB	No

Verify instrument parameters:

Sample Flow (550 ± 55 cc/min)	562	*Sample Temp. (10 - 50 °C)*	38.1
Photo Lamp (58 ± 1 °C)	58.0	*BOX Temp. (30 ± 20 °C)*	26.6
Slope (1 ± 0.15)	0.879	*O3 Measure (2500 - 4800 mV)*	3294.05
Offset (0.0 ± 5 PPB)	2.4	*O3 Reference (2500 - 4800 mV)*	3295.0

Operator comments/observations:

Operator Signature: Kami BoClad

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Resolution EAST

O_3 Monitoring Form

Site Operator: Tom White Date: 9/30/2013

Sampler Make /Model		T400
Sampler SN		SN 224
Dilution Calibrator Model/SN	Primary	T700/SN 191
	Transfer	—

Instrument Check Start Time	921
Instrument Check Stop Time	942
Filter Replacement Y/N	Y
Shelter Temp (5 to 40 °C)	25.9°C
Instrument Range	500 PPB

Level 1 Zero/Span (once every 2 weeks)
Check the Zero/Span ppb with the T700 Dynamic Dilution Calibrator.

Target Dilution (PPB)	O3 Response (PPB)	Final O3 Response (PPB)	Acceptance Criteria (PPB)	Adjustment Required? Y/N
Zero Air	1.9	—	≤ ± 2% of Full Scale (±10 PPB)	N
100	94	—	≤ ± 7% (93 to 107 PPB)	N

Check the real time Analog vs. Digital converter.

Target Dilution (PPB)	T400 Response (PPB)	CR3000 Response (PPB)	Acceptance Criteria	Adjustment Required? Y/N
Zero Air	1.9	2.5	± 2 PPB	N
100 PPB	94	93.8	± 2 PPB	

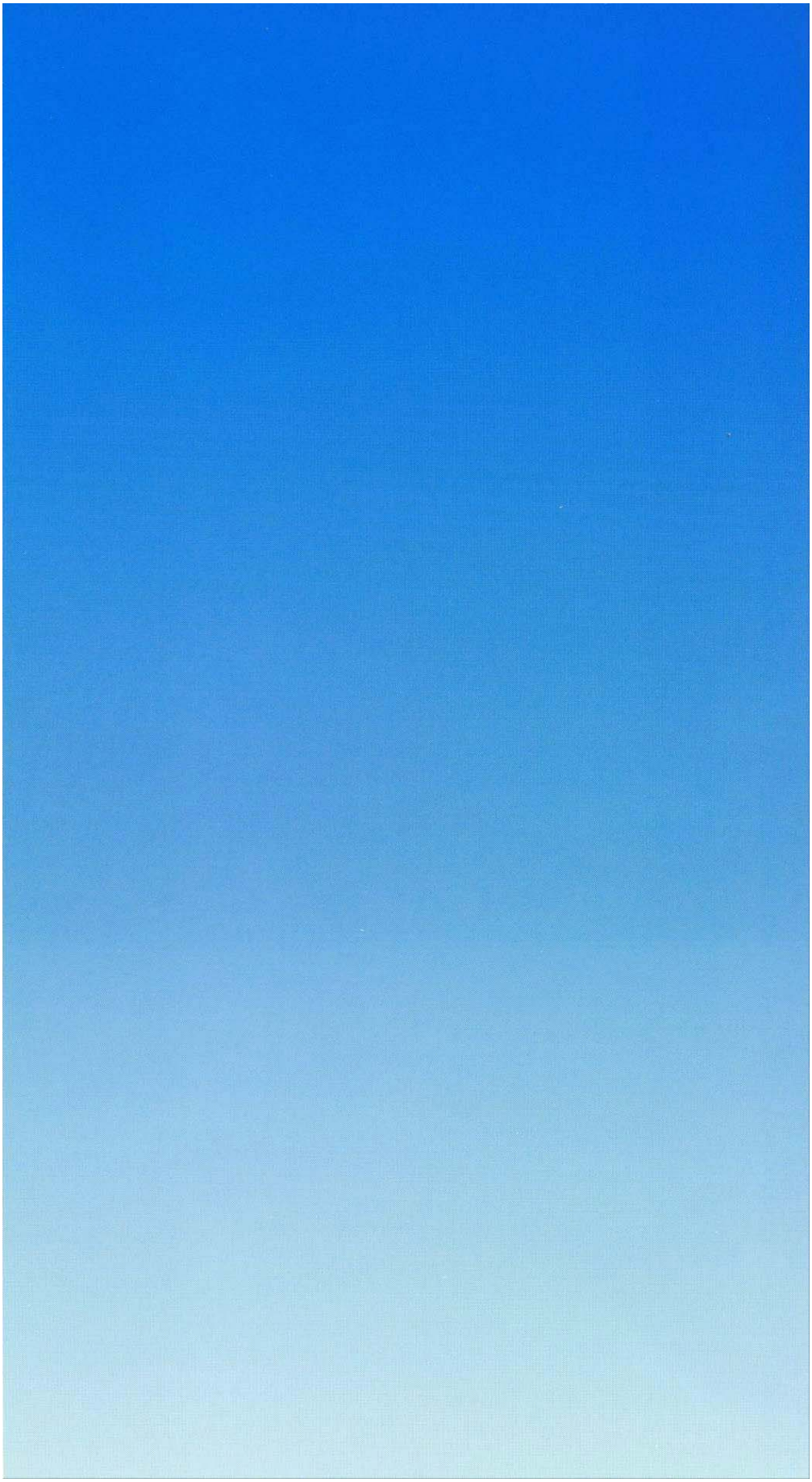
Verify instrument parameters:

Sample Flow (550 ± 55 cc/min)	555	*Sample Temp. (10 - 50 °C)*	37.4°C
Photo Lamp (58 ± 1 °C)	58	*BOX Temp. (30 ± 20 °C)*	25.5
Slope (1 ± 0.15)	0.879	*O3 Measure (2500 - 4800 mV)*	3271.1
Offset (0.0 ± 5 PPB)	2.4	*O3 Reference (2500 - 4800 mV)*	3274.1

Operator comments/observations:

Operator Signature: T White

Appendix K: Audits and Calibrations



Air Quality Calibration Report East Plant Monitoring Station

PREPARED FOR:
RESOLUTION COPPER MINING

PREPARED BY:
RORY ATTRIDGE
AIR SCIENCES INC.

PROJECT 262-5
JULY 2013

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3.1 Meteorological Sensor Calibration Procedures....4
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Appendices

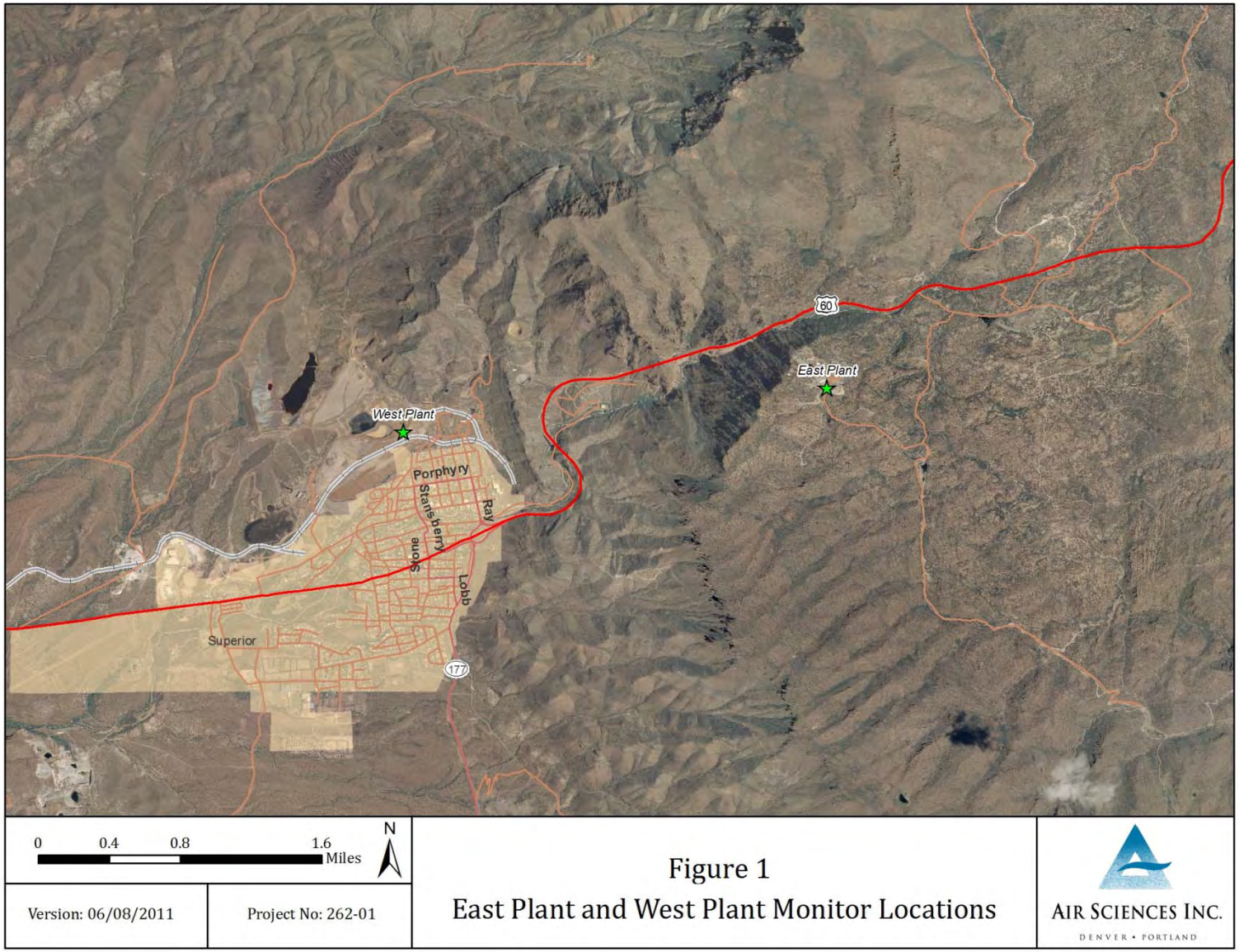
Appendix A: Calibration Forms

1.0 INTRODUCTION

On July 15-17, 2013, and July 22, 2013, the meteorological and air quality instrumentation was calibrated at the Resolution Copper East Plant, near Superior, AZ. The East Plant monitoring station is operated by the Resolution Copper Mining company and is located approximately two miles east of the West operation plant (see Figure 1). The purpose of this document is to provide a brief synopsis of the air quality monitoring system and of the calibration procedures for the meteorological, particulate and ambient gas instrumentation at the East plant site. The calibration was conducted in accordance with the following guideline documents:

