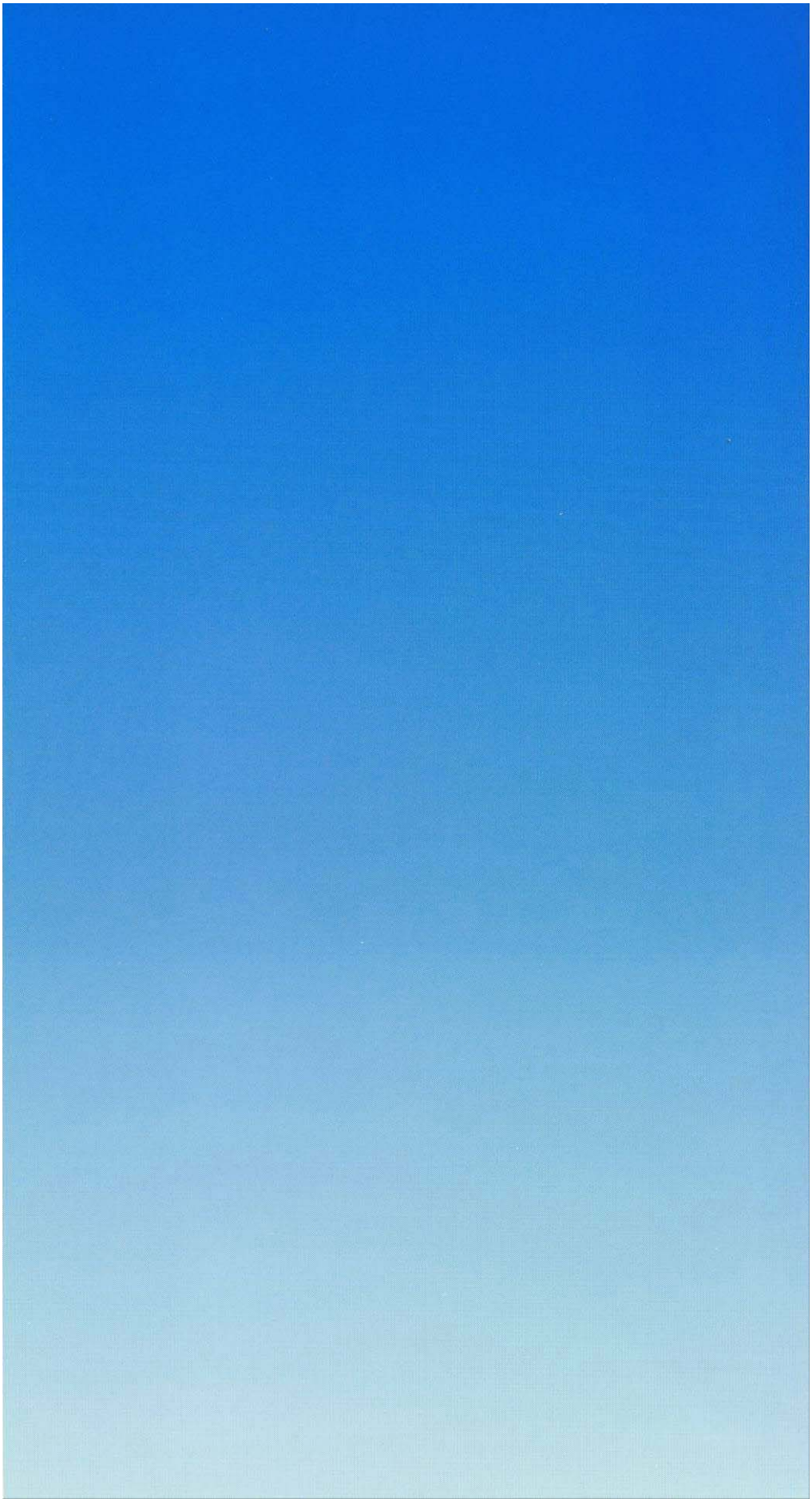

AIR SCIENCES INC.

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Baseline Meteorological and Air Quality Data Report Resolution Copper Mining Project

January 1 – March 31, 2013

PREPARED FOR:
RESOLUTION COPPER
A MEMBER OF RIO TINTO GROUP

262-1
JUNE 2013

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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 first quarter, January 1 – March 31, 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

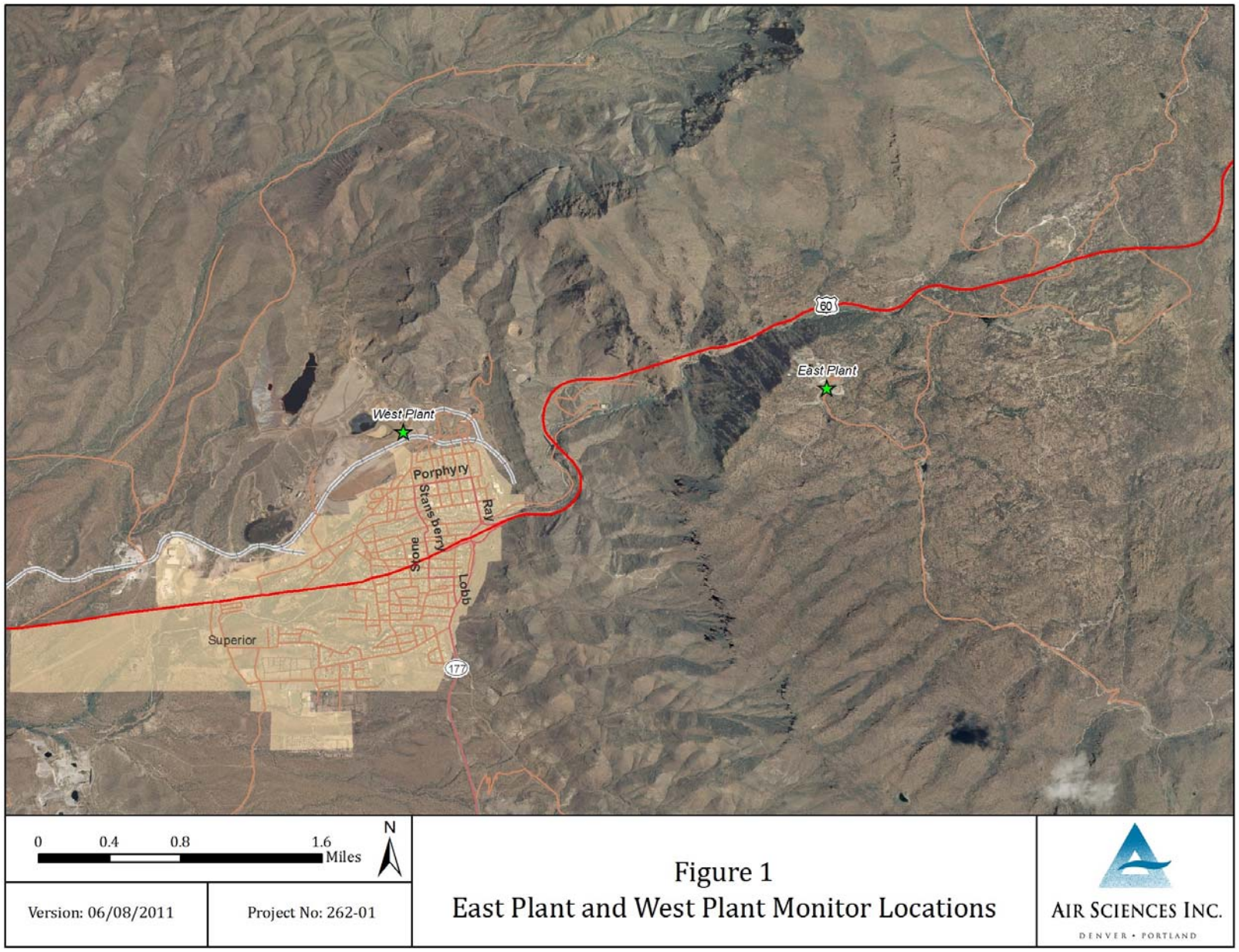
The Resolution Copper Project is located near Superior, Arizona. Currently there are two meteorological and air quality stations. The East Plant station is located at the main project site, east of Superior. The West Plant station is located at RCML's facilities directly north of Superior, Arizona. The 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 January 1 through March 31, 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 January 1 through March 31, 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 January 1 through March 31, 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 January 1 through March 31, 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 $PM_{2.5}$ FEM, but is set to monitor PM_{10}. 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 January 1 through March 31, 2013.

Comparability requirements for $PM_{10-2.5}$ are assured through the EPA designation EPA EQPM-0308-170. 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
January 1 – March 31, 2013
(percent)

	East Plant		West Plant		
Parameter*	**Recorded Observations**	**Recovery Rate**	**Recorded Observations**	**Recovery Rate**	**Minimum Required Recovery Rate**
Meteorological					
Wind speed (10 m)	2,157	99.9	2,153	99.7	90
Wind direction (10 m)	2,157	99.9	2,153	99.7	90
Temperature (2 m)	2,157	99.9	2,154	99.8	90
Delta temperature	2,157	99.9	2,154	99.8	90
Relative humidity	2,157	99.9	2,154	99.8	90
Barometric pressure	2,157	99.9	2,154	99.8	90
Precipitation	2,158	99.9	2,157	99.9	90
Solar radiation	2,157	99.9	2,154	99.8	90
NO_2	86	95.6	--	--	75
O_3	76	84.4	--	--	75
SO_2	79	87.8	--	--	75
PM_{10}	90	100	89	98.9	75
$PM_{2.5}$	90	100	88	97.8	75

*Meteorological parameters are observed hourly (2,160 hours in this period).
NO_2, O_3, SO_2, and PM parameters are observed every 24 hours (90 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 audit performed by Air Sciences on January 14, 2013.

2.1.1.2 West Plant

Meteorological data invalidated at the West Plant station for this quarter was due to a site audit performed by Air Sciences on January 14, 2013.

2.1.2 NO_2 Data Loss

NO_2 24-hour maximum data were invalidated for January 16, 2013, due to a site calibration performed by Air Sciences. Nightly span values were observed outside acceptable tolerances from February 16 through February 19, 2013, resulting in invalid NO_2 24-hour maximum data for those days.

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 January 16, 2013, due to a site calibration performed by Air Sciences. Nightly span values were observed outside acceptable tolerances from February 16 through February 25, 2013, resulting in invalid SO_2 24-hour maximum data for those days.

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

Ozone 24-hour maximum values were invalidated for January15 and 16, 2013, due to a site calibration performed by Air Sciences. Nightly span values were observed outside acceptable tolerances from January 16 through January 21, 2013, March 13 through 17, 2013 and March 30 through 31, 2013 resulting in invalid O_3 24-hour maximum data for those days.

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

No 24-hour average PM_{10} values were invalidated for the East Plant station during the first quarter of 2013.

No 24-hour average $PM_{2.5}$ values were invalidated for the East Plant station during the first quarter of 2013.

Additional invalid hourly PM data at the East Plant were due to monthly flow verifications, regularly scheduled maintenance, power outages, internal instrument errors, and a site calibration performed by Air Sciences on January 15, 2013.

2.1.5.2 West Plant

PM_{10} 24-hour average values were invalidated for the West Plant station on January 30, 2013, due to a tape break error.

$PM_{2.5}$ 24-hour average values were invalidated for the West Plant station on January 1 through 2, 2013, due to a tape break error.

Additional invalid hourly PM data at the West Plant were due to monthly flow verifications, and regularly scheduled maintenance, power outages, and a site calibration performed by Air Sciences on January 14, 2013.

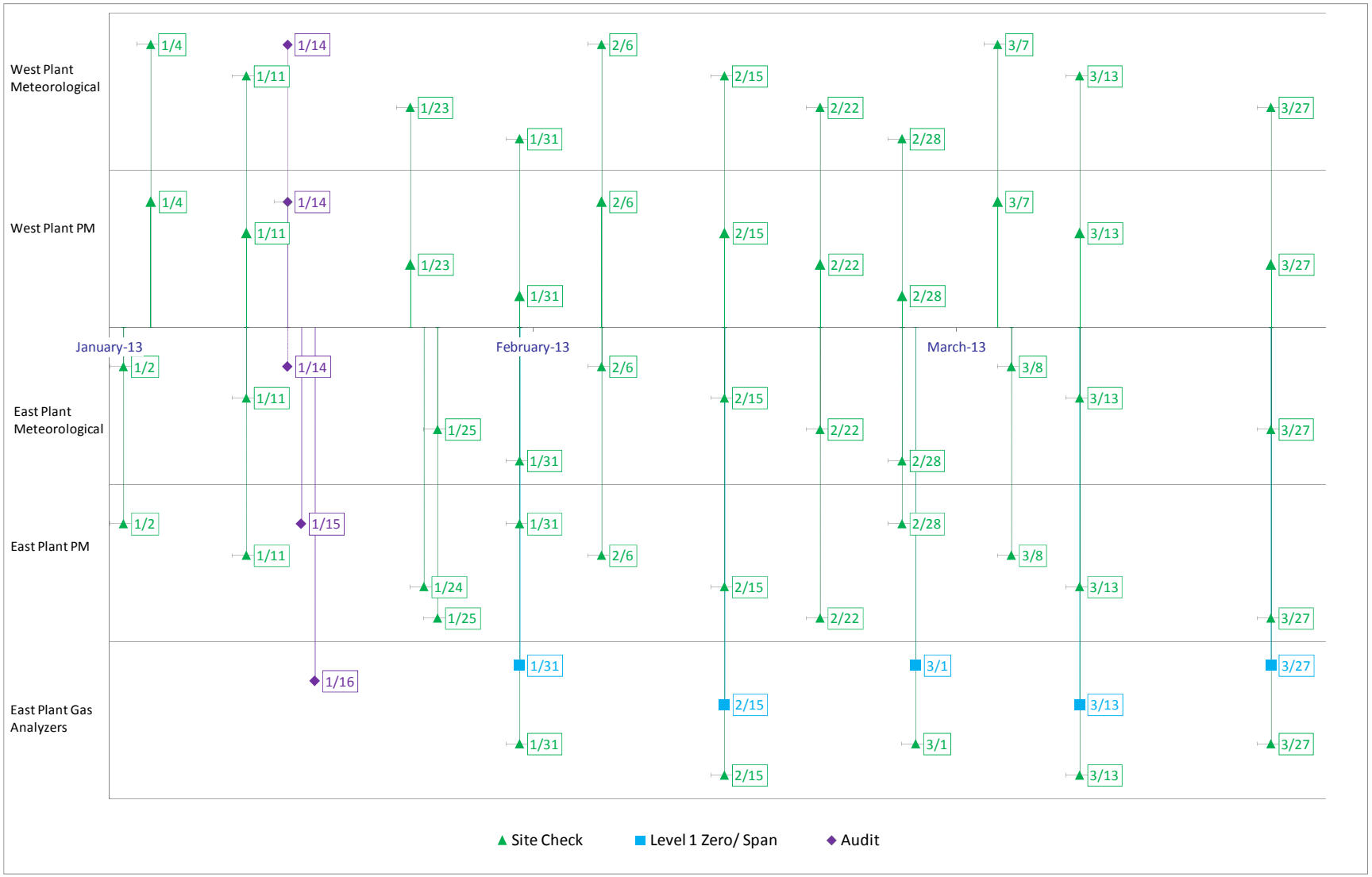
2.2 Quality Control

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-08-003, December 2008)
- 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 Plant, Air Sciences performed an audit of the meteorological system on January 14, 2013, an audit of the particulate instruments on January 15, 2013, as well as a multi-point calibration of the O_3, SO_2, and NO_2 monitors on January 16, 2013. At the West Plant, Air Sciences performed an audit of the meteorological and particulate instruments on January 14, 2013. 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
January 1 – March 31, 2013



3.0 METEOROLOGICAL DATA SUMMARY AND DISCUSSION

3.1 Meteorological Data Summary

Meteorological data from the first 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.

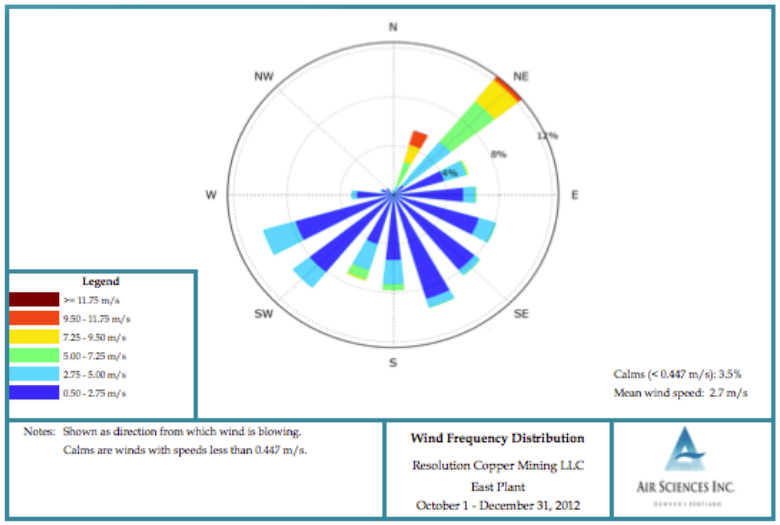
Wind Frequency Table – A two-part table. The left part of the Wind Frequency Table shows the percentage of occurrence of winds for each of the 16 directions that occur in each of the six Wind Speed Class Intervals. The right part shows the percentage of occurrence of winds for each of the 16 directions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

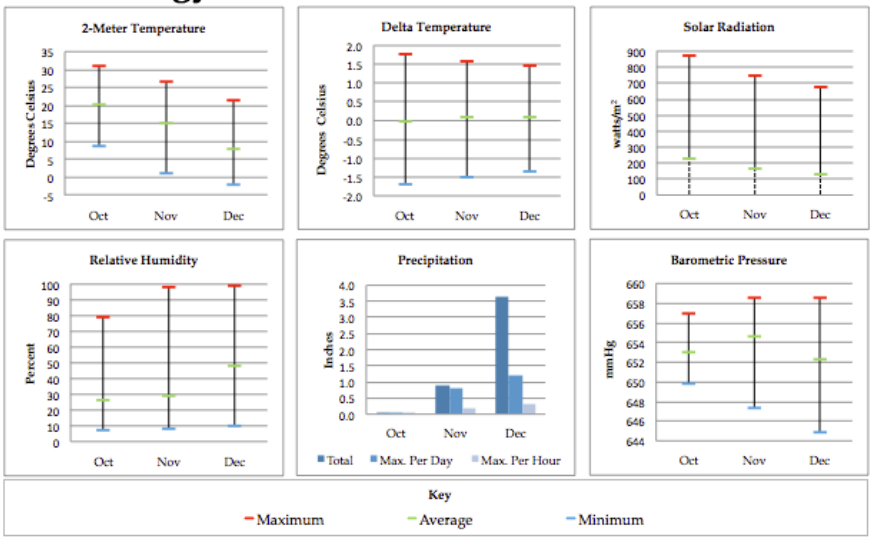
Instantaneous Wind Frequency and Maximum Chart – Graphically summarizes instantaneous (two-second) wind speeds as a percentage of occurrences for each of the nine wind speed intervals and the magnitude, date, and time of the maximum instantaneous wind speed for each month.

Figure 3. 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

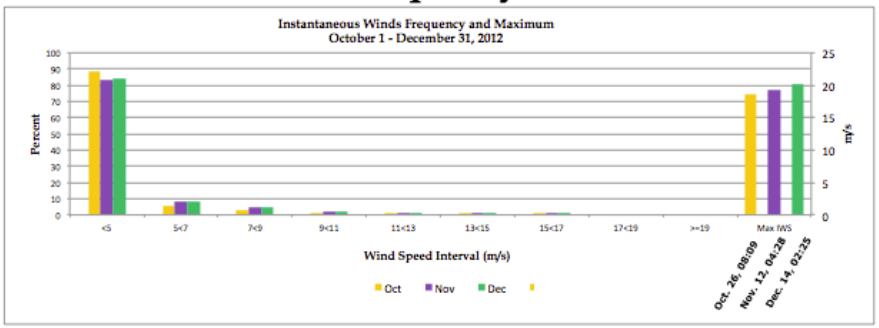
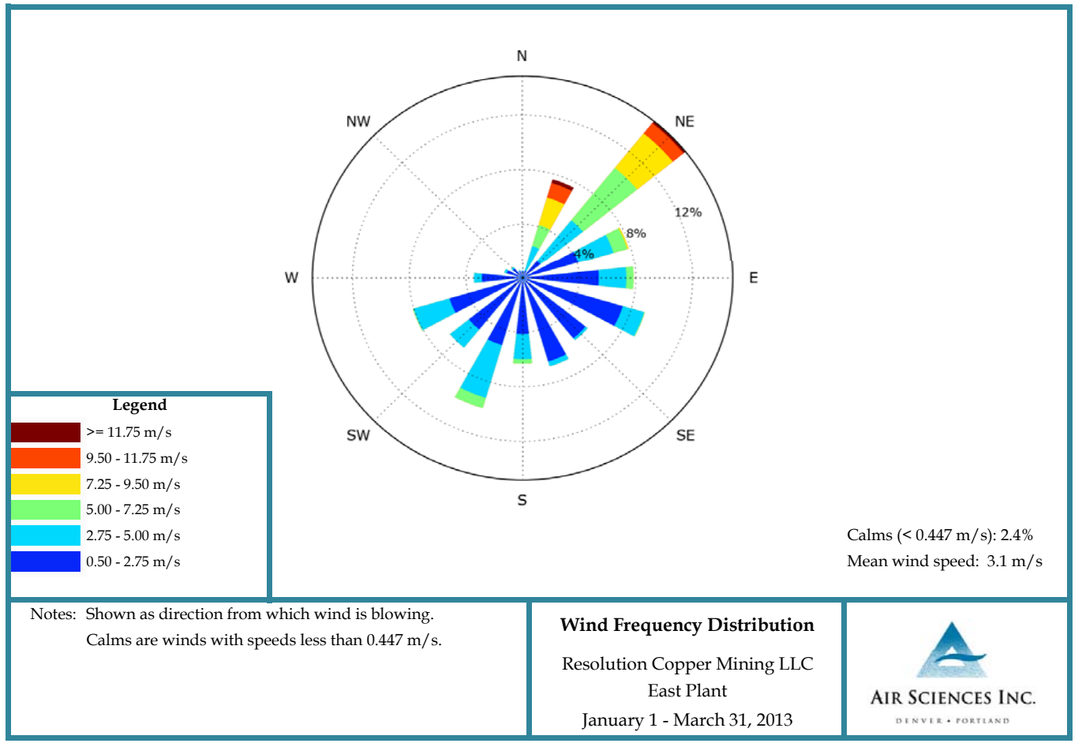


Figure 4: East Plant Meteorological Data Summary

Meteorological Data: January 1 - March 31, 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
East Plant
January 1 - March 31, 2013

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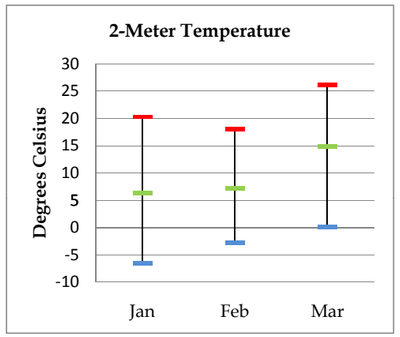
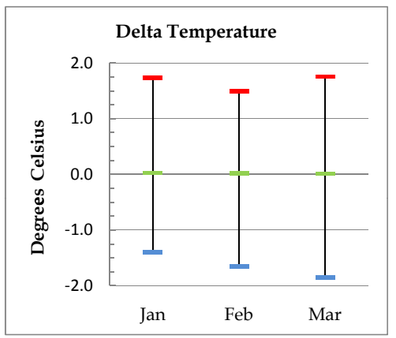
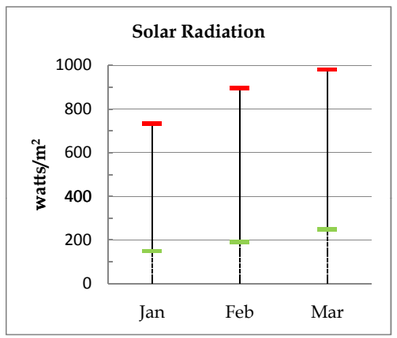
Direction	Speed Class Intervals (m/s) (percent of occurrence) 0.5 <1.5	1.5 <3	3 <5	5 <7	7 <10	>=10	All	Mean Speed
N	0.2	0.3	0.0	0.0	0.0	0.0	0.6	1.9
NNE	0.2	0.5	1.9	1.5	2.5	1.1	7.6	6.7
NE	0.3	1.6	3.6	4.5	4.2	0.6	14.8	5.8
ENE	0.9	3.9	1.9	1.0	0.1	0.0	7.8	3.1
E	1.8	4.0	1.5	0.5	0.0	0.0	7.8	2.4
ESE	3.7	4.3	1.0	0.0	0.0	0.0	9.0	1.9
SE	4.1	1.7	0.1	0.0	0.0	0.0	5.9	1.3
SSE	5.0	1.6	0.1	0.0	0.0	0.0	6.8	1.2
S	2.4	1.9	1.7	0.3	0.0	0.0	6.3	2.3
SSW	1.5	4.6	3.1	0.7	0.0	0.0	10.0	2.9
SW	1.4	4.2	0.9	0.0	0.0	0.0	6.6	2.2
WSW	1.6	4.3	2.1	0.0	0.0	0.0	8.1	2.4
W	1.0	2.0	0.4	0.0	0.0	0.0	3.4	2.0
WNW	0.4	0.7	0.2	0.0	0.0	0.0	1.3	1.9
NW	0.4	0.5	0.1	0.0	0.0	0.0	1.0	1.8
NNW	0.2	0.4	0.0	0.0	0.0	0.0	0.6	2.0
All	25.0	36.6	18.8	8.5	7.0	1.7	97.6	3.1

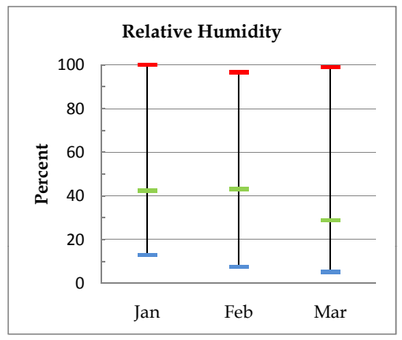
D	Stability Class A	B	C	D	E	F	All
N	0.0	0.1	0.1	0.1	0.0	0.2	0.6
N	0.0	0.7	1.5	5.1	0.0	0.2	7.6
N	0.0	0.6	2.2	11.1	0.7	0.3	14.8
E	0.0	0.2	1.0	3.8	1.7	1.5	8.2
E	0.1	0.3	1.5	2.8	1.3	2.1	8.1
E	0.0	0.7	1.1	2.8	1.5	3.2	9.3
S	0.1	0.3	0.3	0.8	1.3	3.4	6.2
S	0.2	0.2	0.4	0.6	0.9	4.9	7.2
S	0.0	0.5	1.5	1.4	0.6	2.5	6.6
S	0.0	1.7	1.8	4.5	0.6	1.4	10.1
S	0.4	1.9	1.9	0.6	0.6	1.4	6.7
W	0.3	1.8	2.2	1.9	0.6	1.3	8.1
W	0.1	0.4	0.4	0.7	0.7	1.2	3.4
W	0.0	0.1	0.1	0.3	0.3	0.6	1.4
N	0.1	0.0	0.1	0.1	0.2	0.4	1.0
N	0.0	0.0	0.0	0.1	0.3	0.1	0.6
A	1.4	9.3	16.3	36.7	11.5	24.8	100.0

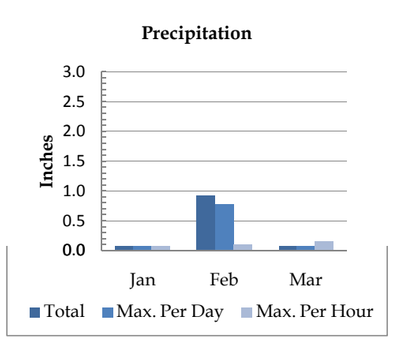
Hourly Statistics

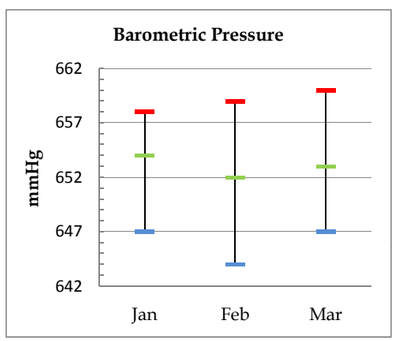












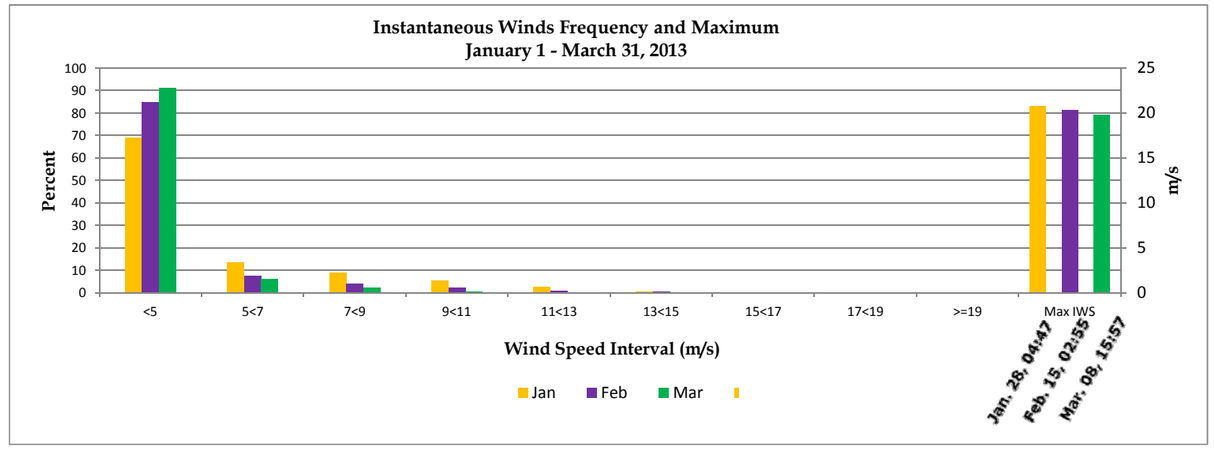
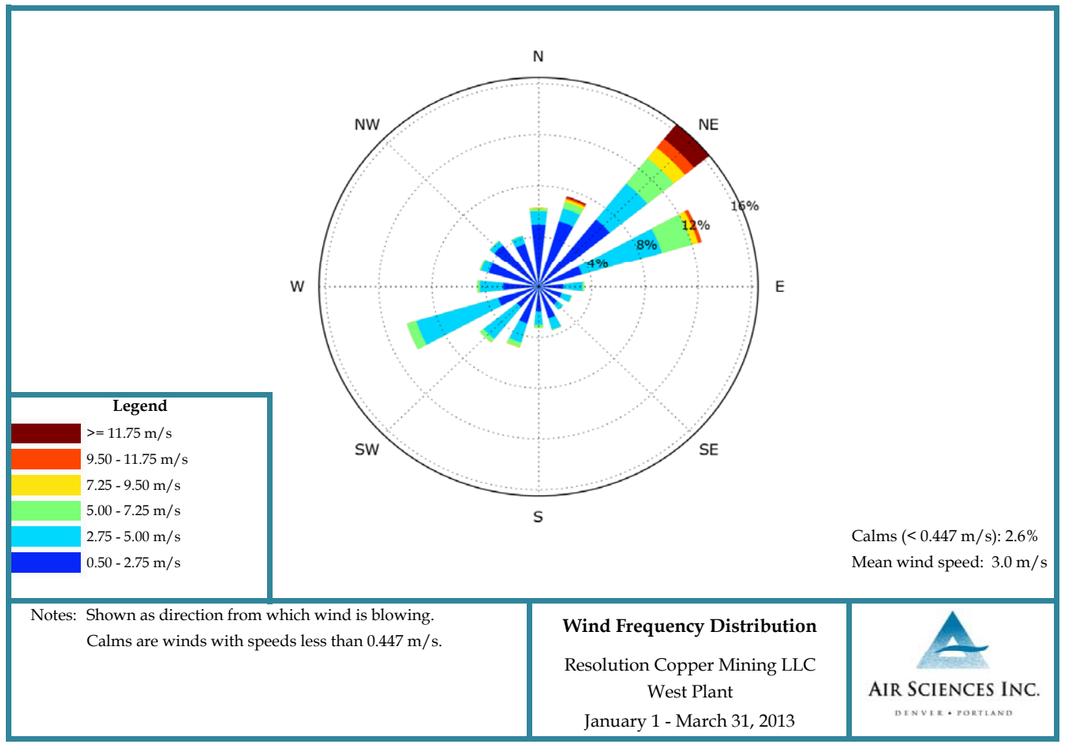


Figure 5: West Plant Meteorological Data Summary

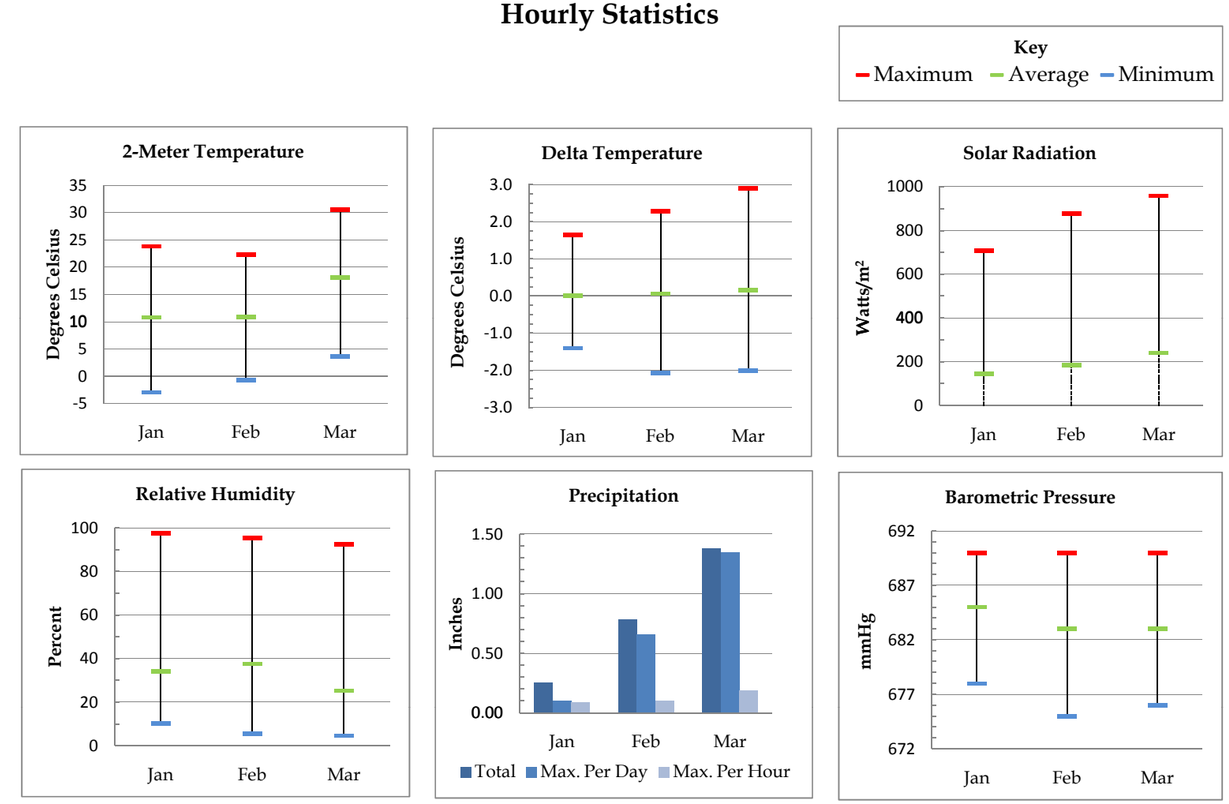
Meteorological Data: January 1 - March 31, 2013

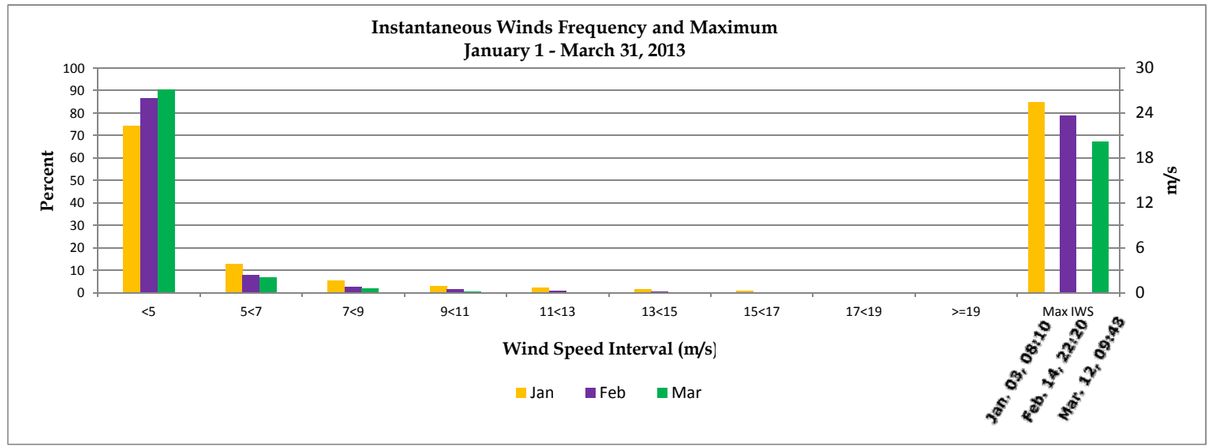


Direction	Speed Class Intervals (m/s) (percent of occurrence) 0.5 <1.5	1.5 <3	3 <5	5 <7	7 <10	>=10	All	Mean Speed
N	3.5	1.5	1.0	0.2	0.0	0.0	6.3	1.8
NNE	2.8	2.8	0.9	0.4	0.3	0.2	7.5	2.7
NE	2.9	4.6	3.0	2.2	1.6	2.2	16.5	4.8
ENE	1.3	2.5	5.9	2.2	0.8	0.1	12.8	4.0
E	0.7	1.5	1.2	0.1	0.0	0.0	3.4	2.7
ESE	0.8	1.2	0.6	0.0	0.0	0.0	2.6	2.2
SE	0.8	1.2	0.4	0.0	0.0	0.0	2.4	2.1
SSE	1.0	2.0	0.6	0.0	0.0	0.0	3.6	2.2
S	0.6	1.5	0.9	0.2	0.0	0.0	3.3	2.6
SSW	0.9	2.5	1.2	0.4	0.0	0.0	5.0	2.7
SW	0.6	1.8	3.0	0.4	0.0	0.0	5.7	3.2
WSW	1.0	2.9	5.7	0.7	0.0	0.0	10.3	3.3
W	1.2	1.9	1.3	0.1	0.0	0.0	4.6	2.5
WNW	2.6	1.4	0.6	0.1	0.0	0.0	4.6	1.7
NW	3.0	1.4	0.3	0.0	0.0	0.0	4.7	1.5
NNW	2.8	0.9	0.6	0.0	0.0	0.0	4.3	1.6
All	26.4	31.4	26.9	7.3	2.9	2.6	97.4	3.0

D	Stability Class A	B	C	D	E	F	All
N	0.0	0.2	0.6	0.9	1.0	3.9	6.6
N	0.0	0.1	0.4	2.0	1.5	3.7	7.7
N	0.0	0.2	0.9	9.2	2.4	4.0	16.7
E	0.0	0.5	2.1	8.0	0.8	1.4	12.8
E	0.0	0.5	0.9	1.5	0.4	0.2	3.5
E	0.2	0.4	1.0	0.6	0.4	0.1	2.6
S	0.1	0.6	0.7	0.5	0.4	0.1	2.4
S	0.0	1.1	0.9	0.7	0.6	0.2	3.6
S	0.1	1.1	0.7	0.9	0.4	0.1	3.3
S	0.3	1.3	1.3	1.3	0.5	0.4	5.0
S	0.2	1.4	2.0	1.5	0.4	0.3	5.8
W	0.0	1.9	4.1	3.6	0.4	0.4	10.4
W	0.0	0.5	1.2	1.5	0.7	0.8	4.8
W	0.0	0.1	0.3	1.3	1.0	2.2	5.0
N	0.0	0.1	0.3	0.9	1.0	3.1	5.4
N	0.0	0.3	0.2	0.3	0.8	2.9	4.6
A	1.1	10.2	17.5	34.6	12.7	23.9	100.0

Hourly Statistics





3.2 Meteorological Data Discussion

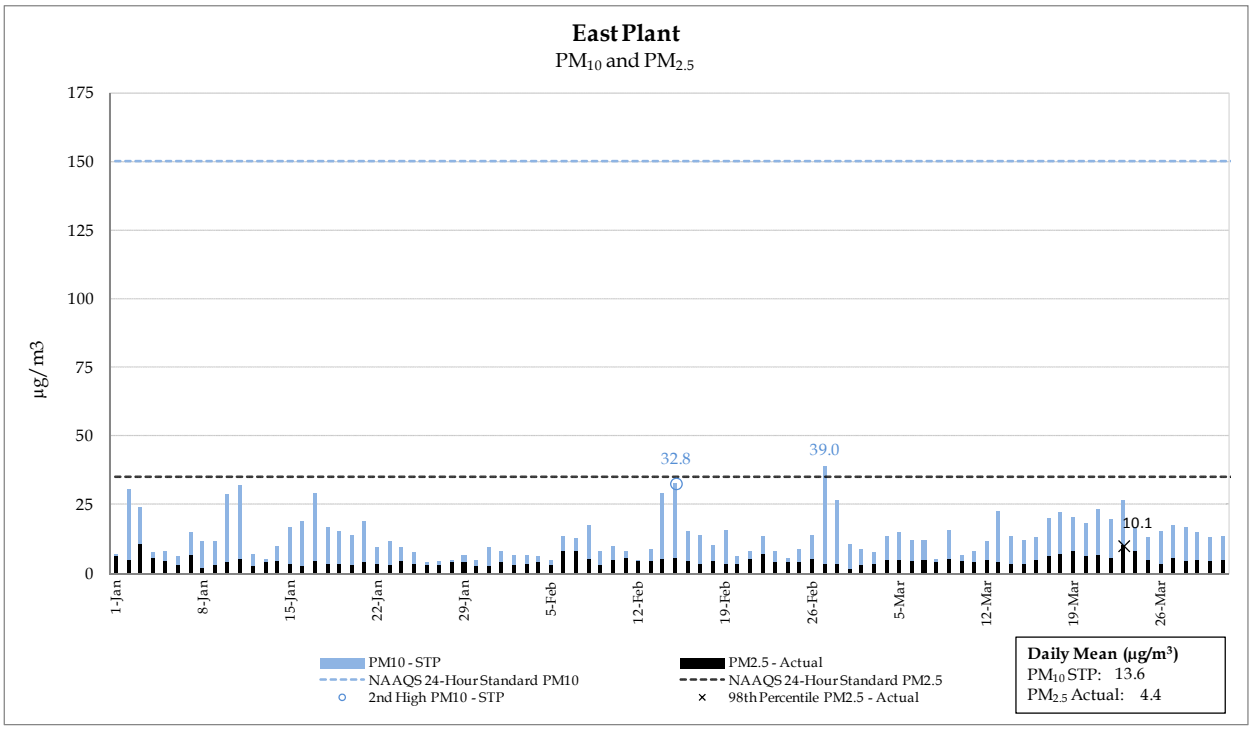
The meteorological data collected at the East and the West Plant sites for the first quarter of 2013 met all data recovery objectives.

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 the first quarter of 2013, and compares the data to the PM_{10} and $PM_{2.5}$ NAAQS. The daily maximum 24-hour average for PM_{10} and $PM_{2.5}$, 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.

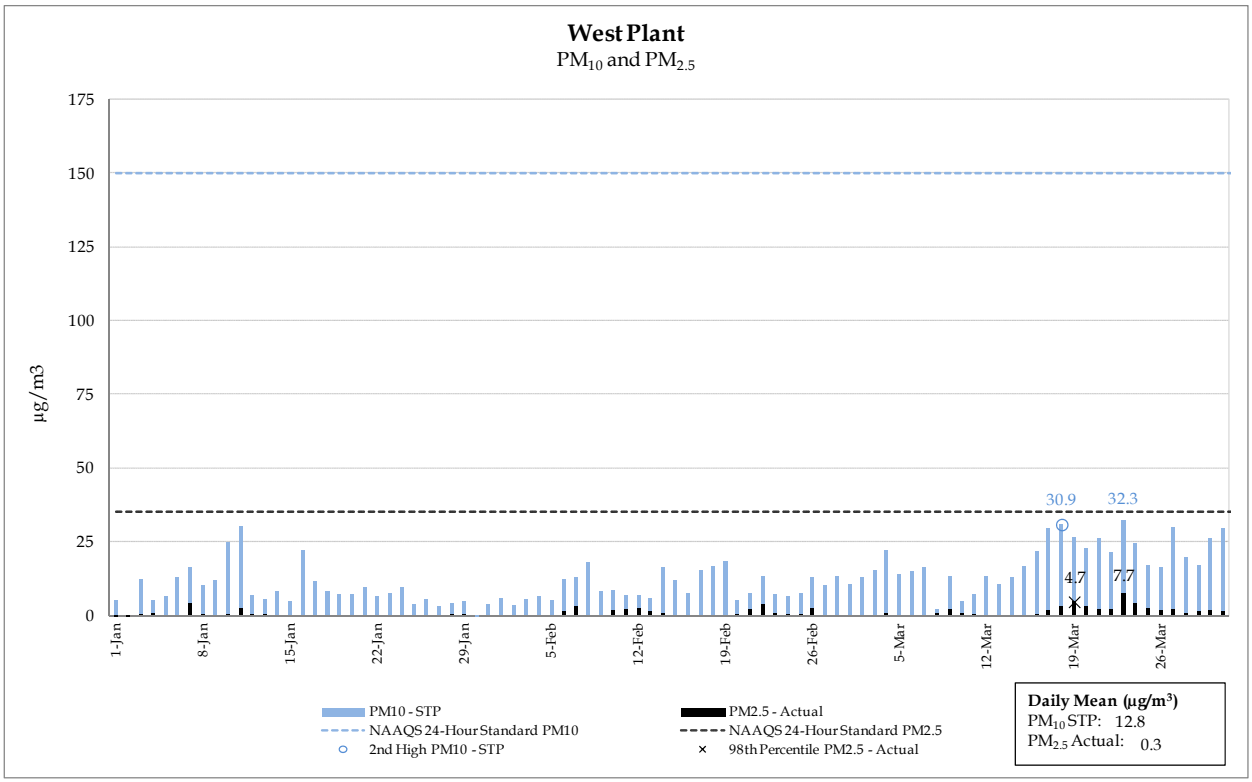
Figure 6. East Plant Particulate Data



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 the first quarter of 2013, and compares the data to the PM_{10} and $PM_{2.5}$ NAAQS. The daily maximum 24-hour average for PM_{10} and $PM_{2.5}$, 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 32.8 µg/m³ and 30.9 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 4.4 and 0.3 $\mu g/m^3$, 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 98^{th} percentile concentrations at the East and West Plants, which were 10.1 and 4.7 $\mu g/m^3$, respectively. The 98^{th} 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 the first quarter of 2013. 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 (1st Quarter 2013)

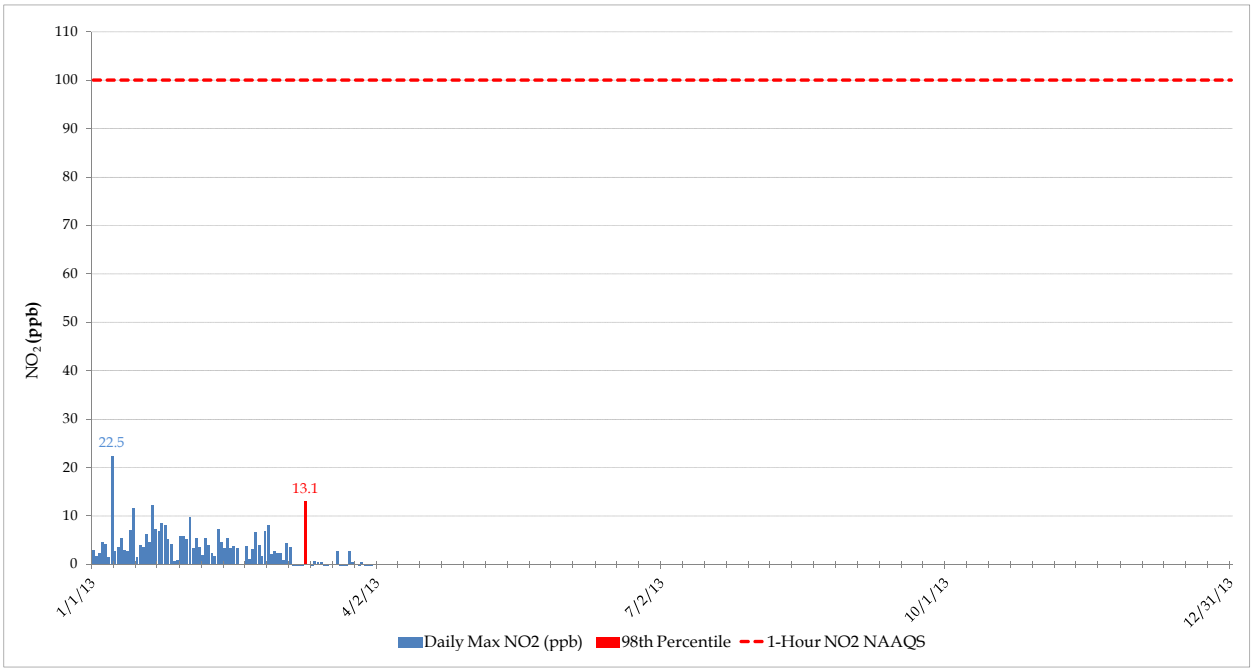
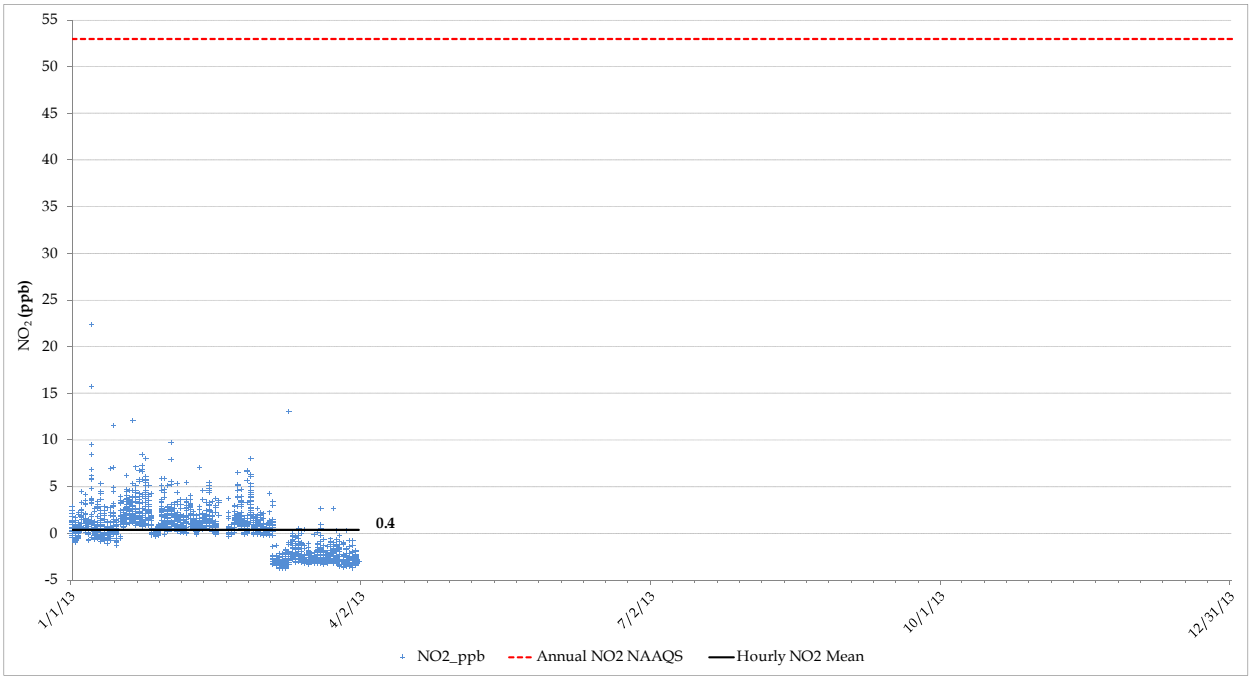


Figure 9. NO_2 Mean Hourly Concentrations (1st Quarter 2013)



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 the first quarter of 2013 is 13.1 ppb, which is less than the NAAQS 1-hour primary standard of 100. As shown in Figure 9, the first quarter of 2013 hourly NO_2 average is 0.4 ppb, which is below the annual NO_2 NAAQS of 53 ppb.

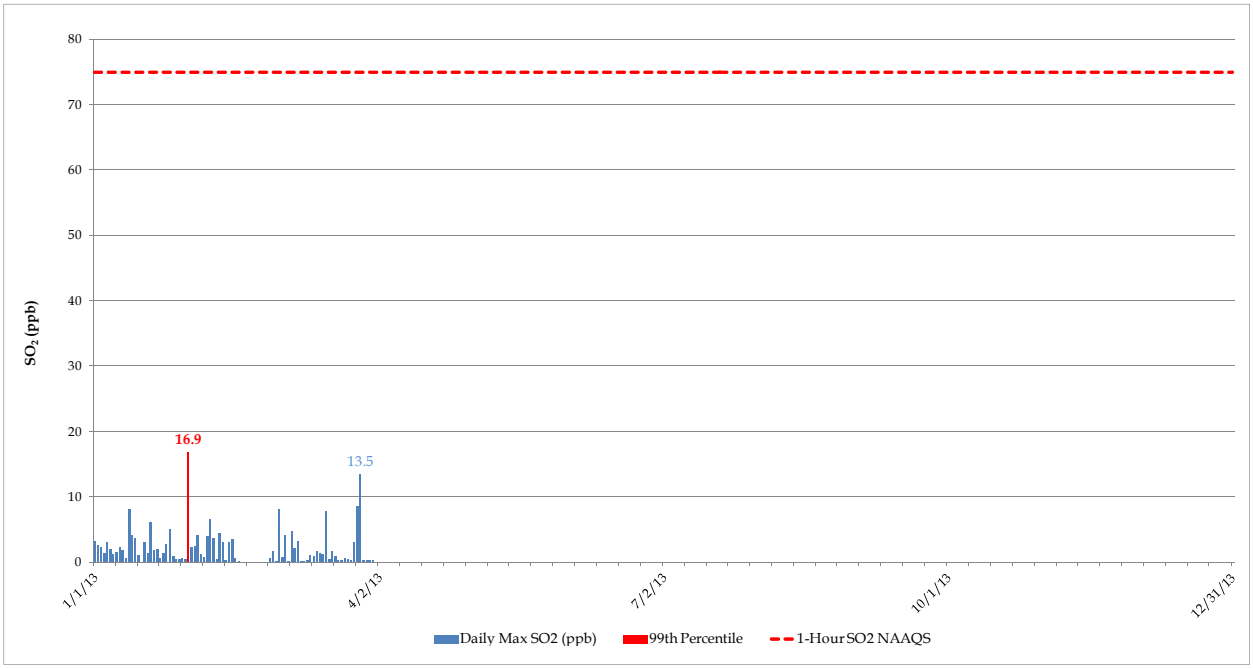
Actual comparison to the NAAQS requires three calendar years of monitoring data, which have not been obtained at this time.

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 the first quarter of 2013, 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 (1st Quarter 2013)



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 the first quarter of 2013 is 16.9 ppb, which is below the annual SO_2 NAAQS of 75 ppb.

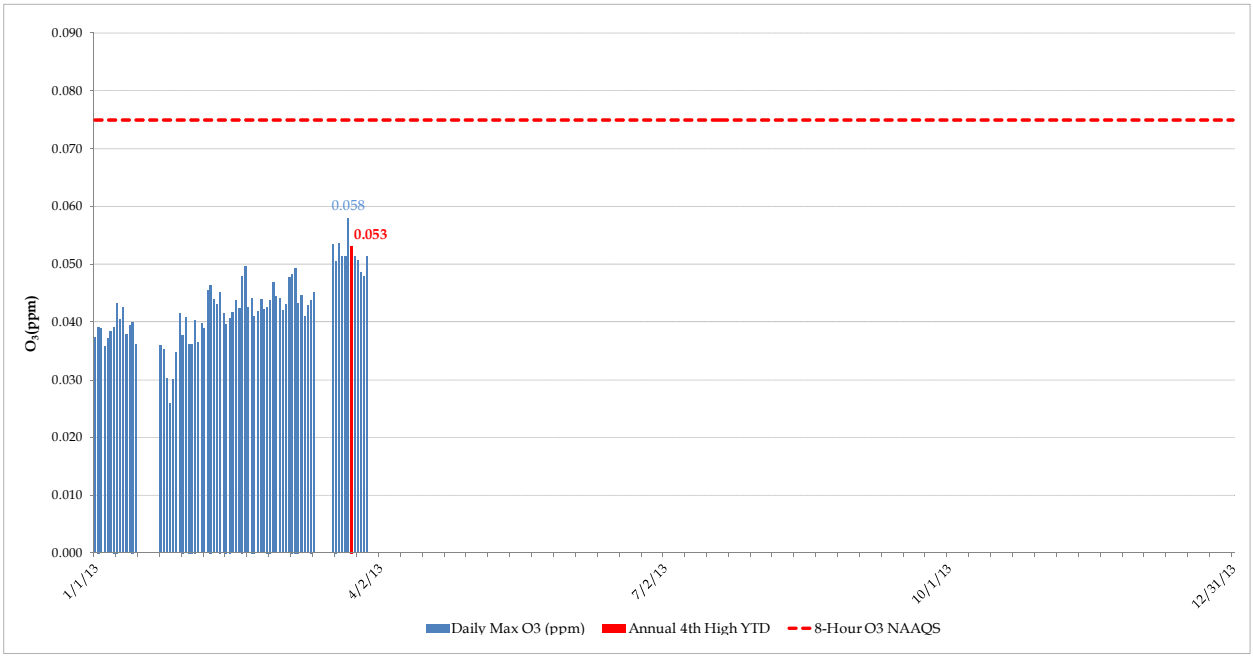
Actual comparison to the NAAQS requires three calendar years of monitoring data, which have not been obtained at this time.

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 the first quarter of 2013, 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 (1st Quarter 2013)



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 year-to-date averaged fourth-high maximum recorded at the East Plant for the first quarter of 2013 is 0.053 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
01/01/13 - 03/31/13
(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	3.3	0.0	0.0	0.0	0.0	3.3	1.6
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	10.0	0.0	0.0	0.0	0.0	10.0	1.7
ESE	0.0	3.3	0.0	0.0	0.0	0.0	3.3	1.8
SE	0.0	6.7	0.0	0.0	0.0	0.0	6.7	2.1
SSE	3.3	10.0	0.0	0.0	0.0	0.0	13.3	1.7
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	3.3	23.3	0.0	0.0	0.0	0.0	26.7	2.5
WSW	0.0	20.0	0.0	0.0	0.0	0.0	20.0	2.2
W	0.0	10.0	0.0	0.0	0.0	0.0	10.0	1.9
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	6.7	0.0	0.0	0.0	0.0	6.7	2.2
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
All	6.7	93.3	0.0	0.0	0.0	0.0	100.0	2.1

Calms (< 0.447 m/s): 0.0%

Mean wind speed: 2.1 m/s

Percent Occurence for this Stability Class: 1.4%

Frequency of Winds By Direction and Speed - 10m
Stability Class B
East Plant, Resolution
01/01/13 - 03/31/13
(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	1.0	0.0	0.0	0.0	0.0	1.0	2.2
NNE	0.0	1.5	6.0	0.0	0.0	0.0	7.5	3.7
NE	0.0	2.5	3.5	0.0	0.0	0.0	6.0	3.2
ENE	0.5	1.0	0.5	0.0	0.0	0.0	2.0	2.3
E	1.5	0.0	1.5	0.0	0.0	0.0	3.0	2.5
ESE	2.0	4.0	1.5	0.0	0.0	0.0	7.5	2.1
SE	1.0	1.5	0.5	0.0	0.0	0.0	3.0	2.0
SSE	0.0	1.5	0.5	0.0	0.0	0.0	2.0	2.9
S	0.5	1.5	3.0	0.0	0.0	0.0	5.0	2.9
SSW	1.0	12.9	4.5	0.0	0.0	0.0	18.4	2.5
SW	1.5	14.4	4.0	0.0	0.0	0.0	19.9	2.4
WSW	0.0	12.9	6.0	0.0	0.0	0.0	18.9	2.7
W	0.5	2.0	1.5	0.0	0.0	0.0	4.0	2.5
WNW	0.0	0.5	0.5	0.0	0.0	0.0	1.0	2.5
NW	0.5	0.0	0.0	0.0	0.0	0.0	0.5	1.2
NNW	0.5	0.0	0.0	0.0	0.0	0.0	0.5	1.4
All	9.5	57.2	33.3	0.0	0.0	0.0	100.0	2.6

Calms (< 0.447 m/s): 0.0%

Mean wind speed: 2.6 m/s

Percent Occurence for this Stability Class: 9.3%

Frequency of Winds By Direction and Speed - 10m
Stability Class C
East Plant, Resolution
01/01/13 - 03/31/13
(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	0.3	0.3	0.0	0.0	0.0	0.6	3.2
NNE	0.3	0.6	5.4	3.1	0.0	0.0	9.4	4.3
NE	0.0	0.9	9.7	2.8	0.0	0.0	13.4	4.3
ENE	0.9	1.7	3.4	0.3	0.0	0.0	6.3	3.2
E	3.1	3.4	2.6	0.0	0.0	0.0	9.1	2.4
ESE	0.6	4.3	1.7	0.3	0.0	0.0	6.8	2.6
SE	0.3	1.4	0.3	0.0	0.0	0.0	2.0	2.4
SSE	0.6	1.7	0.3	0.0	0.0	0.0	2.6	2.4
S	0.3	4.0	4.8	0.3	0.0	0.0	9.4	3.1
SSW	0.6	8.5	2.0	0.0	0.0	0.0	11.1	2.6
SW	0.6	9.4	2.0	0.0	0.0	0.0	12.0	2.5
WSW	0.9	6.8	5.7	0.0	0.0	0.0	13.4	2.8
W	0.0	2.0	0.3	0.0	0.0	0.0	2.3	2.8
WNW	0.0	0.6	0.0	0.0	0.0	0.0	0.6	2.4
NW	0.3	0.0	0.6	0.0	0.0	0.0	0.9	3.1
NNW	0.0	0.0	0.3	0.0	0.0	0.0	0.3	3.2
All	8.3	45.6	39.3	6.8	0.0	0.0	100.0	3.1

Calms (< 0.447 m/s): 0.0%

Mean wind speed: 3.1 m/s

Percent Occurence for this Stability Class: 16.3%

Frequency of Winds By Direction and Speed - 10m
Stability Class D
East Plant, Resolution
01/01/13 - 03/31/13
(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	0.4	0.0	0.0	0.0	0.0	0.4	2.4
NNE	0.0	0.4	1.1	2.7	6.9	2.9	14.0	8.0
NE	0.0	1.6	4.4	10.9	11.5	1.8	30.2	6.6
ENE	0.0	3.9	3.4	2.5	0.4	0.0	10.2	4.0
E	0.5	3.2	2.5	1.3	0.1	0.0	7.6	3.3
ESE	2.1	3.8	1.5	0.0	0.0	0.0	7.4	2.3
SE	1.4	0.6	0.1	0.0	0.0	0.0	2.1	1.4
SSE	0.8	0.8	0.1	0.0	0.0	0.0	1.6	1.9
S	0.1	1.4	1.6	0.8	0.0	0.0	3.9	3.5
SSW	0.3	3.4	6.3	2.0	0.1	0.0	12.1	3.7
SW	0.3	0.8	0.6	0.0	0.0	0.0	1.6	2.6
WSW	0.5	2.8	1.8	0.1	0.0	0.0	5.2	2.8
W	0.1	1.1	0.6	0.0	0.0	0.0	1.9	2.7
WNW	0.0	0.5	0.4	0.0	0.0	0.0	0.9	2.9
NW	0.0	0.1	0.1	0.0	0.0	0.0	0.3	2.5
NNW	0.0	0.3	0.0	0.0	0.0	0.0	0.3	2.7
All	6.1	25.0	24.7	20.2	19.1	4.7	99.7	4.9

Calms (< 0.447 m/s): 0.3%

Mean wind speed: 4.9 m/s

Percent Occurence for this Stability Class: 36.7%

Frequency of Winds By Direction and Speed - 10m
Stability Class E
East Plant, Resolution
01/01/13 - 03/31/13
(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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.4	0.0	0.0	0.0	0.0	0.4	1.7
NE	0.4	5.2	0.8	0.0	0.0	0.0	6.4	2.2
ENE	0.8	13.3	0.4	0.0	0.0	0.0	14.5	2.1
E	1.2	9.6	0.0	0.0	0.0	0.0	10.8	2.1
ESE	2.4	9.2	0.4	0.0	0.0	0.0	12.0	2.1
SE	7.2	3.2	0.0	0.0	0.0	0.0	10.4	1.3
SSE	3.6	4.0	0.0	0.0	0.0	0.0	7.6	1.6
S	1.2	4.4	0.0	0.0	0.0	0.0	5.6	1.9
SSW	1.6	4.0	0.0	0.0	0.0	0.0	5.6	2.0
SW	0.8	4.0	0.0	0.0	0.0	0.0	4.8	1.7
WSW	0.8	4.8	0.0	0.0	0.0	0.0	5.6	1.9
W	0.8	5.2	0.0	0.0	0.0	0.0	6.0	1.9
WNW	0.4	2.4	0.0	0.0	0.0	0.0	2.8	2.1
NW	0.4	1.6	0.0	0.0	0.0	0.0	2.0	1.9
NNW	0.0	2.4	0.0	0.0	0.0	0.0	2.4	2.0
All	21.7	73.9	1.6	0.0	0.0	0.0	97.2	1.9

Calms (< 0.447 m/s): 2.8%

Mean wind speed: 1.9 m/s

Percent Occurence for this Stability Class: 11.5%

Frequency of Winds By Direction and Speed - 10m
Stability Class F
East Plant, Resolution
01/01/13 - 03/31/13
(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	0.9	0.0	0.0	0.0	0.0	0.0	0.9	0.9
NNE	0.6	0.0	0.0	0.0	0.0	0.0	0.6	0.8
NE	1.1	0.0	0.0	0.0	0.0	0.0	1.1	0.8
ENE	2.4	2.4	0.0	0.0	0.0	0.0	4.9	1.5
E	3.4	4.3	0.0	0.0	0.0	0.0	7.7	1.4
ESE	9.4	2.8	0.0	0.0	0.0	0.0	12.2	1.2
SE	10.5	2.4	0.0	0.0	0.0	0.0	12.9	1.1
SSE	16.9	1.3	0.0	0.0	0.0	0.0	18.2	0.9
S	8.4	0.6	0.0	0.0	0.0	0.0	9.0	0.9
SSW	4.1	1.3	0.0	0.0	0.0	0.0	5.4	1.1
SW	3.9	1.1	0.0	0.0	0.0	0.0	5.1	1.2
WSW	4.7	0.6	0.0	0.0	0.0	0.0	5.2	1.1
W	3.2	1.5	0.0	0.0	0.0	0.0	4.7	1.3
WNW	1.5	0.6	0.0	0.0	0.0	0.0	2.1	1.1
NW	1.1	0.6	0.0	0.0	0.0	0.0	1.7	1.2
NNW	0.6	0.0	0.0	0.0	0.0	0.0	0.6	1.2
All	72.7	19.5	0.0	0.0	0.0	0.0	92.1	1.1

Calms (< 0.447 m/s): 7.9%

Mean wind speed: 1.1 m/s

Percent Occurence for this Stability Class: 24.8%

Frequency of Winds By Direction and Speed - 10m
Stability Class A
West Plant, Resolution
01/01/13 - 03/31/13
(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	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	4.2	0.0	0.0	0.0	0.0	4.2	1.9
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	16.7	0.0	0.0	0.0	0.0	16.7	1.7
SE	0.0	12.5	0.0	0.0	0.0	0.0	12.5	1.7
SSE	0.0	4.2	0.0	0.0	0.0	0.0	4.2	2.8
S	4.2	8.3	0.0	0.0	0.0	0.0	12.5	1.7
SSW	4.2	20.8	0.0	0.0	0.0	0.0	25.0	1.6
SW	4.2	12.5	0.0	0.0	0.0	0.0	16.7	1.9
WSW	0.0	4.2	0.0	0.0	0.0	0.0	4.2	1.8
W	0.0	4.2	0.0	0.0	0.0	0.0	4.2	3.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
All	12.5	87.5	0.0	0.0	0.0	0.0	100.0	1.8

Calms (< 0.447 m/s): 0.0%

Mean wind speed: 1.8 m/s

Percent Occurence for this Stability Class: 1.1%

Frequency of Winds By Direction and Speed - 10m
Stability Class B
West Plant, Resolution
01/01/13 - 03/31/13
(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	0.5	1.4	0.0	0.0	0.0	1.8	2.9
NNE	0.0	0.9	0.0	0.0	0.0	0.0	0.9	2.1
NE	0.0	1.4	0.5	0.0	0.0	0.0	1.8	2.7
ENE	0.9	1.4	2.3	0.0	0.0	0.0	4.5	2.5
E	0.0	3.2	1.4	0.0	0.0	0.0	4.5	2.6
ESE	1.4	0.9	1.8	0.0	0.0	0.0	4.1	2.5
SE	1.8	3.2	0.9	0.0	0.0	0.0	5.9	2.2
SSE	1.4	7.3	2.3	0.0	0.0	0.0	10.9	2.3
S	2.3	5.5	3.2	0.0	0.0	0.0	10.9	2.5
SSW	2.7	7.3	2.7	0.0	0.0	0.0	12.7	2.4
SW	0.9	6.4	6.4	0.0	0.0	0.0	13.6	3.1
WSW	2.3	3.6	12.3	0.0	0.0	0.0	18.2	3.3
W	0.0	2.7	2.3	0.0	0.0	0.0	5.0	3.2
WNW	0.0	0.0	0.9	0.0	0.0	0.0	0.9	3.9
NW	0.0	0.9	0.0	0.0	0.0	0.0	0.9	2.3
NNW	0.0	0.9	2.3	0.0	0.0	0.0	3.2	3.4
All	13.6	45.9	40.5	0.0	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: 10.2%

Frequency of Winds By Direction and Speed - 10m
Stability Class C
West Plant, Resolution
01/01/13 - 03/31/13
(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	0.5	2.9	0.0	0.0	0.0	3.4	3.3
NNE	0.0	0.8	1.6	0.0	0.0	0.0	2.4	3.1
NE	0.0	1.6	2.4	1.1	0.0	0.0	5.0	3.8
ENE	0.3	4.5	7.2	0.0	0.0	0.0	11.9	3.3
E	0.3	2.1	2.4	0.3	0.0	0.0	5.0	3.3
ESE	1.6	2.4	1.6	0.0	0.0	0.0	5.6	2.3
SE	0.8	2.1	1.1	0.0	0.0	0.0	4.0	2.6
SSE	1.1	3.7	0.5	0.0	0.0	0.0	5.3	2.3
S	0.5	1.3	1.6	0.3	0.0	0.0	3.7	2.8
SSW	0.5	4.2	2.1	0.3	0.0	0.0	7.2	2.8
SW	0.3	1.6	9.3	0.5	0.0	0.0	11.7	3.6
WSW	0.8	6.4	15.1	1.1	0.0	0.0	23.3	3.5
W	0.0	2.9	3.7	0.0	0.0	0.0	6.6	3.2
WNW	0.3	0.8	0.5	0.0	0.0	0.0	1.6	2.8
NW	0.0	0.8	1.1	0.0	0.0	0.0	1.9	3.1
NNW	0.0	0.3	1.1	0.0	0.0	0.0	1.3	3.6
All	6.4	36.1	54.1	3.4	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: 17.5%

Frequency of Winds By Direction and Speed - 10m
Stability Class D
West Plant, Resolution
01/01/13 - 03/31/13
(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	0.1	0.9	0.9	0.5	0.1	0.0	2.7	3.8
NNE	0.3	1.3	1.3	1.2	0.9	0.7	5.8	5.6
NE	0.3	3.4	5.9	5.9	4.6	6.3	26.3	7.0
ENE	0.7	1.9	11.7	6.3	2.3	0.4	23.2	4.8
E	0.7	1.5	1.7	0.3	0.0	0.0	4.2	2.9
ESE	0.1	0.9	0.4	0.1	0.0	0.0	1.6	2.8
SE	0.4	0.7	0.3	0.0	0.0	0.0	1.3	2.2
SSE	0.5	0.7	0.8	0.1	0.0	0.0	2.1	2.8
S	0.1	1.1	0.8	0.5	0.0	0.0	2.6	3.3
SSW	0.0	1.2	1.5	0.9	0.1	0.0	3.8	3.9
SW	0.3	1.2	2.0	0.8	0.0	0.0	4.3	3.5
WSW	0.8	2.8	5.1	1.6	0.0	0.0	10.3	3.4
W	0.5	2.0	1.2	0.4	0.1	0.0	4.3	3.1
WNW	0.5	2.0	1.1	0.3	0.0	0.0	3.9	2.7
NW	0.9	1.2	0.3	0.0	0.1	0.0	2.6	2.3
NNW	0.1	0.3	0.3	0.1	0.0	0.0	0.8	3.4
All	6.4	23.1	35.3	19.2	8.3	7.4	99.7	4.7

Calms (< 0.447 m/s): 0.3%

Mean wind speed: 4.7 m/s

Percent Occurence for this Stability Class: 34.6%

Frequency of Winds By Direction and Speed - 10m
Stability Class E
West Plant, Resolution
01/01/13 - 03/31/13
(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	3.7	3.7	0.0	0.4	0.0	0.0	7.7	1.7
NNE	2.9	7.3	1.5	0.0	0.0	0.0	11.7	2.0
NE	2.2	12.8	4.0	0.0	0.0	0.0	19.0	2.5
ENE	1.1	2.6	2.6	0.0	0.0	0.0	6.2	2.9
E	1.1	2.2	0.0	0.0	0.0	0.0	3.3	1.7
ESE	1.8	1.1	0.0	0.0	0.0	0.0	2.9	1.5
SE	2.2	0.4	0.4	0.0	0.0	0.0	2.9	1.4
SSE	2.6	1.8	0.0	0.0	0.0	0.0	4.4	1.5
S	1.1	1.8	0.0	0.0	0.0	0.0	2.9	1.6
SSW	2.2	1.8	0.0	0.0	0.0	0.0	4.0	1.4
SW	0.7	2.2	0.0	0.0	0.0	0.0	2.9	1.8
WSW	0.7	2.2	0.0	0.0	0.0	0.0	2.9	1.8
W	2.9	2.9	0.0	0.0	0.0	0.0	5.9	1.5
WNW	5.5	2.6	0.0	0.0	0.0	0.0	8.1	1.5
NW	4.4	3.7	0.0	0.0	0.0	0.0	8.1	1.5
NNW	2.6	3.7	0.4	0.0	0.0	0.0	6.6	1.8
All	37.7	52.7	8.8	0.4	0.0	0.0	99.6	1.9

Calms (< 0.447 m/s): 0.4%

Mean wind speed: 1.9 m/s

Percent Occurence for this Stability Class: 12.7%

Frequency of Winds By Direction and Speed - 10m
Stability Class F
West Plant, Resolution
01/01/13 - 03/31/13
(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	12.5	2.5	0.0	0.0	0.0	0.0	15.0	1.1
NNE	9.7	4.9	0.0	0.0	0.0	0.0	14.6	1.3
NE	10.5	5.6	0.0	0.0	0.0	0.0	16.1	1.3
ENE	3.5	2.3	0.0	0.0	0.0	0.0	5.8	1.2
E	1.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0
ESE	0.4	0.0	0.0	0.0	0.0	0.0	0.4	1.0
SE	0.2	0.2	0.0	0.0	0.0	0.0	0.4	1.5
SSE	0.6	0.2	0.0	0.0	0.0	0.0	0.8	1.2
S	0.2	0.2	0.0	0.0	0.0	0.0	0.4	1.1
SSW	1.0	0.6	0.0	0.0	0.0	0.0	1.6	1.1
SW	0.8	0.0	0.0	0.0	0.0	0.0	0.8	1.0
WSW	1.2	0.4	0.0	0.0	0.0	0.0	1.6	1.2
W	2.7	0.0	0.0	0.0	0.0	0.0	2.7	0.9
WNW	6.8	1.0	0.0	0.0	0.0	0.0	7.8	0.9
NW	8.9	1.2	0.0	0.0	0.0	0.0	10.1	1.0
NNW	10.1	0.8	0.0	0.0	0.0	0.0	10.9	1.0
All	70.0	19.8	0.0	0.0	0.0	0.0	89.9	1.1

Calms (< 0.447 m/s): 10.1%

Mean wind speed: 1.1 m/s

Percent Occurence for this Stability Class: 23.9%

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

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

Day	Wind Speed Interval (percent)									Max Gust (m/s)	Time of Gust
	<5	5 <7	7 <9	9 <11	11 <13	13 <15	15 <17	17 <19	>19		
1	75.97	10.37	5.43	5.47	2.40	0.37	0.00	0.00	0.00	15.90	20:53
2	5.27	19.17	32.00	28.97	12.20	2.33	0.10	0.00	0.00	16.40	10:17
3	0.80	5.10	20.17	34.43	25.83	11.30	2.27	0.13	0.00	19.00	11:51
4	43.60	26.13	21.87	7.30	1.00	0.07	0.00	0.00	0.00	14.30	0:12
5	82.77	15.10	2.03	0.07	0.00	0.00	0.00	0.00	0.00	11.30	8:33
6	67.20	26.97	5.50	0.33	0.00	0.00	0.00	0.00	0.00	11.00	4:28
7	75.17	14.83	5.57	3.20	1.10	0.13	0.00	0.00	0.00	15.00	21:50
8	60.30	15.90	14.57	6.80	2.10	0.33	0.00	0.00	0.00	15.20	1:34
9	55.13	14.30	13.97	9.07	5.53	1.77	0.23	0.00	0.00	17.90	1:45
10	88.43	8.73	2.23	0.50	0.07	0.03	0.00	0.00	0.00	15.70	22:46
11	96.97	2.63	0.37	0.03	0.00	0.00	0.00	0.00	0.00	11.20	2:25
12	97.93	1.90	0.17	0.00	0.00	0.00	0.00	0.00	0.00	9.68	15:32
13	99.17	0.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.27	16:11
14	**	**	**	**	**	**	**	**	**	**	**
15	53.50	27.23	13.30	4.83	1.00	0.10	0.00	0.00	0.00	15.30	4:57
16	31.43	29.07	24.13	11.93	2.97	0.47	0.03	0.00	0.00	16.00	1:48
17	13.77	21.00	25.47	23.20	13.23	3.17	0.10	0.00	0.00	16.50	11:00
18	36.57	20.23	25.47	14.60	3.03	0.10	0.00	0.00	0.00	14.20	7:46
19	78.00	15.83	5.40	0.77	0.00	0.00	0.00	0.00	0.00	12.20	10:17
20	85.33	12.10	2.37	0.20	0.00	0.00	0.00	0.00	0.00	11.10	10:09
21	59.73	21.23	14.37	4.30	0.33	0.03	0.00	0.00	0.00	14.10	9:54
22	91.60	7.10	1.27	0.03	0.00	0.00	0.00	0.00	0.00	9.78	11:36
23	88.97	9.90	1.10	0.00	0.00	0.00	0.00	0.00	0.00	9.68	9:14
24	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.02	22:43
25	91.57	6.53	1.80	0.10	0.00	0.00	0.00	0.00	0.00	10.50	19:14
26	72.90	17.00	7.07	2.17	0.67	0.13	0.03	0.00	0.00	18.20	10:46
27	83.33	14.23	2.30	0.10	0.00	0.00	0.00	0.00	0.00	11.20	23:50
28	80.47	11.03	5.50	2.10	0.73	0.13	0.03	0.00	0.00	20.80	4:47
29	95.10	4.27	0.63	0.03	0.00	0.00	0.00	0.00	0.00	10.10	16:08
30	98.90	1.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.61	17:28
31	54.97	22.77	14.23	6.50	1.47	0.03	0.00	0.00	0.00	13.90	14:16
All	68.83	13.42	8.94	5.57	2.46	0.68	0.09	0.00	0.00	20.79	4:47

** Indicates Invalid Data

Average Frequency Distribution of Wind Speeds - 10m
Resolution - East Plant
Feb-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	82.23	13.17	3.97	0.63	0.03	0.00	0.00	0.00	0.00	13.20	3:06
2	82.57	12.47	4.53	0.43	0.00	0.00	0.00	0.00	0.00	11.40	11:07
3	89.17	8.33	2.37	0.13	0.00	0.00	0.00	0.00	0.00	10.70	5:15
4	96.07	3.43	0.47	0.03	0.00	0.00	0.00	0.00	0.00	9.83	8:55
5	99.80	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.30	13:57
6	99.53	0.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.81	16:07
7	99.93	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.40	17:23
8	93.30	5.27	1.23	0.20	0.03	0.00	0.00	0.00	0.00	13.00	16:22
9	90.13	7.70	1.80	0.30	0.03	0.00	0.00	0.00	0.00	13.50	8:39
10	99.17	0.80	0.03	0.00	0.00	0.00	0.00	0.00	0.00	7.89	11:47
11	99.83	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.20	18:52
12	89.93	8.67	1.33	0.07	0.00	0.00	0.00	0.00	0.00	11.00	10:51
13	83.67	14.37	1.90	0.07	0.00	0.00	0.00	0.00	0.00	10.90	0:55
14	74.10	10.30	4.50	3.23	3.77	2.80	1.10	0.23	0.00	20.10	22:51
15	12.10	23.40	27.73	19.03	10.37	5.23	1.90	0.23	0.07	20.30	2:55
16	37.07	19.80	20.93	14.07	5.57	2.00	0.53	0.00	0.00	17.60	6:06
17	95.93	3.47	0.53	0.03	0.00	0.00	0.00	0.00	0.00	14.50	15:10
18	99.93	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.45	12:01
19	87.67	9.67	2.27	0.37	0.03	0.00	0.00	0.00	0.00	12.90	13:49
20	83.00	12.43	3.97	0.57	0.03	0.00	0.00	0.00	0.00	12.40	18:07
21	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.32	15:13
22	99.07	0.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.99	13:59
23	99.53	0.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.22	18:30
24	89.83	7.80	1.87	0.40	0.07	0.00	0.00	0.00	0.00	12.80	15:00
25	97.83	2.13	0.03	0.00	0.00	0.00	0.00	0.00	0.00	7.53	15:17
26	88.27	9.37	2.17	0.17	0.00	0.00	0.00	0.00	0.00	10.60	23:14
27	47.93	11.87	18.90	14.63	5.63	0.93	0.03	0.00	0.00	16.40	3:38
28	52.30	22.87	12.33	7.77	3.17	1.13	0.33	0.10	0.00	20.20	8:09
All	84.64	7.49	4.03	2.22	1.03	0.43	0.14	0.02	0.00	20.33	2:55

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

Day	Wind Speed Interval (percent)									Max Gust	Time of
	<5	5 <7	7 <9	9 <11	11 <13	13 <15	15 <17	17 <19	>19	(m/s)	Gust
1	58.87	23.03	12.13	4.43	1.30	0.23	0.00	0.00	0.00	15.70	9:25
2	70.73	14.83	9.50	4.20	0.70	0.03	0.00	0.00	0.00	14.60	0:59
3	99.10	0.87	0.03	0.00	0.00	0.00	0.00	0.00	0.00	8.60	14:04
4	96.77	2.70	0.53	0.07	0.00	0.00	0.00	0.00	0.00	10.90	14:58
5	78.00	12.00	8.13	1.83	0.07	0.00	0.00	0.00	0.00	12.20	11:20
6	98.73	1.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.63	15:38
7	94.00	5.73	0.30	0.00	0.00	0.00	0.00	0.00	0.00	9.06	15:13
8	80.90	13.00	4.37	1.37	0.27	0.07	0.03	0.00	0.00	19.80	15:57
9	89.30	8.77	1.73	0.20	0.00	0.00	0.00	0.00	0.00	12.50	1:11
10	83.20	12.23	4.07	0.47	0.03	0.00	0.00	0.00	0.00	12.00	10:31
11	86.63	12.07	1.27	0.03	0.00	0.00	0.00	0.00	0.00	10.10	4:56
12	80.40	8.57	6.53	3.53	0.97	0.07	0.00	0.00	0.00	16.00	9:37
13	77.33	13.93	7.33	1.37	0.03	0.00	0.00	0.00	0.00	12.30	8:10
14	80.33	10.57	7.13	1.90	0.07	0.00	0.00	0.00	0.00	12.10	2:42
15	99.57	0.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.89	14:12
16	98.00	1.93	0.07	0.00	0.00	0.00	0.00	0.00	0.00	8.60	15:05
17	96.87	2.80	0.33	0.00	0.00	0.00	0.00	0.00	0.00	9.32	12:10
18	98.10	1.73	0.17	0.00	0.00	0.00	0.00	0.00	0.00	9.88	14:41
19	99.13	0.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.99	16:49
20	98.40	1.57	0.03	0.00	0.00	0.00	0.00	0.00	0.00	7.68	14:24
21	96.93	2.90	0.17	0.00	0.00	0.00	0.00	0.00	0.00	9.93	13:54
22	96.17	3.17	0.57	0.07	0.00	0.00	0.00	0.00	0.00	12.30	16:42
23	94.20	4.27	1.37	0.20	0.03	0.00	0.00	0.00	0.00	12.70	16:52
24	96.23	3.33	0.40	0.03	0.00	0.00	0.00	0.00	0.00	11.40	16:49
25	88.17	10.00	1.83	0.00	0.00	0.00	0.00	0.00	0.00	9.47	14:10
26	95.30	4.57	0.13	0.00	0.00	0.00	0.00	0.00	0.00	8.96	10:27
27	94.13	5.03	0.77	0.03	0.00	0.00	0.00	0.00	0.00	12.20	15:17
28	97.93	1.97	0.13	0.00	0.00	0.00	0.00	0.00	0.00	9.32	16:02
29	99.33	0.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.22	15:05
30	99.27	0.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.37	14:35
31	98.03	1.87	0.10	0.00	0.00	0.00	0.00	0.00	0.00	8.86	17:15
All	90.97	6.04	2.23	0.64	0.11	0.01	0.00	0.00	0.00	19.76	15:57