- EPA-450/4-87-007, Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD), May 1987
- EPA-454/R-99-005 Meteorological Monitoring Guidance for Regulatory Modeling Applications, Section 8.4, February 2000
- EPA-454/B-13-003, Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II: Ambient Air Quality Monitoring Program, May 2013
- EPA-454/B-08-002, Quality Assurance Handbook for Air Pollution Measurement Systems, Volume IV: Meteorological Measurements Version 2.0, March 2008
- Transfer Standards for the calibration of Ambient Air Monitoring Analyzers for Ozone (EPA-454/B-10-001)
- Code of Federal Regulations (40 CFR Parts 50 and 58)

Figure 1: Project Location Map – East Plant and West Plant Monitoring Station Locations



2.0 SYSTEM DESCRIPTION

The parameters calibrated and or audited at the East Plant monitoring site include wind speed, wind direction, ambient temperature, vertical height temperature difference (delta temperature), solar radiation, relative humidity, precipitation, barometric pressure, particulate matter less than 10 and 2.5 microns in diameter (PM_{10} & $PM_{2.5}$), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), and ozone (O_3).

The meteorological sensors are mounted to a 35-foot, open-lattice, aluminum drop tower and the analyzers are housed in a 60-square-foot climate controlled trailer. Sensor and instrumentation inlet heights are listed in Table 1.

Table 1. Sensors, Instruments and Inlet Heights

Parameter	Approximate Height (meters)
Wind Speed	10
Wind Direction	10
Ambient Temperature	2
Delta Temperature	2, 10
Solar Radiation	2
Relative Humidity	2
Precipitation	1
Barometric Pressure	1.5
PM_{10}	3
$PM_{2.5}$	3
NO_2	3
SO_2	3
O_3	3

Monitored data parameters are recorded via analog inputs on two Campbell Scientific CR3000 dataloggers, each powered independently by either DC solar or by locally supplied AC line power. All meteorological sensors are programmed on a two-second scan interval, and the output is digitally processed and recorded into 15-minute averages. The raw 15-minute averages are temporarily stored on the datalogger memory, and a local computer is automatically configured to permanently back up datalogger files on a 15-minute interval. The raw 15-minute data averages are securely transmitted, via cellular broadband Internet services, to the Air Sciences Inc. server and processed into the Data Acquisition System (DAS) for quality assurance checks. These raw 15-minute averages are used as input for the calculation of one-hour averages.

3.0 CALIBRATION METHODOLOGY

This section provides the calibration procedures for the meteorological, particulate and ambient gas instrumentation at the East Plant monitoring site. Copies of the completed calibration forms for each parameter are included in Appendix A.

3.1 Meteorological Sensor Calibration Procedures

The wind speed sensor calibration was performed by rotating the sensor shaft using a DC-powered variable-speed motor equipped with an optical encoder output referenced to a crystal oscillator. A target sensor speed was calculated based on the calibration rotational speed and compared to the instantaneous datalogger reading. An R.M. Young Torque Disc was used to measure the anemometer starting torque. All data were recorded on a standardized form.

The calibration of the wind direction system was performed by aligning the tail vane of the sensor to its mounting cross-arm. A Brunton Precision Magnetic Compass (BPMC) mounted on a tripod was used to establish the orientation of the cross-arm using the Magnetic Declination Method.[1] With the wind direction sensor oriented along the axis of the cross-arm, the sensor response was compared to the BPMC-measured value and recorded on a standardized form. The potentiometer linearity was checked by recording the system response at 45-degree intervals over the operating range of the system. Data were recorded on a standardized form.

The ambient temperature sensor calibration was performed by comparing the temperature sensor in-situ to a NIST-traceable[2] temperature sensor. Both thermometer and datalogger readings were recorded on a standardized form.

The differential temperature sensor calibration was performed by immersing both temperature sensors in a series of three water baths within the range of the temperature sensors. Positive and negative temperature differentials were checked by immersing the sensors in separate water baths. All cabling and associated wiring remained intact for the calibration of both sensors. A Precision Temperature Sensor was used to measure the bath temperatures. All calibration data were recorded on standardized forms.

The solar radiation sensor calibration was performed by comparing the sensor in-situ to a calibrated pyranometer wired to an independent datalogger. Both the standard and the datalogger readings were recorded on a standardized form.

[1] Refer to section 2.5.2.2 of the Quality Assurance Handbook for Air Pollution Measurement Systems, Volume IV: Version 2.0, March 2008, for more details.

[2] National Institute of Standards and Technology

The relative humidity sensor calibration was performed by comparing the humidity sensor in-situ to a NIST-traceable humidity sensor. Both the standard and datalogger readings were recorded on a standardized form.

The precipitation gauge was calibrated by employing a graduated syringe and distilled water. The volume of water required to cause the tipping bucket to activate was measured repeatedly, averaged, and compared to the calculated value for the activation. All volumes were recorded on a standardized form.

The barometric pressure sensor calibration was performed by comparing the sensor in-situ to a NIST-traceable barometric pressure standard. Both the standard and datalogger readings were recorded on a standardized form.

3.2 Particulate Matter Calibration Procedures

The BAM 1020 PM_{10} and BAM 1020 $PM_{2.5}$ monitors were assessed and calibrated by comparing and then adjusting the temperature, barometric pressure, and internal flow to a certified deltaCal Volumetric Air Flow Calibrator. All required maintenance was performed on the instrument to assure optimal operations. The temperature, barometric pressure, and flow output readings from the deltaCal and the instrument were recorded on a standardized form.

3.3 Ambient Gas Calibration Procedures

Calibration of the Teledyne T100 SO_2 analyzer involved a Multi-Point Calibration (MPA) and an Analog to Digital (A2D) verification. The MPA was performed by using the T700 calibrator to dilute NIST-traceable EPA-protocol calibration gas with a clean zero-air source to calibrate the T100 analyzer at zero, and at five points within the instrument range—typically at point from 100 to 500 PPB of SO_2. An A2D verification check of the T100 instrument response against the CR3000 datalogger response was performed to guarantee accurate representation of the digital scale from the analog output signals.

Calibration of the Teledyne T200 NO_2 analyzer involved an MPA and an A2D verification. The SPC was performed by using the T700 calibrator to dilute NIST-traceable EPA-protocol calibration gas with a clean zero-air source to calibrate the T200 analyzer at zero, and five points within the instrument range—typically at points from 100 to 500 PPB of NO_X. A verification check of the T200 instrument response against the CR3000 datalogger response was performed to guarantee accurate representation of the digital scale from the analog output signals.

Calibration of the Teledyne T400 O_3 analyzer involved an MPA, and an A2D verification. The SPC was performed by using the T700 calibrator to generate O_3 gas to calibrate the T400 analyzer at zero, and at a single point within the instrument range—typically a point from 100 to 500 PPB of O_3. An MPA was performed using a 700E transfer standard calibrator to evaluate the calibration by verifying the analyzer's response to zero and five upscale spans. After the MPA, a verification check of the T400 instrument against the CR3000 datalogger response was performed to guarantee accurate representation of the digital scale from the analog output signals.

4.0 RESULTS AND RECOMMENDATIONS

Bearing replacement of the East Plant RMY 05305 Wind Monitor was completed. Annual servicing of the ambient gaseous analyzer systems was performed.

The Teledyne T200 NO_2 analyzer's internal ozone scrubber was inadvertently damaged during the annual servicing procedures conducted on July 17, 2013. The input flow line of the ozone scrubber was found cross threaded due to being originally over tightened during manufacturer assembly. A replacement ozone scrubber was installed and the T200 NO_2 analyzer calibrated on July 22, 2013.

All other instruments and sensors were within their recommended tolerance parameters at the Resolution Copper East Plant monitoring site.