Average Frequency Distribution of Wind Speeds - 10m
Resolution - West Plant
Jan-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	77.97	14.07	5.03	2.23	0.63	0.10	0.00	0.00	0.00	15.80	21:16
2	11.73	21.00	24.60	17.30	11.13	7.97	4.70	1.33	0.23	21.60	10:02
3	0.10	1.50	9.33	21.33	26.60	20.33	12.60	5.80	2.27	25.50	8:10
4	49.57	11.83	9.73	11.33	10.80	5.27	1.33	0.13	0.03	20.10	0:12
5	83.40	15.30	1.33	0.03	0.00	0.00	0.00	0.00	0.00	9.63	10:55
6	65.07	19.50	9.03	4.10	1.60	0.53	0.10	0.00	0.00	18.90	8:17
7	89.70	8.23	1.37	0.50	0.13	0.03	0.00	0.00	0.00	16.60	23:31
8	85.00	11.17	2.87	0.77	0.17	0.03	0.00	0.00	0.00	16.00	2:33
9	81.63	8.13	4.23	2.97	1.83	0.93	0.27	0.03	0.00	19.70	1:34
10	67.77	20.47	9.53	2.03	0.17	0.03	0.00	0.00	0.00	15.10	1:17
11	97.40	2.57	0.03	0.00	0.00	0.00	0.00	0.00	0.00	7.78	14:00
12	94.63	4.97	0.37	0.00	0.00	0.00	0.00	0.00	0.00	9.63	14:39
13	90.87	9.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	8.29	8:11
14	**	**	**	**	**	**	**	**	**	**	**
15	67.40	18.80	8.70	3.37	1.27	0.37	0.03	0.00	0.00	16.10	8:30
16	81.17	11.23	4.80	2.03	0.63	0.13	0.00	0.00	0.00	16.00	0:37
17	24.90	20.10	19.30	15.30	11.13	6.67	2.27	0.33	0.03	20.50	10:05
18	55.70	23.93	14.90	4.70	0.67	0.10	0.00	0.00	0.00	17.30	1:46
19	89.23	9.20	1.47	0.10	0.00	0.00	0.00	0.00	0.00	10.60	7:06
20	84.43	13.60	1.87	0.03	0.00	0.00	0.00	0.00	0.00	10.40	9:04
21	74.13	12.70	7.63	3.93	1.40	0.23	0.00	0.00	0.00	15.80	10:19
22	90.67	8.80	0.53	0.00	0.00	0.00	0.00	0.00	0.00	10.00	11:57
23	63.83	29.93	5.60	0.60	0.07	0.00	0.00	0.00	0.00	15.00	12:05
24	76.27	22.27	1.47	0.00	0.00	0.00	0.00	0.00	0.00	9.83	5:21
25	81.87	14.10	3.27	0.67	0.10	0.00	0.00	0.00	0.00	13.00	23:06
26	89.30	9.27	1.03	0.20	0.13	0.03	0.00	0.00	0.00	15.80	10:43
27	96.50	3.47	0.03	0.00	0.00	0.00	0.00	0.00	0.00	7.37	23:01
28	83.77	12.87	3.00	0.37	0.00	0.00	0.00	0.00	0.00	11.90	12:42
29	88.73	10.30	0.97	0.00	0.00	0.00	0.00	0.00	0.00	9.22	16:53
30	99.30	0.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.01	8:36
31	82.03	12.33	4.90	0.70	0.03	0.00	0.00	0.00	0.00	12.10	14:47
All	74.14	12.71	5.24	3.15	2.28	1.43	0.71	0.25	0.09	25.45	8:10

** Indicates Invalid Data

Average Frequency Distribution of Wind Speeds - 10m
Resolution - West Plant
Feb-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	98.83	1.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.58	8:57
2	93.60	5.70	0.70	0.00	0.00	0.00	0.00	0.00	0.00	9.83	12:04
3	84.87	12.63	2.40	0.10	0.00	0.00	0.00	0.00	0.00	11.30	3:12
4	99.10	0.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.12	13:22
5	98.50	1.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.42	8:55
6	96.43	3.47	0.10	0.00	0.00	0.00	0.00	0.00	0.00	7.63	15:06
7	93.73	5.73	0.53	0.00	0.00	0.00	0.00	0.00	0.00	8.04	22:59
8	81.67	15.37	2.73	0.20	0.00	0.00	0.00	0.00	0.00	11.40	13:42
9	85.30	12.50	2.00	0.23	0.00	0.00	0.00	0.00	0.00	11.90	4:24
10	96.27	3.63	0.03	0.00	0.00	0.00	0.00	0.00	0.00	7.78	15:15
11	98.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.55	3:04
12	93.13	6.43	0.40	0.00	0.00	0.00	0.00	0.00	0.00	14.00	14:50
13	98.30	1.67	0.03	0.00	0.00	0.00	0.00	0.00	0.00	7.58	11:01
14	85.50	4.47	1.43	2.37	2.30	1.87	1.30	0.53	0.20	23.60	22:20
15	42.87	15.23	11.67	11.17	9.13	5.93	2.83	0.93	0.23	22.80	2:44
16	74.03	9.90	5.10	3.43	2.57	2.23	1.70	0.77	0.23	23.20	9:08
17	75.80	18.43	5.07	0.67	0.03	0.00	0.00	0.00	0.00	11.70	1:52
18	87.53	10.43	2.03	0.00	0.00	0.00	0.00	0.00	0.00	8.91	23:58
19	75.00	17.00	6.87	1.07	0.07	0.00	0.00	0.00	0.00	12.60	13:38
20	94.10	5.10	0.60	0.17	0.03	0.00	0.00	0.00	0.00	12.40	11:00
21	99.03	0.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.47	8:42
22	95.73	4.13	0.13	0.00	0.00	0.00	0.00	0.00	0.00	8.24	13:00
23	97.43	2.33	0.23	0.00	0.00	0.00	0.00	0.00	0.00	8.19	7:46
24	80.87	13.97	4.30	0.80	0.10	0.00	0.00	0.00	0.00	12.50	14:51
25	98.10	1.83	0.03	0.00	0.00	0.00	0.00	0.00	0.00	7.78	14:06
26	89.43	9.90	0.67	0.00	0.00	0.00	0.00	0.00	0.00	9.32	22:20
27	39.67	16.90	18.83	15.67	6.67	1.90	0.37	0.00	0.00	18.50	9:16
28	65.97	17.67	10.30	3.83	1.47	0.53	0.20	0.03	0.00	19.30	7:07
All	86.39	7.89	2.72	1.42	0.80	0.45	0.23	0.08	0.02	23.65	22:20

Average Frequency Distribution of Wind Speeds - 10m
Resolution - West Plant
Mar-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	88.17	9.63	2.07	0.13	0.03	0.00	0.00	0.00	0.00	12.30	23:54
2	72.80	8.83	8.37	6.73	2.77	0.53	0.03	0.00	0.00	16.50	9:41
3	97.17	2.67	0.17	0.00	0.00	0.00	0.00	0.00	0.00	8.91	13:45
4	88.47	9.57	1.80	0.17	0.00	0.00	0.00	0.00	0.00	11.10	13:19
5	82.10	12.13	4.63	1.03	0.10	0.00	0.00	0.00	0.00	12.90	10:39
6	98.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.37	16:00
7	95.23	4.60	0.20	0.00	0.00	0.00	0.00	0.00	0.00	8.24	14:49
8	86.53	7.83	3.27	1.43	0.63	0.17	0.07	0.03	0.00	18.40	14:17
9	99.87	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.79	10:37
10	94.40	4.63	0.90	0.10	0.00	0.00	0.00	0.00	0.00	11.20	13:41
11	93.10	5.67	0.93	0.27	0.03	0.00	0.00	0.00	0.00	12.50	3:21
12	84.13	6.77	3.97	2.97	1.67	0.47	0.07	0.00	0.00	20.10	9:43
13	89.90	7.73	2.13	0.23	0.00	0.00	0.00	0.00	0.00	12.30	10:19
14	82.17	11.77	4.93	1.10	0.03	0.00	0.00	0.00	0.00	12.60	9:34
15	89.57	7.97	2.40	0.10	0.00	0.00	0.00	0.00	0.00	10.00	5:38
16	96.57	3.27	0.17	0.00	0.00	0.00	0.00	0.00	0.00	8.60	15:33
17	88.77	10.40	0.83	0.00	0.00	0.00	0.00	0.00	0.00	9.16	11:45
18	94.97	4.73	0.33	0.00	0.00	0.00	0.00	0.00	0.00	9.06	14:22
19	98.33	1.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.22	12:23
20	91.20	8.17	0.63	0.03	0.00	0.00	0.00	0.00	0.00	10.80	9:38
21	95.47	4.30	0.20	0.03	0.00	0.00	0.00	0.00	0.00	9.73	13:36
22	86.60	10.90	2.30	0.20	0.00	0.00	0.00	0.00	0.00	11.10	14:58
23	77.53	12.73	8.07	1.50	0.13	0.00	0.00	0.00	0.00	14.10	14:01
24	89.40	8.97	1.60	0.00	0.00	0.00	0.00	0.00	0.00	12.20	15:11
25	82.67	10.63	5.53	1.07	0.03	0.00	0.00	0.00	0.00	12.90	8:20
26	88.57	9.20	2.10	0.13	0.00	0.00	0.00	0.00	0.00	14.50	8:49
27	85.47	12.93	1.53	0.07	0.00	0.00	0.00	0.00	0.00	10.20	14:55
28	93.03	6.53	0.43	0.00	0.00	0.00	0.00	0.00	0.00	9.37	14:47
29	97.00	2.83	0.17	0.00	0.00	0.00	0.00	0.00	0.00	9.32	14:42
30	98.13	1.83	0.03	0.00	0.00	0.00	0.00	0.00	0.00	7.78	15:23
31	94.77	4.83	0.37	0.00	0.00	0.00	0.00	0.00	0.00	9.73	15:25
All	90.32	6.96	1.94	0.56	0.18	0.04	0.01	0.00	0.00	20.12	9:43

Appendix C: Meteorological Data – Hourly

SAROAD for Resolution, East_Plant
"Component, Channel: Table100, WS_ms_10m"
Month: Jan 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	0.4	0.8	0.6	0.9	0.9	1.1	1.2	1.3	1.5	2.8	3.8	5.2	4.9	4.4	3.8	3.3	4.0	2.2	1.6	3.1	7.3	10.0	8.9	9.0	3.5	10.0	0.4
2	9.0	7.4	10.0	10.2	9.4	9.7	9.3	9.1	9.5	8.6	9.5	9.8	9.8	8.8	8.6	8.3	7.3	6.1	5.8	8.8	7.7	8.4	6.9	8.5	8.6	10.2	5.8
3	8.1	10.2	10.5	11.3	10.4	11.0	10.5	9.9	10.8	11.8	11.7	12.3	12.4	11.2	11.2	10.3	9.5	8.6	8.3	9.6	10.6	10.4	9.9	10.1	10.4	12.4	8.1
4	8.9	7.6	6.3	8.4	6.7	6.0	7.7	6.7	6.1	7.6	7.4	7.4	6.4	6.3	5.6	4.5	3.4	1.9	1.4	1.6	2.3	2.0	2.7	2.4	5.3	8.9	1.4
5	4.0	2.9	2.7	2.7	2.8	3.0	3.2	4.7	5.2	4.6	5.1	5.2	4.9	4.6	3.5	0.8	1.2	1.3	1.8	2.5	3.2	3.2	3.2	4.2	3.4	5.2	0.8
6	4.1	4.3	5.3	4.9	5.3	5.2	4.9	5.5	4.8	4.6	4.8	5.2	5.2	5.1	4.8	4.4	4.4	3.5	3.4	3.3	2.0	2.3	2.4	1.6	4.2	5.5	1.6
7	1.6	1.7	2.0	1.6	1.5	2.2	2.5	2.4	3.1	4.9	5.6	4.3	2.0	1.9	3.2	3.7	4.8	5.2	3.8	1.4	4.4	7.4	9.2	7.9	3.7	9.2	1.4
8	9.3	9.8	8.3	6.5	2.6	6.5	7.6	5.9	5.4	5.7	3.8	3.7	4.3	3.5	3.5	1.8	2.0	1.6	2.1	2.5	2.3	2.6	2.9	7.1	4.6	9.8	1.6
9	6.6	10.6	10.8	9.7	10.5	7.7	4.9	4.2	6.2	6.9	7.4	7.3	6.3	4.2	3.1	2.7	2.6	1.7	1.2	1.4	1.4	1.6	1.8	1.7	5.1	10.8	1.2
10	1.8	2.2	2.3	2.1	1.8	1.3	1.6	1.4	1.8	2.3	2.3	2.9	4.1	4.0	3.0	3.2	3.5	4.7	4.5	4.2	3.5	2.9	4.3	3.9	2.9	4.7	1.3
11	3.3	3.2	3.7	2.5	2.2	2.1	1.3	1.6	1.4	1.6	1.6	1.7	2.5	2.3	2.5	2.2	2.0	2.4	1.6	1.1	1.2	0.6	0.9	1.0	1.9	3.7	0.6
12	0.8	0.6	0.8	0.9	0.7	0.7	0.6	0.3	0.6	0.9	1.8	2.3	2.8	3.3	2.3	2.5	2.7	1.9	1.6	0.9	0.6	0.5	0.6	0.8	1.3	3.3	0.3
13	0.7	0.5	0.7	0.8	1.0	0.9	0.8	1.0	1.1	1.3	2.6	2.5	2.7	2.8	2.7	2.8	2.2	1.8	1.0	1.2	0.4	0.2	0.6	0.8	1.4	2.8	0.2
14	0.4	0.4	0.5	0.4	0.4	0.7	0.5	0.4	0.6	1.9	1.9	2.5	2.8	3.0	2.8	2.4	--	2.5	3.2	2.1	1.5	3.0	2.2	3.0	1.7	3.2	0.4
15	2.3	4.7	5.3	3.9	6.4	7.9	5.5	8.8	5.7	4.7	5.2	5.6	5.6	5.5	4.0	4.9	4.9	4.0	2.6	1.5	2.5	5.4	5.7	6.9	5.0	8.8	1.5
16	9.7	9.9	6.1	5.0	5.5	7.2	6.9	5.9	5.6	7.1	7.9	7.0	7.0	7.0	6.8	5.6	3.6	2.4	2.2	5.8	3.8	6.8	9.0	7.5	6.3	9.9	2.2
17	9.0	8.2	8.3	8.5	7.6	8.3	8.6	8.8	9.7	10.3	10.5	12.1	10.2	9.9	9.7	10.5	8.0	6.8	6.0	4.2	5.6	4.3	5.8	5.2	8.2	12.1	4.2
18	7.1	8.2	8.9	8.8	8.8	8.6	8.1	8.9	7.7	7.5	7.9	7.6	7.7	6.9	6.0	5.6	4.5	2.4	1.9	1.6	2.2	2.5	2.6	2.8	6.0	8.9	1.6
19	2.8	2.1	2.6	2.9	3.0	3.2	3.1	3.2	3.0	5.8	6.3	5.6	6.2	5.8	5.3	5.2	4.0	2.4	1.6	2.2	2.5	3.5	2.9	2.9	3.7	6.3	1.6
20	2.9	3.1	3.0	2.7	2.9	2.7	2.8	2.9	4.9	4.7	5.5	5.6	5.1	4.7	3.8	3.4	4.1	3.3	1.7	2.0	1.8	2.4	2.7	2.4	3.4	5.6	1.7
21	2.5	2.6	3.0	3.2	3.7	4.1	4.3	4.1	4.6	6.9	7.1	7.8	7.4	7.3	7.9	7.1	5.5	4.8	2.6	2.4	4.2	4.7	2.7	3.0	4.7	7.9	2.4
22	2.7	2.3	2.5	2.6	2.4	3.1	2.9	3.3	3.2	4.0	4.9	5.6	5.3	3.1	1.4	1.6	0.7	1.2	1.2	1.1	1.3	1.5	1.5	1.8	2.6	5.6	0.7
23	2.1	1.8	1.7	2.4	2.4	2.8	3.0	3.4	3.7	4.7	5.8	4.9	4.8	4.5	3.2	2.8	2.5	1.9	2.2	2.0	1.6	1.7	1.5	1.5	2.9	5.8	1.5
24	1.5	1.3	1.4	1.1	1.2	1.3	1.3	1.0	0.5	0.5	0.5	1.0	1.4	1.7	2.5	1.1	1.4	1.3	1.2	1.1	2.0	1.9	2.3	1.9	1.3	2.5	0.5
25	2.0	2.2	2.2	2.0	1.9	1.4	2.3	1.6	2.6	3.2	3.2	2.6	2.8	3.4	3.1	2.1	2.3	2.0	3.9	6.5	4.6	4.2	2.7	1.7	2.8	6.5	1.4
26	1.6	1.4	1.1	1.1	1.0	2.1	2.3	1.8	2.0	2.7	5.4	5.2	6.7	6.1	5.0	5.7	5.0	4.0	3.2	3.7	5.4	5.3	5.5	3.9	3.6	6.7	1.0
27	4.9	4.3	3.0	2.0	2.3	2.8	4.1	4.9	3.7	4.5	3.4	3.4	2.8	2.6	3.1	2.7	3.2	2.4	3.8	4.3	3.0	4.6	4.0	3.9	3.5	4.9	2.0
28	4.7	5.3	4.9	6.2	7.2	5.7	6.0	2.8	1.8	2.0	1.1	1.5	2.3	2.3	2.4	2.6	2.8	3.4	2.0	2.2	1.7	2.1	1.2	1.4	3.1	7.2	1.1
29	1.2	1.7	1.9	1.4	1.7	2.6	2.4	2.9	2.4	1.7	2.2	2.3	3.1	3.4	3.5	2.6	3.1	3.3	2.1	1.9	1.3	2.0	2.6	1.6	2.3	3.5	1.2
30	1.6	2.5	1.7	2.1	1.0	0.6	0.8	1.7	1.8	2.9	3.4	2.3	1.9	2.6	2.6	3.2	3.4	3.6	3.4	0.8	0.7	1.4	2.1	2.0	2.1	3.6	0.6
31	1.6	1.6	1.6	1.7	3.2	5.2	5.3	6.3	5.8	7.5	9.1	7.7	6.6	8.4	7.6	6.4	5.3	3.0	2.3	1.9	3.3	4.0	5.6	2.3	4.7	9.1	1.6
Avg	3.8	4.1	4.0	3.9	3.8	4.1	4.1	4.1	4.1	4.7	5.1	5.2	5.1	4.9	4.5	4.1	3.8	3.1	2.7	2.9	3.1	3.7	3.8	3.7	4.0	--	--
Max	9.7	10.6	10.8	11.3	10.5	11.0	10.5	9.9	10.8	11.8	11.7	12.3	12.4	11.2	11.2	10.5	9.5	8.6	8.3	9.6	10.6	10.4	9.9	10.1	--	12.4	--
Min	0.4	0.4	0.5	0.4	0.4	0.6	0.5	0.3	0.5	0.5	0.5	1.0	1.4	1.7	1.4	0.8	0.7	1.2	1.0	0.8	0.4	0.2	0.6	0.8	--	--	0.2

-- Indicates Invalid Data

SAROAD for Resolution, East_Plant
"Component, Channel: Table100, WS_ms_10m"
Month: Feb 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	2.3	3.1	5.1	6.0	5.2	4.5	3.5	4.3	3.2	4.5	4.6	4.7	4.3	3.1	1.4	3.3	3.4	3.7	2.6	0.7	0.7	1.5	1.5	1.5	3.3	6.0	0.7
2	1.5	2.1	2.0	2.6	3.3	2.6	2.6	3.5	3.1	3.8	5.3	6.3	6.1	6.3	5.5	4.2	3.6	2.3	1.6	2.2	2.2	2.8	2.7	2.8	3.4	6.3	1.5
3	3.1	2.9	3.9	5.1	5.8	6.3	3.4	2.9	2.7	2.1	1.4	2.0	2.8	1.9	1.3	1.7	2.2	2.9	2.1	1.3	1.1	2.2	2.2	2.2	2.7	6.3	1.1
4	1.4	1.6	1.4	1.9	1.6	2.1	2.4	2.7	3.9	5.1	3.7	1.7	1.6	2.6	3.0	2.5	2.8	3.1	3.3	2.4	1.6	0.5	0.5	1.1	2.3	5.1	0.5
5	1.5	1.8	1.9	1.7	1.6	2.0	2.1	2.0	2.1	2.6	3.0	1.6	2.2	2.5	2.4	2.7	2.2	1.8	2.4	0.7	1.0	1.0	0.8	0.8	1.8	3.0	0.7
6	0.6	0.7	0.1	0.7	0.7	1.0	0.7	0.6	0.7	1.2	1.5	1.8	2.3	2.4	2.0	2.0	2.4	1.8	1.5	1.3	1.4	0.8	1.0	1.4	1.3	2.4	0.1
7	1.3	1.2	0.8	0.8	0.6	0.7	0.7	1.0	1.0	1.1	1.3	2.5	2.0	1.9	2.3	1.9	2.0	2.6	2.7	1.8	0.4	0.6	0.8	0.9	1.4	2.7	0.4
8	0.6	0.5	0.8	0.9	1.2	0.9	1.1	1.5	2.6	3.5	2.8	2.8	3.4	3.4	3.7	3.8	4.2	2.3	1.9	2.1	1.9	1.7	2.7	2.4	2.2	4.2	0.5
9	3.0	3.1	5.4	2.6	2.7	2.6	2.9	3.5	3.5	2.9	2.6	4.0	3.5	2.7	2.2	2.1	2.3	2.7	1.5	1.7	1.2	0.9	1.3	1.6	2.6	5.4	0.9
10	1.5	0.9	0.7	0.5	0.6	0.5	0.6	0.9	0.7	1.2	1.9	3.0	2.5	2.1	2.5	2.0	2.3	2.3	1.6	0.7	1.0	0.7	0.9	0.9	1.4	3.0	0.5
11	0.6	0.8	0.8	0.6	1.0	0.8	1.1	1.3	1.6	1.1	1.1	1.2	1.8	1.2	1.4	1.5	0.9	1.0	1.6	2.8	1.6	2.1	0.7	1.1	1.2	2.8	0.6
12	1.0	1.0	0.8	1.0	1.3	1.6	1.7	2.1	2.7	5.2	5.5	5.1	3.9	3.7	3.0	3.2	2.9	2.8	2.6	2.0	0.9	0.7	1.3	2.4	2.4	5.5	0.7
13	3.9	3.7	2.4	2.3	2.5	2.6	3.2	4.2	3.9	5.2	5.3	5.1	3.1	3.0	4.1	4.2	4.1	4.3	4.1	2.6	1.6	0.9	1.8	2.1	3.3	5.3	0.9
14	3.7	2.2	2.4	1.7	2.7	2.5	2.9	2.1	2.8	4.5	6.5	5.9	4.1	3.4	3.8	2.2	3.9	2.7	2.1	2.5	3.7	12.0	12.8	10.6	4.3	12.8	1.7
15	11.4	11.0	12.1	13.1	12.1	6.9	6.9	8.6	9.0	7.0	7.1	6.8	7.1	5.8	5.3	7.4	7.6	7.9	8.2	9.0	9.0	7.7	7.2	5.0	8.3	13.1	5.0
16	7.5	7.5	6.8	6.0	6.3	9.1	12.7	9.7	8.4	8.5	9.3	8.9	8.0	8.0	6.3	6.1	3.8	4.1	3.2	3.8	3.0	3.8	3.3	2.9	6.5	12.7	2.9
17	2.3	2.1	2.3	2.9	2.5	2.4	1.9	2.7	1.8	2.6	2.4	3.3	3.4	3.3	3.0	3.2	2.6	2.4	2.2	2.1	2.7	2.0	1.5	2.0	2.5	3.4	1.5
18	1.1	0.6	1.4	1.1	1.1	1.0	1.0	0.9	1.2	2.2	2.2	1.4	2.6	1.8	2.2	2.3	1.9	1.6	1.3	1.1	1.2	1.1	1.1	1.1	1.4	2.6	0.6
19	1.3	1.1	0.7	0.8	0.7	0.3	0.4	0.5	0.9	3.8	4.0	3.1	4.1	5.2	4.3	3.7	3.3	3.5	3.1	2.4	2.3	2.3	3.7	4.7	2.5	5.2	0.3
20	6.5	3.8	2.2	3.7	3.5	3.7	5.3	5.8	5.1	3.4	4.0	3.7	3.1	1.8	1.9	1.1	1.0	2.4	2.9	0.8	1.7	1.6	0.9	0.9	2.9	6.5	0.8
21	0.7	0.8	1.6	1.6	0.8	0.8	1.1	0.9	1.6	2.2	2.0	2.2	1.9	1.4	1.7	2.3	1.9	0.9	1.2	0.9	1.0	0.7	0.5	0.4	1.3	2.3	0.4
22	0.7	0.9	0.6	1.1	1.1	0.5	0.7	0.9	0.9	1.6	2.3	2.4	1.9	2.3	2.1	2.4	2.2	2.2	1.5	1.6	1.6	0.6	0.9	0.3	1.4	2.4	0.3
23	0.9	0.7	0.9	0.9	0.8	1.2	1.4	1.6	1.3	1.8	3.1	2.1	1.6	2.3	2.7	2.0	2.0	2.3	2.4	1.8	0.6	0.6	1.3	1.2	1.6	3.1	0.6
24	0.9	0.9	0.4	2.2	1.5	2.6	2.0	2.4	2.3	3.1	2.6	3.2	4.2	4.5	4.9	3.5	4.0	4.0	2.3	2.4	2.8	2.8	1.0	3.0	2.6	4.9	0.4
25	2.5	1.2	0.7	0.8	0.8	1.1	1.1	1.0	1.6	1.7	1.8	2.9	3.1	3.4	3.7	3.1	2.6	3.0	1.7	2.0	0.9	0.6	1.3	0.5	1.8	3.7	0.5
26	0.8	0.6	0.7	0.2	1.0	1.0	1.3	1.0	1.0	3.1	3.3	4.2	4.2	4.0	3.9	3.8	2.9	2.7	3.8	3.1	1.6	2.3	4.2	6.4	2.6	6.4	0.2
27	8.2	7.9	8.3	9.4	8.7	9.2	9.9	10.0	9.2	9.2	7.4	6.5	5.4	3.9	2.7	2.6	2.3	2.4	2.0	1.2	2.0	2.4	2.5	2.9	5.7	10.0	1.2
28	4.8	5.0	5.7	6.0	8.7	5.3	6.6	8.2	10.8	7.6	6.8	7.9	8.0	5.8	4.0	4.2	4.1	3.5	2.5	1.1	1.7	1.9	2.2	2.3	5.2	10.8	1.1
Avg	2.7	2.5	2.6	2.8	2.9	2.7	2.9	3.1	3.2	3.6	3.7	3.8	3.6	3.4	3.1	3.0	2.9	2.8	2.5	2.1	1.9	2.1	2.2	2.3	2.9	--	--
Max	11.4	11.0	12.1	13.1	12.1	9.2	12.7	10.0	10.8	9.2	9.3	8.9	8.0	8.0	6.3	7.4	7.6	7.9	8.2	9.0	9.0	12.0	12.8	10.6	--	13.1	--
Min	0.6	0.5	0.1	0.2	0.6	0.3	0.4	0.5	0.7	1.1	1.1	1.2	1.6	1.2	1.3	1.1	0.9	0.9	1.2	0.7	0.4	0.5	0.5	0.3	--	--	0.1

SAROAD for Resolution, East_Plant
"Component, Channel: Table100, WS_ms_10m"
Month: Mar 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	2.8	2.7	3.0	5.4	7.4	6.3	7.3	4.8	6.6	8.0	7.4	5.7	5.4	4.7	5.4	5.2	4.3	2.4	1.7	1.0	0.8	2.5	3.1	5.8	4.6	8.0	0.8
2	5.3	8.6	5.1	6.9	5.3	3.8	3.5	3.8	5.7	8.1	6.0	6.0	4.7	2.6	2.5	1.8	1.3	1.5	2.6	2.5	0.8	0.8	0.9	0.9	3.8	8.6	0.8
3	0.4	0.6	0.5	0.7	0.5	0.9	0.9	0.8	0.5	1.1	1.7	2.3	2.9	2.7	1.7	1.9	2.0	1.6	0.8	1.0	1.4	0.9	1.0	1.5	1.3	2.9	0.4
4	1.1	0.3	0.8	1.9	2.1	3.2	2.2	1.8	2.0	1.8	1.4	2.2	2.5	3.3	3.2	2.6	2.3	2.1	1.8	1.3	0.6	0.4	0.4	0.7	1.8	3.3	0.3
5	0.8	1.8	1.4	2.0	2.0	2.5	2.5	5.1	7.8	7.3	6.8	6.1	5.2	3.8	4.1	2.7	2.8	1.9	1.0	0.8	1.6	2.6	0.6	0.8	3.1	7.8	0.6
6	0.6	0.7	0.5	0.3	0.4	0.6	0.2	0.8	0.8	2.7	2.9	2.5	2.5	2.0	2.6	2.4	2.5	2.0	1.5	1.2	0.5	0.7	0.6	0.3	1.3	2.9	0.2
7	0.2	0.6	0.3	0.7	0.4	0.4	1.9	0.7	1.5	2.3	3.0	2.8	3.0	3.3	3.2	3.0	2.2	2.2	2.2	3.8	3.5	2.9	3.7	4.1	2.2	4.1	0.2
8	4.2	2.9	3.5	4.3	1.7	1.6	2.1	2.7	2.4	1.9	2.5	2.0	3.9	4.5	5.3	5.9	4.5	3.4	2.2	1.2	2.7	3.5	4.9	3.3	3.2	5.9	1.2
9	4.6	5.3	4.8	5.2	3.6	2.9	2.9	2.5	3.0	3.2	3.1	2.6	2.3	1.8	2.3	2.0	2.6	2.9	1.8	1.2	1.4	2.2	1.4	0.8	2.8	5.3	0.8
10	0.8	0.8	--	0.5	0.7	0.7	1.0	1.2	2.7	4.8	6.8	5.8	4.6	4.6	4.5	5.1	4.1	3.1	1.6	0.9	0.8	0.7	0.9	1.5	2.5	6.8	0.5
11	2.2	3.2	4.0	4.0	4.6	5.6	3.6	3.7	4.4	4.9	4.4	2.8	2.7	3.0	2.6	2.5	2.8	3.6	4.1	2.2	0.9	1.2	1.0	1.1	3.1	5.6	0.9
12	0.4	1.6	2.0	2.4	2.7	3.1	3.6	4.6	7.4	9.4	7.6	5.7	5.3	3.4	3.2	3.2	3.6	3.3	3.2	1.7	0.8	1.9	1.8	2.0	3.5	9.4	0.4
13	2.3	2.4	2.3	2.6	2.6	3.3	3.3	4.2	6.3	6.5	7.3	7.0	5.6	4.2	3.9	2.8	2.6	3.8	2.0	1.4	1.8	2.3	2.6	4.0	3.6	7.3	1.4
14	2.6	3.7	7.1	3.1	3.0	3.0	3.2	3.5	5.6	6.5	7.5	6.2	3.7	3.1	2.3	2.1	1.8	1.0	0.8	0.7	0.8	1.2	2.0	2.2	3.2	7.5	0.7
15	2.0	2.2	2.2	2.1	2.2	2.9	1.7	1.7	2.5	2.4	3.1	1.8	2.1	2.2	2.2	1.9	1.9	1.6	0.7	0.7	1.4	1.3	1.4	0.8	1.9	3.1	0.7
16	0.8	0.9	0.6	0.3	0.5	1.0	0.5	0.6	0.7	1.3	2.1	1.8	2.2	2.6	2.4	2.4	2.1	2.2	1.9	2.2	2.3	3.2	3.2	0.8	1.6	3.2	0.3
17	0.7	1.5	0.6	0.9	0.4	0.9	0.4	1.0	2.0	2.6	2.5	2.5	2.8	3.0	2.8	2.7	2.8	2.6	2.2	1.4	0.9	0.8	0.5	0.6	1.6	3.0	0.4
18	0.4	0.9	0.9	0.5	0.6	0.4	0.2	0.6	0.6	1.5	2.0	2.2	2.3	2.5	3.3	3.2	2.0	2.1	1.0	1.0	1.3	0.7	0.8	0.7	1.3	3.3	0.2
19	0.8	0.6	0.6	1.0	0.5	0.3	0.6	0.2	0.5	2.1	2.1	1.9	2.4	2.4	2.8	2.6	3.0	2.1	1.7	1.9	2.0	1.6	0.8	0.6	1.5	3.0	0.2
20	0.9	1.4	1.5	1.5	1.9	1.6	1.8	2.0	2.7	3.1	2.9	3.6	3.1	2.5	2.8	1.7	2.2	1.9	1.5	1.2	0.8	0.4	0.4	1.0	1.9	3.6	0.4
21	1.7	2.0	2.6	1.8	1.1	0.9	0.9	0.8	1.8	2.3	2.1	2.3	2.5	2.7	3.3	2.7	2.4	2.6	3.1	3.1	2.8	3.3	1.8	1.5	2.2	3.3	0.8
22	1.8	1.3	0.4	0.7	0.4	0.6	0.8	0.9	2.6	2.8	2.4	2.8	2.6	2.8	3.2	3.0	3.3	3.0	2.1	2.0	1.6	1.2	1.5	1.1	1.9	3.3	0.4
23	0.8	0.8	0.7	0.5	0.4	0.3	0.3	0.3	1.2	2.9	2.8	3.2	3.8	3.4	4.4	3.4	3.0	2.4	2.0	1.6	1.1	1.3	0.9	1.1	1.8	4.4	0.3
24	1.3	1.3	0.6	1.6	2.1	2.3	1.4	1.8	2.7	3.7	1.8	2.7	3.0	3.0	2.7	3.2	2.9	2.6	2.3	2.1	1.4	1.8	2.4	1.9	2.2	3.7	0.6
25	1.8	0.7	1.2	2.2	2.8	3.4	2.8	3.8	6.1	6.1	5.1	3.8	2.0	2.1	2.8	2.6	2.9	1.9	2.1	2.1	2.2	0.9	0.8	0.9	2.6	6.1	0.7
26	1.0	1.1	1.1	1.7	2.7	2.7	2.7	3.1	3.6	4.5	4.5	3.9	3.0	1.6	2.0	2.0	2.2	2.1	1.2	0.4	0.4	0.6	0.8	1.0	2.1	4.5	0.4
27	0.9	1.3	0.5	0.4	0.7	1.0	0.8	0.8	1.2	3.1	3.6	4.3	4.2	3.0	3.1	2.9	3.4	2.1	2.0	1.1	0.4	0.9	0.9	0.6	1.8	4.3	0.4
28	0.9	1.2	0.9	0.7	1.1	0.7	1.0	0.6	1.1	2.7	2.8	2.8	2.6	3.4	2.6	2.7	2.3	1.7	1.0	0.7	1.1	0.7	1.2	0.6	1.6	3.4	0.6
29	0.6	0.6	0.8	1.0	0.7	1.0	1.1	1.1	1.0	1.2	2.0	2.0	2.3	2.3	2.5	2.8	2.0	1.7	1.3	1.5	0.8	0.6	0.8	0.9	1.4	2.8	0.6
30	0.9	0.3	0.9	1.0	0.9	1.5	1.3	1.5	1.3	1.6	1.1	1.8	2.2	2.1	1.9	2.4	2.9	1.1	1.7	1.4	0.7	0.7	0.6	0.7	1.4	2.9	0.3
31	0.5	0.8	0.6	0.8	0.9	0.7	0.8	0.5	1.1	3.0	2.7	2.6	2.7	2.4	2.9	3.0	2.5	2.5	1.5	0.7	0.7	0.7	1.0	0.6	1.5	3.0	0.5
Avg	1.5	1.7	1.7	1.9	1.8	1.9	1.8	2.0	2.9	3.7	3.7	3.4	3.2	2.9	3.0	2.9	2.7	2.3	1.8	1.5	1.3	1.4	1.5	1.4	2.3	--	--
Max	5.3	8.6	7.1	6.9	7.4	6.3	7.3	5.1	7.8	9.4	7.6	7.0	5.6	4.7	5.4	5.9	4.5	3.8	4.1	3.8	3.5	3.5	4.9	5.8	--	9.4	--
Min	0.2	0.3	0.3	0.3	0.4	0.3	0.2	0.2	0.5	1.1	1.1	1.8	2.0	1.6	1.7	1.7	1.3	1.0	0.7	0.4	0.4	0.4	0.4	0.3	--	--	0.2

-- Indicates Invalid Data

SAROAD for Resolution, East_Plant
"Component, Channel: Table100, WD_10m"
Month: Jan 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	171	147	153	143	132	127	106	151	111	64	45	30	39	41	34	42	44	52	64	62	42	28	31	31	74	171	28
2	31	37	31	31	35	35	35	37	37	39	36	34	34	36	33	33	29	32	39	29	34	32	37	33	34	39	29
3	35	29	31	30	32	31	33	36	36	37	38	39	38	39	40	39	39	37	37	34	31	31	32	32	35	40	29
4	36	39	38	36	36	44	36	38	38	36	38	37	39	26	24	25	30	57	67	95	70	72	58	57	44	95	24
5	40	58	66	63	64	55	63	48	46	59	45	39	29	26	30	81	157	117	102	69	71	79	91	81	64	157	26
6	57	62	44	49	46	46	47	47	54	52	57	56	52	71	95	94	89	49	50	72	73	83	86	99	63	99	44
7	94	113	97	136	101	67	48	69	54	38	34	31	40	250	242	243	249	256	259	194	39	26	21	29	56	259	21
8	23	24	26	34	81	36	32	43	78	35	49	59	47	36	33	34	61	77	46	55	52	53	98	49	48	98	23
9	74	23	28	30	31	45	66	73	54	46	42	39	55	94	120	121	113	90	88	103	96	79	68	74	69	121	23
10	86	84	48	46	94	109	96	104	108	100	113	137	181	185	197	195	191	193	196	190	133	180	172	191	141	197	46
11	218	200	203	123	186	162	153	163	183	217	219	216	221	204	212	198	198	182	184	271	103	123	300	292	196	300	103
12	328	132	159	159	164	147	166	136	102	124	207	219	219	218	231	212	245	181	269	61	51	109	169	207	175	328	51
13	134	155	129	127	139	119	114	118	121	87	107	133	166	188	230	261	232	212	215	210	174	175	143	189	159	261	87
14	138	140	104	68	225	232	117	72	121	108	239	220	198	207	221	235	--	243	255	263	285	48	71	29	180	285	29
15	79	33	35	61	56	38	52	35	84	94	53	37	47	33	30	37	43	72	63	76	89	44	65	48	54	94	30
16	26	38	47	57	78	80	86	75	62	58	32	45	42	39	40	40	41	38	56	44	60	38	34	39	50	86	26
17	35	37	37	36	42	39	39	40	37	37	37	36	39	38	34	35	38	32	39	57	44	51	41	50	40	57	32
18	35	33	32	32	31	33	35	34	35	34	37	37	34	35	34	31	33	48	76	84	69	67	66	66	44	84	31
19	63	98	107	114	107	117	110	113	81	42	41	44	38	34	30	28	28	45	111	104	82	55	85	112	75	117	28
20	95	94	95	92	92	93	102	94	45	46	45	40	37	30	28	28	32	43	85	107	125	109	118	120	75	125	28
21	119	122	106	102	88	81	73	72	55	40	39	36	33	30	28	29	29	33	74	71	50	48	110	109	65	122	28
22	107	117	119	110	107	98	107	107	96	58	46	42	34	34	71	70	131	208	202	173	148	112	82	129	102	208	34
23	130	135	137	120	90	69	64	53	48	42	38	40	35	34	40	76	92	54	69	83	89	98	95	102	76	137	34
24	108	132	112	122	131	107	115	107	146	121	95	222	150	117	88	104	95	116	97	75	81	77	65	63	108	222	63
25	71	63	71	75	81	103	91	104	71	44	44	86	116	118	114	105	94	41	43	33	42	42	61	85	75	118	33
26	107	90	145	92	77	180	67	91	142	145	174	204	202	200	199	202	202	198	190	213	202	204	204	183	169	213	67
27	201	202	212	64	186	185	204	206	194	189	173	180	211	200	185	191	204	206	203	206	196	206	200	204	196	212	64
28	202	198	197	196	200	194	194	168	83	192	225	235	158	209	171	166	172	198	156	246	250	247	262	282	201	282	83
29	235	205	214	188	209	259	250	254	262	271	244	256	215	206	226	218	189	227	187	143	53	236	255	267	228	271	53
30	293	299	308	329	308	156	135	71	99	66	53	41	250	237	245	252	252	249	252	234	79	126	92	109	252	329	41
31	127	161	95	87	46	87	90	85	64	45	36	39	39	37	41	37	40	55	93	109	106	87	46	93	71	161	36
Avg	85	94	88	81	89	91	86	83	79	65	55	53	64	66	63	73	86	87	99	97	79	79	79	81	80	--	--
Max	328	299	308	329	308	259	250	254	262	271	244	256	250	250	245	261	252	256	269	271	285	247	300	292	--	329	--
Min	23	23	26	30	31	31	32	34	35	34	32	30	29	26	24	25	28	32	37	29	31	26	21	29	--	--	21

-- Indicates Invalid Data

SAROAD for Resolution, East_Plant
"Component, Channel: Table100, WD_10m"
Month: Feb 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	91	77	43	39	45	48	61	49	58	48	48	43	30	32	339	247	249	254	254	167	160	151	153	165	67	339	30
2	146	131	138	112	111	115	119	116	119	52	40	32	35	32	31	30	29	42	57	62	74	56	67	72	75	146	29
3	54	55	42	39	36	35	50	58	62	76	118	83	49	51	209	250	247	267	256	104	104	60	67	53	61	267	35
4	74	76	111	112	102	99	90	68	52	41	35	20	26	226	248	256	246	248	261	260	279	140	118	104	89	279	20
5	146	151	144	137	149	128	111	97	106	83	56	105	243	230	238	239	217	240	249	202	149	155	180	171	163	249	56
6	178	173	162	242	214	188	153	129	126	95	105	200	180	247	267	183	245	200	195	226	266	232	151	257	194	267	95
7	308	282	222	201	175	154	137	141	144	103	132	241	227	219	243	239	233	238	255	268	148	160	153	137	197	308	103
8	112	125	117	81	60	111	127	147	175	179	200	192	184	184	194	198	184	142	230	254	218	222	211	199	172	254	60
9	202	195	191	170	120	201	211	205	193	166	201	200	170	149	150	207	171	165	57	304	139	49	140	197	176	304	49
10	197	137	50	175	163	135	123	131	88	63	214	188	206	192	221	205	222	242	228	299	151	178	179	139	175	299	50
11	151	133	124	130	130	128	120	105	94	254	26	117	235	233	221	205	176	238	233	243	235	239	255	220	184	255	26
12	222	255	134	134	106	107	130	94	51	41	26	39	41	25	32	225	251	249	254	240	221	113	103	77	105	255	25
13	62	108	151	88	118	110	122	106	90	58	44	33	41	260	248	248	245	254	256	264	274	147	116	126	121	274	33
14	87	68	95	114	113	107	113	120	97	42	26	26	28	244	242	295	356	332	335	33	25	18	24	30	47	356	18
15	25	25	21	23	27	47	63	69	42	54	50	45	33	46	22	27	31	26	34	30	35	45	43	65	39	69	21
16	42	38	53	53	56	40	31	40	48	43	38	37	35	31	35	32	77	42	46	53	68	68	63	66	47	77	31
17	74	88	84	75	79	87	115	105	108	102	114	197	206	196	202	187	159	108	330	275	275	56	335	62	112	335	56
18	96	216	194	173	202	176	136	133	112	111	126	154	229	258	256	266	210	235	243	143	134	105	122	127	170	266	96
19	119	121	122	105	76	101	95	76	108	173	189	188	181	175	180	184	163	184	203	203	214	215	210	218	161	218	76
20	212	222	203	193	194	188	187	190	200	195	183	236	256	206	181	271	246	208	209	137	221	215	192	146	204	271	137
21	158	138	127	116	96	98	107	130	96	108	111	94	113	118	165	202	237	247	79	112	126	123	178	162	129	247	79
22	172	168	275	167	184	158	156	177	139	256	222	201	281	185	206	232	207	251	207	251	257	88	178	170	200	281	88
23	192	118	160	144	163	159	136	93	91	108	118	109	84	239	220	216	209	201	191	198	274	299	268	311	172	311	84
24	308	271	294	285	236	297	357	114	242	220	303	331	308	274	245	257	305	293	313	331	348	2	37	321	300	357	2
25	311	167	3	169	171	279	162	90	100	31	248	250	236	234	240	249	272	254	244	260	246	154	209	175	226	311	3
26	283	258	279	230	158	168	166	162	154	249	243	240	247	249	241	249	234	240	261	260	324	55	55	34	238	324	34
27	29	28	29	23	25	21	21	23	27	27	34	44	39	44	27	31	42	29	265	64	71	58	74	81	36	265	21
28	80	87	75	59	34	92	44	44	37	37	60	49	43	28	21	17	21	22	50	110	73	112	141	129	59	141	17
Avg	120	128	115	123	119	118	113	107	100	82	90	108	239	221	232	238	229	242	253	235	193	113	134	127	138	--	--
Max	311	282	294	285	236	297	357	205	242	256	303	331	308	274	339	295	356	332	335	331	348	299	335	321	--	357	--
Min	25	25	3	23	25	21	21	23	27	27	26	20	26	25	21	17	21	22	34	30	25	2	24	30	--	--	2

SAROAD for Resolution, East_Plant
"Component, Channel: Table100, WD_10m"
Month: Mar 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	51	55	60	54	46	77	61	45	48	29	33	18	20	19	14	36	24	7	19	64	117	56	54	55	44	117	7
2	55	30	57	61	83	63	94	96	68	33	42	37	39	10	260	235	204	243	244	254	156	170	151	159	83	260	10
3	149	151	152	160	161	135	132	121	95	104	148	195	198	185	231	207	174	143	242	221	235	351	255	209	174	351	95
4	240	234	200	211	215	208	212	205	212	209	220	196	163	195	266	242	206	215	227	221	253	185	114	177	211	266	114
5	171	136	131	94	89	112	86	45	35	37	34	89	107	116	125	182	265	264	66	136	193	247	194	154	119	265	34
6	173	154	159	113	178	135	89	135	96	113	152	194	202	222	209	229	229	229	214	266	236	162	152	61	173	266	61
7	117	107	89	80	101	69	195	108	108	128	160	202	173	175	219	218	208	183	185	200	198	196	204	202	163	219	69
8	194	202	206	193	255	261	209	294	273	308	249	219	203	189	185	191	212	281	290	309	291	190	195	212	231	309	185
9	202	202	202	195	209	210	212	196	182	202	202	203	210	191	208	247	267	258	258	313	5	290	328	107	221	328	5
10	165	143	--	188	123	173	143	122	43	38	31	20	25	19	30	29	27	19	347	8	166	318	152	180	69	347	8
11	136	87	55	68	83	81	85	74	98	56	42	38	248	246	244	249	258	248	254	265	146	177	192	252	139	265	38
12	104	157	114	68	77	109	118	85	36	30	40	60	34	302	249	250	251	257	256	346	160	81	94	105	83	346	30
13	123	130	122	102	104	73	77	60	40	40	32	29	27	25	27	21	11	19	44	98	116	82	66	47	62	130	11
14	88	87	34	97	95	96	76	58	42	40	34	35	90	120	143	91	349	181	276	137	132	157	176	150	94	349	34
15	155	167	172	177	151	102	145	126	100	109	98	104	244	224	224	239	195	215	164	272	267	268	248	254	184	272	98
16	158	170	173	180	142	141	128	131	86	86	112	97	188	218	215	153	110	98	317	266	294	285	286	251	163	317	86
17	130	239	173	56	144	203	118	123	170	213	212	212	215	214	212	211	206	209	177	183	27	86	167	171	180	239	27
18	71	235	167	165	180	70	137	99	77	97	126	252	235	243	207	254	192	223	152	290	265	192	109	29	175	290	29
19	119	173	239	243	157	152	142	132	93	238	245	263	237	234	241	227	220	234	233	260	264	294	219	138	215	294	93
20	168	173	153	164	109	100	75	90	90	66	75	107	153	201	215	195	224	184	167	151	243	204	16	223	152	243	16
21	221	196	209	188	86	260	150	198	234	263	246	237	218	202	225	231	205	211	211	191	201	207	218	180	211	263	86
22	197	222	70	147	202	127	143	111	172	217	238	218	223	208	228	226	169	154	199	293	313	62	61	72	183	313	61
23	22	303	198	147	96	147	167	112	312	234	229	241	277	223	248	239	257	135	288	270	266	241	251	251	235	312	22
24	238	248	130	166	160	167	130	115	77	46	82	221	227	219	228	221	239	215	241	262	245	250	260	262	210	262	46
25	280	93	136	102	113	79	76	55	35	33	37	26	319	266	229	231	220	240	242	251	253	193	180	157	176	319	26
26	140	121	95	86	69	55	57	55	54	62	91	98	89	285	211	224	184	183	121	122	287	147	124	74	106	287	54
27	173	164	51	148	156	158	141	143	96	102	141	174	192	196	203	185	192	149	183	262	168	242	270	89	166	270	51
28	118	78	211	165	168	136	150	110	74	118	123	192	221	200	197	211	186	206	139	179	170	167	193	159	163	221	74
29	155	157	170	175	158	158	134	137	232	309	132	151	223	145	269	228	240	206	164	205	132	167	192	199	180	309	132
30	187	131	183	168	154	173	143	147	90	77	231	278	239	255	237	267	147	245	279	268	354	254	152	161	198	354	77
31	144	167	164	192	152	163	165	136	98	242	241	244	258	311	223	214	204	266	182	224	156	163	244	326	196	326	98
Avg	151	157	147	143	134	130	128	111	84	74	121	180	212	218	224	223	215	216	221	242	218	199	186	164	171	--	--
Max	280	303	239	243	255	261	212	294	312	309	249	278	319	311	269	267	349	281	347	346	354	351	328	326	--	354	--
Min	22	30	34	54	46	55	57	45	35	29	31	18	20	10	14	21	11	7	19	8	5	56	16	29	--	--	5

-- Indicates Invalid Data

SAROAD for Resolution, East_Plant
"Component, Channel: Table100, DeltaTemp_C"
Month: Jan 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	0.81	0.57	0.45	0.64	0.48	0.67	0.43	0.48	-0.13	-0.45	-0.69	-0.75	-0.88	-0.87	-0.87	-0.62	-0.08	0.30	0.32	0.30	0.27	0.27	0.25	0.25	0.05	0.81	-0.88
2	0.25	0.23	0.22	0.22	0.21	0.21	0.21	0.15	-0.12	-0.38	-0.52	-0.62	-0.59	-0.60	-0.46	-0.25	0.09	0.40	0.42	0.37	0.33	0.32	0.29	0.27	0.03	0.42	-0.62
3	0.27	0.25	0.22	0.20	0.21	0.20	0.20	0.15	-0.13	-0.38	-0.53	-0.59	-0.63	-0.61	-0.48	-0.30	-0.01	0.21	0.22	0.18	0.15	0.15	0.16	0.15	-0.03	0.27	-0.63
4	0.17	0.17	0.20	0.17	0.21	0.19	0.18	0.15	-0.24	-0.53	-0.74	-0.94	-1.10	-0.96	-0.85	-0.66	-0.16	0.32	0.41	0.39	0.39	0.37	0.39	0.37	-0.09	0.41	-1.10
5	0.44	0.36	0.33	0.35	0.35	0.31	0.23	0.19	-0.21	-0.54	-0.85	-1.04	-1.13	-1.11	-1.03	-0.70	-0.17	0.60	0.57	0.42	0.43	0.43	0.42	0.36	-0.04	0.60	-1.13
6	0.31	0.29	0.28	0.23	0.23	0.23	0.22	0.17	-0.06	-0.35	-0.53	-0.82	-0.81	-0.46	-0.40	-0.34	-0.01	0.33	0.44	0.44	0.60	0.51	0.63	0.74	0.08	0.74	-0.82
7	0.54	0.49	0.35	0.37	0.60	0.42	0.35	0.28	-0.23	-0.61	-0.85	-1.17	-1.30	-0.92	-0.66	-0.47	-0.15	-0.01	0.10	0.71	0.65	0.42	0.33	0.32	-0.02	0.71	-1.30
8	0.34	0.32	0.44	0.40	0.34	0.50	0.48	0.29	-0.15	-0.42	-0.76	-1.01	-1.12	-1.07	-0.94	-0.74	-0.17	0.47	0.76	0.58	0.50	0.47	0.46	0.29	0.01	0.76	-1.12
9	0.29	0.36	0.30	0.30	0.29	0.28	0.24	0.26	-0.10	-0.41	-0.69	-0.81	-0.85	-0.82	-0.81	-0.49	0.01	0.73	0.74	0.54	0.52	0.82	1.15	1.03	0.12	1.15	-0.85
10	0.88	1.19	1.12	1.15	0.84	0.85	1.02	0.93	0.15	0.03	-0.51	-0.58	-0.59	-0.35	-0.02	0.06	0.05	0.06	0.07	0.10	0.08	-0.01	-0.05	-0.03	0.27	1.19	-0.59
11	-0.04	0.07	0.10	0.12	0.08	0.04	0.03	0.07	-0.14	-0.23	-0.34	-0.43	-0.65	-0.72	-0.74	-0.56	-0.23	0.05	0.13	0.16	0.33	0.61	0.51	0.67	-0.05	0.67	-0.74
12	0.92	0.85	0.51	0.40	0.63	0.67	0.64	0.67	-0.07	-0.42	-0.60	-0.77	-0.88	-0.71	-0.68	-0.59	-0.24	0.06	0.12	0.21	0.44	0.52	0.53	0.97	0.13	0.97	-0.88
13	0.77	0.56	0.65	0.51	1.00	1.08	0.77	0.62	-0.08	-0.50	-0.64	-1.04	-0.86	-0.95	-0.71	-0.64	-0.30	0.06	0.14	0.17	0.41	0.82	0.62	0.56	0.13	1.08	-1.04
14	0.59	0.39	0.40	0.50	0.75	0.55	0.35	0.52	-0.08	-0.75	-0.63	-0.86	-0.99	-0.90	-0.81	-0.71	--	0.04	-0.77	0.07	0.26	0.34	0.21	0.29	-0.05	0.75	-0.99
15	0.25	0.29	0.22	0.17	0.15	0.17	0.13	0.13	-0.33	-0.65	-0.88	-1.12	-1.07	-1.10	-1.06	-0.74	-0.21	0.16	0.36	0.40	0.60	0.36	0.17	0.21	-0.14	0.60	-1.12
16	0.24	0.18	0.16	0.17	0.18	0.15	0.17	0.13	-0.21	0.54	-0.38	-0.86	-0.91	-0.91	-0.72	-0.51	-0.17	0.49	0.55	0.41	0.39	0.39	0.33	0.34	0.01	0.55	-0.91
17	0.31	0.30	0.29	0.29	0.26	0.29	0.29	0.22	-0.09	-0.36	-0.57	-0.65	-0.80	-0.73	-0.59	-0.33	-0.03	0.37	0.42	0.40	0.46	0.39	0.41	0.31	0.04	0.46	-0.80
18	0.41	0.38	0.33	0.32	0.33	0.30	0.32	0.26	-0.08	-0.42	-0.68	-0.91	-1.03	-0.98	-0.93	-0.61	-0.10	0.46	0.59	0.65	0.51	0.54	0.59	0.51	0.03	0.65	-1.03
19	0.57	0.59	0.69	0.74	0.64	0.64	0.52	0.38	0.01	-0.42	-0.72	-1.00	-1.07	-1.06	-0.90	-0.60	-0.11	0.61	0.77	0.71	0.62	0.53	0.55	0.62	0.14	0.77	-1.07
20	0.35	0.36	0.57	0.61	0.58	0.54	0.55	0.46	-0.10	-0.52	-0.78	-1.10	-1.26	-1.25	-1.11	-0.86	-0.15	0.38	0.57	0.56	0.64	0.64	0.56	0.49	0.03	0.64	-1.26
21	0.40	0.40	0.38	0.36	0.31	0.32	0.28	0.26	-0.03	-0.47	-0.75	-0.88	-0.97	-0.93	-0.71	-0.51	-0.13	0.39	0.41	0.54	0.51	0.48	0.42	0.38	0.02	0.54	-0.97
22	0.36	0.33	0.33	0.35	0.40	0.35	0.34	0.24	-0.18	-0.47	-0.84	-1.06	-1.25	-1.40	-1.03	-0.90	-0.40	0.78	0.88	0.99	1.74	1.72	1.02	0.98	0.14	1.74	-1.40
23	0.61	0.83	0.76	0.68	0.83	0.49	0.42	0.36	-0.04	-0.42	-0.73	-0.90	-1.07	-0.66	-1.03	-0.86	-0.18	0.32	0.36	0.61	0.74	0.75	0.63	0.62	0.13	0.83	-1.07
24	0.64	0.46	0.35	0.54	0.50	0.42	0.52	0.46	0.58	0.43	-0.14	0.21	0.01	-0.18	-0.17	-0.07	-0.03	0.16	0.21	0.23	0.07	0.12	0.08	0.09	0.23	0.64	-0.18
25	0.15	0.13	0.21	0.18	0.21	0.35	0.17	0.26	0.08	-0.38	-0.60	-0.76	-0.69	-0.85	-0.65	-0.36	-0.09	0.38	0.26	0.19	0.17	0.15	0.22	0.24	-0.04	0.38	-0.85
26	0.44	0.49	0.44	0.35	0.30	0.19	-0.06	-0.05	0.07	0.02	-0.01	-0.07	-0.09	-0.08	-0.07	-0.06	-0.05	-0.03	-0.03	-0.03	0.00	0.01	-0.01	-0.02	0.07	0.49	-0.09
27	-0.03	-0.03	-0.02	-0.03	-0.03	-0.03	-0.02	-0.03	-0.06	-0.03	0.38	-0.66	-0.52	-0.53	-0.30	-0.20	-0.15	-0.01	0.06	0.04	-0.05	-0.01	-0.03	-0.04	-0.10	0.38	-0.66
28	-0.04	-0.06	-0.04	-0.05	-0.04	-0.02	0.00	-0.10	-0.15	-0.08	-0.19	-0.29	-0.19	-0.65	-0.30	-0.21	-0.18	0.00	0.00	-0.04	-0.02	-0.03	0.04	0.09	-0.11	0.09	-0.65
29	0.02	0.11	0.09	0.02	-0.07	-0.05	-0.07	-0.03	-0.08	-0.34	-0.48	-0.57	-0.69	-0.78	-0.58	-0.28	-0.24	-0.04	0.02	0.10	0.18	0.10	0.10	0.20	-0.14	0.20	-0.78
30	0.31	0.28	0.46	0.46	0.63	0.75	0.61	0.32	-0.34	-0.63	-0.99	-1.20	-0.73	-0.83	-0.65	-0.51	-0.29	-0.01	0.07	0.36	0.66	0.57	0.40	0.51	0.01	0.75	-1.20
31	0.59	0.86	0.50	0.58	0.48	0.29	0.21	0.20	-0.14	-0.33	-0.60	-0.81	-0.79	-0.73	-0.56	-0.29	-0.03	0.26	0.40	0.44	0.48	0.37	0.49	0.46	0.10	0.86	-0.81
Avg	0.39	0.39	0.36	0.36	0.38	0.37	0.31	0.27	-0.09	-0.34	-0.58	-0.78	-0.82	-0.80	-0.67	-0.48	-0.13	0.27	0.31	0.36	0.42	0.42	0.38	0.40	0.03	--	--
Max	0.92	1.19	1.12	1.15	1.00	1.08	1.02	0.93	0.58	0.54	0.38	0.21	0.01	-0.08	-0.02	0.06	0.09	0.78	0.88	0.99	1.74	1.72	1.15	1.03	--	1.74	--
Min	-0.04	-0.06	-0.04	-0.05	-0.07	-0.05	-0.07	-0.10	-0.34	-0.75	-0.99	-1.20	-1.30	-1.40	-1.11	-0.90	-0.40	-0.04	-0.77	-0.04	-0.05	-0.03	-0.05	-0.04	--	--	-1.40

-- Indicates Invalid Data

SAROAD for Resolution, East_Plant
"Component, Channel: Table100, DeltaTemp_C"
Month: Feb 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	0.49	0.42	0.49	0.43	0.41	0.45	0.44	0.32	-0.21	-0.58	-0.89	-1.18	-1.27	-1.31	-0.97	-0.45	-0.23	0.04	0.24	0.75	0.98	1.09	1.25	1.11	0.07	1.25	-1.31
2	1.13	0.60	0.70	0.53	0.56	0.53	0.53	0.41	0.05	-0.38	-0.71	-0.76	-0.92	-0.98	-0.84	-0.71	-0.25	0.38	0.50	0.49	0.48	0.48	0.48	0.35	0.11	1.13	-0.98
3	0.33	0.31	0.34	0.31	0.27	0.24	0.20	0.21	0.15	0.09	0.01	-0.33	-0.63	-0.64	-0.39	-0.17	-0.07	0.01	0.20	0.08	0.07	0.04	0.04	0.07	0.03	0.34	-0.64
4	0.15	0.19	0.21	0.29	0.11	0.15	0.22	0.22	-0.36	-0.71	-1.19	-1.28	-1.19	-0.93	-0.77	-0.63	-0.37	-0.04	0.06	0.19	0.33	0.92	0.83	0.96	-0.11	0.96	-1.28
5	1.16	0.82	0.78	0.66	0.57	0.52	0.64	0.44	-0.31	-0.62	-1.06	-0.94	-0.73	-0.86	-0.70	-0.69	-0.43	-0.01	0.14	0.63	0.71	0.88	0.93	1.48	0.17	1.48	-1.06
6	0.88	0.97	1.00	0.95	0.95	0.70	0.69	0.46	0.16	-0.41	-0.66	-0.74	-0.87	-0.35	-0.28	-0.38	-0.30	-0.04	0.13	0.26	0.38	0.63	0.94	0.49	0.23	1.00	-0.87
7	0.44	0.42	1.17	0.99	0.54	0.83	0.67	0.54	-0.02	-0.66	-0.80	-0.59	-0.41	-0.56	-0.90	-0.60	-0.52	-0.03	0.12	0.34	0.65	0.91	0.57	0.70	0.16	1.17	-0.90
8	0.81	0.73	0.90	1.05	0.79	0.60	1.00	0.79	0.61	-0.33	-0.55	-0.62	-0.81	-0.81	-0.83	-0.67	-0.45	-0.04	0.05	0.07	0.09	0.02	0.09	0.01	0.10	1.05	-0.83
9	0.04	0.00	-0.03	-0.09	-0.11	-0.04	-0.02	-0.04	-0.04	-0.05	-0.10	-0.14	-0.15	-0.15	-0.15	-0.14	-0.10	-0.01	0.03	0.05	0.19	0.29	0.27	0.08	-0.02	0.29	-0.15
10	0.05	0.10	0.24	0.50	0.68	0.67	0.55	0.62	-0.40	-0.89	-0.56	-0.86	-0.83	-0.71	-0.81	-0.69	-0.49	-0.08	0.12	0.30	0.63	0.43	0.81	0.57	0.00	0.81	-0.89
11	0.57	0.56	0.48	0.69	0.65	0.44	0.60	0.28	0.00	-0.12	-0.49	-0.39	-0.45	-0.38	-0.39	-0.35	-0.46	-0.16	-0.07	-0.02	0.12	0.03	0.10	0.50	0.07	0.69	-0.49
12	0.45	0.40	0.71	0.42	0.32	0.24	0.22	0.03	-0.25	-0.68	-0.88	-1.21	-1.29	-1.56	-1.44	-0.71	-0.43	-0.07	0.07	0.19	0.39	0.66	0.52	0.45	-0.14	0.71	-1.56
13	0.32	0.28	0.55	0.45	0.34	0.25	0.33	0.16	-0.25	-0.62	-1.01	-1.33	-1.59	-1.06	-0.62	-0.53	-0.36	-0.04	0.04	0.18	0.45	0.96	0.75	0.43	-0.08	0.96	-1.59
14	0.31	0.56	0.53	0.77	0.49	0.53	0.50	0.31	-0.29	-0.67	-0.90	-1.15	-1.42	-0.72	-0.75	-0.73	-0.56	0.02	0.44	0.59	0.48	0.27	0.24	0.27	-0.04	0.77	-1.42
15	0.24	0.25	0.24	0.22	0.23	0.24	0.21	0.16	-0.04	-0.39	-0.82	-0.95	-1.12	-1.13	-1.07	-0.65	-0.33	0.18	0.35	0.34	0.31	0.28	0.29	0.28	-0.11	0.35	-1.13
16	0.35	0.37	0.29	0.25	0.28	0.35	0.28	0.14	-0.25	-0.58	-0.82	-0.99	-1.12	-1.08	-1.01	-0.77	-0.31	0.19	0.50	0.56	0.54	0.66	0.57	0.58	-0.04	0.66	-1.12
17	0.68	0.72	0.77	0.59	0.64	0.60	0.52	0.27	-0.41	-0.74	-0.98	-1.07	-1.08	-1.01	-0.82	-0.64	-0.41	-0.04	0.15	0.15	0.15	0.25	0.30	0.36	-0.04	0.77	-1.08
18	0.66	0.95	0.94	0.99	1.07	1.16	1.03	0.83	-0.28	-0.84	-1.06	-0.90	-0.92	-1.04	-0.84	-0.71	-0.45	0.00	0.41	0.49	0.43	0.84	0.81	0.90	0.19	1.16	-1.06
19	0.69	0.71	0.77	0.63	0.63	0.70	0.51	0.34	-0.16	-0.56	-0.63	-0.90	-1.01	-1.21	-1.04	-0.66	-0.43	-0.10	0.14	0.25	0.16	0.11	0.05	0.04	-0.04	0.77	-1.21
20	-0.03	-0.06	-0.07	0.02	0.11	0.07	0.04	0.06	-0.06	0.01	0.11	-0.10	-0.09	-0.14	-0.26	-0.23	-0.10	-0.10	-0.06	-0.03	0.00	-0.03	0.11	-0.03	-0.04	0.11	-0.26
21	0.07	0.04	-0.07	-0.09	-0.04	-0.02	-0.04	-0.07	-0.11	-0.20	-0.22	-0.20	0.18	0.09	-0.28	-0.67	-0.22	-0.05	0.10	0.17	0.21	0.43	0.48	0.64	0.01	0.64	-0.67
22	0.55	0.48	0.86	0.49	0.54	0.53	0.69	0.59	-0.25	-0.38	-0.59	-0.84	-0.74	-0.95	-0.63	-0.68	-0.59	-0.19	0.11	0.10	0.18	0.57	0.58	0.68	0.05	0.86	-0.95
23	1.22	0.78	0.84	1.05	0.66	0.77	0.70	0.14	-0.48	-0.78	-0.99	-1.13	-1.14	-0.88	-0.95	-0.78	-0.52	-0.14	0.11	0.20	0.36	0.76	0.40	0.39	0.02	1.22	-1.14
24	0.64	0.66	0.81	0.14	0.23	0.06	0.00	-0.06	-0.28	-0.69	-0.74	-0.61	-0.56	-0.53	-0.52	-0.46	-0.52	-0.17	0.19	0.28	0.32	0.40	0.58	0.28	-0.02	0.81	-0.74
25	0.38	0.66	0.81	0.74	0.83	1.39	0.90	0.34	-0.56	-0.93	-0.71	-0.61	-0.81	-0.85	-0.77	-0.66	-0.58	-0.18	0.12	0.13	0.81	0.85	0.76	1.03	0.13	1.39	-0.93
26	1.29	1.31	1.14	1.49	1.15	0.87	0.60	0.53	-0.09	-0.23	-0.49	-0.65	-0.59	-0.67	-0.76	-0.54	-0.52	-0.14	0.05	0.12	0.42	0.53	0.45	0.42	0.24	1.49	-0.76
27	0.38	0.39	0.36	0.30	0.29	0.28	0.24	0.06	-0.35	-0.69	-1.07	-1.23	-1.48	-1.66	-1.58	-1.28	-0.98	-0.12	0.36	0.65	0.42	0.54	0.49	0.54	-0.22	0.65	-1.66
28	0.29	0.26	0.24	0.30	0.36	0.24	0.40	0.07	-0.29	-0.65	-0.88	-1.06	-1.19	-1.37	-1.41	-1.08	-0.74	0.02	0.56	0.64	0.68	0.68	0.93	0.72	-0.10	0.93	-1.41
Avg	0.52	0.50	0.57	0.54	0.48	0.48	0.45	0.29	-0.17	-0.51	-0.70	-0.81	-0.87	-0.84	-0.78	-0.62	-0.42	-0.03	0.18	0.29	0.39	0.52	0.52	0.51	0.02	--	--
Max	1.29	1.31	1.17	1.49	1.15	1.39	1.03	0.83	0.61	0.09	0.11	-0.10	0.18	0.09	-0.15	-0.14	-0.07	0.38	0.56	0.75	0.98	1.09	1.25	1.48	--	1.49	--
Min	-0.03	-0.06	-0.07	-0.09	-0.11	-0.04	-0.04	-0.07	-0.56	-0.93	-1.19	-1.33	-1.59	-1.66	-1.58	-1.28	-0.98	-0.19	-0.07	-0.03	0.00	-0.03	0.04	-0.03	--	--	-1.66

SAROAD for Resolution, East_Plant
"Component, Channel: Table100, DeltaTemp_C"
Month: Mar 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	0.69	0.58	0.58	0.45	0.44	0.34	0.30	0.10	-0.31	-0.58	-0.93	-1.17	-1.33	-1.37	-1.18	-0.98	-0.67	-0.10	0.80	1.14	0.81	0.91	0.77	0.48	-0.01	1.14	-1.37
2	0.42	0.43	0.43	0.38	0.30	0.53	0.46	0.10	-0.30	-0.65	-1.06	-1.30	-1.58	-1.47	-1.07	-0.84	-0.71	-0.18	0.44	0.32	0.75	1.14	1.08	0.94	-0.06	1.14	-1.58
3	0.86	0.97	0.84	1.01	0.97	0.97	0.77	0.79	-0.30	-0.59	-0.77	-0.88	-0.82	-0.67	-0.52	-0.35	-0.16	-0.03	0.11	0.21	0.21	0.22	0.21	0.29	0.14	1.01	-0.88
4	0.29	0.20	0.29	0.37	0.33	0.27	0.22	0.05	-0.29	-0.60	-0.88	-0.91	-1.12	-0.81	-0.83	-0.78	-0.59	-0.25	0.10	0.16	0.25	0.84	0.66	0.74	-0.09	0.84	-1.12
5	1.04	0.88	0.84	0.68	0.50	0.39	0.34	0.05	-0.35	-0.68	-0.97	-0.89	-1.07	-1.14	-0.87	-0.65	-0.29	-0.06	0.25	0.52	0.60	0.24	0.58	0.69	0.03	1.04	-1.14
6	0.36	0.59	0.56	0.53	0.72	0.52	0.51	0.57	-0.45	-0.83	-1.06	-1.05	-1.22	-1.08	-1.04	-0.84	-0.54	-0.24	0.13	0.43	0.92	0.85	0.78	0.62	-0.01	0.92	-1.22
7	0.71	0.71	0.62	0.81	0.59	0.90	0.88	0.21	-0.55	-0.83	-1.13	-1.14	-1.29	-1.39	-1.04	-0.88	-0.62	-0.26	0.14	0.24	0.30	0.36	0.23	0.06	-0.10	0.90	-1.39
8	0.11	0.20	0.40	0.39	0.12	0.15	-0.05	-0.07	-0.07	-0.19	-0.16	-0.22	-0.10	-0.06	-0.04	-0.06	-0.05	0.02	-0.02	0.01	0.03	0.09	0.20	0.17	0.03	0.40	-0.22
9	0.36	0.26	0.10	0.09	0.05	0.05	0.02	0.00	-0.04	-0.06	-0.08	-0.10	-0.22	-0.20	-0.12	-0.12	-0.06	-0.05	0.02	0.17	0.18	0.09	0.27	0.38	0.04	0.38	-0.22
10	0.28	0.28	--	0.58	0.63	0.60	0.71	0.05	-0.51	-0.81	-0.93	-1.10	-1.30	-1.32	-1.30	-1.03	-0.84	-0.31	0.37	0.57	1.08	1.15	0.87	1.18	-0.05	1.18	-1.32
11	0.79	0.51	0.45	0.34	0.41	0.35	0.40	-0.10	-0.37	-0.76	-1.21	-1.33	-0.74	-0.75	-0.92	-0.71	-0.49	-0.23	0.05	0.30	0.78	1.12	0.96	0.88	-0.01	1.12	-1.33
12	1.12	0.93	0.68	0.61	0.52	0.44	0.45	0.18	-0.22	-0.51	-0.94	-1.02	-1.36	-1.04	-0.71	-0.56	-0.47	-0.20	0.13	0.65	1.06	0.64	0.74	0.78	0.08	1.12	-1.36
13	0.68	0.65	0.65	0.68	0.86	0.77	0.52	0.09	-0.34	-0.75	-0.99	-1.18	-1.39	-1.46	-1.36	-1.24	-0.93	-0.12	0.63	0.74	0.65	0.76	0.61	0.57	-0.04	0.86	-1.46
14	0.56	0.51	0.56	0.57	0.68	0.82	0.66	0.13	-0.33	-0.73	-1.00	-1.32	-1.24	-1.19	-1.10	-0.94	-0.72	-0.13	0.76	1.39	0.73	0.94	1.09	1.36	0.09	1.39	-1.32
15	1.76	1.09	0.99	0.86	1.20	0.57	0.75	0.23	-0.27	-0.76	-0.98	-1.17	-0.78	-1.08	-0.81	-0.64	-0.43	-0.08	0.21	0.40	0.39	0.55	0.47	1.04	0.15	1.76	-1.17
16	0.62	0.83	0.96	1.11	0.74	1.13	0.71	0.30	-0.27	-0.49	-0.87	-1.06	-0.99	-1.05	-0.94	-0.72	-0.56	-0.19	0.14	0.16	0.23	0.15	0.16	0.62	0.03	1.13	-1.06
17	0.88	1.04	0.90	0.77	0.80	0.95	0.83	0.16	-0.30	-0.55	-0.71	-0.90	-0.94	-0.87	-0.88	-0.83	-0.59	-0.23	0.11	0.35	0.61	0.69	1.03	1.03	0.14	1.04	-0.94
18	0.81	0.99	0.95	0.87	0.66	0.77	0.61	0.55	-0.28	-0.90	-1.10	-0.89	-0.97	-1.03	-0.85	-0.75	-0.55	-0.28	0.12	0.20	0.42	0.74	0.78	1.27	0.09	1.27	-1.10
19	1.01	0.53	0.93	0.38	0.66	0.41	0.68	0.29	-0.40	-0.49	-0.67	-0.87	-1.07	-1.01	-0.93	-0.90	-0.66	-0.27	0.06	0.13	0.17	0.45	0.57	0.91	0.00	1.01	-1.07
20	0.74	1.02	0.89	1.09	0.42	0.42	0.32	0.20	-0.09	-0.45	-0.89	-0.77	-1.10	-1.05	-0.66	-0.37	-0.43	-0.16	0.05	0.10	0.23	0.29	0.22	0.19	0.01	1.09	-1.10
21	0.27	0.20	0.17	0.15	0.16	0.24	0.38	0.34	-0.21	-0.48	-0.72	-0.90	-1.06	-1.01	-0.87	-0.83	-0.58	-0.23	0.03	0.19	0.24	0.23	0.41	0.73	-0.13	0.73	-1.06
22	0.63	0.82	0.77	0.71	0.90	0.72	0.69	-0.12	-0.48	-0.70	-0.75	-0.95	-1.03	-1.01	-1.00	-0.80	-0.49	-0.24	0.04	0.10	0.17	0.37	0.38	0.37	-0.04	0.90	-1.03
23	0.47	0.48	0.67	0.76	0.70	0.65	0.68	-0.24	-0.59	-0.55	-0.80	-0.94	-0.81	-0.86	-0.67	-0.65	-0.55	-0.23	0.06	0.15	0.27	0.27	0.29	0.30	-0.05	0.76	-0.94
24	0.40	0.54	0.85	1.14	1.12	1.11	0.54	-0.15	-0.67	-1.25	-1.15	-1.03	-1.12	-1.00	-1.01	-0.82	-0.61	-0.29	0.02	0.11	0.26	0.34	0.17	0.27	-0.09	1.14	-1.25
25	0.38	1.02	0.80	0.47	0.30	0.31	0.29	-0.24	-0.75	-1.14	-1.54	-1.85	-1.36	-1.14	-1.17	-1.13	-0.85	-0.38	0.05	0.14	0.29	0.47	1.06	0.82	-0.21	1.06	-1.85
26	0.69	0.43	0.53	0.52	0.33	0.27	0.24	0.03	-0.55	-1.01	-0.95	-1.08	-0.96	-0.97	-0.75	-0.91	-0.61	-0.28	0.24	0.64	1.12	0.81	0.75	1.30	-0.01	1.30	-1.08
27	0.86	1.11	0.59	0.80	0.96	1.15	1.33	0.43	-0.43	-0.84	-0.97	-1.14	-1.11	-0.96	-0.77	-0.70	-0.32	-0.09	0.07	0.13	0.49	0.41	0.44	0.86	0.10	1.33	-1.14
28	0.76	0.80	0.78	1.19	0.82	0.92	0.69	0.50	-0.59	-0.86	-1.13	-1.14	-0.91	-1.16	-1.02	-0.70	-0.71	-0.21	0.15	0.55	0.59	0.67	0.65	0.82	0.06	1.19	-1.16
29	0.70	0.51	0.68	0.66	0.90	0.76	1.13	0.01	-0.31	-0.80	-1.12	-1.25	-1.09	-1.29	-1.06	-0.99	-0.64	-0.15	0.09	0.15	0.64	0.79	1.10	1.18	0.02	1.18	-1.29
30	0.98	0.88	0.88	0.76	0.68	0.70	0.61	0.56	-0.14	-0.50	-0.52	-0.78	-0.76	-0.74	-0.38	-0.43	-0.62	-0.23	0.04	0.19	0.42	0.73	0.79	0.61	0.16	0.98	-0.78
31	0.79	0.67	0.62	1.12	0.92	0.57	1.03	0.13	-0.39	-0.37	-0.80	-0.94	-1.00	-1.19	-1.08	-0.94	-0.67	-0.32	0.07	0.19	0.53	0.76	0.76	1.43	0.08	1.43	-1.19
Avg	0.68	0.67	0.66	0.67	0.63	0.60	0.57	0.16	-0.36	-0.67	-0.90	-1.01	-1.03	-1.01	-0.87	-0.74	-0.55	-0.19	0.18	0.35	0.50	0.58	0.62	0.74	0.01	--	--
Max	1.76	1.11	0.99	1.19	1.20	1.15	1.33	0.79	-0.04	-0.06	-0.08	-0.10	-0.10	-0.06	-0.04	-0.06	-0.05	0.02	0.80	1.39	1.12	1.15	1.10	1.43	--	1.76	--
Min	0.11	0.20	0.10	0.09	0.05	0.05	-0.05	-0.24	-0.75	-1.25	-1.54	-1.85	-1.58	-1.47	-1.36	-1.24	-0.93	-0.38	-0.02	0.01	0.03	0.09	0.16	0.06	--	--	-1.85

-- Indicates Invalid Data

SAROAD for Resolution, East_Plant
"Component, Channel: Table100, Temp_2m_C"
Month: Jan 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	-1.1	-2.0	-1.9	-2.2	-2.5	-3.0	-2.8	-3.2	-2.2	0.5	1.8	2.8	3.8	4.3	5.0	5.2	4.5	2.9	1.6	1.4	1.9	1.8	1.3	1.1	0.8	5.2	-3.2
2	1.0	1.1	1.3	1.0	0.5	0.4	0.3	0.2	1.0	2.2	3.2	4.4	6.0	7.2	7.5	7.5	7.0	6.0	5.7	5.5	4.9	4.3	3.6	3.5	3.6	7.5	0.2
3	2.9	2.7	2.0	1.3	1.0	0.8	0.7	0.6	1.2	1.9	3.3	4.9	5.7	6.4	6.8	6.8	6.2	5.0	4.2	3.2	2.5	2.0	1.6	1.4	3.1	6.8	0.6
4	1.2	0.8	0.3	0.0	-0.2	-0.5	-0.5	-0.3	0.6	1.7	2.8	3.9	5.3	5.9	6.5	6.6	6.0	4.6	3.6	2.3	2.7	2.4	2.5	2.3	2.5	6.6	-0.5
5	2.3	1.9	1.7	1.5	1.0	1.1	0.9	0.9	1.9	3.4	5.1	6.8	8.4	9.5	10.8	11.5	11.0	8.7	6.0	6.2	5.6	5.3	5.0	4.8	5.0	11.5	0.9
6	4.5	4.3	4.0	3.5	3.1	2.9	2.7	2.5	3.1	4.6	5.8	7.7	9.2	9.9	10.7	10.8	10.0	7.4	6.4	5.8	5.5	4.4	4.7	4.9	5.8	10.8	2.5
7	2.7	1.8	1.9	2.9	1.6	1.6	1.7	1.9	3.2	4.9	6.4	8.2	9.4	9.7	9.2	8.9	8.1	6.6	5.9	5.6	6.6	6.9	6.6	6.2	5.4	9.7	1.6
8	6.6	6.4	5.8	5.2	3.5	6.0	5.2	3.7	5.2	8.3	10.1	11.5	12.7	14.0	14.4	14.8	14.2	12.5	11.5	10.2	10.3	9.6	8.5	8.9	9.1	14.8	3.5
9	8.9	9.6	9.3	8.7	8.5	8.1	6.9	6.3	8.0	9.9	11.7	13.8	15.5	16.2	16.5	16.4	15.4	13.4	11.2	9.4	9.4	9.2	9.4	9.7	10.9	16.5	6.3
10	8.6	8.4	8.0	7.8	7.2	6.9	6.3	6.3	7.3	7.9	9.9	11.8	12.8	12.5	12.1	11.8	11.4	11.1	10.6	9.7	8.5	6.7	5.3	0.5	8.7	12.8	0.5
11	-0.4	-0.1	-0.2	-0.2	-0.6	-1.1	-1.4	-1.7	-1.4	-1.1	-0.5	0.0	0.9	1.7	2.1	2.0	1.4	0.6	0.1	-0.1	-0.9	-1.7	-1.1	-1.5	-0.2	2.1	-1.7
12	-2.2	-2.9	-3.6	-3.8	-4.2	-4.1	-4.1	-4.6	-3.6	-1.8	-0.2	0.3	1.2	1.3	1.5	1.4	0.8	-0.1	-0.6	-0.8	-1.5	-2.1	-3.0	-2.8	-1.6	1.5	-4.6
13	-3.9	-3.9	-4.1	-4.2	-4.4	-4.8	-4.8	-5.2	-3.6	-1.9	-0.5	1.2	1.1	1.4	1.3	1.3	0.6	-0.5	-1.2	-1.7	-2.5	-3.3	-4.3	-4.1	-2.2	1.4	-5.2
14	-4.5	-4.0	-4.5	-4.7	-4.3	-4.2	-5.4	-5.5	-4.5	-2.5	-2.2	-1.6	-0.9	-0.9	-1.3	-1.5	--	-2.8	-3.2	-3.5	-3.9	-4.2	-4.7	-4.5	-3.4	-0.9	-5.5
15	-4.9	-5.0	-5.3	-5.9	-5.9	-5.8	-6.5	-6.2	-5.2	-3.6	-1.6	-0.8	0.3	1.2	2.2	2.7	2.4	1.5	0.4	0.0	-0.2	-0.3	-0.4	-0.4	-2.0	2.7	-6.5
16	-0.2	-0.7	-0.9	-1.1	-1.0	-0.6	0.2	0.6	2.5	3.4	5.2	6.8	8.0	8.8	9.9	10.5	10.0	8.1	6.5	6.2	6.0	6.4	6.0	6.0	4.4	10.5	-1.1
17	5.8	5.3	5.2	5.2	4.8	4.7	5.0	5.1	6.2	8.0	9.3	10.5	11.6	12.9	13.5	13.2	12.7	11.2	10.4	9.8	9.7	8.8	8.4	7.7	8.5	13.5	4.7
18	7.8	7.9	7.8	7.5	7.4	7.0	6.7	6.7	7.5	8.9	10.3	11.4	12.3	13.4	14.2	14.4	13.6	12.1	10.8	10.0	10.3	10.3	9.9	9.9	9.9	14.4	6.7
19	9.6	8.7	7.8	6.8	6.2	5.7	5.1	5.2	7.9	10.7	12.1	13.4	14.1	15.5	16.3	16.5	15.9	14.2	11.5	11.2	11.3	11.3	10.2	8.8	10.7	16.5	5.1
20	7.9	7.4	7.3	8.2	7.9	7.6	7.1	7.4	10.0	11.2	12.4	13.8	15.5	17.0	17.7	17.7	16.4	14.9	13.6	12.7	11.9	11.1	10.6	9.2	11.5	17.7	7.1
21	8.8	8.4	8.2	8.0	8.2	8.5	8.7	8.5	10.2	11.8	12.6	13.8	15.7	17.0	17.2	17.2	16.8	15.9	14.8	14.0	14.4	13.8	11.1	10.3	12.2	17.2	8.0
22	10.0	9.5	8.9	8.7	8.4	8.3	7.8	7.7	9.4	13.1	14.5	15.7	17.0	19.0	20.0	20.3	20.0	17.6	16.0	14.2	13.5	12.8	13.9	12.7	13.3	20.3	7.7
23	11.2	10.1	9.9	9.9	10.9	12.4	11.9	11.8	12.7	13.9	15.2	16.4	17.8	17.5	18.9	20.0	19.3	16.6	14.9	14.4	14.1	13.8	13.6	13.6	14.2	20.0	9.9
24	12.6	12.7	12.8	13.1	12.0	12.0	12.0	12.0	13.0	13.5	14.3	14.7	14.5	13.8	13.9	13.4	13.3	13.0	12.6	12.3	12.0	11.9	11.9	11.8	12.9	14.7	11.8
25	11.5	11.4	11.3	11.4	11.0	10.5	10.6	10.3	11.5	13.2	14.5	16.3	16.9	18.1	18.2	18.1	17.6	15.4	14.6	14.4	14.5	14.6	14.0	12.9	13.9	18.2	10.3
26	12.5	11.8	11.7	11.3	11.4	11.0	10.2	10.1	11.0	11.5	11.5	9.7	9.6	10.0	9.9	10.0	10.1	10.0	9.8	9.6	9.5	9.5	9.5	9.6	10.4	12.5	9.5
27	9.1	9.2	9.2	9.2	9.1	9.0	8.9	8.9	8.8	8.9	9.9	11.5	11.2	11.8	11.4	11.1	11.3	11.0	10.9	10.8	9.9	9.5	9.3	8.8	10.0	11.8	8.8
28	8.6	8.3	7.9	7.4	7.2	7.1	6.9	3.9	2.9	1.4	1.4	1.9	2.0	2.0	3.1	3.7	3.9	3.4	3.1	2.2	1.4	1.1	0.7	1.0	3.8	8.6	0.7
29	1.0	0.7	0.3	0.0	-0.4	-0.8	-1.1	-1.4	-0.7	-0.3	0.8	1.7	2.3	2.9	2.8	3.1	3.6	3.3	3.1	2.7	2.3	2.5	2.5	2.5	1.4	3.6	-1.4
30	2.8	3.2	3.4	3.3	2.3	0.6	0.0	-1.0	1.6	4.3	5.7	6.9	6.8	7.5	7.6	7.7	7.1	6.2	5.4	4.8	3.8	3.6	4.2	4.0	4.2	7.7	-1.0
31	4.2	3.5	3.2	3.2	2.9	3.8	3.6	4.4	5.5	7.3	8.6	10.6	11.8	12.1	12.7	12.9	12.6	11.6	9.9	8.6	8.0	8.3	9.6	8.7	7.8	12.9	2.9
Avg	4.7	4.4	4.2	4.0	3.6	3.6	3.3	3.1	4.2	5.6	6.9	8.1	9.0	9.7	10.1	10.2	10.1	8.4	7.4	6.8	6.5	6.1	5.8	5.4	6.3	--	--
Max	12.6	12.7	12.8	13.1	12.0	12.4	12.0	12.0	13.0	13.9	15.2	16.4	17.8	19.0	20.0	20.3	20.0	17.6	16.0	14.4	14.5	14.6	14.0	13.6	--	20.3	--
Min	-4.9	-5.0	-5.3	-5.9	-5.9	-5.8	-6.5	-6.2	-5.2	-3.6	-2.2	-1.6	-0.9	-0.9	-1.3	-1.5	0.6	-2.8	-3.2	-3.5	-3.9	-4.2	-4.7	-4.5	--	--	-6.5