Appendix A: Calibration Forms

METEOROLOGICAL CALIBRATION DATA

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Client : Resolution Copper Company
Job No. : 262-5
Site : East Plant
Date : 7/15/2013
Time: 1445-1730 hours
Auditors: R. Attridge
A. Schlabaugh

Data Logger
Model : CR3000
Serial No : 6591

WIND SPEED, 10m

Model:	05305	Calibration Motor No.:	CA03336
Serial No:	112953	Calibration Disk No.:	2

System Linearity Check

	Input rpm	Target* m/s	Logger Reading m/s	Difference m/s	Acceptance Criteria
CW	0.0	0.00	0.00	0.00	0.0
CW	200.0	1.02	1.02	0.00	0.3
CW	400.0	2.05	2.05	0.00	0.3
CW	600.0	3.07	3.07	0.00	0.4
CW	800.0	4.10	4.10	0.00	0.4
CW	1000.0	5.12	5.12	0.00	0.5
CW	2000.0	10.24	10.24	0.00	0.7
CW	3000.0	15.36	15.36	0.00	1.0
CW	4000.0	20.48	20.48	0.00	1.2
CW	5000.0	25.60	25.60	0.00	1.5

RM Young
*Target (m/s) = rpm x 0.00512

Bearing Torque Test (Passing 0.4 m/s = 0.6 g-cm)

Clockwise	0.4	g-cm
Counterclockwise	0.4	g-cm

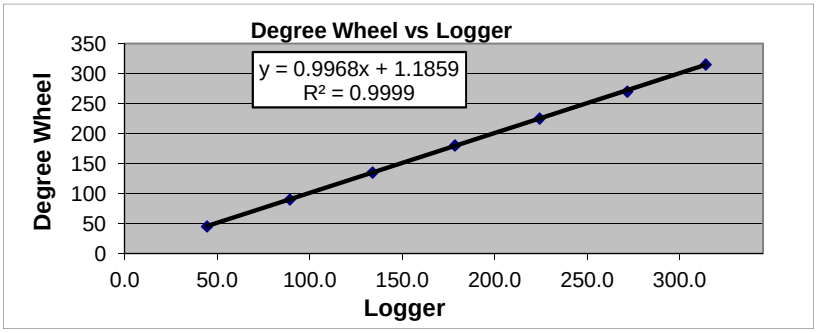
WIND DIRECTION, 10m

Model: 05305 Serial No: 112953 Compass No.: 1

System Accuracy and Linearity Check Declination [1] = 10 East

Orientation	Compass (Degrees)	Target (Degrees)	Logger Reading (Degrees)	Difference (Degrees)	Acceptance Criteria
1. Vane	167.0	165.0	164.8	-0.2	±5
Tail	347.0	345.0	348.1	3.1	±5

CW	Initial Logger (Degrees)	Difference (Degrees)	Corrected Logger (Degrees)	Difference (Degrees)	Acceptance Criteria [2]
45	44.4	-0.6	45.0	0.0	±3
90	89.2	-0.8	89.8	-0.2	±3
135	133.9	-1.1	134.5	-0.5	±3
180	178.4	-1.6	179.0	-1.0	±3
225	224.2	-0.8	224.8	-0.2	±3
270	271.6	1.6	272.2	2.2	±3
315	314.0	-1.0	314.6	-0.4	±3
	Avg	-0.6			
CCW					
45	45.4	0.4	45.5	0.5	±3
90	89.1	-0.9	89.2	-0.8	±3
135	133.8	-1.2	133.9	-1.1	±3
180	178.9	-1.1	179.0	-1.0	±3
225	224.3	-0.7	224.4	-0.6	±3
270	271.9	1.9	272.0	2.0	±3
315	316.0	1.0	316.1	1.1	±3
	Avg	-0.1			



[1] Declination added to compass

[2] May reference wider acceptance criteria in *QA Handbook for Air Pollution Measurement Systems, Systems, Volume IV - Meteorological Measurements, August 1989*

WIND SPEED CALIBRATION, 10m

Model:	05305	Calibration Motor No.:		CA03336
Serial No:	112953	Calibration Disk No.:		2

System Linearity Check

	Input rpm	Target* m/s	Logger Reading m/s	Difference m/s	Acceptance Criteria
CW	0.0	0.00	0.00	0.00	0.0
CW	200.0	1.02	1.02	0.00	0.3
CW	400.0	2.05	2.05	0.00	0.3
CW	600.0	3.07	3.07	0.00	0.4
CW	800.0	4.10	4.10	0.00	0.4
CW	1000.0	5.12	5.12	0.00	0.5
CW	2000.0	10.24	10.24	0.00	0.7
CW	3000.0	15.36	15.36	0.00	1.0
CW	4000.0	20.48	20.48	0.00	1.2
CW	5000.0	25.60	25.60	0.00	1.5

RM Young
*Target (m/s) = rpm x 0.00512

Bearing Torque Test (Passing 0.4 m/s = 0.6 g-cm)

Clockwise	0.2	g-cm
Counterclockwise	0.2	g-cm

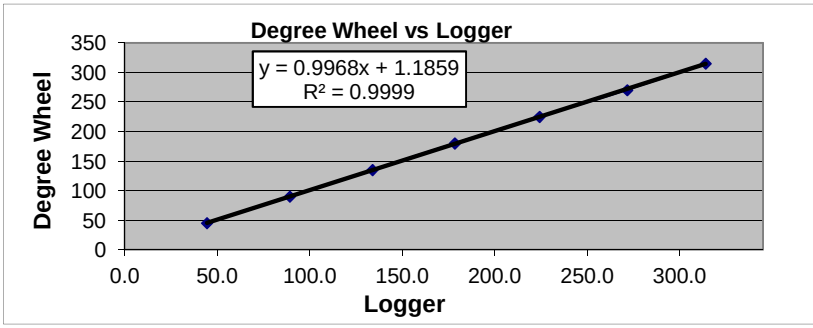
WIND DIRECTION CALIBRATION, 10m

Model: 05305 Serial No: 112953 Compass No.: 1

System Accuracy and Linearity Check Declination [1] = 10 East

Orientation	Compass (Degrees)	Target (Degrees)	Logger Reading (Degrees)	Difference (Degrees)	Acceptance Criteria
1. Vane	167.0	165.0	164.4	-0.6	±5
Tail	347.0	345.0	346.7	1.7	±5

CW	Initial Logger (Degrees)	Difference (Degrees)	Corrected Logger (Degrees)	Difference (Degrees)	Acceptance Criteria [2]
45	44.4	-0.6	45.0	0.0	±3
90	89.2	-0.8	89.8	-0.2	±3
135	133.9	-1.1	134.5	-0.5	±3
180	178.4	-1.6	179.0	-1.0	±3
225	224.2	-0.8	224.8	-0.2	±3
270	271.6	1.6	272.2	2.2	±3
315	314.0	-1.0	314.6	-0.4	±3
Avg		-0.6			
CCW					
45	45.4	0.4	45.5	0.5	±3
90	89.1	-0.9	89.2	-0.8	±3
135	133.8	-1.2	133.9	-1.1	±3
180	178.9	-1.1	179.0	-1.0	±3
225	224.3	-0.7	224.4	-0.6	±3
270	271.9	1.9	272.0	2.0	±3
315	316.0	1.0	316.1	1.1	±3
Avg		-0.1			



[1] Declination added to compass

[2] May reference wider acceptance criteria in *QA Handbook for Air Pollution Measurement Systems, Systems, Volume IV - Meteorological Measurements, August 1989*

Ambient Temperature, 2m

Model: HC2S3-L | Serial No: 60749863
Std Model: HC2S3-L | Std Serial No: 6104543

System Linearity Check

	Measured (ºC)	Logger Reading (ºC)	Difference (ºC)	Acceptance Criteria
1.	35.3	35.4	-0.1	±0.5
2.	35.4	35.5	-0.1	±0.5
3.	35.3	35.5	-0.2	±0.5
4.	35.3	35.5	-0.2	±0.5
5.	35.3	35.4	-0.1	±0.5
6.	35.4	35.5	-0.1	±0.5
7.	35.4	35.4	0.0	±0.5
8.	35.4	35.5	-0.1	±0.5
9.	35.3	35.5	-0.2	±0.5
10.	35.3	35.4	-0.1	±0.5

Relative Humidity, 2m

Model: HC2S3 | Serial No: 60749863
Std Model: HC2S3 | Std Serial No: 6104543

	Measured (%)	Logger Reading (%)	Difference (%)	Acceptance Criteria (%)
1.	25.3	24.9	0.4	±7
2.	25.3	24.8	0.5	±7
3.	25.4	24.7	0.7	±7
4.	25.4	24.7	0.7	±7
5.	25.2	24.7	0.5	±7
6.	24.6	24.4	0.2	±7
7.	24.4	23.3	1.1	±7
8.	24.6	23.8	0.8	±7
9.	25.2	24.2	1.0	±7
10.	25.2	24.4	0.8	±7

Delta Temperature, 2m, 10m

Model: 41342 | Serial No (2m): 020208
Serial No (10m): 020213
Std Model: 41342 | Std Serial No: 22518

Aspirator Fans Working properly? Yes

	Standard (ºC)	Lower T (ºC)	Upper T (ºC)	Difference Lower T [1] (ºC)	Difference Upper T [1] (ºC)	Difference Delta T [2] (ºC)
Bath 1	52.16	52.11	52.15	0.05	0.01	0.04
Bath 2	29.21	29.20	29.30	0.01	0.09	0.10
Bath 3	2.77	2.79	2.82	0.02	0.05	0.03

1. The acceptance criteria for deviation from the standard for both upper and lower temperatures is ± 0.5
2. The acceptance criteria for deviation from the standard for delta temperatures is ± 0.1

Barometric Pressure, 2m

Model: PTB110 | Serial No: G0077095
Std Model: PTB110 | Std Serial No: G0770076

System Linearity Check

	Measured (mmHg)	Logger Reading (mmHg)	Difference (mmHg)	Acceptance Criteria (mmHg)
1.	650.4	650.7	-0.3	±2.3
2.	650.4	650.7	-0.3	±2.3
3.	650.4	650.7	-0.3	±2.3
4.	650.4	650.7	-0.3	±2.3

SOLAR RADIATION, 2m

Model: CMP3 Serial No: 115422

Std Model: CMP3 Std Serial No: 123276

System Linearity Check

	Standard (w/m^2)	Logger Reading (w/m^2)	Difference (w/m^2)	Difference (%)	Acceptance Criteria
Covered Reading	0.0	0.0	0.0	0.0	± 25 W/m^2 or 5%
1.	347.4	338.8	8.6	-2.5	± 25 W/m^2 or 5%
2.	346.4	338.8	7.6	-2.2	± 25 W/m^2 or 5%
3.	346.3	342.6	3.7	-1.1	± 25 W/m^2 or 5%
4.	349.5	340.2	9.3	-2.7	± 25 W/m^2 or 5%
5.	319.1	324.0	-4.9	1.5	± 25 W/m^2 or 5%
6.	223.1	224.4	-1.3	0.6	± 25 W/m^2 or 5%
7.	229.0	220.6	8.4	-3.8	± 25 W/m^2 or 5%
8.	232.3	222.8	9.5	-4.3	± 25 W/m^2 or 5%
9.	246.1	237.4	8.7	-3.7	± 25 W/m^2 or 5%
10.	244.7	236.2	8.5	-3.6	± 25 W/m^2 or 5%
		Avg	5.8		

PRECIPITATION, GROUND LEVEL

Model: 5202 Serial No: 8721

System Linearity Check

	Water (cc)	Calculated Target* (inches)	Logger Reading (inches)	Difference (inches)
1.	2.10	0.004	0.004	0.000
2.	2.20	0.004	0.004	0.000
3.	2.10	0.004	0.004	0.000
4.	2.10	0.004	0.004	0.000
5.	2.10	0.004	0.004	0.000
6.	2.00	0.004	0.004	0.000
7.	2.00	0.004	0.004	0.000
8.	2.00	0.004	0.004	0.000
9.	2.20	0.004	0.004	0.000
10.	2.00	0.010	0.004	0.006
Total	20.80	0.047	0.040	0.007

Reading taken from final storage for period averaged data = 0.04 inches

***Target (RM Young gauge) = water (cc)/2.01 * 0.004 (inches)**

COMMENTS

Bearing replacment of the RMY 05305 Wind Monitor completed.