-- Indicates Invalid Data

SAROAD for Resolution, East_Plant
"Component, Channel: Table100, Temp_2m_C"
Month: Feb 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	8.2	7.9	8.1	8.4	8.1	7.9	7.3	7.7	8.6	10.1	11.5	13.0	14.3	15.5	16.5	15.5	14.7	13.3	11.8	10.5	10.2	9.4	8.5	8.3	10.6	16.5	7.3
2	8.6	7.9	8.2	8.0	7.7	7.2	7.2	7.6	9.4	12.7	13.8	14.2	15.4	16.4	17.2	18.0	17.4	15.5	14.1	13.2	13.1	13.1	12.7	12.6	12.1	18.0	7.2
3	13.0	12.7	12.7	12.6	12.3	12.1	11.8	11.5	11.7	11.9	12.7	14.9	15.5	14.7	14.5	14.0	13.7	12.4	12.0	10.7	10.0	10.2	10.2	10.4	12.4	15.5	10.0
4	10.0	9.5	8.5	8.2	8.5	8.2	8.3	8.3	9.9	11.4	13.2	14.4	15.0	15.1	14.8	14.8	14.5	13.6	12.8	12.2	11.9	10.2	10.0	10.0	11.4	15.1	8.2
5	8.9	8.4	8.2	7.9	7.5	7.2	7.3	8.4	9.4	11.9	14.3	15.1	15.4	15.8	15.5	15.5	15.2	14.1	13.3	11.9	10.4	10.1	10.5	9.6	11.3	15.8	7.2
6	9.2	9.6	9.3	10.0	9.2	8.4	8.2	8.3	8.8	10.4	12.2	13.4	14.4	13.1	12.8	13.4	13.1	12.5	11.6	11.1	10.5	9.8	8.5	10.3	10.7	14.4	8.2
7	10.5	10.5	8.5	8.1	7.6	6.7	6.4	6.3	7.9	11.0	12.7	12.6	12.7	13.6	14.4	14.2	14.1	12.9	12.0	11.1	9.8	8.5	8.6	7.8	10.3	14.4	6.3
8	8.6	8.8	8.7	8.0	8.3	8.3	8.2	8.8	9.9	11.4	11.5	11.8	11.9	12.0	12.2	11.8	11.4	10.3	8.4	7.5	6.9	6.5	6.0	5.6	9.3	12.2	5.6
9	4.7	4.5	4.0	2.2	0.0	-0.8	-0.3	-0.2	-0.1	0.1	0.4	1.2	1.5	2.0	2.5	2.9	3.0	3.0	3.0	2.6	2.2	1.9	2.2	2.8	1.9	4.7	-0.8
10	2.8	2.4	1.9	0.8	0.4	-0.4	-0.8	-0.5	1.2	3.2	3.6	4.6	5.0	5.3	5.7	5.7	5.5	4.7	4.0	3.5	2.1	1.9	1.6	1.0	2.7	5.7	-0.8
11	1.5	1.6	0.9	1.1	1.0	1.1	1.3	1.0	1.4	0.7	0.8	1.4	1.6	1.2	2.2	2.1	1.8	2.1	1.6	1.0	0.2	-0.1	-0.3	-1.1	1.1	2.2	-1.1
12	-0.8	-0.9	-1.6	-1.7	-2.2	-2.7	-2.8	-2.8	-0.8	1.6	2.9	4.1	5.1	6.2	6.8	5.6	5.5	4.7	3.9	3.4	2.8	1.5	0.8	1.2	1.7	6.8	-2.8
13	2.4	1.5	1.2	1.0	0.4	0.0	0.2	1.2	3.2	5.4	7.2	8.6	10.0	10.2	9.3	9.4	9.0	8.2	7.4	6.9	6.3	5.0	4.7	4.6	5.2	10.2	0.0
14	5.7	4.8	4.4	3.8	3.8	3.6	3.6	4.1	6.5	9.2	10.5	11.6	12.8	11.8	11.8	13.2	13.7	12.3	10.9	10.1	9.6	9.8	9.6	9.0	8.6	13.7	3.6
15	8.3	8.1	7.8	7.6	7.2	6.7	6.7	6.9	8.5	9.1	11.1	13.2	14.9	15.9	16.3	16.4	15.8	14.4	12.9	12.0	11.3	10.3	9.5	9.5	10.9	16.4	6.7
16	8.5	8.8	8.4	7.8	7.6	8.1	8.3	8.2	9.5	11.2	12.9	14.5	15.6	16.4	17.7	17.9	17.9	15.8	13.4	12.7	11.9	11.2	10.9	11.0	11.9	17.9	7.6
17	9.6	8.5	8.2	8.2	7.7	7.1	6.3	6.2	9.6	12.3	13.9	14.8	15.3	15.3	15.0	14.7	14.4	13.5	12.6	11.8	11.7	11.5	11.1	10.1	11.2	15.3	6.2
18	9.2	8.8	7.3	6.6	5.3	5.6	5.7	5.5	7.8	10.6	12.1	13.5	14.2	14.8	15.1	15.1	14.7	13.7	12.5	10.3	9.3	9.2	9.1	8.5	10.2	15.1	5.3
19	8.1	7.6	7.9	8.0	8.1	8.0	7.4	7.5	9.0	11.5	11.9	12.7	13.6	14.5	14.8	14.4	13.8	12.5	11.2	10.4	9.9	9.2	8.1	6.9	10.3	14.8	6.9
20	5.8	4.9	4.6	3.7	3.2	3.2	2.6	2.2	2.3	0.9	0.7	-1.5	-1.9	-1.1	-0.7	-0.2	-0.3	-1.0	-2.1	-2.0	-1.6	-1.7	-2.1	-2.3	0.6	5.8	-2.3
21	-2.0	-2.4	-2.1	-2.1	-2.0	-1.8	-1.7	-1.4	-1.1	-0.6	-0.1	0.5	1.0	1.8	3.5	4.8	4.0	3.8	2.8	2.0	1.4	1.3	1.6	1.0	0.5	4.8	-2.4
22	0.9	0.7	1.2	-0.1	-0.1	0.0	-0.6	-0.2	1.6	3.5	4.3	5.1	5.3	6.0	5.7	6.1	6.2	5.5	4.7	4.4	4.3	3.0	2.3	1.9	3.0	6.2	-0.6
23	1.7	1.6	0.8	0.4	0.7	0.4	-0.3	0.9	3.7	5.9	7.4	8.5	9.6	9.9	10.5	10.6	10.4	9.6	8.2	7.1	6.8	6.2	6.7	6.6	5.6	10.6	-0.3
24	6.3	6.3	5.3	6.1	4.8	3.9	2.1	1.1	1.5	2.4	3.3	3.2	3.7	4.1	3.3	4.0	5.3	4.8	4.1	3.9	3.6	3.0	2.2	3.0	3.8	6.3	1.1
25	2.5	0.8	0.7	-0.5	-0.7	-0.9	-1.3	1.2	2.9	4.7	5.4	5.9	7.0	7.9	7.9	8.1	8.0	7.1	6.1	5.7	4.4	3.3	3.6	3.3	3.9	8.1	-1.3
26	3.7	2.6	2.7	2.7	0.8	1.6	1.2	2.6	5.0	5.9	7.0	8.1	8.7	9.2	9.7	9.9	10.0	9.3	8.4	7.9	7.1	5.0	4.6	4.7	5.8	10.0	0.8
27	4.9	4.6	4.3	3.9	3.3	3.0	2.6	2.9	4.0	5.2	7.0	8.6	9.7	10.6	11.2	11.6	11.4	10.4	9.0	7.2	5.5	4.9	4.0	4.4	6.4	11.6	2.6
28	4.6	4.5	4.4	4.3	5.5	4.0	4.2	4.7	5.5	7.2	8.8	10.3	11.9	13.1	14.3	14.6	14.5	13.6	11.6	9.7	9.5	8.8	8.2	7.7	8.6	14.6	4.0
Avg	5.9	5.5	5.2	4.8	4.4	4.1	3.9	4.2	5.6	7.2	8.3	9.2	10.0	10.4	10.7	10.9	10.7	9.7	8.7	7.8	7.2	6.5	6.2	6.0	7.2	--	--
Max	13.0	12.7	12.7	12.6	12.3	12.1	11.8	11.5	11.7	12.7	14.3	15.1	15.6	16.4	17.7	18.0	17.9	15.8	14.1	13.2	13.1	13.1	12.7	12.6	--	18.0	--
Min	-2.0	-2.4	-2.1	-2.1	-2.2	-2.7	-2.8	-2.8	-1.1	-0.6	-0.1	-1.5	-1.9	-1.1	-0.7	-0.2	-0.3	-1.0	-2.1	-2.0	-1.6	-1.7	-2.1	-2.3	--	--	-2.8

SAROAD for Resolution, East_Plant
"Component, Channel: Table100, Temp_2m_C"
Month: Mar 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	6.3	5.9	5.8	6.8	8.2	8.4	8.5	9.0	10.3	11.8	13.4	15.0	16.3	17.8	18.8	19.3	19.0	18.0	16.0	14.5	13.9	11.8	11.9	12.1	12.4	19.3	5.8
2	12.2	13.4	11.9	11.2	10.8	10.8	10.1	11.2	13.7	15.3	17.0	18.8	20.2	21.0	21.1	21.0	21.3	20.4	18.7	17.5	15.2	14.5	13.7	13.7	15.6	21.3	10.1
3	14.2	13.5	13.1	12.4	12.5	11.0	10.8	10.9	13.7	15.3	17.1	18.0	18.3	18.1	17.2	17.2	16.8	16.1	15.5	15.3	15.3	15.0	14.9	14.9	14.9	18.3	10.8
4	14.6	14.5	14.2	14.0	13.7	12.9	11.6	10.8	11.2	11.8	12.7	13.7	14.4	14.4	14.6	14.9	14.9	14.2	13.3	12.7	12.2	11.1	10.1	9.9	13.0	14.9	9.9
5	9.5	8.9	8.8	9.6	9.8	9.3	8.8	10.1	11.6	13.2	14.9	17.0	18.0	18.6	19.0	18.8	17.4	16.8	15.9	14.9	14.7	14.9	13.9	12.5	13.6	19.0	8.8
6	12.5	12.0	12.1	11.5	11.3	10.9	10.8	10.5	13.2	15.5	16.7	17.2	18.1	19.0	19.2	19.4	18.7	17.6	16.3	15.7	15.2	13.7	13.2	13.0	14.7	19.4	10.5
7	12.6	12.0	12.0	11.4	10.5	10.3	10.4	10.9	12.8	14.1	15.5	16.1	17.2	18.0	18.1	18.3	17.8	17.1	16.0	15.6	15.2	15.0	14.6	13.7	14.4	18.3	10.3
8	12.5	11.2	10.5	9.0	7.9	8.0	7.6	6.8	6.9	6.7	6.0	6.9	7.6	7.8	7.0	6.7	2.3	1.2	1.1	0.2	0.2	0.6	1.2	1.3	5.7	12.5	0.2
9	1.6	1.9	1.9	1.8	1.5	1.5	1.4	1.4	1.6	1.5	1.7	1.8	2.4	2.4	2.3	2.8	2.9	2.8	3.0	3.2	3.6	4.3	4.1	3.1	2.4	4.3	1.4
10	2.9	2.4	--	2.2	1.6	1.6	1.4	2.3	5.3	6.9	8.1	9.1	10.3	10.9	11.9	12.1	12.1	11.6	10.8	9.8	8.1	8.4	7.8	7.4	7.2	12.1	1.4
11	7.2	6.6	6.5	6.0	7.1	7.4	6.4	6.4	8.3	10.5	12.6	14.2	14.3	14.5	15.1	15.4	15.1	14.4	13.4	12.5	10.9	10.7	10.4	11.5	10.7	15.4	6.0
12	10.2	8.8	8.2	9.4	8.9	8.3	8.5	10.8	14.1	15.4	16.5	18.1	19.9	19.8	18.9	19.0	18.9	18.4	17.4	16.6	14.6	15.0	15.3	14.5	14.4	19.9	8.2
13	13.2	12.9	12.4	12.0	12.0	12.9	12.9	14.2	15.7	17.1	18.7	20.4	21.7	23.0	23.3	23.7	23.7	22.6	20.7	18.8	17.3	16.9	16.3	16.6	17.5	23.7	12.0
14	15.6	15.6	17.5	15.0	14.5	14.1	14.2	16.5	18.8	20.1	21.6	23.5	24.9	25.5	25.9	26.1	25.9	25.1	23.2	21.0	20.8	19.5	17.9	17.8	20.0	26.1	14.1
15	17.2	16.8	15.9	15.5	14.6	14.8	13.7	15.5	18.6	22.1	23.1	24.7	25.1	25.4	24.8	24.5	23.9	23.1	21.9	21.0	20.7	20.3	20.1	18.3	20.1	25.4	13.7
16	16.6	16.1	16.0	15.9	15.3	13.7	14.1	15.4	16.8	18.1	20.0	21.4	22.2	22.5	22.9	22.5	22.0	21.2	20.1	19.3	18.9	19.1	19.0	17.7	18.6	22.9	13.7
17	15.7	16.2	14.8	13.4	13.7	13.6	12.7	14.1	15.8	16.5	17.4	18.1	18.4	19.0	19.4	19.6	19.5	19.1	18.1	17.3	16.3	15.3	15.2	15.1	16.4	19.6	12.7
18	13.8	14.1	13.5	12.8	12.2	11.5	11.4	12.1	13.7	16.4	17.7	18.3	19.0	19.8	19.7	19.6	19.5	18.9	18.0	17.6	16.3	15.3	14.0	15.0	15.8	19.8	11.4
19	13.9	13.8	14.4	14.9	13.3	12.8	12.0	12.5	14.2	15.8	16.3	17.3	18.4	19.0	19.3	19.5	19.4	18.6	17.5	17.0	16.9	16.0	14.8	13.5	15.9	19.5	12.0
20	13.6	13.8	12.8	12.6	12.0	12.3	11.8	12.2	13.8	16.3	18.0	18.4	20.1	20.7	20.2	19.5	19.5	18.7	18.0	17.6	17.4	17.3	17.3	17.2	16.3	20.7	11.8
21	17.2	17.1	16.8	16.1	15.3	14.8	13.7	13.9	14.9	15.7	17.2	18.2	19.5	20.0	19.8	19.8	19.6	18.8	17.9	17.3	17.2	17.1	16.5	15.7	17.1	20.0	13.7
22	15.2	14.7	13.0	12.8	12.6	11.5	10.9	12.3	14.6	15.3	16.2	17.1	17.8	18.3	18.6	18.9	18.6	18.2	17.3	16.4	15.8	15.0	14.7	14.2	15.4	18.9	10.9
23	13.5	13.1	12.0	10.1	9.5	9.0	8.8	9.8	11.6	12.5	13.9	15.0	16.1	16.6	16.4	16.6	16.4	15.9	14.8	14.0	13.7	13.2	12.6	12.2	13.2	16.6	8.8
24	11.5	10.7	9.0	7.0	6.5	6.1	6.4	8.6	11.4	13.9	15.5	16.0	16.5	16.9	17.3	17.2	16.9	16.2	15.3	14.5	14.0	14.0	14.0	13.9	12.9	17.3	6.1
25	13.4	10.9	9.8	9.3	9.0	9.2	8.6	11.3	13.4	15.5	17.3	18.6	19.1	19.3	19.8	20.1	19.9	19.3	18.0	17.1	16.7	15.6	14.4	13.6	15.0	20.1	8.6
26	13.6	12.6	13.0	12.8	12.3	12.0	11.3	11.7	13.8	16.3	17.7	18.7	19.5	20.7	21.0	22.2	22.1	21.6	20.2	19.0	18.0	16.0	15.6	16.0	16.6	22.2	11.3
27	16.3	15.1	13.8	13.4	13.1	13.2	11.8	12.9	15.5	18.2	19.6	20.6	21.3	21.6	21.6	21.6	21.2	20.6	19.9	19.1	18.1	17.8	17.3	16.1	17.5	21.6	11.8
28	13.5	13.9	14.0	12.8	11.8	12.4	12.6	12.9	16.2	18.0	19.2	20.1	20.2	21.2	21.3	20.8	20.8	20.0	19.1	17.5	15.8	15.7	15.5	15.2	16.7	21.3	11.8
29	14.8	14.7	14.5	13.6	13.7	13.6	12.5	13.4	17.0	19.1	20.3	21.4	21.8	22.3	22.7	22.6	22.2	21.1	20.2	19.4	17.6	16.4	16.0	15.9	17.8	22.7	12.5
30	15.0	15.6	15.5	15.2	15.3	14.9	14.4	14.6	15.7	17.7	19.4	20.6	21.0	21.5	20.7	20.5	20.6	20.1	19.5	19.1	18.4	17.5	15.4	15.3	17.6	21.5	14.4
31	15.0	14.9	14.8	15.3	14.1	14.7	13.8	15.4	17.6	18.1	19.5	20.8	21.6	22.4	22.6	22.5	22.1	21.5	20.5	19.9	17.8	16.8	17.8	16.2	18.2	22.6	13.8
Avg	12.7	12.4	12.3	11.5	11.1	10.9	10.4	11.3	13.3	14.9	16.2	17.3	18.1	18.6	18.7	18.8	18.4	17.7	16.7	15.9	15.1	14.5	14.0	13.6	14.8	--	--
Max	17.2	17.1	17.5	16.1	15.3	14.9	14.4	16.5	18.8	22.1	23.1	24.7	25.1	25.5	25.9	26.1	25.9	25.1	23.2	21.0	20.8	20.3	20.1	18.3	--	26.1	--
Min	1.6	1.9	1.9	1.8	1.5	1.5	1.4	1.4	1.6	1.5	1.7	1.8	2.4	2.4	2.3	2.8	2.3	1.2	1.1	0.2	0.2	0.6	1.2	1.3	--	--	0.2

-- Indicates Invalid Data

SAROAD for Resolution, East_Plant
"Component, Channel: Table100, SR_Wm2_2m"
Month: Jan 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	0	28	209	398	524	623	642	596	480	320	123	3	0	0	0	0	0	0	164	642	0
2	0	0	0	0	0	0	0	27	206	398	546	631	651	603	493	328	132	4	0	0	0	0	0	0	168	651	0
3	0	0	0	0	0	0	0	26	206	400	546	631	650	601	491	328	134	4	0	0	0	0	0	0	167	650	0
4	0	0	0	0	0	0	0	25	205	400	547	631	648	602	494	329	134	3	0	0	0	0	0	0	167	648	0
5	0	0	0	0	0	0	0	27	211	405	553	640	659	611	500	330	135	3	0	0	0	0	0	0	170	659	0
6	0	0	0	0	0	0	0	11	140	278	389	571	531	360	367	331	144	4	0	0	0	0	0	0	130	571	0
7	0	0	0	0	0	0	0	20	193	386	535	621	638	592	505	366	167	13	0	0	0	0	0	0	168	638	0
8	0	0	0	0	0	0	0	25	208	404	555	644	666	617	505	337	141	4	0	0	0	0	0	0	171	666	0
9	0	0	0	0	0	0	0	27	210	404	555	643	657	621	504	326	148	3	0	0	0	0	0	0	171	657	0
10	0	0	0	0	0	0	0	16	145	161	406	412	436	259	73	31	17	1	0	0	0	0	0	0	82	436	0
11	0	0	0	0	0	0	0	8	239	309	491	489	656	622	519	357	157	6	0	0	0	0	0	0	161	656	0
12	0	0	0	0	0	0	0	26	198	316	547	638	660	610	531	367	161	6	0	0	0	0	0	0	169	660	0
13	0	0	0	0	0	0	0	19	178	302	396	645	458	552	509	371	164	7	0	0	0	0	0	0	150	645	0
14	0	0	0	0	0	0	0	15	208	412	566	645	663	608	529	391	--	4	0	0	0	0	0	0	176	663	0
15	0	0	0	0	0	0	0	30	217	418	574	666	690	650	540	374	167	7	0	0	0	0	0	0	180	690	0
16	0	0	0	0	0	0	0	30	222	390	563	658	681	640	534	372	166	6	0	0	0	0	0	0	178	681	0
17	0	0	0	0	0	0	0	29	217	420	575	670	694	652	545	382	175	8	0	0	0	0	0	0	182	694	0
18	0	0	0	0	0	0	0	22	193	395	546	663	690	636	566	380	159	9	0	0	0	0	0	0	178	690	0
19	0	0	0	0	0	0	0	31	223	428	584	679	703	662	555	390	186	8	0	0	0	0	0	0	185	703	0
20	0	0	0	0	0	0	0	29	217	418	573	665	687	645	541	379	157	9	0	0	0	0	0	0	180	687	0
21	0	0	0	0	0	0	0	17	188	415	570	622	690	646	544	384	189	12	0	0	0	0	0	0	178	690	0
22	0	0	0	0	0	0	0	32	223	426	582	678	704	661	554	389	190	10	0	0	0	0	0	0	185	704	0
23	0	0	0	0	0	0	0	39	194	353	539	545	538	369	488	426	207	13	0	0	0	0	0	0	155	545	0
24	0	0	0	0	0	0	0	8	79	102	185	128	145	166	148	54	49	5	0	0	0	0	0	0	44	185	0
25	0	0	0	0	0	0	0	14	93	248	301	457	416	515	367	185	61	2	0	0	0	0	0	0	111	515	0
26	0	0	0	0	0	0	0	1	10	34	52	30	67	56	39	34	16	4	0	0	0	0	0	0	14	67	0
27	0	0	0	0	0	0	0	3	45	179	569	519	367	370	142	116	100	11	0	0	0	0	0	0	101	569	0
28	0	0	0	0	0	0	0	2	15	22	95	215	83	216	227	206	190	19	0	0	0	0	0	0	54	227	0
29	0	0	0	0	0	0	0	37	242	440	611	695	735	680	500	159	175	15	0	0	0	0	0	0	179	735	0
30	0	0	0	0	0	0	0	42	247	456	614	710	734	695	592	427	229	27	0	0	0	0	0	0	199	734	0
31	0	0	0	0	0	0	0	46	237	379	591	696	644	622	522	307	181	33	0	0	0	0	0	0	177	696	0
Avg	0	0	0	0	0	0	0	23	181	339	493	573	577	540	449	306	145	8	0	0	0	0	0	0	151	--	--
Max	0	0	0	0	0	0	0	46	247	456	614	710	735	695	592	427	229	33	0	0	0	0	0	0	--	735	--
Min	0	0	0	0	0	0	0	1	10	22	52	30	67	56	39	31	16	1	0	0	0	0	0	0	--	--	0

-- Indicates Invalid Data

SAROAD for Resolution, East_Plant
"Component, Channel: Table100, SR_Wm2_2m"
Month: Feb 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	0	46	255	465	625	724	751	702	591	432	232	29	0	0	0	0	0	0	202	751	0
2	0	0	0	0	0	0	0	46	215	442	612	619	688	648	595	439	217	33	0	0	0	0	0	0	190	688	0
3	0	0	0	0	0	0	0	9	47	81	138	291	351	284	240	117	82	23	0	0	0	0	0	0	69	351	0
4	0	0	0	0	0	0	0	19	258	462	615	708	742	719	605	433	239	38	0	0	0	0	0	0	202	742	0
5	0	0	0	0	0	0	0	51	261	468	626	720	751	711	607	447	249	39	0	0	0	0	0	0	205	751	0
6	0	0	0	0	0	0	0	19	159	278	492	593	616	269	174	246	224	52	0	0	0	0	0	0	130	616	0
7	0	0	0	0	0	0	0	44	245	453	628	576	372	436	676	378	262	44	0	0	0	0	0	0	171	676	0
8	0	0	0	0	0	0	0	16	163	385	549	633	659	665	599	446	269	46	0	0	0	0	0	0	185	665	0
9	0	0	0	0	0	0	0	4	23	84	151	218	217	175	144	127	79	14	0	0	0	0	0	0	52	218	0
10	0	0	0	0	0	0	0	57	272	466	499	679	627	441	586	405	258	49	0	0	0	0	0	0	181	679	0
11	0	0	0	0	0	0	0	16	35	83	195	212	263	322	226	131	192	50	0	0	0	0	0	0	72	322	0
12	0	0	0	0	0	0	0	113	377	531	674	775	806	765	668	364	280	50	0	0	0	0	0	0	225	806	0
13	0	0	0	0	0	0	0	68	292	506	670	773	800	758	656	492	285	52	0	0	0	0	0	0	223	800	0
14	0	0	0	0	0	0	0	75	303	517	683	783	809	767	662	494	287	52	0	0	0	0	0	0	226	809	0
15	0	0	0	0	0	0	0	43	217	429	685	790	833	793	685	512	307	57	0	0	0	0	0	0	223	833	0
16	0	0	0	0	0	0	0	85	323	543	711	814	840	799	690	521	305	70	0	0	0	0	0	0	238	840	0
17	0	0	0	0	0	0	0	84	313	528	694	799	827	788	682	516	306	73	0	0	0	0	0	0	234	827	0
18	0	0	0	0	0	0	0	82	312	530	698	799	820	796	694	494	227	62	0	0	0	0	0	0	230	820	0
19	0	0	0	0	0	0	0	64	267	528	536	634	758	795	683	509	305	89	0	0	0	0	0	0	215	795	0
20	0	0	0	0	0	0	0	13	73	53	57	58	149	186	299	259	96	7	0	0	0	0	0	0	52	299	0
21	0	0	0	0	0	0	0	17	97	216	465	564	401	584	737	552	156	53	2	0	0	0	0	0	160	737	0
22	0	0	0	0	0	0	0	92	327	546	736	762	699	800	416	520	323	92	1	0	0	0	0	0	221	800	0
23	0	0	0	0	0	0	0	105	340	555	722	822	845	805	696	531	321	96	1	0	0	0	0	0	243	845	0
24	0	0	0	0	0	0	0	69	352	616	568	365	572	644	532	393	345	110	1	0	0	0	0	0	190	644	0
25	0	0	0	0	0	0	0	117	360	577	745	851	877	837	720	549	336	105	1	0	0	0	0	0	253	877	0
26	0	0	0	0	0	0	0	123	365	585	751	852	880	839	719	548	338	108	2	0	0	0	0	0	255	880	0
27	0	0	0	0	0	0	0	133	380	600	766	869	895	853	731	558	343	109	1	0	0	0	0	0	260	895	0
28	0	0	0	0	0	0	0	125	375	597	765	871	897	851	731	559	344	111	2	0	0	0	0	0	260	897	0
Avg	0	0	0	0	0	0	0	62	250	433	574	648	669	644	573	428	257	61	0	0	0	0	0	0	192	--	--
Max	0	0	0	0	0	0	0	133	380	616	766	871	897	853	737	559	345	111	2	0	0	0	0	0	--	897	--
Min	0	0	0	0	0	0	0	4	23	53	57	58	149	175	144	117	79	7	0	0	0	0	0	0	--	--	0

SAROAD for Resolution, East_Plant
"Component, Channel: Table100, SR_Wm2_2m"
Month: Mar 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	0	129	375	594	758	855	880	837	723	554	343	111	2	0	0	0	0	0	257	880	0
2	0	0	0	0	0	0	0	140	386	604	770	871	893	847	722	557	325	113	3	0	0	0	0	0	260	893	0
3	0	0	0	0	0	0	0	115	333	507	719	713	567	506	343	227	138	45	2	0	0	0	0	0	176	719	0
4	0	0	0	0	0	0	1	140	376	591	751	854	886	697	737	537	337	113	4	0	0	0	0	0	251	886	0
5	0	0	0	0	0	0	1	134	365	508	637	786	846	790	578	374	222	73	6	0	0	0	0	0	222	846	0
6	0	0	0	0	0	0	0	127	389	604	766	865	897	853	741	569	357	125	3	0	0	0	0	0	262	897	0
7	0	0	0	0	0	0	2	158	401	618	783	879	902	859	745	574	357	125	2	0	0	0	0	0	267	902	0
8	0	0	0	0	0	0	0	29	69	112	186	187	121	105	94	149	14	9	1	0	0	0	0	0	45	187	0
9	0	0	0	0	0	0	1	33	63	48	85	138	295	163	69	96	67	54	4	0	0	0	0	0	46	295	0
10	0	0	--	0	0	0	4	173	416	632	800	899	926	879	764	593	376	140	3	0	0	0	0	0	287	926	0
11	0	0	0	0	0	0	6	188	432	645	807	896	917	874	760	592	379	144	4	0	0	0	0	0	277	917	0
12	0	0	0	0	0	0	7	189	432	647	809	903	926	872	757	588	375	141	4	0	0	0	0	0	277	926	0
13	0	0	0	0	0	0	8	195	438	652	817	912	934	881	767	595	381	146	3	0	0	0	0	0	280	934	0
14	0	0	0	0	0	0	10	200	443	657	819	911	933	884	768	599	382	143	3	0	0	0	0	0	281	933	0
15	0	0	0	0	0	0	14	188	413	669	806	853	916	892	655	513	348	122	8	0	0	0	0	0	267	916	0
16	0	0	0	0	0	0	13	213	327	438	716	869	796	893	768	600	387	148	6	0	0	0	0	0	257	893	0
17	0	0	0	0	0	0	14	195	437	652	815	912	938	893	783	613	373	163	7	0	0	0	0	0	283	938	0
18	0	0	0	0	0	0	5	89	398	660	823	917	939	893	781	606	367	161	10	0	0	0	0	0	277	939	0
19	0	0	0	0	0	0	6	143	346	630	772	900	925	889	768	581	371	138	9	0	0	0	0	0	270	925	0
20	0	0	0	0	0	0	8	102	219	386	563	612	878	788	477	272	307	107	9	0	0	0	0	0	197	878	0
21	0	0	0	0	0	0	6	110	321	588	815	893	951	837	724	546	354	130	10	0	0	0	0	0	262	951	0
22	0	0	0	0	0	0	24	217	460	673	831	924	946	902	733	581	364	173	8	0	0	0	0	0	285	946	0
23	0	0	0	0	0	0	24	221	469	688	848	941	972	925	815	638	415	177	9	0	0	0	0	0	298	972	0
24	0	0	0	0	0	0	29	244	492	706	860	952	971	922	803	634	415	179	8	0	0	0	0	0	301	971	0
25	0	0	0	0	0	0	36	256	501	710	865	951	969	920	803	634	417	181	9	0	0	0	0	0	302	969	0
26	0	0	0	0	0	0	15	133	414	686	724	852	575	659	659	637	416	178	11	0	0	0	0	0	248	852	0
27	0	0	0	0	0	0	17	156	441	647	781	854	881	661	602	467	222	93	15	0	0	0	0	0	243	881	0
28	0	0	0	0	0	0	15	224	456	656	849	864	790	904	776	525	400	144	14	0	0	0	0	0	276	904	0
29	0	0	0	0	0	0	9	247	502	712	871	954	977	926	811	638	367	116	18	0	0	0	0	0	298	977	0
30	0	0	0	0	0	0	13	104	189	355	547	690	637	674	254	272	342	135	13	0	0	0	0	0	176	690	0
31	0	0	0	0	0	0	51	274	513	726	877	966	983	928	811	640	423	172	18	0	0	0	0	0	321	983	0
Avg	0	0	0	0	0	0	11	163	381	581	738	825	838	792	664	516	334	129	7	0	0	0	0	0	250	--	--
Max	0	0	0	0	0	0	51	274	513	726	877	966	983	928	815	640	423	181	18	0	0	0	0	0	--	983	--
Min	0	0	0	0	0	0	0	29	63	48	85	138	121	105	69	96	14	9	1	0	0	0	0	0	--	--	0

-- Indicates Invalid Data

SAROAD for Resolution, East_Plant
"Component, Channel: Table100, RH_Percent"
Month: Jan 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	85	88	85	85	83	85	80	80	73	71	72	68	61	54	52	50	53	61	70	70	58	50	50	50	68	88	50
2	51	52	50	50	50	48	47	48	45	43	42	41	37	34	33	34	37	40	41	40	40	40	39	39	42	52	33
3	40	39	40	39	38	39	39	40	39	38	37	34	33	34	36	38	42	48	51	56	61	65	64	67	44	67	33
4	68	69	70	68	69	71	71	69	66	62	58	53	49	46	41	40	40	43	46	53	49	48	50	53	56	71	40
5	52	54	55	56	60	60	62	62	58	52	46	42	36	31	27	26	30	36	40	31	30	29	34	38	44	62	26
6	39	41	43	46	48	49	49	49	45	38	37	32	28	24	19	19	21	30	32	33	33	38	37	36	36	49	19
7	45	49	49	46	52	54	56	55	51	47	44	41	37	35	37	37	40	44	46	49	44	33	32	33	44	56	32
8	30	30	31	31	37	28	30	34	30	23	18	16	15	13	13	14	15	18	21	26	26	28	31	30	24	37	13
9	30	28	29	30	30	31	34	35	31	26	24	21	18	15	15	14	16	20	25	28	26	25	23	21	25	35	14
10	23	25	25	25	27	28	30	30	29	32	28	24	21	21	24	25	27	27	26	29	34	44	68	94	32	94	21
11	97	90	76	73	75	77	80	82	77	76	70	66	52	44	36	29	27	27	29	30	35	41	37	39	57	97	27
12	44	48	51	49	51	47	47	50	47	41	33	33	27	24	24	24	23	26	30	31	36	40	44	41	38	51	23
13	47	46	46	46	45	48	48	49	41	37	32	28	27	26	25	25	25	30	31	32	35	40	46	41	37	49	25
14	47	43	46	45	40	36	43	44	38	33	30	30	27	24	27	26	--	33	32	34	38	46	46	43	37	47	24
15	41	32	28	28	28	30	33	29	25	22	18	18	17	16	16	16	17	19	21	23	25	27	27	27	24	41	16
16	27	27	28	29	30	30	30	30	27	26	26	24	23	22	21	21	21	24	27	24	22	19	22	24	25	30	19
17	25	25	25	22	23	24	24	25	24	22	21	20	19	18	19	18	19	22	24	25	25	27	28	30	23	30	18
18	29	30	30	31	31	32	33	33	31	30	28	26	24	23	21	20	20	22	24	25	24	26	27	26	27	33	20
19	27	29	32	35	35	37	38	37	30	25	23	22	21	19	17	16	17	20	27	27	25	25	26	26	26	38	16
20	27	28	28	26	27	27	29	28	23	22	21	20	19	17	16	17	17	18	21	23	24	27	28	31	23	31	16
21	29	27	26	26	24	23	22	24	20	20	21	21	20	19	19	19	20	21	23	24	20	18	22	22	22	29	18
22	21	20	20	20	21	22	23	23	22	19	20	20	19	18	17	17	16	21	24	27	26	25	23	26	21	27	16
23	27	27	26	25	23	21	23	24	23	23	22	22	21	20	19	18	18	23	24	24	25	25	25	26	23	27	18
24	27	27	28	28	30	30	30	31	30	32	33	40	44	47	37	41	43	46	49	57	56	48	49	54	39	57	27
25	63	66	67	67	69	70	69	69	67	61	56	48	44	39	39	39	42	57	57	54	52	52	59	68	57	70	39
26	73	80	82	87	87	89	97	98	98	96	94	97	97	98	98	99	99	99	100	100	100	99	97	98	94	100	73
27	99	100	100	100	100	100	100	100	100	100	84	77	80	75	77	82	78	81	82	82	93	96	96	97	91	100	75
28	97	98	98	99	99	100	96	99	99	99	99	99	99	88	77	72	62	63	66	78	85	84	84	82	88	100	62
29	81	82	84	88	91	91	92	89	67	69	65	56	53	54	55	48	47	48	51	58	60	58	58	58	67	92	47
30	57	53	47	43	49	61	63	68	56	37	26	23	24	31	34	36	39	40	38	42	50	52	47	47	44	68	23
31	46	49	49	50	52	49	52	49	46	42	39	34	31	31	30	27	29	34	39	42	43	40	31	35	40	52	27
Avg	48	48	48	48	49	50	51	51	47	44	41	39	36	34	33	32	33	37	39	41	42	42	44	45	43	--	--
Max	99	100	100	100	100	100	100	100	100	100	99	99	99	98	98	99	99	99	100	100	100	99	97	98	--	100	--
Min	21	20	20	20	21	21	22	23	20	19	18	16	15	13	13	14	15	18	21	23	20	18	22	21	--	--	13

-- Indicates Invalid Data

SAROAD for Resolution, East_Plant
"Component, Channel: Table100, RH_Percent"
Month: Feb 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	38	38	37	37	37	37	39	37	35	33	31	31	29	24	20	31	33	41	45	50	51	50	53	46	38	53	20
2	40	46	45	43	42	42	38	35	31	23	23	23	21	21	19	16	18	22	24	25	22	22	25	28	29	46	16
3	27	28	27	26	25	24	25	25	25	25	29	32	30	30	33	37	37	40	42	47	54	59	62	58	35	62	24
4	62	66	73	77	77	76	69	62	54	49	45	43	41	44	49	47	47	52	55	56	57	64	65	57	58	77	41
5	53	47	43	44	46	45	43	38	37	33	29	33	35	38	42	39	38	42	46	50	55	54	51	54	43	55	29
6	55	53	54	55	59	62	65	65	62	57	51	47	46	52	55	51	50	54	62	62	64	68	72	63	58	72	46
7	61	63	68	71	72	76	77	75	66	53	48	51	49	44	43	43	42	48	50	53	59	63	62	65	58	77	42
8	60	58	57	59	55	53	53	47	39	34	36	37	35	31	34	34	35	41	50	53	51	41	40	40	45	60	31
9	46	45	50	66	90	96	96	96	94	89	84	74	70	64	61	55	55	53	53	56	59	62	60	54	68	96	45
10	53	56	59	65	68	75	76	73	62	55	52	46	44	42	43	44	42	47	50	55	61	62	61	64	57	76	42
11	62	62	65	62	63	62	61	64	62	73	79	77	79	86	76	77	82	79	81	83	89	94	95	95	75	95	61
12	90	91	90	87	89	91	89	88	72	56	47	45	40	36	35	48	43	43	45	48	53	60	60	48	62	91	35
13	38	43	43	44	47	49	47	41	35	29	27	26	24	27	32	31	32	36	35	35	36	43	46	44	37	49	24
14	36	38	40	43	42	44	45	42	36	31	28	27	25	29	31	27	25	29	32	30	33	33	32	33	34	45	25
15	33	31	30	29	30	31	29	27	20	21	20	17	14	12	10	8	9	10	13	14	16	19	22	23	20	33	8
16	23	19	18	19	19	17	16	16	15	14	13	12	12	11	10	10	8	10	12	11	11	12	13	15	14	23	8
17	17	19	20	19	19	21	23	23	17	14	14	13	14	14	14	14	13	14	14	15	16	17	17	18	17	23	13
18	20	21	24	26	30	29	31	32	27	24	22	19	16	14	13	14	16	17	19	26	28	27	27	27	23	32	13
19	27	27	25	24	24	25	26	25	23	20	20	19	17	16	14	13	13	14	18	21	24	26	33	43	22	43	13
20	57	71	74	83	88	86	85	79	81	92	96	96	95	95	93	89	87	94	96	96	95	95	96	96	88	96	57
21	96	96	97	97	97	97	97	96	95	90	88	93	87	79	71	62	65	67	78	84	86	85	82	85	86	97	62
22	83	81	78	84	83	81	83	81	74	59	55	54	53	53	54	47	47	45	49	50	48	55	59	60	63	84	45
23	60	60	63	64	61	63	65	57	46	40	36	31	31	29	31	33	32	31	36	44	44	45	39	43	45	65	29
24	44	41	46	43	51	57	77	78	63	63	51	48	32	24	33	29	19	19	22	23	25	29	33	31	41	78	19
25	32	40	41	46	47	49	51	36	32	28	25	26	26	26	28	28	28	29	30	29	35	40	38	41	35	51	25
26	38	42	41	39	45	41	42	34	30	24	25	27	28	28	28	26	24	25	27	28	31	30	23	19	31	45	19
27	15	14	14	15	18	19	21	21	21	21	19	15	14	13	11	11	12	12	15	20	24	24	26	23	17	26	11
28	22	21	20	19	16	19	17	16	17	15	14	12	11	11	10	9	9	10	14	18	16	14	14	14	15	22	9
Avg	46	47	48	50	52	52	53	50	45	42	40	38	36	35	35	35	34	37	40	42	44	46	47	46	43	--	--
Max	96	96	97	97	97	97	97	96	95	92	96	96	95	95	93	89	87	94	96	96	95	95	96	96	--	97	--
Min	15	14	14	15	16	17	16	16	15	14	13	12	11	11	10	8	8	10	12	11	11	12	13	14	--	--	8

SAROAD for Resolution, East_Plant
"Component, Channel: Table100, RH_Percent"
Month: Mar 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	17	17	18	16	14	15	16	16	16	16	17	18	18	17	16	15	15	17	21	24	24	27	25	24	18	27	14
2	25	22	26	27	28	29	30	27	23	21	19	15	14	13	16	18	18	18	23	25	31	31	33	31	24	33	13
3	29	29	29	31	28	31	32	30	25	25	22	18	18	16	19	18	18	20	20	19	20	21	21	23	23	32	16
4	23	24	24	25	25	24	26	29	30	32	31	32	33	32	29	30	29	32	35	37	39	42	46	46	31	46	23
5	47	49	50	48	47	48	50	45	41	38	34	24	21	21	18	20	23	24	27	30	30	28	31	34	34	50	18
6	34	35	34	36	37	38	39	39	33	29	25	23	18	18	18	18	18	20	23	24	24	26	27	28	28	39	18
7	29	30	31	33	37	39	35	33	33	29	24	24	23	22	21	19	21	23	25	24	23	24	25	30	27	39	19
8	38	51	58	73	87	88	93	96	91	91	93	89	88	91	90	86	97	98	99	99	99	99	99	99	87	99	38
9	97	92	93	91	93	92	92	91	90	94	92	91	90	89	92	88	87	89	87	87	85	80	82	87	90	97	80
10	88	91	--	92	93	90	89	83	70	64	58	51	44	40	38	35	36	39	41	48	55	52	52	50	61	93	35
11	49	49	46	46	40	38	42	44	41	35	33	31	30	34	36	34	34	37	39	38	44	44	44	38	39	49	30
12	42	47	50	44	46	46	41	31	23	23	23	21	19	27	34	35	33	35	39	37	43	39	34	33	35	50	19
13	39	38	38	36	35	32	30	25	23	23	20	17	17	16	16	14	12	12	13	17	20	23	26	24	24	39	12
14	26	25	20	26	27	27	26	21	19	18	17	15	13	12	11	11	10	12	16	19	18	20	24	23	19	27	10
15	24	26	29	30	32	30	31	28	25	19	14	13	13	17	17	14	14	14	16	17	19	19	18	21	21	32	13
16	25	25	25	26	27	33	30	26	26	24	18	17	17	17	16	16	16	17	20	21	22	18	16	19	22	33	16
17	23	22	25	29	30	29	32	26	23	22	21	22	22	21	19	18	19	18	18	19	21	23	22	21	23	32	18
18	24	22	24	26	27	29	31	33	32	26	23	20	20	18	17	16	16	18	19	19	23	24	29	27	23	33	16
19	30	31	30	28	33	35	38	36	32	29	28	27	24	21	21	21	21	22	23	23	24	28	31	34	28	38	21
20	33	32	36	36	38	39	40	40	38	32	28	23	19	17	17	19	20	23	25	25	25	25	24	25	28	40	17
21	25	26	27	29	31	32	36	37	32	30	28	27	26	25	25	25	26	28	29	30	29	29	30	30	29	37	25
22	32	34	39	38	38	41	41	37	35	35	32	31	29	29	28	26	24	22	24	26	27	29	29	29	32	41	22
23	31	31	33	38	39	43	47	43	37	31	30	23	8	6	5	7	7	6	7	8	8	8	8	9	21	47	5
24	9	11	15	19	20	20	19	17	14	11	9	10	10	11	12	12	12	12	13	13	14	14	13	12	13	20	9
25	12	17	19	21	22	20	19	15	13	12	11	11	10	10	11	11	11	12	12	14	14	17	19	21	15	22	10
26	21	24	22	23	23	20	19	18	17	15	14	12	12	11	10	9	8	9	10	12	14	17	17	16	16	24	8
27	15	16	19	20	19	18	22	21	20	15	14	13	13	12	13	12	11	11	10	13	15	15	17	19	16	22	10
28	24	22	19	19	21	18	18	21	14	12	11	11	12	10	10	11	10	10	12	15	18	19	18	18	16	24	10
29	19	20	21	24	24	23	25	24	16	15	14	14	12	11	10	9	8	9	10	11	14	16	16	17	16	25	8
30	18	16	16	17	17	19	21	24	24	21	16	12	14	12	13	14	15	15	16	17	18	19	23	22	18	24	12
31	22	22	23	22	25	24	26	26	21	19	18	17	15	14	14	14	15	16	18	20	23	25	23	26	20	26	14
Avg	31	32	31	34	36	36	37	35	31	29	27	25	23	23	23	22	23	24	25	27	28	29	30	30	29	--	--
Max	97	92	93	92	93	92	93	96	91	94	93	91	90	91	92	88	97	98	99	99	99	99	99	99	--	99	--
Min	9	11	15	16	14	15	16	15	13	11	9	10	8	6	5	7	7	6	7	8	8	8	8	9	--	--	5

-- Indicates Invalid Data

SAROAD for Resolution, East_Plant
"Component, Channel: Table100, Precip_Inches"
Month: Jan 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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	0.004	0.044	0.048	0.044	0
11	0.072	0.032	0.004	0.004	0	0	0	0	0.004	0.008	0.008	0	0	0	0	0	0	0	0	0	0	0	0	0	0.132	0.072	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	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	0	0	0	0	0	0	0	0	0	0	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	0.004	0	0	0	0	0	0	0	0	0	0	0	0.004	0.004	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.004	0	0	0	0	0.004	0	0.008	0.004	0
26	0.008	0.004	0.012	0.004	0	0.234	0.192	0.228	0.131	0.141	0.256	0.102	0	0.008	0.071	0.024	0.012	0.004	0	0	0	0	0	0	1.43	0.256	0
27	0.059	0.004	0.276	0.214	0.04	0.185	0.052	0.028	0.012	0	0	0	0	0	0	0	0	0	0.004	0	0.024	0.02	0.004	0.008	0.93	0.276	0
28	0	0	0.036	0.016	0.008	0	0.004	0.083	0.004	0.052	0.004	0	0.012	0	0	0	0	0	0	0	0.004	0	0	0	0.223	0.083	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	0.139	0.04	0.328	0.238	0.048	0.419	0.248	0.339	0.151	0.201	0.268	0.102	0.016	0.008	0.071	0.024	0.012	0.008	0.004	0	0.028	0.02	0.012	0.052	2.78	--	--
Max	0.072	0.032	0.276	0.214	0.04	0.234	0.192	0.228	0.131	0.141	0.256	0.102	0.012	0.008	0.071	0.024	0.012	0.004	0.004	0	0.024	0.02	0.004	0.044	--	0.276	--
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: Feb 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	0	0	0.008	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0.052	0.016	0.008	0.008	0.012	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.096	0.052	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	0.004	0	0	0	0	0	0	0	0	0	0	0.004	0.004	0
12	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	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	0.09	0.032	0	0	0	0	0.044	0.099	0.048	0.072	0.068	0.088	0.064	0.02	0.016	0.068	0.044	0.012	0.004	0	0.004	0.773	0.099	0
21	0	0.004	0	0	0	0	0.004	0	0.008	0.012	0.008	0	0	0	0	0	0	0	0	0	0	0	0	0	0.036	0.012	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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
Total	0	0.004	0	0.094	0.032	0.052	0.02	0.008	0.016	0.076	0.107	0.048	0.072	0.072	0.088	0.064	0.02	0.016	0.068	0.044	0.012	0.004	0	0.004	0.921	--	--
Max	0	0.004	0	0.09	0.032	0.052	0.016	0.008	0.008	0.044	0.099	0.048	0.072	0.068	0.088	0.064	0.02	0.016	0.068	0.044	0.012	0.004	0	0.004	--	0.099	--
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: Mar 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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	0.008	0.032	0.084	0.012	0.016	0.04	0.088	0.063	0.012	0.141	0.004	0.067	0.02	0.079	0.032	0.15	0.149	0.024	0.044	0.064	0.104	0.135	0.072	1.44	0.15	0
9	0.04	0.004	0	0	0.016	0	0	0	0	0	0.004	0.012	0	0	0	0	0.008	0	0	0	0	0	0	0	0.084	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
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	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	0	0	0	0	0	0	0	0	0	0	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
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	0.04	0.012	0.032	0.084	0.028	0.016	0.04	0.088	0.063	0.012	0.145	0.016	0.067	0.02	0.079	0.032	0.158	0.149	0.024	0.044	0.064	0.104	0.135	0.072	1.52	--	--
Max	0.04	0.008	0.032	0.084	0.016	0.016	0.04	0.088	0.063	0.012	0.141	0.012	0.067	0.02	0.079	0.032	0.15	0.149	0.024	0.044	0.064	0.104	0.135	0.072	--	0.15	--
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, BP_mmHg"
Month: Jan 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	655	655	655	655	655	655	655	655	656	655	655	654	654	654	654	653	654	654	654	654	654	654	654	656	653
2	654	653	653	653	653	653	653	653	653	653	653	653	652	652	652	652	652	652	652	652	652	652	652	652	652	654	652
3	652	652	652	652	652	652	652	653	653	653	654	654	653	653	653	653	653	654	654	654	654	655	655	655	653	655	652
4	655	655	655	655	656	656	656	656	657	657	657	657	656	655	655	656	656	656	656	656	656	657	657	657	656	657	655
5	657	657	657	657	657	657	657	658	658	658	658	658	657	657	657	657	657	657	657	657	656	656	656	656	657	658	656
6	656	656	656	656	655	655	655	655	656	656	655	655	654	653	652	652	652	652	651	651	651	651	650	650	653	656	650
7	650	650	649	649	649	649	649	649	649	649	649	649	649	648	648	648	648	649	649	649	649	649	649	649	649	650	648
8	649	649	649	650	649	650	650	651	651	652	652	652	652	652	652	652	652	652	653	653	654	654	654	654	652	654	649
9	654	654	654	654	654	655	655	656	656	657	657	656	655	655	655	654	654	654	654	654	653	653	653	653	655	657	653
10	653	653	652	652	651	651	651	651	652	652	651	650	650	649	649	648	648	648	647	647	647	647	647	648	650	653	647
11	648	649	649	649	649	650	650	650	651	652	652	651	650	650	650	650	650	650	650	650	650	650	650	650	650	652	648
12	649	649	649	649	649	649	649	650	650	651	651	651	651	650	650	651	651	651	651	651	651	652	652	652	650	652	649
13	652	652	652	651	651	651	651	652	652	652	652	651	651	650	650	650	650	650	650	650	650	650	650	650	651	652	650
14	650	650	651	651	651	651	651	651	652	652	652	652	651	651	652	652	--	653	653	653	654	654	654	654	652	654	650
15	654	654	655	655	655	655	655	656	657	657	657	657	657	657	656	657	657	657	657	657	658	658	658	658	656	658	654
16	658	658	658	658	658	657	657	658	658	658	658	658	658	657	657	657	657	657	657	657	657	657	657	657	657	658	657
17	657	657	657	656	656	656	657	657	657	658	658	657	657	656	656	656	656	656	657	657	657	657	657	657	657	658	656
18	657	657	657	656	656	656	656	657	657	658	658	657	656	656	656	656	656	656	656	656	656	656	656	656	656	658	656
19	656	656	656	656	656	656	656	657	657	658	658	657	657	656	656	656	656	656	656	656	656	656	656	656	656	658	656
20	656	656	656	656	656	656	656	656	656	656	656	656	655	655	654	654	654	654	654	654	654	654	654	654	655	656	654
21	654	654	654	654	654	654	654	654	655	655	656	656	655	654	654	654	654	654	654	654	655	655	655	655	655	656	654
22	655	656	656	656	656	656	656	656	656	657	657	657	657	656	656	656	656	656	656	656	656	656	656	657	656	657	655
23	657	657	657	657	657	657	657	657	658	658	658	658	658	657	657	657	656	657	657	656	656	657	657	657	657	658	656
24	657	657	657	657	657	657	657	657	658	658	658	658	658	657	657	657	657	657	657	657	657	658	658	658	657	658	657
25	657	657	657	656	656	656	656	656	656	657	657	657	656	655	654	654	654	654	654	654	653	653	653	653	655	657	653
26	653	652	652	652	651	651	651	651	651	651	651	651	651	650	650	650	650	651	651	651	652	652	652	652	651	653	650
27	652	652	652	651	651	651	652	652	652	652	653	652	652	651	651	651	651	651	651	651	651	650	650	650	651	653	650
28	650	650	650	650	649	649	649	650	650	650	651	650	650	650	650	650	650	650	650	650	650	650	651	651	650	651	649
29	650	650	650	650	650	650	651	651	651	652	652	652	652	652	651	652	652	652	653	653	654	654	654	655	652	655	650
30	655	655	656	656	656	656	657	657	657	658	658	658	658	657	656	657	657	656	656	656	656	656	656	656	657	658	655
31	657	657	657	656	656	656	656	656	656	656	656	657	656	656	655	655	655	655	655	655	656	656	655	655	656	657	655
Avg	654	654	654	654	654	654	654	654	654	655	655	655	654	654	653	653	653	653	654	654	654	654	654	654	654	--	--
Max	658	658	658	658	658	657	657	658	658	658	658	658	658	657	657	657	657	657	657	657	658	658	658	658	--	658	--
Min	648	649	649	649	649	649	649	649	649	649	649	649	649	648	648	648	648	648	647	647	647	647	647	648	--	--	647

-- Indicates Invalid Data

SAROAD for Resolution, East_Plant
"Component, Channel: Table100, BP_mmHg"
Month: Feb 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	656	656	655	655	656	655	656	656	656	657	657	657	657	656	656	656	656	656	656	656	657	657	657	657	656	657	655
2	657	657	657	657	657	657	657	658	658	658	658	658	658	657	656	656	656	656	656	656	656	656	656	656	657	658	656
3	656	656	655	655	654	654	654	654	655	655	655	654	653	653	652	652	652	652	652	653	653	653	653	653	654	656	652
4	652	653	652	652	652	652	652	653	653	653	653	653	653	652	652	652	652	652	652	652	652	653	653	653	652	653	652
5	653	652	652	652	652	652	652	652	653	653	653	653	653	652	652	652	652	651	651	651	651	651	651	651	652	653	651
6	651	651	651	651	651	651	651	651	651	652	652	652	651	651	651	651	651	652	652	652	652	653	653	653	651	653	651
7	653	653	653	653	653	653	654	654	654	655	655	655	654	653	653	653	653	652	652	652	652	652	652	651	653	655	651
8	651	651	651	650	650	650	649	650	650	650	650	650	650	649	648	648	647	647	647	647	647	647	647	647	649	651	647
9	647	646	646	646	646	646	646	647	648	648	649	649	649	649	649	649	650	650	650	650	651	651	651	651	649	651	646
10	651	651	651	651	651	651	650	651	651	651	651	651	651	650	650	650	650	650	650	650	650	650	650	650	651	651	650
11	650	650	650	650	650	650	650	650	650	651	651	651	651	651	651	651	651	651	652	652	652	653	653	653	651	653	650
12	653	654	654	654	654	654	654	655	655	656	656	656	656	655	655	655	655	655	655	655	655	656	656	655	655	656	653
13	655	654	654	654	654	654	654	654	655	655	655	655	655	654	654	654	654	654	654	654	654	654	654	654	654	655	654
14	654	654	654	654	654	654	654	654	654	654	654	654	655	654	653	653	653	653	653	654	654	654	654	655	654	655	653
15	655	655	655	655	655	655	656	656	656	657	657	657	657	657	657	657	657	657	657	657	657	658	658	659	656	659	655
16	658	658	658	658	658	657	657	658	658	658	658	657	657	656	655	655	654	654	654	654	654	654	653	653	656	658	653
17	653	653	652	652	651	651	651	651	651	651	651	651	650	650	649	649	649	649	649	650	650	650	650	651	651	653	649
18	651	651	651	651	651	652	652	652	653	653	653	653	653	652	652	652	651	651	651	651	651	651	651	651	652	653	651
19	650	650	650	650	649	649	649	650	650	649	649	649	648	648	647	647	646	646	646	646	646	646	646	645	648	650	645
20	645	645	645	644	644	644	644	644	644	644	644	644	644	644	644	644	645	645	646	646	647	647	648	648	645	648	644
21	648	649	649	649	649	650	650	650	651	651	651	651	651	650	650	650	650	650	650	650	650	651	651	651	650	651	648
22	651	651	651	650	651	651	651	652	653	653	653	653	653	653	653	653	653	653	653	653	654	654	654	654	652	654	650
23	654	654	653	653	653	653	652	652	653	653	653	652	652	650	650	649	649	648	648	648	648	648	648	648	651	654	648
24	648	648	647	647	647	647	647	647	647	648	648	648	648	648	649	649	650	650	651	651	651	652	652	652	649	652	647
25	653	653	653	653	653	654	654	654	655	655	655	655	654	653	653	653	653	653	653	653	652	652	652	652	653	655	652
26	652	652	651	651	650	651	651	651	651	651	651	652	651	651	651	651	651	651	651	652	652	653	653	653	651	653	650
27	653	654	654	654	654	654	654	655	656	656	656	656	656	655	655	655	655	655	655	655	656	656	656	656	655	656	653
28	656	656	656	655	656	656	657	657	657	658	658	658	658	658	657	657	657	658	658	658	658	659	659	659	657	659	655
Avg	652	652	652	652	652	652	652	652	653	653	653	653	653	652	652	652	652	652	652	652	652	652	653	653	652	--	--
Max	658	658	658	658	658	657	657	658	658	658	658	658	658	658	657	657	657	658	658	658	658	659	659	659	--	659	--
Min	645	645	645	644	644	644	644	644	644	644	644	644	644	644	644	644	645	645	646	646	646	646	646	645	--	--	644

SAROAD for Resolution, East_Plant
"Component, Channel: Table100, BP_mmHg"
Month: Mar 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	659	659	659	658	658	658	658	659	659	659	659	660	659	658	658	658	658	658	658	658	658	658	659	658	659	660	658
2	658	659	659	658	658	659	659	659	659	659	659	659	659	658	658	657	657	657	656	656	656	656	656	656	658	659	656
3	656	655	655	654	654	654	654	654	655	655	655	654	654	654	653	653	652	653	652	652	652	652	652	651	653	656	651
4	651	651	650	650	650	650	650	650	651	651	651	651	651	651	651	652	652	652	652	653	654	654	654	654	652	654	650
5	654	654	654	654	654	654	654	655	655	655	655	655	655	654	654	654	653	653	653	653	653	654	654	653	654	655	653
6	653	653	653	653	653	653	653	653	654	654	654	654	653	653	652	652	652	651	651	651	651	651	651	651	652	654	651
7	651	651	651	651	650	651	651	652	652	652	652	652	652	651	651	651	651	651	651	651	651	651	651	651	651	652	650
8	651	650	650	650	649	649	649	649	649	649	649	649	648	647	647	647	648	648	649	649	649	649	650	650	649	651	647
9	650	650	650	650	650	650	650	651	651	651	651	652	652	651	651	652	652	652	652	653	653	653	653	653	651	653	650
10	653	653	--	653	653	653	654	654	655	655	655	655	655	654	654	654	654	654	655	655	655	655	655	655	654	655	653
11	656	656	655	655	655	655	655	655	656	656	656	656	655	655	654	654	654	654	654	654	654	654	654	654	655	656	654
12	654	654	654	653	653	653	654	654	655	655	655	655	655	655	654	654	654	654	654	655	655	655	655	655	654	655	653
13	655	656	655	656	656	656	656	656	657	657	657	657	657	656	656	656	656	655	655	656	656	656	656	656	656	657	655
14	656	656	656	656	656	656	656	657	657	657	657	657	657	656	656	656	655	655	655	655	655	655	655	655	656	657	655
15	655	655	655	654	654	654	654	655	655	655	655	655	655	654	654	653	653	653	652	652	652	652	652	652	654	655	652
16	652	652	652	651	651	651	651	651	651	652	652	651	651	650	649	649	649	649	649	649	649	650	650	650	650	652	649
17	650	650	649	649	649	649	650	650	650	651	651	651	651	650	650	650	650	650	650	650	651	651	651	651	650	651	649
18	651	651	651	651	651	651	652	652	653	653	653	653	653	653	652	652	652	652	652	652	652	652	653	652	652	653	651
19	652	652	652	652	652	652	652	653	653	653	654	654	653	653	653	653	653	653	653	653	654	654	654	654	653	654	652
20	654	654	654	654	654	654	654	654	654	654	654	654	654	653	653	652	652	652	651	651	651	651	651	651	653	654	651
21	650	650	649	649	649	649	649	649	649	649	649	649	649	649	648	648	648	648	648	648	648	648	648	647	649	650	647
22	647	647	647	647	647	647	647	647	648	648	648	648	648	647	647	647	647	647	647	647	648	648	648	648	647	648	647
23	649	649	648	648	648	649	649	650	651	651	652	652	652	651	651	651	650	651	651	651	652	652	652	652	650	652	648
24	652	652	652	652	652	652	652	652	653	653	653	652	652	651	651	650	650	650	650	651	651	651	651	651	652	653	650
25	651	651	651	651	651	652	652	653	653	653	653	653	653	652	652	652	652	652	652	652	652	653	653	652	652	653	651
26	652	652	652	652	652	652	652	653	653	653	653	653	652	652	652	651	651	651	650	650	651	651	651	651	652	653	650
27	651	651	651	651	651	651	651	652	652	653	653	653	653	652	652	652	652	652	652	652	652	653	653	653	652	653	651
28	653	653	653	653	653	653	653	654	654	655	655	655	655	654	654	654	653	653	654	654	654	654	654	654	654	655	653
29	654	654	654	654	655	655	655	655	656	656	656	656	656	655	655	654	654	654	654	654	655	655	655	655	655	656	654
30	655	655	655	654	654	654	654	655	655	655	655	655	655	654	654	654	654	653	653	653	654	654	654	654	654	655	653
31	653	653	653	653	653	653	654	654	654	654	655	654	654	654	653	653	652	652	652	652	652	652	652	652	653	655	652
Avg	653	653	653	652	652	653	653	653	654	654	654	654	653	653	653	652	652	652	652	652	653	653	653	653	653	--	--
Max	659	659	659	658	658	659	659	659	659	659	659	660	659	658	658	658	658	658	658	658	658	658	659	658	--	660	--
Min	647	647	647	647	647	647	647	647	648	648	648	648	648	647	647	647	647	647	647	647	648	648	648	647	--	--	647

-- Indicates Invalid Data

SAROAD for Resolution, West_Plant
"Component, Channel: Table100, WS_ms_10m"
Month: Jan 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	1.7	2.2	2.6	3.7	4.5	4.7	4.5	4.0	5.3	1.7	2.9	3.4	2.8	1.8	3.1	1.7	2.0	2.5	1.7	1.7	3.6	8.2	7.0	7.2	3.5	8.2	1.7
2	4.8	5.2	6.0	8.3	11.1	9.3	8.6	11.0	14.1	12.8	14.2	12.4	11.8	9.1	6.9	6.1	6.0	7.1	8.0	7.9	7.7	7.8	7.5	8.5	8.8	14.2	4.8
3	9.5	9.6	10.7	11.0	10.6	10.4	10.9	12.9	15.5	16.3	16.4	15.4	13.2	13.4	12.3	11.2	12.1	12.2	12.5	14.1	12.8	13.0	12.4	12.5	12.5	16.4	9.5
4	13.1	12.4	11.0	9.3	8.6	11.9	7.8	6.7	11.3	9.6	6.5	6.2	4.4	2.4	2.0	1.9	2.5	2.7	3.4	4.0	4.3	3.1	3.0	3.4	6.3	13.1	1.9
5	2.5	2.1	2.0	2.3	3.1	3.3	3.5	1.8	3.5	3.0	3.4	4.0	4.2	4.8	4.1	1.9	2.0	1.4	2.8	3.3	5.4	3.9	2.0	2.9	3.1	5.4	1.4
6	3.7	2.7	2.7	3.4	4.0	4.4	4.3	4.1	6.2	5.4	6.0	6.1	4.3	6.1	4.5	4.1	3.6	3.5	4.3	7.8	4.5	4.1	4.7	1.7	4.4	7.8	1.7
7	4.4	4.9	4.8	2.1	3.0	2.1	1.4	0.9	0.9	1.4	1.4	2.3	2.5	3.4	3.2	3.1	3.5	2.2	1.0	0.6	1.1	2.0	3.4	5.7	2.6	5.7	0.6
8	4.2	4.2	5.3	5.1	2.6	1.5	1.5	2.8	4.2	2.6	3.8	3.7	3.5	4.0	4.3	2.8	1.5	2.5	1.3	0.9	3.0	2.6	1.6	4.3	3.1	5.3	0.9
9	9.4	9.8	5.4	3.9	3.0	1.7	2.8	2.4	2.1	5.2	3.7	2.6	2.5	3.0	2.2	2.3	2.3	1.2	3.2	2.2	1.8	2.3	3.7	3.3	3.4	9.8	1.2
10	5.4	4.5	3.7	3.5	5.9	5.4	6.4	6.1	6.6	5.1	2.8	3.8	3.6	2.7	2.0	1.6	4.7	3.0	3.5	4.6	3.7	1.9	5.4	4.0	4.2	6.6	1.6
11	2.3	2.2	1.8	3.0	2.6	2.5	1.3	1.2	1.4	1.6	2.3	2.3	3.0	3.3	3.4	3.3	3.6	3.1	1.0	0.9	0.8	0.2	0.6	0.8	2.0	3.6	0.2
12	0.5	0.3	0.4	1.3	2.4	2.6	1.9	1.9	0.5	0.9	1.1	2.2	3.0	4.1	4.6	4.4	4.2	3.4	1.3	0.9	0.4	1.6	2.1	0.8	1.9	4.6	0.3
13	1.9	2.2	2.8	3.9	4.4	3.6	4.2	4.6	4.9	3.3	1.7	2.7	2.4	2.5	3.8	3.7	3.3	2.6	1.4	0.3	1.1	0.6	1.4	1.8	2.7	4.9	0.3
14	0.8	1.2	1.2	1.3	0.8	0.9	1.8	1.2	--	--	--	2.3	2.4	--	3.7	2.9	2.9	2.5	1.3	0.5	1.0	1.3	1.5	0.8	1.6	3.7	0.5
15	1.5	5.4	6.9	6.8	2.9	3.6	4.0	3.7	7.8	4.8	3.3	3.6	4.3	3.5	3.1	2.4	3.1	3.0	4.0	1.4	2.3	6.7	6.7	7.3	4.3	7.8	1.4
16	9.2	4.0	3.0	1.9	4.3	5.9	5.1	2.9	2.1	2.1	1.9	2.6	3.1	3.4	3.3	2.7	2.7	2.6	2.0	2.0	2.3	3.8	3.6	3.2	3.3	9.2	1.9
17	5.5	7.2	5.4	6.4	6.6	9.5	12.6	12.5	10.3	12.5	11.9	6.1	3.7	7.9	6.2	6.1	6.2	5.8	8.0	7.3	7.2	7.4	7.2	6.4	7.7	12.6	3.7
18	6.4	7.3	5.0	6.4	6.6	6.7	6.7	7.1	7.0	6.6	5.5	3.7	3.4	4.8	3.4	3.1	2.4	3.7	4.2	4.2	4.4	3.3	2.7	2.8	4.9	7.3	2.4
19	2.9	2.6	2.7	4.0	3.4	2.6	4.1	5.4	2.5	3.7	2.8	3.1	3.9	3.7	2.4	2.6	2.6	3.4	3.6	2.6	1.4	2.0	2.3	2.4	3.0	5.4	1.4
20	3.2	4.8	5.0	5.0	4.3	4.1	2.8	3.0	3.2	2.6	2.6	2.4	2.8	3.3	2.8	2.6	3.4	1.8	1.2	4.0	4.1	2.0	2.0	2.2	3.1	5.0	1.2
21	2.3	1.9	3.5	2.2	2.5	3.7	4.3	3.4	2.1	5.1	9.9	6.5	4.1	6.8	6.9	6.4	3.4	3.3	3.2	1.2	1.7	2.2	2.0	2.2	3.8	9.9	1.2
22	2.2	3.1	1.6	2.2	3.5	2.5	3.7	4.6	4.4	2.2	2.3	3.1	3.8	3.7	1.7	1.7	2.3	2.1	1.3	1.2	1.6	3.9	3.4	2.0	2.7	4.6	1.2
23	4.3	5.0	3.3	3.9	5.3	2.0	2.2	4.6	4.5	4.4	3.1	4.7	6.2	4.4	4.5	4.8	3.6	3.4	5.9	6.6	5.4	2.4	1.9	4.1	4.2	6.6	1.9
24	5.0	5.1	4.7	4.3	5.2	5.8	6.0	4.1	0.8	0.9	3.8	1.7	1.0	1.5	1.8	1.4	1.7	2.2	3.2	5.1	4.4	3.6	3.6	3.6	3.4	6.0	0.8
25	3.9	4.1	3.5	3.3	3.7	4.0	4.5	3.9	2.1	1.8	2.7	2.6	3.1	2.8	1.8	2.3	2.2	1.4	3.0	5.2	4.6	4.9	5.8	5.9	3.5	5.9	1.4
26	3.1	4.9	1.8	1.6	2.4	1.9	3.7	1.3	2.7	2.2	3.9	2.2	4.7	4.5	4.8	2.9	3.0	3.4	2.8	1.5	1.8	1.5	2.0	2.1	2.8	4.9	1.3
27	1.0	0.9	2.0	2.4	0.9	1.0	1.2	1.1	1.1	2.6	3.6	3.5	3.8	3.6	3.7	3.4	3.5	2.1	0.9	1.6	2.8	1.5	3.1	4.1	2.3	4.1	0.9
28	3.3	3.5	5.4	5.1	5.0	4.3	5.5	4.0	1.9	2.3	1.0	1.4	4.1	2.5	3.7	4.2	4.6	3.5	2.7	2.3	1.6	1.9	1.4	0.7	3.2	5.5	0.7
29	0.1	0.2	0.2	1.0	0.5	0.8	1.7	0.7	0.4	1.5	3.6	4.7	4.5	5.0	3.9	4.6	5.1	4.2	2.3	2.0	1.4	0.6	0.6	0.5	2.1	5.1	0.1
30	0.6	0.3	0.3	0.4	0.7	1.0	0.9	2.5	2.7	1.6	1.2	2.0	2.4	2.2	2.3	3.3	3.4	3.1	0.6	0.6	1.0	0.6	1.4	1.2	1.5	3.4	0.3
31	0.8	0.8	2.7	1.5	1.1	1.3	4.7	5.5	2.8	2.4	3.3	2.5	4.8	5.5	5.5	6.0	4.6	2.3	1.1	1.8	1.7	2.8	1.7	1.0	2.8	6.0	0.8
Avg	3.8	4.0	3.8	3.9	4.0	4.0	4.3	4.2	4.5	4.3	4.4	4.1	4.1	4.3	3.9	3.6	3.6	3.3	3.1	3.2	3.2	3.3	3.5	3.5	3.8	--	--
Max	13.1	12.4	11.0	11.0	11.1	11.9	12.6	12.9	15.5	16.3	16.4	15.4	13.2	13.4	12.3	11.2	12.1	12.2	12.5	14.1	12.8	13.0	12.4	12.5	--	16.4	--
Min	0.1	0.2	0.2	0.4	0.5	0.8	0.9	0.7	0.4	0.9	1.0	1.4	1.0	1.5	1.7	1.4	1.5	1.2	0.6	0.3	0.4	0.2	0.6	0.5	--	--	0.1

-- Indicates Invalid Data

SAROAD for Resolution, West_Plant
"Component, Channel: Table100, WS_ms_10m"
Month: Feb 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	1.1	1.4	1.7	1.4	1.6	2.0	1.6	1.6	2.1	2.1	2.3	2.5	3.1	1.6	2.8	2.7	2.9	2.2	1.0	0.7	0.4	0.8	0.8	1.4	1.8	3.1	0.4
2	1.3	0.7	0.8	2.1	2.5	1.2	1.3	2.3	0.6	2.3	3.4	3.7	4.0	3.0	3.6	2.0	2.2	1.9	3.1	2.6	2.0	1.6	1.5	4.3	2.3	4.3	0.6
3	2.9	2.7	5.2	5.8	4.4	3.4	2.6	3.1	2.8	3.5	5.6	4.5	3.0	2.2	2.7	2.2	2.3	1.5	1.2	1.2	1.1	2.9	0.5	0.9	2.8	5.8	0.5
4	0.7	0.6	0.5	0.8	1.2	1.5	0.9	1.2	1.6	2.1	1.9	1.6	2.4	4.0	3.2	3.2	2.8	2.7	1.5	0.4	1.3	0.6	0.7	0.7	1.6	4.0	0.4
5	0.8	0.8	0.6	2.0	0.7	1.6	1.8	1.9	2.7	2.1	1.4	1.6	2.4	3.5	3.3	3.0	3.5	2.8	0.8	1.1	1.2	2.2	1.5	1.0	1.9	3.5	0.6
6	2.9	0.9	1.0	0.5	--	0.6	1.8	1.3	1.5	3.0	1.5	2.8	2.3	4.0	3.6	4.7	3.8	3.2	1.6	0.6	0.6	0.5	0.9	0.5	1.9	4.7	0.5
7	0.4	0.3	0.5	0.4	0.2	1.9	3.9	4.3	2.6	1.2	1.2	1.7	1.8	2.6	1.5	2.4	3.2	2.9	0.9	0.5	0.6	1.7	3.7	5.9	1.9	5.9	0.2
8	4.6	3.7	1.7	2.0	2.1	1.6	1.2	0.8	0.6	2.1	3.8	4.9	5.4	5.3	5.4	5.7	4.7	4.8	2.4	0.7	0.8	0.9	0.9	0.6	2.8	5.7	0.6
9	1.2	1.1	3.3	5.2	4.6	2.2	1.2	1.3	2.3	3.3	4.2	5.0	4.8	4.4	4.9	4.6	3.7	3.0	2.2	0.9	0.9	1.1	1.0	0.8	2.8	5.2	0.8
10	0.1	0.2	1.4	1.1	1.3	1.6	3.1	2.2	2.0	1.4	2.4	2.8	2.6	3.3	3.5	3.8	3.7	3.2	1.3	1.4	1.4	0.6	0.8	2.6	2.0	3.8	0.1
11	3.7	3.0	3.2	4.6	4.0	3.6	1.2	1.4	1.1	2.4	0.9	0.9	2.1	0.9	1.8	1.6	1.7	0.8	1.9	0.7	1.4	0.7	0.9	0.9	1.9	4.6	0.7
12	0.7	1.3	0.7	0.7	1.0	0.7	1.0	4.5	1.1	0.9	1.9	3.8	2.4	3.5	3.7	4.2	4.0	3.5	0.8	0.5	0.8	1.7	3.0	0.9	2.0	4.5	0.5
13	1.0	1.6	1.0	1.1	1.2	1.0	0.9	1.3	1.7	2.1	2.2	2.3	2.4	4.1	3.4	3.6	3.1	2.9	0.8	0.6	1.1	1.0	1.4	0.9	1.8	4.1	0.6
14	1.0	1.2	0.4	0.4	2.0	1.2	1.0	1.1	0.7	0.9	1.0	1.9	3.9	4.6	3.2	2.7	3.4	2.4	1.0	0.7	2.1	7.9	12.9	11.3	2.9	12.9	0.4
15	10.3	10.8	13.2	13.0	12.0	10.3	10.9	4.8	5.6	10.7	5.0	3.4	2.6	3.4	3.0	3.8	3.5	3.1	3.0	5.2	6.8	7.2	5.0	5.4	6.8	13.2	2.6
16	5.2	3.3	4.8	3.7	4.4	4.3	4.3	6.0	13.3	13.6	7.2	4.2	2.0	2.0	2.4	2.0	2.5	2.6	1.9	2.0	2.1	3.0	2.8	2.5	4.2	13.6	1.9
17	2.2	3.9	3.0	4.4	2.3	3.5	4.1	6.3	5.8	2.0	2.8	3.2	4.3	5.1	5.1	5.5	5.6	4.4	2.2	0.4	1.3	0.9	0.5	1.8	3.4	6.3	0.4
18	1.5	1.1	1.9	1.9	1.4	1.6	4.0	4.3	4.8	2.5	1.2	3.0	2.2	2.2	2.7	2.1	2.9	2.2	0.8	1.7	3.3	5.1	5.2	6.2	2.7	6.2	0.8
19	6.1	6.1	4.2	2.6	1.2	1.1	0.6	1.2	1.0	2.0	3.3	3.3	5.0	5.9	6.0	6.0	6.4	5.2	3.3	1.3	0.6	1.0	2.5	2.3	3.3	6.4	0.6
20	3.3	1.7	1.5	3.9	2.2	2.8	4.5	3.8	3.8	3.7	2.9	2.7	1.1	1.0	1.3	1.5	0.9	2.0	2.9	1.2	1.4	1.1	0.9	0.7	2.2	4.5	0.7
21	0.8	0.9	1.9	2.1	1.0	1.7	1.3	1.8	3.9	2.4	2.6	2.8	2.1	1.4	1.4	2.2	1.7	1.1	1.3	2.7	2.7	3.4	1.0	0.6	1.9	3.9	0.6
22	0.7	0.4	0.5	0.7	1.9	0.5	0.4	0.4	1.0	0.9	2.2	3.2	4.0	4.1	3.8	3.7	3.5	3.1	1.7	0.2	1.0	1.5	2.0	1.8	1.8	4.1	0.2
23	1.4	1.5	1.9	2.2	0.9	2.0	2.2	4.3	3.4	1.4	1.5	1.7	1.9	2.3	2.5	2.5	3.2	3.6	2.2	1.0	0.9	0.6	0.5	0.5	1.9	4.3	0.5
24	0.5	1.2	0.8	1.0	0.5	2.6	1.2	3.8	4.0	4.7	3.9	4.6	5.8	5.9	6.2	4.8	5.1	4.0	2.2	1.8	2.0	2.6	2.3	1.5	3.0	6.2	0.5
25	1.5	1.1	1.1	1.8	0.8	1.1	1.2	0.9	1.4	1.1	2.1	1.8	2.3	2.9	3.7	3.5	3.5	3.5	1.5	0.5	1.2	0.9	0.8	0.9	1.7	3.7	0.5
26	0.6	0.7	0.3	0.4	1.6	1.5	1.1	0.4	0.7	0.5	1.5	2.7	3.4	3.8	4.5	4.3	4.0	4.4	1.5	1.2	1.5	4.9	4.8	3.6	2.3	4.9	0.3
27	7.6	8.2	7.2	7.5	9.6	9.3	10.2	10.1	9.9	10.1	7.2	8.8	5.2	3.0	3.2	2.4	2.3	3.1	1.9	0.7	3.2	4.9	6.1	7.7	6.2	10.2	0.7
28	3.9	4.7	7.1	5.8	3.4	6.3	9.1	8.1	5.9	5.0	5.8	5.2	3.7	2.7	3.2	2.6	3.5	2.4	2.8	2.3	2.8	3.4	2.6	2.0	4.3	9.1	2.0
Avg	2.4	2.3	2.6	2.8	2.6	2.6	2.8	3.0	3.1	3.2	3.0	3.2	3.1	3.3	3.4	3.3	3.3	3.0	1.8	1.3	1.7	2.3	2.4	2.5	2.7	--	--
Max	10.3	10.8	13.2	13.0	12.0	10.3	10.9	10.1	13.3	13.6	7.2	8.8	5.8	5.9	6.2	6.0	6.4	5.2	3.3	5.2	6.8	7.9	12.9	11.3	--	13.6	--
Min	0.1	0.2	0.3	0.4	0.2	0.5	0.4	0.4	0.6	0.5	0.9	0.9	1.1	0.9	1.3	1.5	0.9	0.8	0.8	0.2	0.4	0.5	0.5	0.5	--	--	0.1

-- Indicates Invalid Data

SAROAD for Resolution, West_Plant
"Component, Channel: Table100, WS_ms_10m"
Month: Mar 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	2.5	1.3	2.5	1.9	1.4	3.8	1.4	2.0	4.2	3.1	4.3	3.9	3.4	1.9	3.7	3.9	2.8	1.6	1.6	1.3	1.2	4.4	5.7	2.7	5.7	1.2
2	3.4	3.2	4.8	8.9	5.5	3.1	2.3	4.0	9.5	10.0	8.1	6.6	3.7	2.3	3.4	1.9	1.3	2.2	0.9	1.2	0.6	2.0	1.3	1.8	3.8	10.0	0.6
3	0.6	1.7	1.0	0.6	0.6	1.3	2.4	2.7	0.9	1.9	1.6	1.7	3.0	5.2	1.7	1.8	2.8	2.0	1.3	1.1	1.6	0.9	1.1	1.0	1.7	5.2	0.6
4	0.8	1.1	0.7	1.0	0.9	0.4	1.0	1.4	1.2	3.8	2.9	4.3	4.9	6.0	4.6	4.8	3.9	3.2	2.1	1.2	0.3	1.1	2.3	2.6	2.4	6.0	0.3
5	1.0	2.3	2.0	3.7	3.0	5.9	4.4	3.1	2.9	3.5	6.6	4.6	4.7	4.4	4.8	4.5	3.3	1.8	1.2	1.0	0.6	0.6	1.3	0.5	3.0	6.6	0.5
6	2.5	2.5	1.2	1.1	0.6	1.4	0.9	2.2	1.1	1.0	2.7	2.5	2.4	2.5	3.0	3.3	4.1	3.4	2.0	1.2	1.0	0.5	1.4	1.1	1.9	4.1	0.5
7	1.1	0.5	1.2	2.4	2.4	2.6	1.5	1.1	1.4	1.9	2.8	2.4	2.7	3.5	4.1	4.3	4.0	3.6	1.7	0.6	1.3	1.2	0.8	1.1	2.1	4.3	0.5
8	2.7	2.2	1.6	2.3	1.6	1.5	1.9	2.7	2.6	3.5	2.3	1.5	2.9	5.0	6.0	7.4	6.2	2.5	2.2	2.3	2.8	2.4	2.2	1.1	2.9	7.4	1.1
9	1.0	1.2	1.6	1.9	1.0	0.7	1.0	0.7	2.3	2.8	3.2	2.0	3.0	3.1	2.7	2.1	1.4	0.7	0.7	0.6	0.5	0.4	0.4	0.5	1.5	3.2	0.4
10	0.3	0.9	--	0.9	1.5	0.9	0.6	0.9	0.8	1.3	2.6	3.0	3.5	3.9	4.7	3.9	3.1	3.0	2.0	1.4	0.9	0.8	0.9	0.6	1.8	4.7	0.3
11	3.0	2.0	3.6	3.5	1.7	4.5	4.3	3.7	2.4	1.6	1.6	1.9	2.4	3.2	2.6	2.8	2.9	3.0	1.3	0.7	1.4	0.6	1.2	0.4	2.4	4.5	0.4
12	1.3	1.2	1.6	1.4	2.3	2.8	1.1	1.5	3.2	7.0	9.8	7.7	4.7	4.3	2.9	2.8	2.9	2.9	1.3	1.6	1.5	2.6	4.6	1.7	3.1	9.8	1.1
13	1.2	1.4	1.8	1.9	1.8	2.0	3.7	3.7	2.4	3.7	5.4	4.4	2.3	1.8	2.0	1.9	1.6	1.9	2.4	1.4	2.6	3.4	2.7	4.8	2.6	5.4	1.2
14	4.7	6.3	2.5	3.6	2.3	2.4	2.2	1.4	2.1	5.9	6.2	5.2	3.1	3.2	4.5	3.5	2.5	2.1	2.1	1.6	0.8	2.5	1.4	1.0	3.0	6.3	0.8
15	1.0	0.9	0.5	0.7	2.2	6.1	4.5	1.5	5.4	1.8	1.8	1.8	2.4	4.1	3.8	4.0	3.5	2.1	0.8	0.3	0.3	0.4	0.2	0.9	2.1	6.1	0.2
16	0.4	1.2	1.6	0.7	1.0	2.4	2.5	0.8	2.5	2.3	1.9	3.2	2.9	2.9	3.6	4.7	3.4	3.8	2.0	1.1	1.5	1.4	0.7	1.3	2.1	4.7	0.4
17	1.6	1.3	1.8	1.9	1.7	1.5	1.8	1.9	1.0	1.9	3.5	4.7	4.7	4.5	4.4	4.3	4.2	5.0	2.0	1.1	1.3	0.8	1.3	1.6	2.5	5.0	0.8
18	1.3	1.8	1.4	0.9	1.1	1.9	2.7	3.0	2.7	2.0	3.1	2.4	2.6	3.7	4.9	3.9	3.9	3.6	1.3	1.2	1.0	1.0	0.9	0.4	2.2	4.9	0.4
19	0.4	0.5	1.3	0.7	1.2	0.8	0.8	2.0	0.6	1.1	2.3	2.2	2.7	2.6	3.3	3.2	3.3	3.8	1.5	0.8	1.3	0.6	0.7	0.7	1.6	3.8	0.4
20	1.4	0.5	2.8	1.6	4.9	4.1	4.1	2.9	3.0	3.0	2.2	3.7	3.5	2.9	3.7	3.5	3.5	2.4	1.4	0.9	0.2	0.5	0.5	0.8	2.4	4.9	0.2
21	1.5	1.1	0.7	1.1	1.4	1.0	0.9	0.9	0.8	0.8	1.4	1.8	3.0	4.1	4.4	4.1	3.6	3.7	1.6	0.8	0.8	0.8	1.3	1.6	1.8	4.4	0.7
22	0.9	0.6	1.5	1.2	1.2	1.8	2.5	3.3	1.5	2.1	3.0	3.6	3.6	4.4	4.6	5.6	5.8	5.4	3.4	0.9	1.0	1.0	0.8	0.6	2.5	5.8	0.6
23	0.8	0.8	1.1	0.8	1.5	2.0	1.5	1.2	1.3	1.6	2.2	3.5	6.6	6.6	7.1	6.2	6.8	5.9	3.5	0.9	0.4	0.9	1.7	0.6	2.7	7.1	0.4
24	0.5	0.8	1.5	0.4	2.0	1.9	1.5	1.5	1.3	1.5	1.4	2.3	3.2	4.1	4.5	5.0	5.0	5.7	3.3	0.5	0.8	1.4	1.4	0.7	2.2	5.7	0.4
25	0.3	0.6	3.0	3.5	3.1	6.1	6.8	6.8	6.1	3.6	2.0	1.6	2.8	2.8	3.0	2.5	3.3	3.8	2.4	0.9	0.8	0.6	1.3	1.2	2.9	6.8	0.3
26	4.0	5.2	4.8	2.0	1.9	2.1	3.9	2.9	3.1	3.4	4.1	3.5	1.8	1.7	1.8	3.2	3.8	3.3	2.1	0.9	0.7	2.1	1.6	1.7	2.7	5.2	0.7
27	2.1	1.0	1.5	2.0	3.0	4.5	4.0	4.6	3.6	2.4	4.4	3.6	4.9	4.2	4.9	4.5	4.6	3.6	2.4	0.6	1.0	0.5	0.6	0.5	2.9	4.9	0.5
28	0.4	1.7	2.0	2.6	4.0	3.4	3.3	2.8	2.3	1.4	3.3	3.0	3.0	4.5	4.4	4.0	3.6	2.2	1.3	1.3	1.6	0.8	1.1	0.3	2.4	4.5	0.3
29	0.1	1.1	0.5	1.4	0.7	1.8	2.7	2.2	1.5	1.0	1.4	2.4	2.5	2.6	3.3	3.3	3.6	3.2	2.2	0.7	0.7	1.9	0.7	0.6	1.8	3.6	0.1
30	1.0	0.7	1.2	0.7	1.2	1.1	2.4	1.6	1.8	1.6	1.1	1.4	2.7	3.4	3.7	3.3	3.0	1.2	2.0	1.8	0.7	0.3	0.3	0.3	1.6	3.7	0.3
31	0.3	0.6	0.4	0.8	0.3	0.2	1.7	0.9	0.7	1.1	1.7	2.3	3.0	3.8	4.0	3.8	4.4	3.7	1.8	0.7	1.1	0.8	1.4	1.5	1.7	4.4	0.2
Avg	1.4	1.6	1.7	1.9	1.9	2.4	2.5	2.3	2.4	2.7	3.2	3.2	3.3	3.7	3.8	3.8	3.6	3.1	1.9	1.1	1.0	1.2	1.4	1.3	2.3	--	--
Max	4.7	6.3	4.8	8.9	5.5	6.1	6.8	6.8	9.5	10.0	9.8	7.7	6.6	6.6	7.1	7.4	6.8	5.9	3.5	2.3	2.8	3.4	4.6	5.7	--	10.0	--
Min	0.1	0.5	0.4	0.4	0.3	0.2	0.6	0.7	0.6	0.8	1.1	1.4	1.8	1.7	1.7	1.8	1.3	0.7	0.7	0.3	0.2	0.3	0.2	0.3	--	--	0.1