Signature: Rory Attridge

East Plant BAM-1020 $PM_{2.5}$ Audit Sheet

Model:	**BAM-1020**	**Serial Number:**	M6466
Audit Date:	7/16/2013	**Audited By:**	R. Attridge
Audit Time:	1028 hr.		

Firmware: 3236-06 V3.6.3

Flow Audits						
Flow Reference Standard Used:	Model:	Delta Cal	Serial No:	1103	Calibration Date:	4/9/2013
Temperature Standard Used:	Model:	Delta Cal	Serial No:	1103	Calibration Date:	4/9/2013
Barometric Pressure Standard Used:	Model:	Delta Cal	Serial No:	1103	Calibration Date:	4/9/2013

Leak Check Value:	as found:	0.4 LPM	Should Be: <1.0	as left:	0.1 LPM	Should Be: <1.0		
		BAM	**Ref. Std.**		**BAM**	**Ref. Std.**		
Ambient Temperature (°C):	as found:	23.1	21.8	as left:	25.7	24.3	Adjusted	X
Barometric Pressure (mmHg):	as found:	655.5	654	as left:	655	654	Adjusted	X
Flow Rate (15.0 LPM):	as found:	14.9	14.82	as left:	15.0	15.26	Adjusted	X
Flow Rate (18.4 LPM):	as found:	18.4	18.05	as left:	18.4	18.75	Adjusted	X
Flow Rate (16.7 LPM):	as found:	16.7	16.52	as left:	16.7	17.06	Adjusted	X

Audit Notes: **Full cleaning performed including the reference membrane. Reference membrane count test results: test 1 = 0.791, test 2 = 0.782, test 3 = 0.787, test 4 = 0.787. ABS updated from 0.779 to 0.787.**

Mechanical Audits

Pump muffler unclogged:	As found	X	As left	X	PM10 particle trap clean:	As found		As left	X	N/A	
Sample nozzle clean:	As found		As left	X	PM10 drip jar empty:	As found		As left	X	N/A	
Tape support vane clean:	As found		As left	X	PM10 bug screen clear:	As found	X	As left	X	N/A	
Capstan shaft clean:	As found		As left	X	PM2.5 particle trap clean:	As found		As left	X	N/A	
Rubber pinch rollers clean:	As found		As left	X	Inlet tube water-tight seal OK:	As found		As left	X		
Chassis ground wire installed:	As found	X	As left	X	Inlet tube perpendicular to BAM:	As found	X	As left	x		

Signature: Roy Attridge

East Plant BAM-1020 PM_{10} Audit Sheet

Model:	**BAM-1020**	**Serial Number:**	M8714
Audit Date:	7/16/2013	**Audited By:**	A. Schlabaugh
Audit Time:	1028-1303 hrs		

Firmware: 3236-06 V3.6.3

Flow Audits						
Flow Reference Standard Used:	Model:	Delta Cal	Serial No:	1103	Calibration Date:	4/9/2013
Temperature Standard Used:	Model:	Delta Cal	Serial No:	1103	Calibration Date:	4/9/2013
Barometric Pressure Standard Used:	Model:	Delta Cal	Serial No:	1103	Calibration Date:	4/9/2013

Leak Check Value:	as found:	0.2 LPM	Should Be: <1.0	as left:	0.3 LPM	Should Be: <1.0	

		BAM	Ref. Std.		BAM	Ref. Std.		
Ambient Temperature (°C):	as found:	21.4	22.7	as left:	23.6	23.2	Adjusted	X
Barometric Pressure (mmHg):	as found:	630	655.5	as left:	655	655.5	Adjusted	X
Flow Rate (15.0 LPM):	as found:	15.0	14.16	as left:	15.1	14.72	Adjusted	X
Flow Rate (18.4 LPM):	as found:	18.4	17.37	as left:	18.4	18.03	Adjusted	X
Flow Rate (16.7 LPM):	as found:	16.7	15.71	as left:	16.7	16.68	Adjusted	X

Audit Notes: **Full service and cleaning performed including the reference membrane and membrane assembly. Membrane test results: Membrane density = 0.873, ABS = 0.873, test 1 = 0.882, test 2 = 0.874, test 3 = 0.874, test 4 = 0.870. Average of tests = 0.875. No changes made to ABS.**

Mechanical Audits

Pump muffler unclogged:	As found	X	As left	X	PM10 particle trap clean:	As found		As left	X	N/A		
Sample nozzle clean:	As found		As left	X	PM10 drip jar empty:	As found		As left	X	N/A		
Tape support vane clean:	As found		As left	X	PM10 bug screen clear:	As found		As left	X	N/A		
Capstan shaft clean:	As found		As left	X	PM2.5 particle trap clean:	As found		As left		N/A	X	
Rubber pinch rollers clean:	As found		As left	X	Inlet tube water-tight seal OK:	As found	X	As left	X			
Chassis ground wire installed:	As found	X	As left	X	Inlet tube perpendicular to BAM:	As found	X	As left	X			

Signature: _____

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Resolution EAST

SO_2 Monitoring Form

Site Operator: R. Attridge **Date: 7-17-2013**

Sampler Make /Model		T100
Sampler SN		193
Dilution Calibrator Model/SN	**Primary**	T700/ 191
	Transfer	M700E / SN1098

Instrument Check Start Time	0800
Instrument Check Stop Time	1800
Filter Replacement Y/N	Yes
Shelter Temp (5 to 40 °C)	23.6
Instrument Range	500 ppb
Source Gas Conc.	40 ppm

Level 1 Zero/ Span (once every 2 weeks):
Check the Zero/ Span with the T700 Dynamic Dilution Calibrator:

Target Dilution (PPB)	SO_2 Response (PPB)	Final SO_2 Response (PPB)	Acceptance Criteria (PPB)	Adjustment Required? Y/N
Zero Air	3.270	-0.400	± 3% of Full Scale (-15 to 15 PPB)	N
100	102.200	100.090	≤ ± 10% (360 to 110 PPB)	N

Check the real time Analog vs. Digital Converter:

Target Dilution (PPB)	SO_2 Response (PPB)	CR3000 Response (PPB)	Acceptance Criteria (PPB)	Adjustment Required? Y/N
Zero Air	-0.400	0.030	± 2	N
100	100.090	100.400	± 2	N

Verify Instrument Parameters:

Sample Flow (450 ± 45 cc/ min)	408	Sample Press. (Ambient ± 2 in-Hg)	23.9
UV Lamp (1000 – 4800 mV)	2841	Lamp Ratio (30 – 120%)	79.2
Slope (1 ± 0.3)	1.097	BOX Temp. (Ambient ± 5°C)	32.5
Offset (< 250 mV)	18.1	HVPS (400 – 900 V)	571

Operator comments/ observations:

Multipoint Calibration (Quarterly, or as needed):

Check the analyzer response over 0 – 500 ppb range with the Dilution Calibrator.

Primary Standard:

Target (PPB)	Actual Generated SO_2 (PPB)	SO_2 Response (PPB)	Best Fit Line (PPB)	Acceptable Criteria (± 2% from BFL)
Zero Air	0.000	-0.400	-0.254	PASS, <2%FS
100	100.000	100.090	100.589	PASS, 0.5%
200	200.000	201.800	201.432	PASS, 0.2%
300	300.000	302.600	302.275	PASS, 0.1%
400	400.000	403.200	403.118	PASS, 0%
500	500.000	503.700	503.961	PASS, 0.1%
			Best Fit Line (BFL) Y = 1.0084xx +-0.2536 R^2 = 1.0	

Transfer Standard:

Target (PPB)	Actual Generated SO_2 (PPB)	SO_2 Response (PPB)	Best Fit Line (PPB)	Acceptable Criteria (± 2% from BFL)
Zero Air	0.000	0.360	0.785	PASS, <2%FS
100	102.000	101.060	102.740	PASS, 1.6%
200	202.000	202.600	202.696	PASS, 0%
300	301.000	301.450	301.652	PASS, 0.1%
400	399.000	402.130	399.609	PASS, 0.6%
500	499.000	497.670	499.564	PASS, 0.4%
			Best Fit Line (BFL) Y = 0.9996x + 0.7852 R^2 = 0.99993	

Operator Comments/ observations: Annual servicing completed

Operator Signature: 

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Resolution EAST

O_3 Monitoring Form

Site Operator: R. Attridge **Date: 7-17-2013**

Sampler Make /Model		T400
Sampler SN		224
Dilution Calibrator Model/SN	**Primary**	T700/ 191
	Transfer	700E/ 1098

Instrument Check Start Time	0800
Instrument Check Stop Time	1800
Filter Replacement Y/N	Yes
Shelter Temp (5 to 40 °C)	23.4
Instrument Range	500 ppb

Level 1 Zero/Span (once every 2 weeks)

Check the Zero/ Span ppb with the T700 Dynamic Dilution Calibrator.