-- Indicates Invalid Data

SAROAD for Resolution, West_Plant
"Component, Channel: Table100, WD_10m"
Month: Jan 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	41	34	52	59	66	68	48	68	122	73	76	38	88	68	327	26	82	78	65	330	49	44	56	54	330	12
2	38	28	49	60	62	56	47	48	50	48	51	50	51	46	51	51	53	51	52	55	62	62	59	61	52	62	28
3	59	59	59	42	47	52	53	51	49	49	48	48	48	49	47	49	50	50	50	53	52	50	53	55	51	59	42
4	54	48	51	52	53	52	46	40	53	58	55	52	46	37	63	93	82	77	75	70	66	84	71	56	60	93	37
5	35	73	32	274	54	44	49	357	35	23	102	94	93	92	89	166	213	298	79	57	76	89	42	43	60	357	23
6	83	100	187	200	286	292	298	10	36	57	64	57	83	75	59	66	74	71	74	44	192	67	67	358	61	358	10
7	65	48	64	95	65	54	36	9	321	247	248	241	240	253	272	246	256	265	284	54	300	75	171	45	328	321	9
8	194	238	41	46	182	352	234	183	93	210	1	2	354	280	284	259	228	279	13	329	343	349	20	19	319	354	1
9	65	34	187	1	261	266	323	291	294	111	107	149	195	357	106	104	85	39	75	1	304	163	51	144	64	357	1
10	53	79	110	79	68	67	61	61	58	63	115	158	166	157	161	190	218	193	209	218	243	217	223	226	142	243	53
11	124	201	205	247	246	233	262	270	290	185	238	211	229	234	239	245	246	238	325	353	296	348	217	36	247	353	36
12	286	357	358	52	49	38	334	37	243	119	240	232	237	238	245	246	247	253	285	56	37	40	34	8	325	358	8
13	43	45	56	64	66	61	64	60	56	61	66	193	179	149	240	240	233	257	278	19	41	320	40	35	52	320	19
14	66	53	51	48	43	55	56	63	--	--	--	189	125	--	239	220	243	257	294	208	17	150	209	67	86	294	17
15	45	356	348	31	63	197	200	220	68	61	360	42	347	345	26	102	33	99	74	44	15	28	42	38	38	360	15
16	354	275	219	39	59	75	68	31	301	314	197	55	74	70	9	42	55	41	34	244	303	315	347	322	13	354	9
17	10	32	3	23	16	39	41	41	40	49	49	26	7	47	48	45	43	51	37	44	45	45	39	36	36	51	3
18	44	45	18	39	51	53	53	62	66	62	61	86	94	40	74	77	113	81	72	70	72	72	62	53	63	113	18
19	58	48	43	62	39	7	52	54	300	236	287	115	120	131	123	126	94	57	74	39	301	0	294	314	49	314	0
20	84	64	67	56	60	64	38	48	45	305	200	68	96	93	87	66	75	22	343	56	60	12	6	329	51	343	6
21	337	332	32	357	323	287	278	279	305	38	54	13	340	45	51	57	65	71	64	264	357	148	286	329	359	357	13
22	53	52	8	24	44	27	51	54	65	295	155	115	84	77	317	251	250	278	22	38	5	47	80	11	36	317	5
23	50	62	49	68	67	33	284	54	35	72	198	49	81	70	73	69	46	41	70	69	68	111	152	69	65	284	33
24	73	73	78	73	67	65	64	45	326	278	68	104	99	183	200	232	77	75	75	59	71	76	77	72	76	326	45
25	70	63	91	66	71	65	70	60	121	248	193	150	63	78	113	110	50	56	68	66	30	42	42	42	74	248	30
26	66	66	85	65	102	42	74	166	123	122	166	149	186	188	194	206	200	242	256	210	158	214	216	279	161	279	42
27	154	167	279	289	227	226	170	165	103	134	156	188	212	202	239	226	189	200	155	178	257	221	225	231	200	289	103
28	193	190	200	196	187	194	214	221	218	205	16	253	236	201	224	226	227	230	247	225	275	195	71	194	215	275	16
29	217	105	254	257	284	351	286	7	94	192	228	245	229	241	221	239	230	239	241	265	328	0	322	355	262	355	0
30	314	289	319	281	346	303	326	16	25	245	228	237	266	234	248	233	268	254	323	359	333	5	352	345	301	359	5
31	296	35	40	52	309	311	48	51	342	274	207	120	66	72	54	46	57	139	68	28	10	317	315	279	22	342	10
Avg	51	50	45	43	45	33	34	41	36	80	115	108	97	95	94	156	103	41	39	40	6	48	37	22	49	--	--
Max	354	357	358	357	346	352	334	357	342	314	360	253	354	357	317	327	268	298	343	359	357	349	352	358	--	360	--
Min	10	28	3	1	16	7	36	7	25	23	1	2	7	37	9	42	26	22	13	1	5	0	6	8	--	--	0

-- Indicates Invalid Data

SAROAD for Resolution, West_Plant
"Component, Channel: Table100, WD_10m"
Month: Feb 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	333	359	295	316	314	306	323	346	36	60	93	109	78	145	232	252	257	280	320	6	333	275	281	20	328	359	6
2	353	151	311	21	45	308	309	15	257	276	308	60	94	115	49	125	100	83	63	48	51	74	330	24	35	353	15
3	350	320	57	55	24	42	243	203	84	81	61	63	244	192	279	297	271	294	322	103	19	72	49	327	10	350	19
4	184	247	334	296	274	288	356	280	281	233	134	158	196	242	248	263	244	255	303	310	349	199	284	273	264	356	134
5	291	289	268	32	308	15	25	49	40	110	166	209	220	258	259	259	246	265	308	57	354	39	55	35	326	354	15
6	39	6	6	1	--	334	37	208	291	78	180	182	204	277	259	238	239	255	296	319	316	335	16	301	304	335	1
7	289	303	337	355	334	33	47	53	48	189	152	151	108	242	252	252	262	243	310	5	31	9	41	61	349	355	5
8	60	70	49	143	119	196	235	272	95	151	192	203	200	206	204	201	217	247	247	102	208	129	135	180	176	272	49
9	124	150	185	244	276	82	137	163	224	234	225	223	234	240	245	240	238	233	248	265	50	38	55	59	214	276	38
10	55	57	34	7	34	44	49	86	78	129	199	139	187	208	231	252	242	258	290	23	292	268	359	40	25	359	7
11	50	69	65	68	63	65	209	255	254	250	284	251	197	180	168	176	87	217	215	240	260	48	357	49	191	357	48
12	243	322	148	295	336	193	346	65	76	200	186	137	144	284	307	249	245	249	332	288	339	59	46	59	291	346	46
13	39	283	36	27	4	300	288	270	282	217	315	81	193	258	253	248	246	243	208	17	33	29	59	340	308	340	4
14	338	48	319	313	22	7	300	355	95	135	146	184	266	260	254	251	256	256	301	75	324	14	22	30	327	355	7
15	33	26	23	37	45	56	58	69	177	54	71	101	81	67	312	11	7	358	359	13	8	21	17	40	36	359	7
16	76	102	12	240	130	278	294	9	49	44	42	37	58	131	32	36	58	97	9	294	319	270	325	217	25	325	9
17	194	42	352	65	149	113	73	72	67	130	141	162	195	228	224	242	248	257	267	354	36	6	29	294	114	354	6
18	332	343	19	352	358	16	56	58	62	100	103	201	228	157	213	150	240	260	341	52	66	68	63	60	47	358	16
19	60	62	64	98	1	322	354	113	126	139	184	177	178	184	206	218	228	221	231	162	337	309	236	214	182	354	1
20	154	165	187	184	143	147	147	158	160	147	106	265	93	149	118	191	240	184	98	313	36	203	67	284	157	313	36
21	292	315	61	95	244	30	86	80	59	77	59	147	156	73	203	195	182	261	117	72	70	60	110	357	88	357	30
22	354	293	8	84	35	359	220	128	82	150	222	251	260	225	239	240	242	238	253	318	5	33	23	355	295	359	5
23	254	42	40	36	298	59	30	76	90	146	183	193	196	202	232	229	245	245	255	326	354	307	289	346	281	354	30
24	332	19	326	210	321	305	62	252	229	224	308	297	285	278	262	261	295	296	353	7	3	6	313	334	307	353	3
25	344	16	355	29	266	309	293	325	76	193	211	257	224	245	230	256	255	249	283	284	11	351	266	32	291	355	11
26	320	336	309	32	41	7	358	55	134	180	201	261	250	239	234	252	238	242	259	349	344	58	69	46	313	358	7
27	29	30	38	29	50	49	47	48	50	53	70	50	48	97	106	33	275	287	312	321	33	42	36	32	36	321	29
28	63	49	58	158	213	68	37	58	89	137	92	45	68	348	4	356	346	330	352	31	44	38	2	8	40	356	2
Avg	3	13	12	27	1	11	10	54	83	144	154	170	187	213	241	242	249	256	298	357	4	23	18	10	344	--	--
Max	354	359	355	355	358	359	358	355	291	276	315	297	285	348	312	356	346	358	359	354	354	351	359	357	--	359	--
Min	29	6	6	1	1	7	25	9	36	44	42	37	48	67	4	11	7	83	9	5	3	6	2	8	--	--	1

-- Indicates Invalid Data

SAROAD for Resolution, West_Plant
"Component, Channel: Table100, WD_10m"
Month: Mar 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	337	39	347	285	192	321	141	62	262	279	176	302	327	327	37	336	309	239	280	4	332	323	41	37	327	347	4
2	269	237	54	57	28	252	323	29	54	46	53	46	72	202	237	198	217	246	305	15	19	28	4	32	8	323	4
3	1	19	6	19	77	32	32	22	206	153	120	171	168	240	213	190	246	259	25	297	18	326	342	321	351	342	1
4	328	26	52	51	312	29	346	348	122	261	234	237	230	245	254	247	242	239	260	314	303	17	37	35	307	348	17
5	237	41	38	62	27	66	92	287	275	137	51	68	136	119	134	213	261	297	44	98	19	61	25	325	55	325	19
6	37	39	9	49	351	37	44	41	158	123	186	140	190	176	203	220	249	250	294	339	271	351	10	338	0	351	9
7	37	57	62	63	64	70	53	59	97	162	157	136	161	198	202	221	252	249	279	100	77	80	103	105	106	279	37
8	169	90	61	98	357	1	248	304	302	348	353	105	148	179	192	197	263	236	312	48	169	135	157	92	141	357	1
9	91	160	187	186	163	187	144	138	150	203	214	205	241	251	229	252	287	289	351	58	126	230	305	52	198	351	52
10	266	26	--	326	46	36	29	38	173	153	262	349	2	340	327	4	9	4	336	343	297	14	292	345	350	349	2
11	39	23	29	16	350	60	38	6	68	262	132	219	223	246	242	273	268	257	282	331	31	353	31	319	338	353	6
12	351	10	26	3	26	32	318	289	234	321	58	54	19	258	280	260	250	260	301	17	22	56	66	330	345	351	3
13	282	304	342	353	311	311	21	21	337	30	35	42	36	112	87	162	62	53	31	33	52	60	11	62	25	353	11
14	69	64	337	35	343	324	309	323	303	40	39	35	91	102	171	187	254	249	321	45	339	28	20	340	6	343	20
15	307	343	304	326	24	51	64	318	77	180	195	188	200	260	252	248	245	252	270	354	2	279	305	8	296	354	2
16	336	34	46	311	30	39	26	253	70	80	147	177	172	201	238	252	264	264	277	303	8	13	305	13	332	336	8
17	52	38	62	59	44	50	52	74	111	191	221	241	230	244	246	242	235	250	252	32	31	6	58	32	32	252	6
18	65	39	42	52	47	56	47	51	77	159	163	168	225	240	237	249	248	262	285	331	248	295	11	307	334	331	11
19	299	303	2	6	339	322	23	56	159	199	158	201	189	249	224	220	228	246	255	301	344	234	323	68	273	344	2
20	9	292	37	60	58	68	89	106	150	129	159	51	173	199	240	233	233	235	287	311	45	315	354	41	57	354	9
21	40	46	334	279	312	341	28	39	148	67	189	207	223	247	234	226	216	223	205	88	9	37	43	40	334	341	9
22	61	34	40	29	35	42	60	70	153	204	205	214	232	227	236	240	248	245	253	304	29	318	333	285	294	333	29
23	36	51	27	36	43	41	48	76	115	219	245	251	254	251	268	255	250	254	258	333	1	34	40	23	345	333	1
24	337	11	31	8	26	30	32	349	116	185	220	214	248	239	251	241	249	248	253	313	15	30	27	304	316	349	8
25	314	351	42	44	66	62	54	49	44	44	9	106	166	191	255	256	235	253	273	327	0	341	29	28	11	351	0
26	47	62	70	144	245	226	43	47	27	60	62	56	29	220	164	227	231	234	286	353	312	32	36	52	38	353	27
27	45	47	56	46	48	51	46	62	58	127	155	165	185	202	219	226	218	237	251	308	25	343	2	336	52	343	2
28	30	67	54	27	47	45	50	44	71	177	170	156	205	224	245	221	245	252	307	347	19	280	25	336	14	347	19
29	308	0	309	27	344	33	54	143	74	145	203	190	223	228	251	244	242	247	270	310	41	39	308	267	289	344	0
30	29	14	337	13	27	126	38	191	68	144	208	251	242	255	251	248	170	256	311	354	292	292	263	316	291	354	13
31	340	307	301	1	312	319	46	268	126	204	232	261	264	269	227	244	247	250	255	350	350	319	9	357	290	357	1
Avg	4	24	23	27	19	30	40	32	106	155	173	176	204	227	232	235	247	254	288	351	5	358	8	5	343	--	--
Max	351	351	347	353	357	341	346	349	337	348	353	349	327	340	327	336	309	297	351	354	350	353	354	357	--	357	--
Min	1	0	2	1	24	1	21	6	27	30	9	35	2	102	37	4	9	4	25	4	0	6	2	8	--	--	0

-- Indicates Invalid Data

SAROAD for Resolution, West_Plant
"Component, Channel: Table100, DeltaTemp_C"
Month: Jan 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	0.68	0.56	0.42	0.42	0.34	0.38	0.31	0.33	0.00	-0.47	-0.77	-1.08	-0.90	-0.89	-0.93	-0.59	-0.33	0.04	0.32	0.30	0.30	0.23	0.28	0.29	-0.03	0.68	-1.08
2	0.26	0.26	0.29	0.24	0.21	0.23	0.25	0.24	0.04	-0.36	-0.61	-0.82	-0.83	-0.77	-0.70	-0.46	-0.16	0.08	0.16	0.21	0.24	0.24	0.23	0.23	-0.05	0.29	-0.83
3	0.19	0.19	0.17	0.14	0.15	0.17	0.17	0.14	-0.05	-0.39	-0.61	-0.82	-0.89	-0.79	-0.63	-0.43	-0.18	0.02	0.09	0.07	0.04	0.05	0.08	0.07	-0.13	0.19	-0.89
4	0.09	0.10	0.08	0.10	0.10	0.09	0.15	0.18	-0.10	-0.53	-0.93	-1.29	-1.14	-0.93	-0.92	-0.82	-0.42	-0.02	0.12	0.19	0.22	0.17	0.21	0.21	-0.21	0.22	-1.29
5	0.23	0.24	0.38	1.09	0.38	0.46	0.44	0.44	0.09	-0.56	-0.81	-0.88	-1.06	-1.00	-0.82	-0.93	-0.56	0.14	0.44	0.37	0.35	0.27	0.39	0.28	-0.03	1.09	-1.06
6	0.38	0.58	0.49	0.48	0.19	0.19	0.09	0.07	-0.01	-0.19	-0.32	-0.53	-0.59	-0.46	-0.52	-0.43	-0.18	0.02	0.10	0.12	0.14	0.16	0.09	0.30	0.01	0.58	-0.59
7	0.18	0.20	0.12	0.21	0.56	0.58	0.52	1.01	0.47	-0.21	-0.55	-0.61	-0.73	-0.57	-0.67	-0.60	-0.39	-0.12	0.23	0.39	0.56	0.33	0.39	0.37	0.07	1.01	-0.73
8	0.29	0.35	0.29	0.32	0.42	0.68	0.72	0.65	0.22	-0.50	-0.60	-0.91	-0.91	-0.68	-0.85	-0.46	-0.55	-0.03	0.38	0.91	0.79	0.62	0.96	0.53	0.11	0.96	-0.91
9	0.35	0.31	0.42	0.43	0.52	0.68	0.55	0.86	0.64	-0.28	-0.52	-0.79	-0.78	-0.80	-0.85	-0.72	-0.28	0.22	0.66	0.28	0.22	0.17	0.22	0.26	0.07	0.86	-0.85
10	0.18	0.16	0.12	0.19	0.21	0.29	0.30	0.38	-0.01	-0.14	-0.73	-0.97	-1.12	-0.85	-0.40	-0.11	0.07	0.10	0.18	0.26	0.20	-0.03	-0.10	-0.24	-0.09	0.38	-1.12
11	-0.33	-0.14	-0.12	-0.08	-0.09	-0.10	-0.10	0.00	-0.11	-0.73	-0.60	-0.92	-1.14	-0.83	-0.75	-0.59	-0.43	-0.09	0.16	0.56	0.69	0.71	0.52	1.38	-0.13	1.38	-1.14
12	0.95	1.23	1.38	1.10	0.83	0.51	0.42	0.89	0.13	-0.60	-0.55	-0.96	-0.82	-0.76	-0.70	-0.60	-0.39	-0.08	0.20	0.80	1.25	1.31	0.84	0.76	0.30	1.38	-0.96
13	1.02	0.92	0.46	0.35	0.31	0.32	0.29	0.22	-0.13	-0.50	-0.75	-1.27	-1.16	-1.26	-0.88	-0.71	-0.62	-0.13	0.13	0.50	1.21	1.08	0.71	0.44	0.02	1.21	-1.27
14	0.48	0.59	1.19	1.35	1.52	0.87	0.54	0.60	--	--	--	-1.36	-1.40	--	-0.84	-0.90	-0.44	-0.17	0.00	0.16	0.58	0.48	0.52	0.48	0.21	1.52	-1.40
15	0.44	0.17	0.10	0.14	0.23	0.32	0.38	0.40	-0.12	-0.59	-0.74	-1.13	-0.98	-0.93	-0.89	-0.80	-0.43	-0.08	0.12	0.31	0.49	0.27	0.19	0.19	-0.12	0.49	-1.13
16	0.13	0.15	0.37	0.65	0.25	0.19	0.32	0.47	0.23	-0.30	-0.59	-0.86	-1.09	-0.85	-0.70	-0.61	-0.32	0.14	0.42	0.94	0.80	0.64	0.34	0.41	0.05	0.94	-1.09
17	0.41	0.32	0.32	0.36	0.27	0.25	0.23	0.20	0.02	-0.42	-0.67	-0.75	-0.83	-0.96	-0.77	-0.54	-0.20	0.02	0.14	0.13	0.19	0.18	0.17	0.15	-0.08	0.41	-0.96
18	0.20	0.21	0.29	0.23	0.27	0.35	0.33	0.30	0.03	-0.39	-0.60	-0.78	-0.83	-0.90	-0.85	-0.64	-0.38	0.06	0.29	0.37	0.41	0.61	0.28	0.33	-0.03	0.61	-0.90
19	0.60	0.62	0.66	0.59	0.40	0.53	0.36	0.37	0.54	-0.11	-0.43	-1.07	-1.11	-1.04	-0.92	-0.73	-0.34	0.09	0.47	0.62	0.98	0.77	0.73	0.65	0.13	0.98	-1.11
20	0.34	0.34	0.43	0.49	0.47	0.29	0.27	0.23	0.02	-0.26	-0.49	-0.74	-0.98	-0.97	-0.99	-0.68	-0.27	0.15	0.62	0.57	0.48	0.58	0.71	0.58	0.05	0.71	-0.99
21	0.51	0.80	0.46	0.58	0.48	0.67	0.55	0.38	0.04	-0.42	-0.66	-0.80	-0.72	-0.99	-0.87	-0.57	-0.24	0.03	0.24	0.70	0.63	0.64	0.73	0.77	0.12	0.80	-0.99
22	0.66	0.61	0.65	0.65	0.56	0.93	0.58	0.43	0.07	-0.21	-0.70	-1.13	-1.08	-1.04	-0.68	-0.62	-0.35	0.17	1.51	1.41	1.35	0.80	0.86	0.99	0.27	1.51	-1.13
23	0.75	0.41	0.50	0.40	0.48	0.42	0.36	0.26	0.09	-0.43	-0.65	-0.66	-0.79	-0.43	-0.63	-0.61	-0.32	0.05	0.28	0.34	0.39	0.13	0.11	0.31	0.03	0.75	-0.79
24	0.41	0.34	0.31	0.32	0.26	0.25	0.22	0.23	0.18	-0.10	-0.28	-0.20	-0.35	-0.44	-0.59	-0.26	-0.28	-0.17	-0.07	-0.02	-0.03	0.00	-0.02	0.05	-0.01	0.41	-0.59
25	0.07	0.04	0.04	0.12	0.12	0.16	0.11	0.11	-0.05	-0.19	-0.46	-0.66	-0.77	-0.99	-0.73	-0.63	-0.29	0.04	0.07	0.09	0.09	0.03	0.07	0.05	-0.15	0.16	-0.99
26	0.27	0.27	0.00	0.30	0.15	0.07	0.11	0.06	0.13	0.02	-0.15	-0.13	-0.29	-0.46	-0.29	-0.24	-0.17	-0.09	-0.07	-0.09	-0.07	-0.04	-0.05	-0.10	-0.04	0.30	-0.46
27	-0.15	-0.18	-0.12	-0.10	-0.12	-0.12	-0.11	-0.14	-0.20	-0.34	-1.25	-1.08	-0.77	-0.76	-0.40	-0.36	-0.44	-0.12	-0.03	0.01	-0.03	-0.07	-0.04	-0.02	-0.29	0.01	-1.25
28	0.01	-0.04	0.00	-0.05	-0.07	-0.02	-0.07	-0.24	-0.25	-0.29	-0.38	-0.53	-0.41	-0.75	-0.77	-0.69	-0.48	-0.16	-0.09	-0.17	-0.11	-0.23	-0.12	0.03	-0.25	0.03	-0.77
29	-0.08	0.07	0.24	0.25	0.23	0.21	0.02	0.22	-0.20	-0.70	-0.73	-0.60	-0.91	-0.75	-0.91	-0.51	-0.42	-0.18	-0.02	0.10	0.28	0.89	1.19	1.30	-0.04	1.30	-0.91
30	1.24	0.95	1.03	1.16	1.64	1.42	1.19	0.83	0.21	-0.49	-0.47	-0.55	-0.73	-0.72	-0.51	-0.75	-0.42	-0.09	0.33	1.24	0.95	1.02	1.03	0.90	0.43	1.64	-0.75
31	1.11	1.32	0.80	1.00	0.98	0.97	0.53	0.56	0.22	-0.13	-0.51	-0.96	-0.93	-0.82	-0.62	-0.38	-0.32	0.34	0.65	1.53	1.04	0.81	0.78	1.65	0.40	1.65	-0.96
Avg	0.38	0.39	0.38	0.43	0.40	0.40	0.32	0.34	0.07	-0.36	-0.60	-0.83	-0.87	-0.81	-0.73	-0.58	-0.34	0.01	0.26	0.43	0.47	0.41	0.40	0.44	0.02	--	--
Max	1.24	1.32	1.38	1.35	1.64	1.42	1.19	1.01	0.64	0.02	-0.15	-0.13	-0.29	-0.43	-0.29	-0.11	0.07	0.34	1.51	1.53	1.35	1.31	1.19	1.65	--	1.65	--
Min	-0.33	-0.18	-0.12	-0.10	-0.12	-0.12	-0.11	-0.24	-0.25	-0.73	-1.25	-1.36	-1.40	-1.26	-0.99	-0.93	-0.62	-0.18	-0.09	-0.17	-0.11	-0.23	-0.12	-0.24	--	--	-1.40

-- Indicates Invalid Data

SAROAD for Resolution, West_Plant
"Component, Channel: Table100, DeltaTemp_C"
Month: Feb 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	1.94	1.81	1.30	1.35	1.34	1.41	1.21	1.32	0.39	-0.32	-0.73	-1.04	-1.18	-1.08	-0.68	-0.38	-0.31	-0.10	0.66	1.49	1.59	1.00	1.67	2.28	0.62	2.28	-1.18
2	1.84	1.15	1.71	1.50	0.91	1.50	1.61	0.91	0.40	-0.04	-0.47	-0.70	-0.86	-0.94	-0.82	-0.70	-0.42	0.10	0.36	0.68	1.56	1.00	1.55	0.33	0.51	1.84	-0.94
3	0.33	0.31	0.25	0.25	0.26	0.13	0.11	0.13	0.14	-0.02	-0.01	-0.32	-0.53	-0.87	-0.47	-0.40	-0.28	-0.15	0.08	-0.04	0.08	-0.03	-0.05	0.24	-0.03	0.33	-0.87
4	0.27	0.34	0.86	0.61	0.37	0.58	0.59	0.41	-0.08	-0.39	-0.94	-1.05	-1.40	-0.60	-0.56	-0.57	-0.43	-0.23	0.05	0.76	0.78	0.63	0.73	0.90	0.07	0.90	-1.40
5	1.20	0.98	1.10	0.98	1.16	1.14	0.90	0.87	0.28	-0.75	-1.03	-0.77	-0.88	-0.62	-0.62	-0.54	-0.41	-0.21	0.33	0.88	0.66	0.43	1.06	1.72	0.33	1.72	-1.03
6	0.60	0.79	1.91	1.84	1.45	0.89	1.00	0.61	0.29	-0.42	-0.99	-1.53	-1.27	-0.52	-0.45	-0.79	-0.49	-0.18	0.03	0.41	1.09	1.13	1.24	1.21	0.33	1.91	-1.53
7	1.24	1.16	1.62	1.39	1.49	1.50	0.66	0.37	-0.08	-0.71	-1.07	-1.41	-1.33	-0.64	-0.60	-0.57	-0.50	-0.18	0.21	1.03	1.12	0.66	0.34	0.31	0.25	1.62	-1.41
8	0.34	0.33	0.61	0.43	0.26	0.37	0.59	0.67	0.36	-0.81	-1.15	-1.46	-1.60	-1.58	-1.65	-1.68	-1.02	-0.18	-0.04	0.01	0.02	-0.13	-0.05	-0.05	-0.31	0.67	-1.68
9	-0.21	-0.25	-0.19	-0.15	-0.21	-0.22	-0.25	-0.29	-0.25	-0.30	-0.64	-0.64	-0.42	-0.49	-0.35	-0.30	-0.23	-0.12	0.00	0.15	0.52	0.96	0.39	0.20	-0.14	0.96	-0.64
10	0.08	0.10	1.18	1.57	1.16	0.66	0.51	0.38	-0.29	-0.84	-1.17	-1.64	-1.52	-1.55	-0.85	-0.65	-0.61	-0.34	0.01	0.64	0.23	0.41	0.73	0.40	-0.06	1.57	-1.64
11	0.21	0.22	0.29	0.25	0.14	0.15	0.08	-0.02	-0.13	-0.20	-0.41	-0.40	-0.66	-0.60	-0.90	-0.67	-0.59	-0.26	-0.23	-0.11	0.00	0.18	0.43	0.26	-0.12	0.43	-0.90
12	0.38	0.21	0.05	-0.06	-0.07	-0.15	0.26	0.57	-0.30	-0.62	-0.95	-1.38	-1.25	-0.89	-0.86	-0.80	-0.64	-0.31	0.00	0.37	0.83	0.40	0.31	0.53	-0.18	0.83	-1.38
13	0.66	0.51	1.18	1.18	0.90	1.17	1.18	0.87	0.17	-0.44	-0.66	-1.23	-0.93	-0.66	-0.64	-0.64	-0.50	-0.31	0.15	0.87	1.60	1.11	0.89	1.03	0.31	1.60	-1.23
14	1.21	1.20	1.18	1.78	1.20	1.33	1.32	1.01	0.08	-0.81	-0.99	-1.27	-0.87	-0.70	-0.66	-0.55	-0.50	-0.23	0.26	0.66	0.49	0.34	0.19	0.17	0.24	1.78	-1.27
15	0.20	0.20	0.18	0.21	0.23	0.20	0.18	0.14	0.00	-0.41	-0.67	-1.00	-0.95	-1.07	-0.82	-0.72	-0.47	-0.15	0.13	0.20	0.19	0.20	0.21	0.23	-0.15	0.23	-1.07
16	0.27	0.39	0.48	0.59	0.36	0.38	0.37	0.39	-0.07	-0.52	-0.76	-0.95	-1.11	-1.03	-1.00	-0.88	-0.49	-0.18	0.11	0.67	0.40	0.43	0.46	0.61	-0.05	0.67	-1.11
17	0.81	0.19	0.12	0.20	0.16	0.17	0.14	0.22	-0.23	-0.96	-1.44	-1.87	-2.07	-1.10	-1.16	-0.87	-0.56	-0.24	0.21	0.48	1.23	1.00	2.04	0.65	-0.12	2.04	-2.07
18	1.26	1.89	1.28	1.13	1.41	1.49	0.65	0.46	-0.20	-0.99	-0.96	-1.45	-0.99	-1.35	-1.36	-1.16	-0.65	-0.17	0.14	0.33	0.32	0.34	0.33	0.35	0.09	1.89	-1.45
19	0.31	0.33	0.41	0.51	0.74	0.99	1.22	0.80	-0.03	-1.09	-1.63	-1.62	-2.06	-2.04	-1.53	-1.17	-0.70	-0.41	0.02	0.35	0.28	0.09	0.03	0.05	-0.26	1.22	-2.06
20	-0.15	-0.24	-0.24	-0.16	-0.14	-0.16	-0.13	-0.12	-0.24	-0.32	-0.27	-0.08	-0.03	0.11	-0.23	-0.56	-0.26	-0.28	0.00	0.04	0.06	-0.11	0.06	0.18	-0.14	0.18	-0.56
21	0.28	0.30	0.32	0.17	0.05	0.16	0.06	0.06	-0.14	-0.36	-0.67	-1.27	-1.08	-0.74	-0.96	-1.10	-0.78	-0.23	-0.14	0.03	0.09	0.20	0.43	0.82	-0.19	0.82	-1.27
22	0.66	0.53	0.65	0.94	1.05	1.15	0.83	0.68	-0.32	-0.86	-0.87	-0.73	-0.79	-1.19	-0.81	-0.76	-0.57	-0.36	-0.02	0.36	1.14	0.77	0.99	0.72	0.13	1.15	-1.19
23	0.91	0.87	1.14	0.77	0.75	0.69	0.82	0.30	-0.37	-0.94	-0.98	-0.96	-1.09	-1.21	-0.98	-0.85	-0.68	-0.34	0.06	0.28	1.07	0.78	0.76	1.49	0.10	1.49	-1.21
24	1.50	1.23	1.44	0.42	0.40	0.11	0.03	0.09	-0.32	-0.69	-0.57	-0.60	-0.65	-0.79	-0.53	-0.56	-0.53	-0.30	0.07	0.39	0.34	0.34	0.91	0.71	0.10	1.50	-0.79
25	0.88	1.26	1.35	1.70	0.76	1.39	1.36	1.28	-0.29	-0.64	-0.91	-0.81	-1.06	-0.87	-1.18	-0.72	-0.61	-0.41	0.06	0.58	1.04	0.92	0.77	1.25	0.30	1.70	-1.18
26	1.59	1.41	1.47	1.40	1.48	1.30	1.99	1.18	-0.22	-0.61	-0.87	-0.61	-0.79	-0.90	-1.06	-0.69	-0.74	-0.32	0.05	0.63	0.68	0.31	0.22	0.25	0.30	1.99	-1.06
27	0.27	0.25	0.26	0.26	0.21	0.22	0.19	0.17	-0.35	-0.86	-1.07	-1.34	-1.35	-1.34	-1.36	-1.06	-0.76	-0.40	0.09	0.76	0.48	0.25	0.27	0.20	-0.25	0.76	-1.36
28	0.27	0.28	0.25	0.43	0.47	0.38	0.32	0.20	-0.32	-1.01	-1.02	-1.15	-1.35	-1.07	-1.11	-0.93	-0.71	-0.30	0.14	0.66	0.48	0.51	0.60	0.91	-0.13	0.91	-1.35
Avg	0.68	0.63	0.79	0.77	0.65	0.68	0.64	0.49	-0.08	-0.61	-0.85	-1.05	-1.07	-0.94	-0.86	-0.76	-0.55	-0.24	0.10	0.48	0.66	0.50	0.63	0.64	0.06	--	--
Max	1.94	1.89	1.91	1.84	1.49	1.50	1.99	1.32	0.40	-0.02	-0.01	-0.08	-0.03	0.11	-0.23	-0.30	-0.23	0.10	0.66	1.49	1.60	1.13	2.04	2.28	--	2.28	--
Min	-0.21	-0.25	-0.24	-0.16	-0.21	-0.22	-0.25	-0.29	-0.37	-1.09	-1.63	-1.87	-2.07	-2.04	-1.65	-1.68	-1.02	-0.41	-0.23	-0.11	0.00	-0.13	-0.05	-0.05	--	--	-2.07

SAROAD for Resolution, West_Plant
"Component, Channel: Table100, DeltaTemp_C"
Month: Mar 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	0.70	0.78	0.92	0.88	0.59	1.13	1.02	0.66	0.02	-0.39	-1.29	-1.00	-1.12	-0.99	-1.11	-0.87	-0.68	-0.32	0.22	1.26	1.79	1.07	0.49	0.39	0.17	1.79	-1.29
2	0.70	0.69	0.47	0.33	0.42	0.58	0.76	0.63	-0.25	-0.72	-0.96	-1.16	-1.41	-1.14	-0.78	-1.01	-0.90	-0.40	0.37	1.09	1.81	1.51	1.52	1.41	0.15	1.81	-1.41
3	2.02	1.84	2.08	1.82	1.82	1.55	1.23	0.92	-0.17	-0.99	-1.17	-1.26	-1.52	-0.80	-0.62	-0.70	-0.27	-0.13	0.11	0.30	0.54	0.60	0.98	0.78	0.37	2.08	-1.52
4	0.87	1.19	1.07	1.56	1.11	1.15	0.99	0.60	-0.58	-0.52	-0.81	-0.91	-1.22	-1.02	-0.72	-0.76	-0.68	-0.62	-0.05	0.16	0.58	1.17	0.98	0.43	0.17	1.56	-1.22
5	0.93	0.57	0.94	0.52	0.51	0.36	0.46	0.36	-0.05	-0.55	-0.89	-1.07	-1.65	-1.51	-1.26	-0.81	-0.45	-0.27	0.15	0.21	0.84	1.55	1.68	1.09	0.07	1.68	-1.65
6	1.09	1.02	1.04	1.49	1.38	1.55	1.42	0.99	-0.65	-1.00	-1.59	-1.69	-1.56	-1.81	-1.56	-1.39	-0.68	-0.33	-0.02	0.66	0.82	1.25	1.16	0.74	0.10	1.55	-1.81
7	1.73	1.75	1.20	1.00	0.72	0.88	1.10	1.17	-0.73	-1.30	-1.68	-1.67	-1.75	-1.78	-1.79	-1.28	-0.68	-0.40	0.11	0.34	0.51	0.56	0.34	0.05	-0.07	1.75	-1.79
8	0.02	0.28	0.45	0.14	0.09	-0.02	-0.11	-0.18	-0.22	-0.24	-0.28	-0.59	-0.50	-0.76	-0.55	-0.36	-0.27	-0.30	-0.20	-0.17	-0.12	-0.16	-0.13	-0.10	-0.18	0.45	-0.76
9	-0.11	-0.09	-0.11	-0.15	-0.16	-0.19	-0.27	-0.28	-0.30	-0.29	-0.33	-0.36	-0.35	-0.33	-0.33	-0.27	-0.17	-0.16	-0.14	0.14	-0.08	0.04	0.16	0.86	-0.14	0.86	-0.36
10	0.47	0.49	--	0.79	0.58	0.71	0.82	0.55	-0.43	-0.88	-0.74	-0.96	-1.13	-1.07	-0.78	-0.85	-0.60	-0.27	0.21	1.01	0.80	1.16	0.83	1.22	0.08	1.22	-1.13
11	1.21	0.74	0.81	0.67	1.09	0.64	0.64	0.37	-0.58	-0.46	-0.87	-0.89	-1.07	-0.70	-0.95	-0.84	-0.64	-0.35	0.10	1.22	1.91	1.40	1.47	1.26	0.26	1.91	-1.07
12	1.94	1.93	1.41	2.03	1.82	0.97	1.66	1.06	-0.03	-0.41	-0.91	-1.08	-1.19	-1.09	-0.85	-0.64	-0.62	-0.33	0.29	1.73	2.02	1.25	0.94	1.14	0.54	2.03	-1.19
13	1.33	1.22	0.92	1.59	1.29	0.94	0.81	0.53	-0.22	-0.67	-0.98	-1.16	-1.18	-1.22	-1.20	-1.07	-0.85	-0.31	0.47	0.60	0.73	0.88	0.90	0.67	0.17	1.59	-1.22
14	0.61	0.50	0.59	0.60	0.78	0.77	0.85	0.52	-0.18	-0.71	-0.98	-1.15	-1.38	-1.52	-1.93	-1.49	-0.71	-0.49	0.19	1.15	1.65	2.02	1.45	2.15	0.14	2.15	-1.93
15	2.76	2.66	2.62	2.86	2.19	0.70	0.54	0.58	-0.34	-1.26	-1.28	-1.31	-1.57	-0.96	-0.87	-0.73	-0.46	-0.09	0.41	1.69	1.97	1.45	1.62	2.90	0.67	2.90	-1.57
16	1.98	2.47	2.39	2.11	2.56	0.98	0.91	0.71	-0.42	-0.67	-1.20	-1.94	-2.01	-1.38	-1.01	-0.83	-0.72	-0.39	0.07	0.60	0.93	0.62	1.19	2.67	0.40	2.67	-2.01
17	2.67	1.92	1.21	1.15	1.80	1.54	1.33	0.46	-0.72	-0.95	-1.15	-1.08	-1.38	-1.12	-1.04	-0.95	-0.89	-0.41	0.00	0.81	1.38	2.00	1.12	1.24	0.37	2.67	-1.38
18	1.62	1.98	2.41	2.52	2.00	0.94	0.58	0.35	-0.56	-1.27	-1.98	-1.87	-1.31	-1.23	-1.13	-0.93	-0.66	-0.46	0.02	0.51	0.39	0.86	1.32	1.54	0.24	2.52	-1.98
19	1.16	1.48	1.23	0.80	1.28	0.87	1.24	0.53	-0.46	-0.89	-1.54	-1.47	-1.76	-0.96	-1.21	-1.15	-1.07	-0.42	-0.06	0.29	0.40	0.50	1.03	1.25	0.04	1.48	-1.76
20	0.93	1.03	0.71	0.71	0.36	0.33	0.25	0.03	-0.23	-0.49	-0.76	-1.08	-1.70	-1.40	-0.77	-0.64	-0.66	-0.38	-0.04	0.20	0.81	0.85	1.00	1.33	0.02	1.33	-1.70
21	1.41	1.16	0.95	0.65	0.40	0.95	0.89	0.21	-0.73	-0.84	-1.29	-1.37	-1.21	-0.80	-1.13	-1.28	-1.13	-0.64	-0.27	-0.02	0.16	0.59	1.20	1.17	-0.04	1.41	-1.37
22	1.22	1.39	1.74	1.47	1.65	1.70	0.64	0.11	-0.94	-0.90	-1.44	-1.61	-1.39	-1.65	-1.24	-0.99	-0.70	-0.50	-0.05	0.24	1.03	0.78	0.99	0.93	0.10	1.74	-1.65
23	2.07	2.40	1.79	1.43	1.57	1.53	0.85	0.12	-1.06	-0.87	-0.85	-1.01	-1.00	-1.01	-1.06	-0.96	-0.73	-0.40	-0.04	0.58	1.30	1.62	2.14	2.22	0.44	2.40	-1.06
24	1.81	2.00	1.81	1.59	1.23	0.86	0.89	0.31	-0.78	-0.91	-0.94	-1.23	-1.26	-1.23	-1.17	-1.12	-0.87	-0.50	-0.11	0.24	1.38	1.44	2.26	1.49	0.30	2.26	-1.26
25	1.78	1.57	0.79	0.60	0.44	0.37	0.40	-0.03	-0.62	-1.06	-1.26	-1.33	-2.00	-1.73	-1.10	-0.93	-1.01	-0.48	-0.08	0.48	1.49	0.74	1.36	0.91	-0.03	1.78	-2.00
26	0.44	0.40	0.30	0.13	0.08	0.10	0.08	-0.03	-0.33	-0.72	-0.98	-1.23	-1.02	-1.02	-1.20	-0.95	-0.81	-0.47	0.06	0.66	1.34	1.81	2.19	1.99	0.03	2.19	-1.23
27	1.89	2.02	1.52	1.18	0.84	0.66	0.66	0.21	-0.58	-1.30	-1.79	-1.91	-1.94	-1.47	-1.32	-1.04	-0.76	-0.26	0.06	0.28	0.85	1.58	2.01	1.72	0.13	2.02	-1.94
28	1.46	1.11	1.29	2.10	0.64	0.44	0.40	0.05	-0.84	-1.09	-1.91	-1.90	-1.46	-1.42	-1.08	-1.29	-0.71	-0.34	0.12	0.57	0.68	0.68	1.42	1.52	0.02	2.10	-1.91
29	1.27	1.38	1.53	1.55	1.11	1.80	0.97	-0.02	-0.94	-0.96	-1.01	-1.55	-1.47	-1.40	-1.23	-1.10	-0.82	-0.36	-0.10	0.29	1.32	1.08	0.96	1.17	0.15	1.80	-1.55
30	1.49	1.64	1.09	1.37	1.27	0.59	0.63	0.11	-0.24	-0.71	-0.85	-0.84	-0.87	-0.89	-0.60	-0.66	-0.98	-0.45	-0.17	0.07	0.36	1.25	1.42	1.57	0.23	1.64	-0.98
31	1.70	1.79	1.72	1.83	2.01	1.92	1.47	0.35	-0.85	-0.97	-1.15	-1.15	-1.02	-0.96	-1.51	-1.20	-0.97	-0.55	-0.07	0.76	0.86	0.77	1.35	1.29	0.31	2.01	-1.51
Avg	1.33	1.33	1.23	1.20	1.08	0.88	0.78	0.38	-0.48	-0.81	-1.12	-1.25	-1.34	-1.17	-1.07	-0.94	-0.71	-0.38	0.05	0.58	0.98	1.06	1.20	1.26	0.17	--	--
Max	2.76	2.66	2.62	2.86	2.56	1.92	1.66	1.17	0.02	-0.24	-0.28	-0.36	-0.35	-0.33	-0.33	-0.27	-0.17	-0.09	0.47	1.73	2.02	2.02	2.26	2.90	--	2.90	--
Min	-0.11	-0.09	-0.11	-0.15	-0.16	-0.19	-0.27	-0.28	-1.06	-1.30	-1.98	-1.94	-2.01	-1.81	-1.93	-1.49	-1.13	-0.64	-0.27	-0.17	-0.12	-0.16	-0.13	-0.10	--	--	-2.01