Target Dilution (PPB)	O_3 Response (PPB)	Final O_3 Response (PPB)	Acceptance Criteria (PPB)	Adjustment Required? Y/N
Zero Air	-2.200	0.100	≤ ± 2% of Full Scale (± 10 PPB)	No
100	94.100	95.700	≤ ± 7% (93 to 107 PPB)	Yes

Check the real time Analog vs. Digital Converter:

Target Dilution (PPB)	T400 Response (PPB)	CR3000 Response (PPB)	Acceptance Criteria (PPB)	Adjustment Required? Y/N
Zero Air	0.100	-1.020	± 2	N
100	95.700	94.050	± 2	N

Verify Instrument Parameters:

Sample Flow (550 ± 55 cc/ min)	557	Sample Temp. (10 - 50°C)	37.1
Photo Lamp (58 ± 1°C)	58.0	BOX Temp. (30 ± 20°C)	25.3
Slope (1 ± 0.15)	0.879	O_3 Measure (2500 – 4800 mV)	3372.7
Offset (0.0 ± 5 PPB)	2.4	O_3 Reference (2500 – 4800 mV)	3375.5

Operator comments/ observations: None

Multipoint Calibration (Quarterly, or as needed):

Check the analyzer response over 0 – 500 ppb range with the Dilution Calibrator.

Primary Standard:

Target (PPB)	Actual Generated O_3 (PPB)	O_3 Response (PPB)	Best Fit Line (PPB)	Acceptable Criteria (± 2% from BFL)
Zero Air	0.000	0.1	0.2	PASS, < 2% FS
100	100.0	100.5	100.5	PASS, 0%
200	201.0	202.8	201.5	PASS, 0.5%
300	302.0	303.4	303.2	PASS, 0.1%
400	401.0	402.4	402.5	PASS, 0%
500	502.0	503.8	503.8	PASS, 0%

Best Fit Line (BFL)
Y = 1.0033x + 0.1667
R^2 = 1.0

Target Standard:

Target (PPB)	Actual Generated O_3 (PPB)	O_3 Response (PPB)	Best Fit Line (PPB)	Acceptable Criteria (± 2% from BFL)
Zero Air	0.000	0.3	0.94	PASS, < 2% FS
100	100.0	102.5	101.4	PASS, 0%
200	200.0	203.1	201.9	PASS, 0.5%
300	300.0	303.2	302.4	PASS, 0.1%
400	400.0	404.5	402.9	PASS, 0%
500	499.0	500.6	502.4	PASS, 0%

Best Fit Line (BFL)
Y = 1.0049x + 0.9382
R^2 = 0.99995

Operator Comments / Observations: Annual services completed.

Operator Signature: 

Resolution East
Simplified GPT Data Sheet
T200
Project No. 262-5

AIR SCIENCES INC.
DENVER • PORTLAND

14.7.11.1. Simplified GPT Data Sheet

Key: Enter Value / Auto Calculated

Line #	TEST		RESULT	
1	LEAK-CHECK	(WHEN HOT)	no	(Yes or no?)
2	NO_x RESPONSE	(MOLY BYPASSED)	448.3	
3	NO_x RESPONSE	(MOLY IN-LINE)	448.4	
4	**OUT-GASSING**		0.1	(>-5 ppb, <5 ppb)
5	($NO_{x\ ORIG}$)	(NO_x mode, O_3 off)	448.4	ppb
6	($NO_{x\ REM}$)	(NO_x mode, O_3 on)	443.1	ppb
7	NO_x **LOSS**	(Line #5 - #6) = **A**	5.3	(**A**) (<4% of $NO_{x\ ORIG}$: for 450PP 4% is 18 ppb)
8	(NO_{ORIG})	(NO mode, O_3 off)	433.3	ppb
9	(NO_{REM})	(NO mode, O_3 on)	42	ppb
10	NO_2	(Line #8 - #9) = **B**	391.3	(**B**) (>300 ppb)
11	Efficiency LOSS	[(**A**/**B**)x100]=**C**%	1.354	(**C**) %
12	Total Conv Eff	[100%-**C**] = **D**%	98.64554	(**D**) (102%>D>96%)

AIR SCIENCES INC.

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Resolution EAST

NO_x Monitoring Form

Site Operator: A. Schlabaugh **Date: 7-22-2013**

Sampler Make /Model		T200
Sampler SN		197
Dilution Calibrator Model/SN	**Primary**	**T700/191**
	Transfer	

Instrument Check Start Time	1141
Instrument Check Stop Time	1506
Filter Replacement Y/N	Y
Shelter Temp (5 to 40 °C)	24.8
Instrument Range	500 ppb
Source Gas Conc.	40 ppm NO

Level 1 Zero/ Span (once every 2 weeks)
Check the Zero/ Span with the T700 Dynamic Dilution Calibrator:

Target Dilution (PPB)	NO Response (PPB)	NO_2 Response (PPB)	NO_x Response (PPB)	Final NO_x Response (PPB)	Acceptance Criteria (PPB)	Adjustment Required? Y/N
Zero Air	-2.7	-14.5	-17.2	-0.4	± 3% of full scale (± 15 PPB)	Y
100 PPB	101.6	-4.3	97.5	102.1	≤ ± 10% (90 to 110 PPB)	N

Check the real time Analog vs. Digital Converter:

Target Dilution (PPB)	T200 Response (PPB)		CR3000 Response (PPM)		Acceptance Criteria (PPB)	Adjustment Required? Y/N
Zero Air	NO	-2.7	NO	-0.7	± 2	N
	NO_2	-14.5	NO_2	-12.4		
	NO_x	-17.2	NO_x	-16.8		
100	NO	101.6	NO	99.6	± 2	N
	NO_2	-4.3	NO_2	-2.4		
	NO_x	97.5	NO_x	97.1		

Verify Instrument Parameters:

Sample Flow (500 ± 50 cc/min)	486	Moly Temp. (315 ± 5°C)	314.5
Ozone Flow (80 ± 15 cc/ min)	76	HVPS (400 – 900 V)	600

NO_x Slope (1 ± 0.3)	1.237	NO Slope (1 ± 0.3)	1.195
NO_x Offset (0 ± 100)	-0.9	NO Offset (0 ± 100)	-4.5

Operator comments/ observations: None

Multipoint Calibration (Quarterly, or as needed):
Check the analyzer response over 0 – 500 ppb range with the Dilution Calibrator.

Primary Standard:

Target (PPB)	Actual Generated T200 (PPB)	NO Response	NO_2 Response	NO_x Response	Best Fit Line	Acceptable Criteria (± 2% from BFL)
Zero Air	0	1.8	-1.4	0.3	2.1	PASS, 0 ± 5
100	101	102.6	1.1	103.6	103.3	PASS, -0.2%
200	200	202.4	2.3	204.7	202.6	PASS, -1.0%
300	300	300.9	2.8	303.7	302.8	PASS, -0.3%
400	399	398.2	3.7	402.0	402.1	PASS, 0.02%
500	499	497.2	3.8	501.0	502.3	PASS, 0.3%

Best Fit Line (BFL)
Y= 1.0025x +2.0913
R^2 = 0.99999

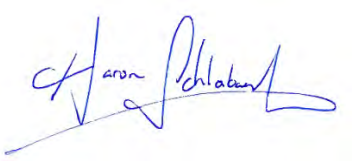
Transfer Standard:

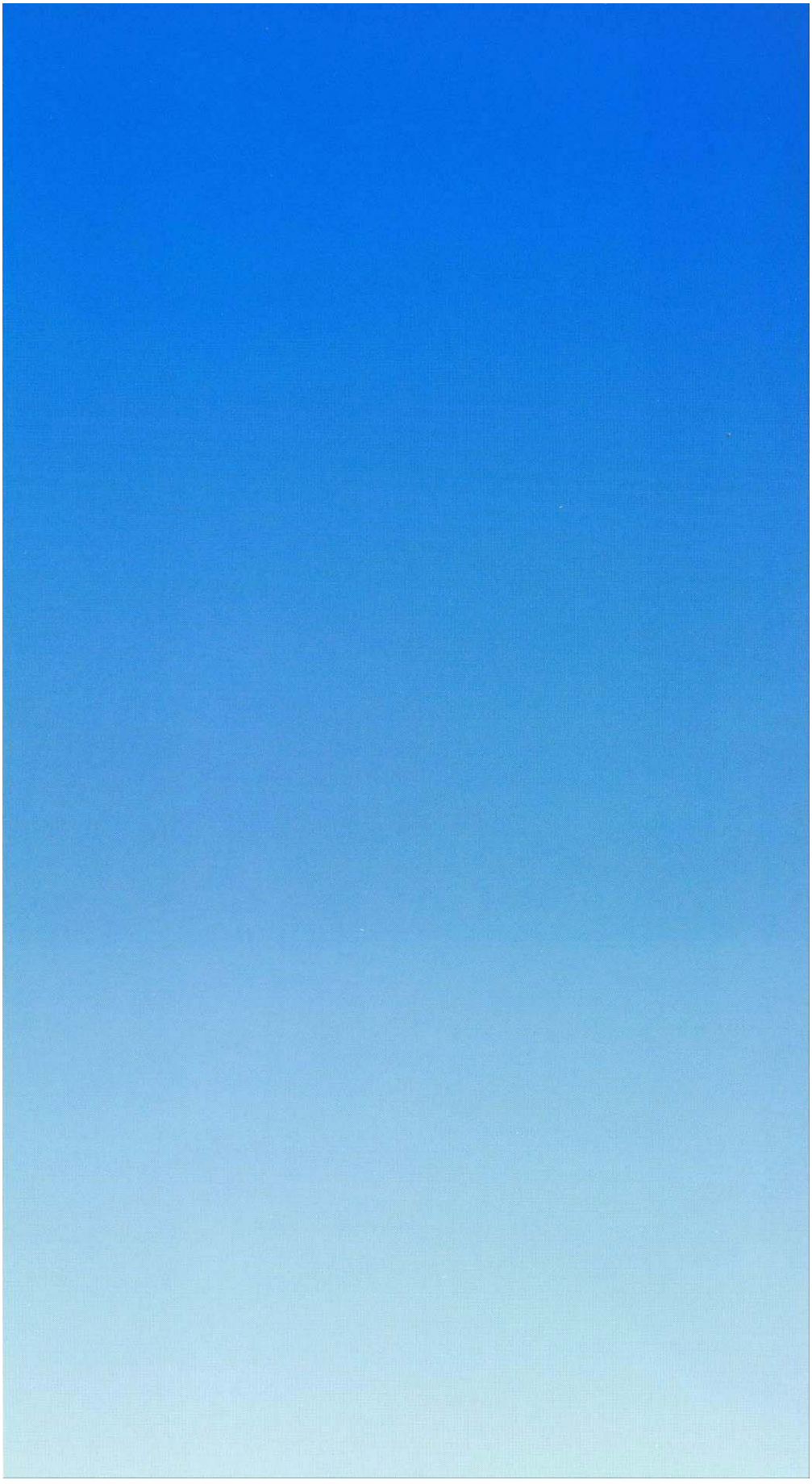
Target (PPB)	Actual Generated T200 (PPB)	NO Response	NO_2 Response	NO_x Response	Best Fit Line	Acceptable Criteria (± 2% from BFL)
Zero Air						
100						
200						
300						
400						
500						

Best Fit Line (BFL)

Operator comments/ observations: Multipoint calibration and Gas Phase Titration (GPT) performed. 445 ppb calibrated for GPT, NO response=431.9, NO2 = 12.8, NOx = 444.7

Operator Signature:





Air Quality Calibration Report West Plant Monitoring Station

PREPARED FOR:
RESOLUTION COPPER MINING

PREPARED BY:
RORY ATTRIDGE
AIR SCIENCES INC.

PROJECT 262-5
JULY 2013

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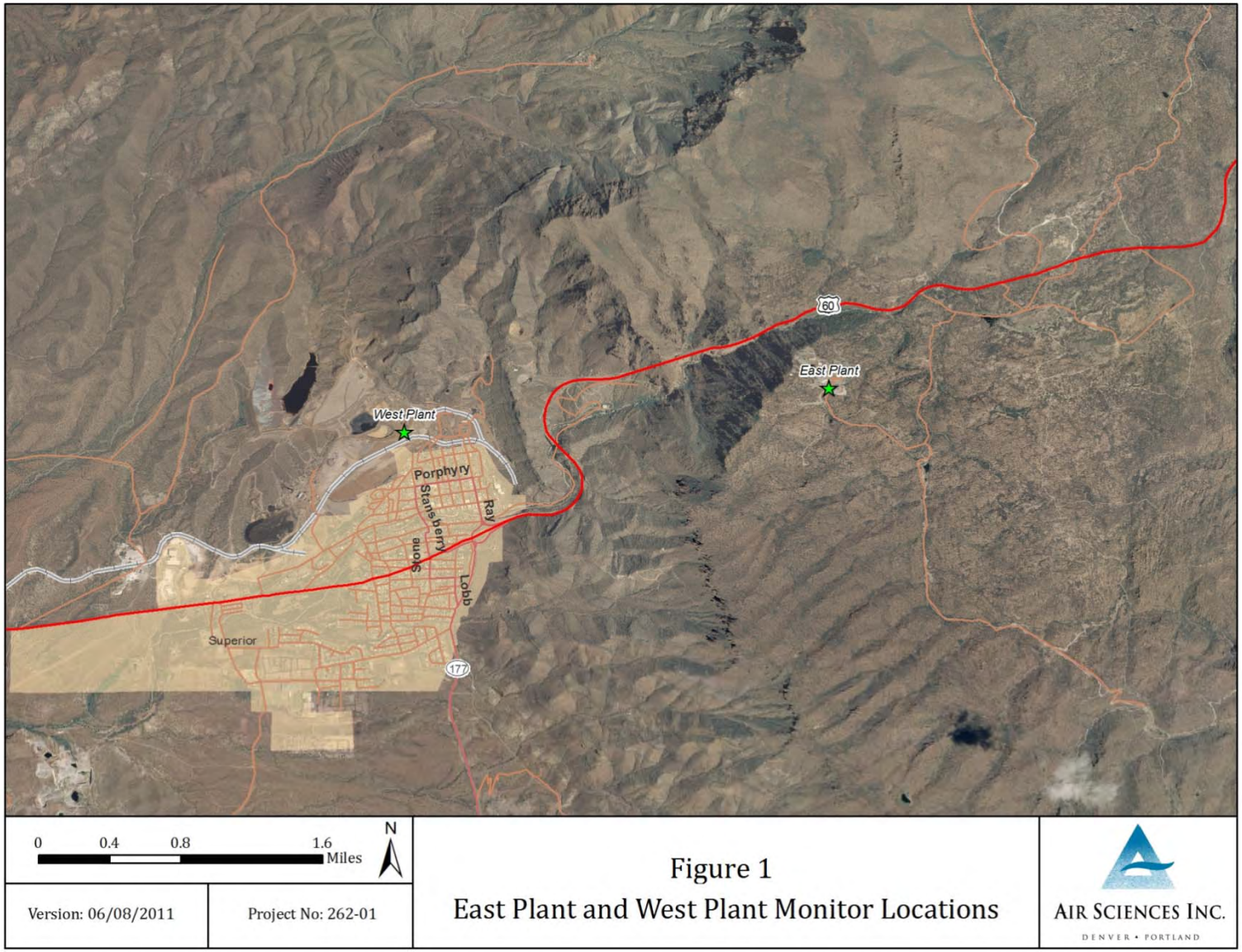
Appendix A: Calibration Forms

1.0 INTRODUCTION

On July 15, 2013, the meteorological and air quality instrumentation was calibrated at the Resolution Copper West Plant, near Superior, AZ. The West Plant monitoring station is operated by the Resolution Copper Mining company and is located approximately one quarter mile west of the administration buildings (see Figure 1). The calibration was conducted in accordance with the following guideline documents:

- EPA-450/4-87-007, Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD), May 1987
- EPA-454/R-99-005 Meteorological Monitoring Guidance for Regulatory Modeling Applications, Section 8.4, February 2000
- EPA-454/B-13-003, Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II: Ambient Air Quality Monitoring Program, May 2013
- EPA-454/B-08-002, Quality Assurance Handbook for Air Pollution Measurement Systems, Volume IV: Meteorological Measurements Version 2.0, March 2008
- Transfer Standards for the calibration of Ambient Air Monitoring Analyzers for Ozone (EPA-454/B-10-001)
- Code of Federal Regulations (40 CFR Parts 50 and 58)

Figure 1. Project Location Map – East Plant and West Plant Monitoring Station Locations



2.0 SYSTEM DESCRIPTION

The parameters calibrated and or audited at the West Plant monitoring site include wind speed, wind direction, ambient temperature, vertical height temperature difference (delta temperature), solar radiation, relative humidity, precipitation, barometric pressure, and particulate matter less than 10 and 2.5 microns in diameter (PM_{10} & $PM_{2.5}$).

The meteorological sensors are mounted to a 35-foot, open-lattice, aluminum drop tower. The particulate monitors are housed in a climate controlled enclosure. The particulate inlets and instrumentation heights are listed in Table 1 (as measured from ground-level).

Table 1. Sensors, Instruments and Inlet Heights

Parameter	Approximate Height (meters)
Wind Speed	10
Wind Direction	10
Ambient Temperature	2
Delta Temperature	2, 10
Solar Radiation	2
Relative Humidity	2
Precipitation	1
Barometric Pressure	1.5
PM_{10}	2
$PM_{2.5}$	2

Monitored data parameters are recorded via analog inputs on two Campbell Scientific CR3000 dataloggers, each powered independently by either DC solar or by locally supplied AC line power. All meteorological sensors are programmed on a two-second scan interval, and the output is digitally processed and recorded into 15-minute averages. The raw 15-minute averages are temporarily stored on the datalogger memory, and a local computer is automatically configured to permanently back up datalogger files on a 15-minute interval. The raw 15-minute data averages are securely transmitted, via cellular broadband Internet services, to the Air Sciences Inc. server and processed into the Data Acquisition System (DAS) for quality assurance checks. These raw 15-minute averages are used as input for the calculation of one-hour averages.

3.0 CALIBRATION METHODOLOGY

This section provides the calibration procedures for the meteorological and particulate instrumentation at the West Plant monitoring site. Copies of the completed calibration forms for each parameter are included in Appendix A.

3.1 Meteorological Sensor Calibration Procedures

The wind speed sensor calibration was performed by rotating the sensor shaft using a DC-powered variable-speed motor equipped with an optical encoder output referenced to a crystal oscillator. A target sensor speed was calculated based on the calibration rotational speed and compared to the instantaneous datalogger reading. An R.M. Young Torque Disc was used to measure the anemometer starting torque. All data were recorded on a standardized form.

The calibration of the wind direction system was performed by aligning the tail vane of the sensor to its mounting cross-arm. A Brunton Precision Magnetic Compass (BPMC) mounted on a tripod was used to establish the orientation of the cross-arm using the Magnetic Declination Method.[1] With the wind direction sensor oriented along the axis of the cross-arm, the sensor response was compared to the BPMC-measured value and recorded on a standardized form. The potentiometer linearity was checked by recording the system response at 45-degree intervals over the operating range of the system. Data were recorded on a standardized form.

The ambient temperature sensor calibration was performed by comparing the temperature sensor in-situ to a NIST-traceable[2] temperature sensor. Both thermometer and datalogger readings were recorded on a standardized form.

The differential temperature sensor calibration was performed by immersing both temperature sensors in a series of three water baths within the range of the temperature sensors. Positive and negative temperature differentials were checked by immersing the sensors in separate water baths. All cabling and associated wiring remained intact for the calibration of both sensors. A Precision Temperature Sensor was used to measure the bath temperatures. All calibration data were recorded on standardized forms.

The solar radiation sensor calibration was performed by comparing the sensor in-situ to a calibrated pyranometer wired to an independent datalogger. Both the standard and the datalogger readings were recorded on a standardized form.

1 Refer to section 2.5.2.2 of the Quality Assurance Handbook for Air Pollution Measurement Systems, Volume IV: Version 2.0, March 2008, for more details.
2 National Institute of Standards and Technology

The relative humidity sensor calibration was performed by comparing the humidity sensor in-situ to a NIST-traceable humidity sensor. Both the standard and datalogger readings were recorded on a standardized form.

The precipitation gauge was calibrated by employing a graduated syringe and distilled water. The volume of water required to cause the tipping bucket to activate was measured repeatedly, averaged, and compared to the calculated value for the activation. All volumes were recorded on a standardized form.

The barometric pressure sensor calibration was performed by comparing the sensor in-situ to a NIST-traceable barometric pressure standard. Both the standard and datalogger readings were recorded on a standardized form.

3.2 Particulate Matter Calibration Procedures

The BAM 1020 PM_{10} and BAM 1020 $PM_{2.5}$ monitors were assessed and calibrated by comparing and then adjusting the temperature, barometric pressure, and internal flow to a certified deltaCal Volumetric Air Flow Calibrator. All required maintenance was performed on the instrument to assure optimal operations. The temperature, barometric pressure, and flow output readings from the deltaCal and the instrument were recorded on a standardized form.

4.0 RESULTS AND RECOMMENDATIONS

Bearing replacement of the West Plant RMY 05305 Wind Monitor was completed.

All instruments and sensors were within their recommended tolerance parameters at the Resolution Copper West Plant monitoring site.

Appendix A: Calibration Forms

METEOROLOGICAL AUDIT DATA



Client : Resolution Copper Company
Job No. : 262-5
Site : West Plant
Date : 7/15/2013
Time: 1300-1400 hours
Auditors: R. Attridge
A. Schlabaugh

Data Logger
Model : CR3000
Serial No : 6590

WIND SPEED, 10m (As Found)

Model:	RM Young	Calibration Motor No.:	CA03336
Serial No:	112592	Calibration Disk No.:	1

System Linearity Check

	Input rpm	Target* m/s	Logger Reading m/s	Difference m/s	Acceptance Criteria
CW	0.0	0.00	0.00	0.00	0.0
CW	200.0	1.02	1.02	0.00	0.3
CW	400.0	2.05	2.05	0.00	0.3
CW	600.0	3.07	3.07	0.00	0.4
CW	800.0	4.10	4.10	0.00	0.4
CW	1000.0	5.12	5.12	0.00	0.5
CW	2000.0	10.24	10.24	0.00	0.7
CW	3000.0	15.36	15.36	0.00	1.0
CW	4000.0	20.48	20.48	0.00	1.2
CW	5000.0	25.60	25.60	0.00	1.5

RM Young
*Target (m/s) = rpm x 0.00512

Bearing Torque Test (Passing 0.4 m/s = 0.6 g-cm)

Clockwise	0.2	g-cm
Counterclockwise	0.3	g-cm

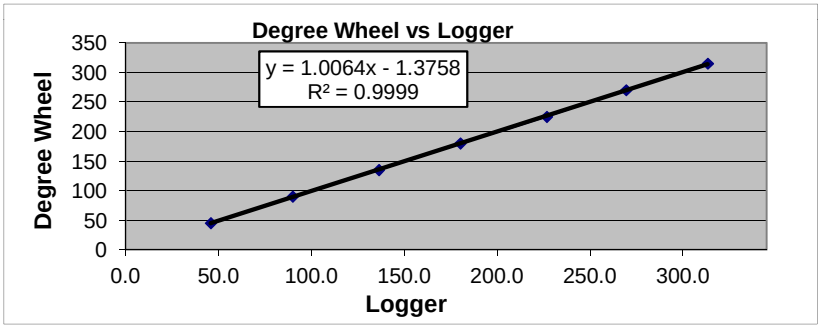
WIND DIRECTION, 10m (As Found)

Model: RM Young Serial No: 112592 Compass No.: 5080695331

System Accuracy and Linearity Check Declination[1] = 10 East

Orientation	Compass (Degrees)	Target (Degrees)	Logger Reading (Degrees)	Difference (Degrees)	Acceptance Criteria
1. Vane	340.0	340.0	339.6	-0.4	±5
Tail	160.0	160.0	158.5	-1.5	±5

CW	Initial Logger (Degrees)	Difference (Degrees)	Corrected Logger (Degrees)	Difference (Degrees)	Acceptance Criteria [2]
45	45.8	0.8	45.6	0.6	±3
90	89.9	-0.1	89.2	-0.8	±3
135	136.3	1.3	134.9	-0.1	±3
180	180.2	0.2	180.8	0.8	±3
225	226.7	1.7	225.0	0.0	±3
270	269.4	-0.6	270.5	0.5	±3
315	313.3	-1.7	314.8	-0.2	±3
	Avg	0.2			
CCW					
45	44.6	-0.4	0.0	-1.1	±3
90	90.4	0.4	88.7	-1.3	±3
135	134.6	-0.4	135.9	0.9	±3
180	180.2	0.2	181.2	1.2	±3
225	226.3	1.3	224.0	-1.0	±3
270	270.9	0.9	272.0	2.0	±3
315	316.7	1.7	314.0	-1.0	±3
	Avg	0.0			



[1] Declination added to compass

[2] May reference wider acceptance criteria in *QA Handbook for Air Pollution Measurement Systems, Systems, Volume IV - Meteorological Measurements, August 1989*

WIND SPEED CALIBRATION, 10m (Replacement Bearings)

Model: RM Young | Calibration Motor No.: CA03336

Serial No: 112592 | Calibration Disk No.: 1

System Linearity Check

	Input rpm	Target* m/s	Logger Reading m/s	Difference m/s	Acceptance Criteria
CW	0.0	0.00	0.00	0.00	0.0
CW	200.0	1.02	1.02	0.00	0.3
CW	400.0	2.05	2.05	0.00	0.3
CW	600.0	3.07	3.07	0.00	0.4
CW	800.0	4.10	4.10	0.00	0.4
CW	1000.0	5.12	5.12	0.00	0.5
CW	2000.0	10.24	10.24	0.00	0.7
CW	3000.0	15.36	15.36	0.00	1.0
CW	4000.0	20.48	20.48	0.00	1.2
CW	5000.0	25.60	25.60	0.00	1.5

RM Young
*Target (m/s) = rpm x 0.00512

Bearing Torque Test (Passing 0.4 m/s = 0.6 g-cm)

Clockwise	0.1	g-cm
Counterclockwise	0.1	g-cm

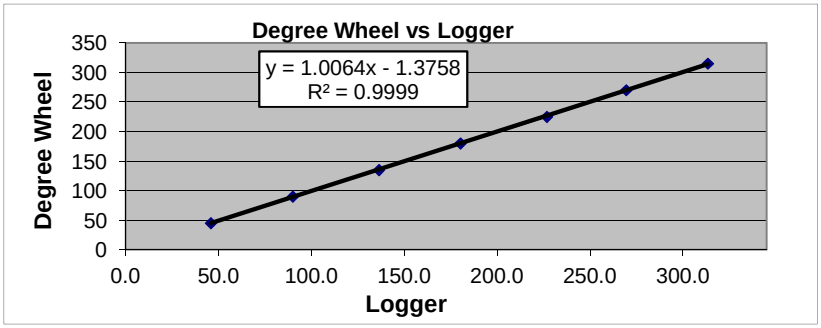
WIND DIRECTION CALIBRATION, 10m (Replacement Bearings)

Model: RM Young Serial No: 112592 Compass No.: 5080695331

System Accuracy and Linearity Check Declination[1] = 10 East

Orientation	Compass (Degrees)	Target (Degrees)	Logger Reading (Degrees)	Difference (Degrees)	Acceptance Criteria
1. Vane	340.0	340.0	339.6	-0.4	±5
Tail	160.0	160.0	158.5	-1.5	±5

CW	Initial Logger (Degrees)	Difference (Degrees)	Corrected Logger (Degrees)	Difference (Degrees)	Acceptance Criteria [2]
45	45.3	0.3	45.1	0.1	±3
90	89.9	-0.1	89.2	-0.8	±3
135	135.7	0.7	134.9	-0.1	±3
180	181.9	1.9	180.8	0.8	±3
225	226.6	1.6	225.0	0.0	±3
270	271.7	1.7	270.5	0.5	±3
315	316.3	1.3	314.8	-0.2	±3
	Avg	1.1			
CCW					
45	45.3	0.3	0.0	-1.1	±3
90	89.0	-1.0	88.7	-1.3	±3
135	135.2	0.2	135.9	0.9	±3
180	181.7	1.7	181.2	1.2	±3
225	227.3	2.3	224.0	-1.0	±3
270	271.0	1.0	272.0	2.0	±3
315	315.0	0.0	314.0	-1.0	±3
	Avg	0.0			



[1] Declination added to compass

[2] May reference wider acceptance criteria in *QA Handbook for Air Pollution Measurement Systems, Systems, Volume IV - Meteorological Measurements, August 1989*

Ambient Temperature, 2m

Model: HC2S3-L Serial No: 60749962
Std Model: HC2S3-L Std Serial No: 6104543

System Linearity Check

	Measured (ºC)	Logger Reading (ºC)	Difference (ºC)	Acceptance Criteria
1.	42.4	42.9	-0.5	±0.5
2.	43.1	43.0	0.1	±0.5
3.	43.0	43.0	0.0	±0.5
4.	43.9	43.2	0.7	±0.5
5.	43.5	43.5	0.0	±0.5
6.	42.2	43.2	-1.0	±0.5
7.	42.2	42.3	-0.1	±0.5
8.	42.2	42.2	0.0	±0.5
9.	42.2	42.2	0.0	±0.5
10.	42.2	42.3	-0.1	±0.5

Relative Humidity, 2m

Model: HC2S3 Serial No: 60749962
Std Model: HC2S3 Std Serial No: 6104543

	Measured (%)	Logger Reading (%)	Difference (%)	Acceptance Criteria (%)
1.	17.0	16.5	0.5	±7
2.	17.0	16.5	0.5	±7
3.	17.0	16.5	0.5	±7
4.	17.0	16.5	0.5	±7
5.	17.0	16.5	0.5	±7
6.	17.0	16.5	0.5	±7
7.	17.0	16.5	0.5	±7
8.	17.0	16.5	0.5	±7
9.	17.0	16.5	0.5	±7
10.	17.0	16.5	0.5	±7

Delta Temperature, 2m, 10m

Model: 41342 Serial No (2m): 020205

Serial No (10m): 020211

Std Model: 41342 Std Serial No: 22518

Aspirator Fans Working properly? Yes

	Standard (ºC)	Lower T (ºC)	Upper T (ºC)	Difference Lower T [1] (ºC)	Difference Upper T [1] (ºC)	Difference Delta T [2] (ºC)
Bath 1	67.40	67.50	67.50	0.10	0.10	0.00
Bath 2	26.60	26.80	26.80	0.20	0.20	0.00
Bath 3	-0.11	-0.13	-0.12	0.02	0.01	0.01

1. The acceptance criteria for deviation from the standard for both upper and lower temperatures is ± 0.5
2. The acceptance criteria for deviation from the standard for delta temperatures is ± 0.1

Barometric Pressure, 2m

Model: PTB110 Serial No: G0077095

Std Model: PTB110 Std Serial No: G0770076

System Linearity Check

	Measured (mmHg)	Logger Reading (mmHg)	Difference (mmHg)	Acceptance Criteria (mmHg)
1.	679.4	679.8	-0.4	±2.3
2.	679.4	679.8	-0.4	±2.3
3.	679.4	679.8	-0.4	±2.3
4.	679.4	679.8	-0.4	±2.3

SOLAR RADIATION, 2m

Model: CMP3 Serial No: 115433

Std Model: CMP3 Std Serial No: 123276

System Linearity Check

	Standard (w/m^2)	Logger Reading (w/m^2)	Difference (w/m^2)	Difference (%)	Acceptance Criteria
Covered Reading	0.0	0.0	0.0	0.0	± 25 W/m^2 or 5%
1.	246.1	243.3	2.8	-1.2	± 25 W/m^2 or 5%
2.	244.2	242.7	1.5	-0.6	± 25 W/m^2 or 5%
3.	242.6	242.0	0.6	-0.2	± 25 W/m^2 or 5%
4.	241.4	241.6	-0.2	0.1	± 25 W/m^2 or 5%
5.	239.6	240.9	-1.3	0.5	± 25 W/m^2 or 5%
6.	237.9	240.0	-2.1	0.9	± 25 W/m^2 or 5%
7.	236.6	238.5	-1.9	0.8	± 25 W/m^2 or 5%
8.	232.6	232.2	0.4	-0.2	± 25 W/m^2 or 5%
9.	230.5	231.1	-0.6	0.3	± 25 W/m^2 or 5%
10.	239.5	242.8	-3.3	1.4	± 25 W/m^2 or 5%
		Avg	-0.4		

PRECIPITATION, GROUND LEVEL

Model: 52202 Serial No: 8730

System Linearity Check

	Water (cc)	Calculated Target* (inches)	Logger Reading (inches)	Difference (inches)
1.	2.20	0.0044	0.0040	0.000
2.	2.00	0.0040	0.0040	0.000
3.	2.10	0.0042	0.0040	0.000
4.	2.10	0.0042	0.0040	0.000
5.	2.20	0.0044	0.0040	0.000
6.	2.00	0.0040	0.0040	0.000
7.	2.10	0.0042	0.0040	0.000
8.	2.10	0.0042	0.0040	0.000
Total	16.80	0.0334	0.0320	0.001

Reading taken from final storage for period averaged data = 0.04 inches

*Target (RM Young gauge) = water (cc)/2.01 * 0.004 (inches)

COMMENTS

Bearing replacement and calibration of the RMY 05305 Wind Monitor completed.

Signature: Rory Attridge

West Plant BAM-1020 $PM_{2.5}$ Audit Sheet

Model:	**BAM-1020**	**Serial Number:**	M8193
Audit Date:	7/15/2013	**Audited By:**	R. Attridge
Audit Time:	0930-1131 hr.		

Firmware: 3236-06 V3.6.3

Flow Audits						
Flow Reference Standard Used:	Model:	Delta Cal	Serial No:	1103	Calibration Date:	4/9/2013
Temperature Standard Used:	Model:	Delta Cal	Serial No:	1103	Calibration Date:	4/9/2013
Barometric Pressure Standard Used:	Model:	Delta Cal	Serial No:	1103	Calibration Date:	4/9/2013

Leak Check Value:	as found:	0.8 LPM	Should Be: <1.0	as left:	0.2 LPM	Should Be: <1.0	
		BAM	**Ref. Std.**		**BAM**	**Ref. Std.**	
Ambient Temperature (°C):	as found:	33.6	33.9	as left:	37.8	38.0	Adjusted
Barometric Pressure (mmHg):	as found:	682	682	as left:	681	681	Adjusted
Flow Rate (15.0 LPM):	as found:	15.0	14.56	as left:	15.0	14.82	Adjusted
Flow Rate (18.4 LPM):	as found:	18.4	18.15	as left:	18.4	18.33	Adjusted
Flow Rate (16.7 LPM):	as found:	16.7	16.34	as left:	16.7	16.52	Adjusted

Audit Notes: **Full cleaning performed including the reference membrane. Reference membrane count test results: count 1 = 934447, count 2= 934211, count 3 = 935014, count 4 = 934601, count 5 = 935238, count 6 = 935487. No changes made to ABS value.**

Mechanical Audits

Pump muffler unclogged:	As found	X	As left	X	PM10 particle trap clean:	As found		As left	X	N/A	
Sample nozzle clean:	As found		As left	X	PM10 drip jar empty:	As found		As left	X	N/A	
Tape support vane clean:	As found		As left	X	PM10 bug screen clear:	As found	X	As left	X	N/A	
Capstan shaft clean:	As found		As left	X	PM2.5 particle trap clean:	As found		As left	X	N/A	
Rubber pinch rollers clean:	As found		As left	X	Inlet tube water-tight seal OK:	As found		As left	X		
Chassis ground wire installed:	As found	X	As left	X	Inlet tube perpendicular to BAM:	As found	X	As left	x		

Signature: Roy Attridge

West Plant BAM-1020 PM_{10} Calibration Sheet

Model:	**BAM-1020**	**Serial Number:**	M8712
Audit Date:	7/15/13	**Audited By:**	A. Schlabaugh
Audit Time:	0934		

Firmware:

Flow Audits					
Flow Reference Standard Used:	Model: DeltaCal	Serial No: 1103	Calibration Date: 04/09/13		
Temperature Standard Used:	Model: DeltaCal	Serial No: 1103	Calibration Date: 04/09/13		
Barometric Pressure Standard Used:	Model: DeltaCal	Serial No: 1103	Calibration Date: 04/09/13		

Leak Check Value: as found: 2.1 Should Be: <1.0 as left: 0.1 Should Be: <1.0

		BAM	Ref. Std.		BAM	Ref. Std.		
Ambient Temperature:	as found:	33.9	33.4	as left:	34.7	34.7	Adjusted	Y
Barometric Pressure:	as found:	683	682	as left:	681	681	Adjusted	Y
Flow Rate (15.0 lpm):	as found:	15.1	14.63	as left:	15.0	15.06	Adjusted	Y
Flow Rate (18.4 lpm):	as found:	18.4	17.98	as left:	18.4	18.38	Adjusted	Y
Flow Rate (16.7 lpm):	as found:	16.7	16.27	as left:	16.7	16.69	Adjusted	Y

Calibration Notes: Calibration and cleaning performed, including reference membrane. Reference membrane density test results: Density from membrane = 0.806, ABS = 0.783 Test 1 = 0.808, Test 2=0, 806, Test 3 = 0.804, Test 4 = 0.811.

ABS changed to 0.806. BAM was found with buildup on nozzle, causing pinholes in tape. Cal ended at 11:20

Mechanical Audits

Pump muffler unclogged:	As found	X	As left		PM10 particle trap clean:	As found		As left	X	N/A	
Sample nozzle clean:	As found		As left	X	PM10 drip jar empty:	As found		As left	X	N/A	
Tape support vane clean:	As found		As left	X	PM10 bug screen clear:	As found		As left	X	N/A	
Capstan shaft clean:	As found		As left	X	PM2.5 particle trap clean:	As found		As left		N/A	X
Rubber pinch rollers clean:	As found		As left	X	Inlet tube water-tight seal OK:	As found	X	As left			
Chassis ground wire installed:	As found	X	As left		Inlet tube perpendicular to BAM:	As found	X	As left			

Signature: _____

Appendix L: CD