-- Indicates Invalid Data

SAROAD for Resolution, West_Plant
"Component, Channel: Table100, Temp_2m_C"
Month: Jan 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	2.8	2.7	2.6	2.6	3.0	3.0	2.7	2.4	2.8	4.7	6.3	7.2	7.5	8.4	9.0	9.3	8.9	7.9	6.8	6.7	6.5	6.9	7.0	7.4	5.6	9.3	2.4
2	7.4	7.0	7.6	7.6	7.1	7.6	7.4	7.1	7.7	8.2	8.7	9.4	10.3	11.5	12.0	12.2	12.0	11.4	11.1	10.9	10.5	10.3	9.9	9.9	9.4	12.2	7.0
3	9.5	8.9	8.5	7.5	7.3	7.5	7.6	7.7	7.6	8.1	8.3	9.1	10.0	10.3	10.6	10.8	10.2	9.7	9.4	8.5	7.3	6.7	6.7	6.6	8.5	10.8	6.6
4	6.7	6.5	5.7	5.4	5.1	4.9	5.4	5.3	5.5	6.7	7.5	8.5	9.3	10.0	11.0	11.1	10.6	9.5	8.5	7.9	8.1	8.1	7.7	7.8	7.6	11.1	4.9
5	7.5	7.3	6.4	4.5	6.3	5.6	5.2	4.6	5.7	7.8	9.6	10.6	12.3	13.5	14.5	15.5	14.7	12.3	11.4	11.2	11.0	10.8	10.4	10.5	9.6	15.5	4.5
6	10.0	9.5	9.2	8.8	9.4	9.8	9.8	9.7	9.7	10.3	11.0	12.2	13.1	13.7	14.7	14.8	14.4	13.0	12.3	12.3	12.0	11.0	10.4	9.6	11.3	14.8	8.8
7	9.1	8.2	7.5	6.9	6.3	5.2	6.0	4.8	5.7	7.3	9.7	10.9	12.0	12.3	12.0	12.2	11.6	10.1	9.0	8.0	7.7	7.1	8.4	11.0	8.7	12.3	4.8
8	10.3	10.1	11.5	11.9	9.1	8.0	7.9	7.7	9.7	11.8	13.3	14.9	16.2	16.0	15.4	14.4	14.9	13.0	11.2	10.3	13.4	13.3	11.7	12.3	12.0	16.2	7.7
9	13.5	15.2	13.7	13.5	12.7	11.3	11.3	10.3	10.6	15.7	17.2	18.4	19.3	19.9	20.6	20.6	19.9	18.5	16.4	16.4	16.0	15.8	15.5	15.3	15.7	20.6	10.3
10	14.7	14.5	14.0	13.5	12.7	12.2	12.3	12.3	12.1	12.7	14.2	16.2	16.5	16.4	16.0	15.3	15.0	14.4	13.8	13.0	11.2	9.7	8.3	4.0	13.1	16.5	4.0
11	2.8	3.4	3.3	3.5	3.1	2.5	2.2	1.9	1.9	3.1	3.3	4.3	5.3	5.3	5.7	5.7	5.6	4.5	3.4	2.8	2.4	1.6	0.9	0.5	3.3	5.7	0.5
12	0.4	0.2	0.0	-0.3	0.1	0.1	-1.2	-0.9	-1.0	1.9	2.9	4.2	4.8	5.0	5.3	5.1	4.7	3.7	2.7	1.8	1.5	0.8	1.0	0.4	1.8	5.3	-1.2
13	0.1	0.2	0.4	0.8	0.8	0.7	0.4	0.6	0.9	2.0	3.3	5.0	4.9	5.3	5.3	5.1	4.6	3.3	2.1	1.3	0.3	-0.4	-0.3	0.0	1.9	5.3	-0.4
14	-0.2	-0.1	-1.0	-1.6	-1.8	-2.2	-1.7	-2.0	--	--	--	2.4	2.8	--	2.5	2.6	1.7	1.0	0.2	-0.5	-1.2	-1.6	-1.7	-1.7	-0.2	2.8	-2.2
15	-1.3	-0.9	-0.9	-1.2	-2.1	-2.9	-2.7	-2.7	-1.3	0.0	2.0	3.1	4.0	5.3	6.1	7.0	6.9	5.9	5.0	4.1	3.8	4.7	4.9	4.9	2.2	7.0	-2.9
16	5.1	3.8	2.8	2.3	3.3	3.8	4.1	4.2	4.8	7.0	9.1	10.9	11.9	12.8	13.7	14.7	14.4	13.0	11.4	10.0	10.3	10.9	11.6	11.2	8.6	14.7	2.3
17	12.1	12.5	12.2	12.4	12.0	12.3	12.5	12.4	13.0	14.2	15.2	15.5	16.5	17.2	17.9	17.8	17.3	16.6	16.1	15.7	15.3	15.1	14.9	14.3	14.6	17.9	12.0
18	14.5	14.5	14.1	13.9	13.6	12.7	12.4	12.3	12.7	14.1	15.2	16.2	17.0	18.0	18.9	19.1	18.5	17.2	16.1	15.5	15.3	15.3	15.5	15.2	15.3	19.1	12.3
19	14.7	14.4	13.8	13.8	13.5	12.7	13.1	12.6	12.0	13.8	16.6	18.3	18.9	20.1	20.9	21.2	20.5	19.5	18.0	17.1	16.1	15.7	14.9	14.9	16.1	21.2	12.0
20	15.0	14.8	14.6	15.2	15.0	15.0	14.7	14.5	15.1	16.5	17.5	18.3	19.5	20.9	21.8	21.9	21.1	19.6	18.2	18.1	17.9	16.9	16.5	16.0	17.3	21.9	14.5
21	15.0	14.3	14.8	14.1	13.8	13.3	13.0	13.7	14.6	17.5	18.5	19.2	20.2	21.6	22.0	21.8	21.6	21.1	20.4	18.7	18.1	18.2	17.0	16.7	17.5	22.0	13.0
22	16.4	15.3	14.6	14.4	14.2	13.9	14.2	14.6	15.7	17.8	19.5	20.7	21.2	22.6	23.5	23.9	23.5	21.9	19.2	18.3	17.4	18.1	18.1	17.7	18.2	23.9	13.9
23	17.9	17.5	17.3	17.2	17.5	17.8	17.5	17.5	18.0	19.1	20.1	20.9	21.9	22.0	22.7	23.6	23.6	22.2	20.3	19.9	19.7	19.7	19.6	19.5	19.7	23.6	17.2
24	18.7	19.1	18.9	18.6	18.5	18.5	18.6	18.3	16.7	17.5	19.0	18.8	18.5	17.8	17.9	17.3	17.2	16.7	16.9	16.7	16.7	16.6	16.6	16.4	17.8	19.1	16.4
25	16.4	16.5	16.3	16.2	16.0	15.9	15.8	15.7	16.3	17.2	18.6	19.9	20.8	21.9	22.3	22.1	21.6	20.1	19.1	19.7	19.9	19.9	19.5	18.9	18.6	22.3	15.7
26	17.8	16.7	15.4	15.0	14.7	13.3	13.7	12.7	14.1	13.8	13.6	12.6	13.1	13.8	13.4	13.2	13.2	13.0	12.8	12.8	12.9	12.9	12.7	12.1	13.7	17.8	12.1
27	12.0	11.9	11.6	11.5	11.4	11.5	11.5	11.5	11.8	12.7	15.1	15.2	15.3	15.7	14.9	15.0	15.4	14.7	14.2	13.8	13.1	12.7	12.8	12.3	13.2	15.7	11.4
28	12.1	11.7	11.4	10.7	10.5	10.4	9.5	6.4	5.9	5.1	5.2	6.0	5.9	6.7	7.7	8.1	8.1	7.3	6.7	5.6	5.0	4.5	4.1	4.0	7.4	12.1	4.0
29	3.6	3.8	3.5	2.9	2.3	2.1	2.0	1.1	1.7	3.5	4.8	5.2	6.3	6.6	7.1	7.3	7.7	7.2	6.7	6.2	5.8	5.1	4.9	4.7	4.7	7.7	1.1
30	4.0	3.9	3.6	3.0	2.9	3.0	3.1	3.3	4.9	7.0	8.3	9.7	10.3	10.8	10.7	11.5	10.8	9.7	8.6	7.3	7.2	6.5	7.0	6.5	6.8	11.5	2.9
31	6.5	6.5	7.1	6.7	6.4	6.3	7.5	9.0	9.3	10.5	13.2	15.3	16.5	16.7	16.7	17.3	17.3	16.0	12.9	12.0	11.5	12.3	11.4	10.5	11.5	17.3	6.3
Avg	9.5	9.4	9.1	8.8	8.5	8.3	8.3	8.0	8.8	10.3	11.6	12.2	13.0	13.9	14.0	14.1	13.8	12.7	11.6	11.0	10.7	10.5	10.3	10.0	10.8	--	--
Max	18.7	19.1	18.9	18.6	18.5	18.5	18.6	18.3	18.0	19.1	20.1	20.9	21.9	22.6	23.5	23.9	23.6	22.2	20.4	19.9	19.9	19.9	19.6	19.5	--	23.9	--
Min	-1.3	-0.9	-1.0	-1.6	-2.1	-2.9	-2.7	-2.7	-1.3	0.0	2.0	2.4	2.8	5.0	2.5	2.6	1.7	1.0	0.2	-0.5	-1.2	-1.6	-1.7	-1.7	--	--	-2.9

-- Indicates Invalid Data

SAROAD for Resolution, West_Plant
"Component, Channel: Table100, Temp_2m_C"
Month: Feb 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	10.0	10.3	11.0	10.7	10.3	10.2	10.3	10.2	11.7	13.8	15.8	17.0	18.2	19.5	19.2	18.3	17.9	16.5	14.8	13.3	12.7	12.0	11.9	11.8	13.6	19.5	10.0
2	12.3	11.4	11.3	11.6	12.2	11.2	11.4	12.7	11.3	15.0	18.0	19.4	20.0	20.9	21.5	22.2	22.0	20.0	18.5	17.4	16.1	17.1	16.0	18.4	16.2	22.2	11.2
3	18.2	18.0	18.2	18.1	17.8	17.5	17.2	17.0	16.4	16.5	17.7	19.2	18.7	18.6	17.6	17.3	17.1	15.7	14.9	14.1	13.7	14.0	13.4	13.6	16.7	19.2	13.4
4	13.2	12.5	11.6	11.2	11.1	11.4	11.5	10.9	12.4	14.6	16.8	17.8	18.9	18.1	18.1	18.3	18.1	17.3	16.2	14.8	14.9	13.4	12.6	12.7	14.5	18.9	10.9
5	12.3	12.0	11.7	12.2	11.1	11.4	11.4	11.7	12.8	15.5	17.7	18.5	19.0	18.8	18.7	18.9	18.6	17.7	16.4	15.1	14.4	14.5	13.7	13.1	14.9	19.0	11.1
6	13.7	12.1	12.1	11.9	11.6	11.3	11.9	11.2	12.2	14.5	15.7	17.7	18.0	16.6	16.9	17.7	17.0	16.2	15.1	14.2	13.4	12.5	11.9	11.7	14.1	18.0	11.2
7	11.2	10.8	11.1	10.6	10.1	9.8	11.1	11.7	12.4	13.6	15.7	17.1	17.9	17.3	17.5	17.9	17.5	16.6	15.3	14.0	13.1	12.6	13.2	13.5	13.8	17.9	9.8
8	13.4	13.4	12.7	12.1	11.7	11.5	11.0	10.4	11.5	14.8	15.7	16.3	16.5	16.6	16.8	16.7	15.7	13.8	11.6	10.8	10.1	9.8	9.1	8.5	12.9	16.8	8.5
9	8.0	7.7	7.5	5.5	2.8	1.7	3.0	3.1	3.7	4.1	4.9	5.7	5.6	6.4	6.6	6.9	7.0	6.9	6.5	5.9	5.1	4.8	5.6	5.9	5.5	8.0	1.7
10	6.0	5.9	4.4	4.0	3.3	3.4	3.6	3.5	4.8	6.5	7.9	9.1	9.6	10.3	9.3	9.3	9.3	8.6	7.6	6.8	6.5	5.4	5.5	5.7	6.5	10.3	3.3
11	6.2	6.1	6.1	6.1	6.2	6.1	4.1	3.9	4.0	3.9	3.8	4.7	5.1	4.8	6.3	5.8	5.5	5.6	5.3	4.5	3.5	2.8	2.4	2.3	4.8	6.3	2.3
12	1.4	1.5	1.0	1.0	0.6	0.2	-0.6	0.7	1.1	3.9	6.3	8.2	9.0	9.6	10.0	9.5	9.4	8.5	7.6	6.8	6.0	5.3	5.7	4.8	4.9	10.0	-0.6
13	3.8	4.1	4.0	3.8	3.9	3.4	3.7	3.8	5.7	8.7	10.5	12.5	13.2	12.5	12.6	12.8	12.7	12.1	10.6	9.2	8.3	7.8	8.0	7.4	8.1	13.2	3.4
14	7.6	6.9	6.6	6.2	7.0	6.8	6.5	6.7	7.2	9.8	12.8	15.4	15.8	14.8	14.8	15.5	15.7	14.9	13.3	12.5	13.0	13.2	14.0	13.5	11.3	15.8	6.2
15	13.2	13.2	12.8	13.3	13.6	12.9	12.1	11.9	12.8	13.5	14.4	16.6	18.3	19.5	20.2	20.5	19.9	18.8	17.4	16.6	15.8	15.6	14.9	14.0	15.5	20.5	11.9
16	13.7	14.3	14.6	13.3	14.0	13.5	13.2	14.6	15.9	17.0	18.2	18.9	19.9	21.0	21.8	22.3	22.1	20.8	19.2	17.3	17.8	17.6	17.5	15.7	17.3	22.3	13.2
17	14.9	15.7	15.3	15.2	14.6	13.9	13.2	12.7	14.2	16.2	18.2	19.1	20.0	19.2	19.2	18.9	18.4	17.5	15.7	14.6	13.1	13.7	12.4	13.2	15.8	20.0	12.4
18	12.4	10.7	10.3	10.1	9.3	9.5	10.9	11.2	12.6	14.5	15.9	17.6	17.6	18.6	19.3	19.3	18.6	17.3	16.4	15.2	14.6	14.8	15.1	14.9	14.4	19.3	9.3
19	14.4	13.7	12.9	11.8	11.1	10.3	10.1	10.5	11.7	15.0	16.4	17.0	18.5	19.3	19.0	18.8	17.8	16.6	14.8	13.3	12.9	12.5	11.4	10.2	14.2	19.3	10.1
20	9.2	8.6	8.2	7.1	6.7	6.7	6.3	5.9	6.0	4.4	3.6	0.1	0.2	0.8	2.1	3.2	3.1	1.1	0.2	0.6	1.2	0.9	1.0	0.3	3.6	9.2	0.1
21	0.2	0.3	0.8	1.0	0.5	1.5	1.6	2.2	3.0	3.6	4.6	6.3	6.5	6.6	7.9	8.7	8.3	7.7	7.3	6.6	6.4	6.0	4.9	4.3	4.4	8.7	0.2
22	4.6	4.0	4.0	3.4	3.6	3.3	2.5	2.5	5.2	7.3	8.1	8.7	9.0	9.7	9.7	10.0	9.8	9.4	8.4	7.6	6.9	6.3	5.5	5.5	6.5	10.0	2.5
23	4.6	5.0	4.8	5.0	4.3	4.4	4.3	5.8	7.0	9.4	10.9	12.1	13.2	13.7	14.1	14.2	14.2	13.3	11.4	10.3	9.5	8.8	7.7	8.1	9.0	14.2	4.3
24	7.7	7.4	8.0	7.3	7.2	6.8	6.3	5.1	5.1	5.9	6.6	7.0	7.3	7.9	6.8	7.9	9.0	8.7	7.9	7.2	7.0	6.8	5.6	5.5	7.0	9.0	5.1
25	4.8	3.2	3.0	2.7	2.3	2.2	2.7	1.9	4.9	7.5	8.9	9.7	11.0	11.5	12.0	11.7	11.6	11.0	9.7	8.8	7.5	6.6	5.9	5.7	6.9	12.0	1.9
26	5.7	5.3	4.8	4.2	4.6	4.9	3.9	4.1	6.7	9.3	10.9	11.4	12.4	13.1	13.9	13.7	14.0	13.2	11.8	10.7	10.2	10.4	9.9	9.7	9.1	14.0	3.9
27	9.7	9.6	9.3	9.0	8.7	8.5	8.1	8.1	9.2	9.9	10.8	11.9	13.1	14.2	14.9	15.2	15.3	14.4	12.5	11.2	11.3	11.0	10.8	10.2	11.1	15.3	8.1
28	8.9	8.9	8.9	8.6	7.5	8.9	9.5	9.1	9.5	11.4	12.6	13.7	15.5	16.7	18.0	18.6	18.7	18.1	16.6	14.7	14.3	13.0	12.4	11.3	12.7	18.7	7.5
Avg	9.3	9.0	8.8	8.5	8.1	8.0	7.9	8.0	9.0	10.7	12.1	13.2	13.9	14.2	14.5	14.6	14.4	13.5	12.3	11.2	10.7	10.3	9.9	9.7	10.9	--	--
Max	18.2	18.0	18.2	18.1	17.8	17.5	17.2	17.0	16.4	17.0	18.2	19.4	20.0	21.0	21.8	22.3	22.1	20.8	19.2	17.4	17.8	17.6	17.5	18.4	--	22.3	--
Min	0.2	0.3	0.8	1.0	0.5	0.2	-0.6	0.7	1.1	3.6	3.6	0.1	0.2	0.8	2.1	3.2	3.1	1.1	0.2	0.6	1.2	0.9	1.0	0.3	--	--	-0.6

SAROAD for Resolution, West_Plant
"Component, Channel: Table100, Temp_2m_C"
Month: Mar 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	11.1	10.3	9.9	9.9	9.8	10.1	10.9	9.5	12.1	15.4	17.9	18.7	19.8	21.5	22.6	23.1	22.9	20.7	18.8	16.9	15.8	15.3	16.6	17.6	15.7	23.1	9.5
2	15.8	15.9	18.0	17.2	16.3	15.2	14.9	15.8	18.2	19.9	21.0	22.2	23.6	24.4	24.1	24.5	24.8	24.1	22.0	20.0	18.4	17.7	16.9	16.8	19.5	24.8	14.9
3	16.3	15.7	15.3	15.2	14.4	14.4	14.9	15.1	16.0	18.9	20.7	21.8	22.7	21.7	20.8	21.1	20.5	19.6	18.9	17.7	18.0	16.7	17.2	16.8	17.9	22.7	14.4
4	16.4	16.7	15.7	15.6	15.9	14.7	13.8	13.0	14.8	15.1	16.2	17.1	18.2	18.5	18.4	18.8	18.6	18.3	16.9	16.0	15.0	14.1	14.1	14.1	16.1	18.8	13.0
5	12.8	13.5	13.4	14.2	14.1	14.4	14.4	13.0	15.4	18.1	19.4	20.9	22.1	22.6	23.1	22.3	21.2	20.7	19.9	19.1	17.5	16.5	15.9	15.1	17.5	23.1	12.8
6	15.8	15.6	14.9	14.5	14.6	13.7	13.5	13.9	16.0	18.4	20.7	21.4	22.0	23.1	23.4	23.5	22.3	21.2	19.9	18.6	16.7	16.1	16.2	16.3	18.0	23.5	13.5
7	15.3	15.3	15.0	14.6	13.8	13.8	13.4	13.2	16.2	17.8	19.2	20.0	21.2	22.0	22.6	22.3	21.3	20.9	19.3	18.4	17.7	17.5	16.8	16.5	17.7	22.6	13.2
8	15.9	14.4	14.1	12.2	11.4	11.1	10.5	9.7	10.0	9.9	9.1	10.6	11.4	12.4	10.8	10.2	5.4	4.9	5.0	3.6	3.7	4.0	4.8	5.3	9.2	15.9	3.6
9	5.4	5.5	5.5	5.2	4.9	5.0	5.0	5.0	5.4	5.4	5.7	5.8	6.1	6.1	6.3	6.7	6.8	6.7	6.8	6.3	6.6	6.3	6.0	5.7	5.8	6.8	4.9
10	6.1	6.0	--	5.2	4.9	4.6	4.2	5.1	7.4	10.0	11.7	12.7	13.7	14.9	15.2	15.8	16.0	15.6	14.7	13.4	11.4	10.9	10.4	9.9	10.4	16.0	4.2
11	10.3	10.2	10.9	11.5	9.6	10.9	10.3	10.1	12.4	13.9	16.0	17.3	18.0	17.8	18.5	19.0	18.7	18.1	16.7	14.9	13.5	13.0	12.9	12.0	14.0	19.0	9.6
12	11.6	11.8	12.3	11.8	12.0	12.8	12.0	12.4	15.7	19.4	20.3	21.6	23.3	22.0	22.1	22.2	22.5	21.9	20.6	18.4	17.4	18.8	20.5	18.8	17.6	23.3	11.6
13	18.6	18.0	18.2	17.2	17.2	16.8	17.9	18.1	19.6	21.9	23.0	24.5	25.7	26.9	27.1	27.4	27.6	26.8	24.9	23.0	22.2	22.8	22.2	23.3	22.1	27.6	16.8
14	22.5	22.3	21.7	21.8	20.2	19.6	19.2	19.0	21.4	24.8	26.0	27.2	28.7	29.6	30.5	30.4	29.5	29.0	27.2	24.3	22.5	22.2	21.8	20.7	24.2	30.5	19.0
15	20.5	20.3	19.5	19.0	19.2	20.3	20.5	20.4	23.0	24.2	26.4	28.3	29.3	28.5	28.4	28.2	27.4	26.6	25.0	22.5	21.6	20.3	20.0	20.1	23.3	29.3	19.0
16	19.5	18.9	18.1	17.9	17.2	18.2	17.8	17.4	20.7	22.0	24.0	25.7	26.5	26.5	26.4	26.0	25.8	25.0	23.3	21.9	21.1	19.9	18.8	18.1	21.5	26.5	17.2
17	17.4	17.8	17.8	17.2	16.4	16.0	16.1	17.2	19.4	20.7	21.5	21.8	22.6	22.9	23.3	23.5	23.7	23.0	21.6	19.8	18.9	18.2	17.7	17.6	19.7	23.7	16.0
18	17.3	16.4	15.7	14.8	14.4	15.4	15.1	16.0	17.8	20.0	21.8	22.5	22.9	23.5	23.7	23.6	23.4	22.9	21.6	20.7	19.1	17.9	17.3	17.2	19.2	23.7	14.4
19	16.5	16.9	16.3	16.6	15.2	15.4	14.8	16.1	17.0	19.6	21.1	21.8	22.9	22.6	23.3	23.4	23.4	22.3	21.1	20.3	19.5	17.9	17.5	16.8	19.1	23.4	14.8
20	16.7	16.3	17.1	16.7	17.2	17.5	17.4	17.6	18.4	20.2	21.5	22.7	24.3	24.7	24.1	23.4	23.3	22.6	21.6	20.9	19.9	19.1	18.8	18.6	20.0	24.7	16.3
21	18.8	19.1	19.0	18.6	18.4	17.5	16.6	17.3	18.4	19.5	21.1	22.4	23.3	23.2	23.7	24.1	23.9	23.0	21.6	20.6	20.3	19.7	18.7	18.3	20.3	24.1	16.6
22	17.4	16.8	16.2	15.3	15.1	14.8	15.1	15.9	18.4	19.3	20.5	21.4	21.7	22.7	22.7	22.8	22.6	22.3	20.8	19.4	18.1	18.3	17.6	17.1	18.8	22.8	14.8
23	15.1	14.3	13.9	13.1	12.6	12.0	11.9	12.9	15.2	16.2	17.3	18.8	20.2	20.5	20.8	20.7	20.4	19.8	18.2	16.7	15.6	14.6	13.7	13.3	16.2	20.8	11.9
24	12.6	11.9	11.4	11.2	11.3	11.3	10.8	12.2	15.2	17.0	18.2	19.7	20.5	20.9	21.2	21.2	21.0	20.2	18.8	17.5	16.0	15.7	15.0	14.4	16.1	21.2	10.8
25	14.1	13.9	14.3	14.1	14.8	14.4	15.2	16.5	17.9	19.6	20.8	21.9	23.5	23.8	23.4	23.7	23.9	23.0	21.5	20.0	18.6	17.8	17.5	17.3	18.8	23.9	13.9
26	18.2	18.5	18.9	18.3	17.9	17.5	17.0	17.4	18.3	19.8	21.3	22.8	23.6	24.3	25.1	26.0	26.0	25.4	23.9	22.4	20.3	19.5	18.9	18.6	20.8	26.0	17.0
27	18.3	17.5	17.3	17.6	17.2	17.2	17.1	18.4	20.1	22.5	24.2	24.9	26.0	25.9	25.9	25.7	25.5	24.4	23.3	22.0	20.8	19.4	18.5	18.0	21.2	26.0	17.1
28	17.3	17.6	17.1	16.2	16.7	16.5	16.7	17.7	20.2	21.5	23.6	24.1	24.5	25.3	25.0	25.0	24.4	23.7	22.7	21.8	20.4	18.4	18.7	18.3	20.6	25.3	16.2
29	18.1	17.7	17.0	17.0	16.6	16.2	17.1	17.4	20.1	22.0	23.2	25.1	25.7	26.5	26.5	26.4	25.9	24.9	23.7	22.6	20.6	20.0	19.3	18.2	21.2	26.5	16.2
30	18.0	18.4	18.0	18.3	18.3	17.7	18.7	18.6	19.9	21.0	22.9	24.1	24.7	25.1	24.5	24.4	24.6	23.9	23.2	22.7	21.2	19.6	18.8	18.0	21.0	25.1	17.7
31	17.7	17.3	17.0	16.4	16.8	16.3	16.1	17.4	20.5	22.0	23.6	24.7	25.4	25.9	26.8	26.6	26.3	25.4	24.2	22.6	21.8	20.4	19.2	18.8	21.2	26.8	16.1
Avg	15.7	15.5	15.7	15.0	14.7	14.6	14.5	14.8	16.8	18.6	20.0	21.1	22.1	22.5	22.6	22.6	22.2	21.5	20.2	18.9	17.7	17.1	16.7	16.4	18.2	--	--
Max	22.5	22.3	21.7	21.8	20.2	20.3	20.5	20.4	23.0	24.8	26.4	28.3	29.3	29.6	30.5	30.4	29.5	29.0	27.2	24.3	22.5	22.8	22.2	23.3	--	30.5	--
Min	5.4	5.5	5.5	5.2	4.9	4.6	4.2	5.0	5.4	5.4	5.7	5.8	6.1	6.1	6.3	6.7	5.4	4.9	5.0	3.6	3.7	4.0	4.8	5.3	--	--	3.6

-- Indicates Invalid Data

SAROAD for Resolution, West_Plant
"Component, Channel: Table100, SR_Wm2_2m"
Month: Jan 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	0	4	112	337	472	587	610	580	476	331	129	4	0	0	0	0	0	0	152	610	0
2	0	0	0	0	0	0	0	4	112	343	499	597	630	594	492	341	149	9	0	0	0	0	0	0	157	630	0
3	0	0	0	0	0	0	0	4	113	342	498	596	628	592	492	341	150	10	0	0	0	0	0	0	157	628	0
4	0	0	0	0	0	0	0	4	112	346	497	594	625	586	487	337	148	9	0	0	0	0	0	0	156	625	0
5	0	0	0	0	0	0	0	4	114	342	499	601	635	601	501	344	151	10	0	0	0	0	0	0	158	635	0
6	0	0	0	0	0	0	0	7	107	248	365	533	509	353	363	345	158	8	0	0	0	0	0	0	125	533	0
7	0	0	0	0	0	0	0	4	107	324	478	579	606	593	549	365	174	17	0	0	0	0	0	0	158	606	0
8	0	0	0	0	0	0	0	4	113	340	501	607	642	609	506	351	155	12	0	0	0	0	0	0	160	642	0
9	0	0	0	0	0	0	0	3	112	345	504	603	627	609	480	348	159	5	0	0	0	0	0	0	158	627	0
10	0	0	0	0	0	0	0	6	94	146	376	379	417	232	65	28	16	0	0	0	0	0	0	0	73	417	0
11	0	0	0	0	0	0	0	5	103	362	380	551	662	621	520	363	169	16	0	0	0	0	0	0	156	662	0
12	0	0	0	0	0	0	0	4	117	273	492	609	652	631	531	372	168	18	0	0	0	0	0	0	161	652	0
13	0	0	0	0	0	0	0	10	124	260	354	619	425	546	517	379	177	20	0	0	0	0	0	0	143	619	0
14	0	0	0	0	0	0	0	1	--	--	--	622	660	--	530	384	179	19	0	0	0	0	0	0	120	660	0
15	0	0	0	0	0	0	0	4	123	359	520	626	665	637	540	388	184	20	0	0	0	0	0	0	169	665	0
16	0	0	0	0	0	0	0	5	123	331	502	614	654	627	533	384	182	20	0	0	0	0	0	0	166	654	0
17	0	0	0	0	0	0	0	4	121	361	525	627	664	641	544	396	190	22	0	0	0	0	0	0	171	664	0
18	0	0	0	0	0	0	0	6	112	339	492	619	661	625	563	391	169	16	0	0	0	0	0	0	166	661	0
19	0	0	0	0	0	0	0	4	122	365	527	636	678	652	554	404	194	25	0	0	0	0	0	0	173	678	0
20	0	0	0	0	0	0	0	4	120	354	517	622	661	634	541	394	161	12	0	0	0	0	0	0	167	661	0
21	0	0	0	0	0	0	0	9	132	352	517	617	662	636	544	398	191	27	0	0	0	0	0	0	170	662	0
22	0	0	0	0	0	0	0	4	124	362	525	634	677	651	554	403	195	29	0	0	0	0	0	0	173	677	0
23	0	0	0	0	0	0	0	10	130	317	489	544	495	388	508	408	200	33	0	0	0	0	0	0	147	544	0
24	0	0	0	0	0	0	0	7	72	94	175	114	130	171	161	48	48	4	0	0	0	0	0	0	43	175	0
25	0	0	0	0	0	0	0	8	87	222	281	432	378	492	353	179	56	1	0	0	0	0	0	0	104	492	0
26	0	0	0	0	0	0	0	2	10	36	61	37	142	177	121	51	26	10	1	1	1	1	1	0	28	177	0
27	0	0	0	0	0	0	0	3	50	209	680	327	429	376	135	145	133	16	0	0	0	0	0	0	104	680	0
28	0	0	0	0	0	0	0	2	22	35	145	265	117	407	489	304	238	17	0	0	0	0	0	0	85	489	0
29	0	0	0	0	0	0	0	6	138	384	562	665	708	675	517	290	238	17	0	0	0	0	0	0	175	708	0
30	0	0	0	0	0	0	0	6	144	389	556	669	709	681	589	440	243	53	0	0	0	0	0	0	187	709	0
31	0	0	0	0	0	0	0	14	144	328	534	652	608	598	509	311	191	40	0	0	0	0	0	0	164	652	0
Avg	0	0	0	0	0	0	0	5	107	295	451	541	560	540	460	321	159	17	0	0	0	0	0	0	143	--	--
Max	0	0	0	0	0	0	0	14	144	389	680	669	709	681	589	440	243	53	1	1	1	1	1	0	--	709	--
Min	0	0	0	0	0	0	0	1	10	35	61	37	117	171	65	28	16	0	0	0	0	0	0	0	--	--	0

-- Indicates Invalid Data

SAROAD for Resolution, West_Plant
"Component, Channel: Table100, SR_Wm2_2m"
Month: Feb 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	0	6	149	399	569	681	723	685	587	443	247	51	0	0	0	0	0	0	189	723	0
2	0	0	0	0	0	0	0	16	144	380	559	587	677	631	592	447	225	47	0	0	0	0	0	0	179	677	0
3	0	0	0	0	0	0	0	8	45	78	138	309	360	272	232	131	80	20	0	0	0	0	0	0	70	360	0
4	0	0	0	0	0	0	0	10	172	396	558	664	708	689	592	445	256	63	0	0	0	0	0	0	190	708	0
5	0	0	0	0	0	0	0	7	163	402	567	676	721	697	605	462	270	68	0	0	0	0	0	0	193	721	0
6	0	0	0	0	0	0	0	15	130	252	460	632	571	204	301	534	288	71	0	0	0	0	0	0	144	632	0
7	0	0	0	0	0	0	0	11	164	389	560	651	685	419	465	432	270	70	0	0	0	0	0	0	172	685	0
8	0	0	0	0	0	0	0	14	139	335	512	611	643	654	617	461	283	74	0	0	0	0	0	0	181	654	0
9	0	0	0	0	0	0	0	11	66	139	352	293	229	308	225	164	102	17	0	0	0	0	0	0	79	352	0
10	0	0	0	0	0	0	0	11	186	422	604	683	702	784	428	479	294	80	0	0	0	0	0	0	195	784	0
11	0	0	0	0	0	0	0	10	28	83	205	251	208	443	253	155	273	25	0	0	0	0	0	0	81	443	0
12	0	0	0	0	0	0	0	9	196	436	614	734	779	753	658	507	303	90	0	0	0	0	0	0	212	779	0
13	0	0	0	0	0	0	0	11	202	442	615	728	773	749	653	503	302	90	1	0	0	0	0	0	211	773	0
14	0	0	0	0	0	0	0	10	208	449	621	734	782	755	659	506	307	91	0	0	0	0	0	0	213	782	0
15	0	0	0	0	0	0	0	29	172	380	635	742	806	781	682	528	327	86	0	0	0	0	0	0	215	806	0
16	0	0	0	0	0	0	0	11	232	485	661	770	812	784	687	532	324	108	0	0	0	0	0	0	225	812	0
17	0	0	0	0	0	0	0	13	229	464	639	757	807	783	686	534	332	107	1	0	0	0	0	0	223	807	0
18	0	0	0	0	0	0	0	15	232	465	638	760	796	787	688	498	240	64	0	0	0	0	0	0	216	796	0
19	0	0	0	0	0	0	0	31	220	477	544	594	751	786	685	524	327	111	0	0	0	0	0	0	210	786	0
20	0	0	0	0	0	0	0	10	56	56	55	33	44	59	338	312	97	3	0	0	0	0	0	0	44	338	0
21	0	0	0	0	0	0	0	17	149	267	457	444	351	391	662	429	173	50	1	0	0	0	0	0	141	662	0
22	0	0	0	0	0	0	0	19	251	475	674	801	834	850	720	515	347	117	3	0	0	0	0	0	234	850	0
23	0	0	0	0	0	0	0	15	269	490	661	778	823	797	697	546	348	123	4	0	0	0	0	0	231	823	0
24	0	0	0	0	0	0	0	19	267	344	370	394	396	541	370	457	316	137	4	0	0	0	0	0	151	541	0
25	0	0	0	0	0	0	0	16	291	511	690	805	852	828	725	569	364	135	4	0	0	0	0	0	241	852	0
26	0	0	0	0	0	0	0	17	296	511	688	806	854	828	724	568	366	137	4	0	0	0	0	0	242	854	0
27	0	0	0	0	0	0	0	19	315	539	716	833	877	847	739	578	373	141	5	0	0	0	0	0	249	877	0
28	0	0	0	0	0	0	0	27	307	532	712	830	874	842	738	578	373	139	5	0	0	0	0	0	248	874	0
Avg	0	0	0	0	0	0	0	15	189	378	538	628	658	641	572	458	279	83	1	0	0	0	0	0	185	--	--
Max	0	0	0	0	0	0	0	31	315	539	716	833	877	850	739	578	373	141	5	0	0	0	0	0	--	877	--
Min	0	0	0	0	0	0	0	6	28	56	55	33	44	59	225	131	80	3	0	0	0	0	0	0	--	--	0

SAROAD for Resolution, West_Plant
"Component, Channel: Table100, SR_Wm2_2m"
Month: Mar 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	0	28	308	529	699	814	859	830	726	572	368	142	6	0	0	0	0	0	245	859	0
2	0	0	0	0	0	0	0	28	323	543	720	833	872	841	737	576	346	134	7	0	0	0	0	0	248	872	0
3	0	0	0	0	0	0	0	37	279	452	677	659	528	475	330	224	132	41	1	0	0	0	0	0	160	677	0
4	0	0	0	0	0	0	1	41	308	530	701	817	865	771	729	560	359	138	6	0	0	0	0	0	243	865	0
5	0	0	0	0	0	0	0	57	301	455	613	743	822	777	572	383	225	75	7	0	0	0	0	0	210	822	0
6	0	0	0	0	0	0	0	57	323	536	710	824	871	845	746	590	386	157	9	0	0	0	0	0	252	871	0
7	0	0	0	0	0	0	1	62	336	551	728	836	874	849	749	596	383	154	1	0	0	0	0	0	255	874	0
8	0	0	0	0	0	0	0	27	49	98	196	287	186	380	268	139	21	12	2	0	0	0	0	0	69	380	0
9	0	0	0	0	0	0	2	35	51	54	94	102	204	140	89	82	56	41	3	0	0	0	0	0	40	204	0
10	0	0	--	0	0	0	2	85	346	563	742	855	899	868	766	609	401	171	11	0	0	0	0	0	275	899	0
11	0	0	0	0	0	0	2	91	362	578	750	852	892	864	762	609	404	172	13	0	0	0	0	0	265	892	0
12	0	0	0	0	0	0	2	94	364	585	760	865	903	861	757	603	399	168	11	0	0	0	0	0	265	903	0
13	0	0	0	0	0	0	2	98	369	589	763	869	904	869	768	612	405	178	9	0	0	0	0	0	268	904	0
14	0	0	0	0	0	0	2	102	373	596	768	872	909	875	773	618	410	179	9	0	0	0	0	0	270	909	0
15	0	0	0	0	0	0	5	105	358	601	756	855	909	886	680	529	367	129	9	0	0	0	0	0	258	909	0
16	0	0	0	0	0	0	2	122	294	419	669	825	772	881	774	623	417	179	11	0	0	0	0	0	249	881	0
17	0	0	0	0	0	0	4	119	370	586	762	871	913	882	787	633	414	195	12	0	0	0	0	0	273	913	0
18	0	0	0	0	0	0	4	81	343	597	771	874	912	882	789	624	400	174	10	0	0	0	0	0	269	912	0
19	0	0	0	0	0	0	6	121	303	565	719	859	896	876	774	599	394	154	12	0	0	0	0	0	261	896	0
20	0	0	0	0	0	0	7	92	207	372	522	601	850	777	470	275	305	104	9	0	0	0	0	0	191	850	0
21	0	0	0	0	0	0	6	99	282	490	747	868	917	832	718	562	369	134	10	0	0	0	0	0	251	917	0
22	0	0	0	0	0	0	7	142	392	606	776	880	918	888	824	586	379	192	22	0	0	0	0	0	275	918	0
23	0	0	0	0	0	0	9	148	401	615	787	896	952	915	826	658	446	198	22	0	0	0	0	0	286	952	0
24	0	0	0	0	0	0	7	160	422	639	806	911	946	910	816	655	447	199	25	0	0	0	0	0	289	946	0
25	0	0	0	0	0	0	7	173	437	649	808	909	947	907	815	654	447	201	22	0	0	0	0	0	291	947	0
26	0	0	0	0	0	0	12	110	363	620	696	794	573	620	671	651	438	205	20	0	0	0	0	0	241	794	0
27	0	0	0	0	0	0	14	132	397	577	736	822	852	620	605	473	210	94	15	0	0	0	0	0	231	852	0
28	0	0	0	0	0	0	12	188	403	587	810	812	802	860	792	530	418	151	15	0	0	0	0	0	266	860	0
29	0	0	0	0	0	0	7	189	439	652	815	921	953	913	822	651	387	126	21	0	0	0	0	0	287	953	0
30	0	0	0	0	0	0	12	97	180	337	528	659	610	624	253	280	291	135	17	0	0	0	0	0	168	659	0
31	0	0	0	0	0	0	10	205	448	657	820	922	958	910	828	656	454	192	19	0	0	0	0	0	308	958	0
Avg	0	0	0	0	0	0	5	101	327	524	692	790	815	788	678	529	351	146	12	0	0	0	0	0	241	--	--
Max	0	0	0	0	0	0	14	205	448	657	820	922	958	915	828	658	454	205	25	0	0	0	0	0	--	958	--
Min	0	0	0	0	0	0	0	27	49	54	94	102	186	140	89	82	21	12	1	0	0	0	0	0	--	--	0

-- Indicates Invalid Data

SAROAD for Resolution, West_Plant
"Component, Channel: Table100, RH_Percent"
Month: Jan 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	66	66	64	65	62	59	58	58	54	49	48	47	47	39	38	40	42	43	50	50	43	31	31	31	49	66	31
2	33	34	31	31	32	29	28	28	27	26	26	26	24	23	23	23	24	26	27	27	25	26	26	25	27	34	23
3	26	26	27	28	27	26	26	26	26	25	25	25	24	26	28	29	31	34	35	38	43	44	40	45	30	45	24
4	44	44	47	46	47	49	45	45	45	40	39	38	36	34	31	30	30	31	32	35	32	31	32	33	38	49	30
5	33	33	36	44	39	43	45	47	45	37	31	29	25	23	21	22	25	32	29	22	18	17	20	22	31	47	17
6	23	26	27	28	26	24	23	22	22	20	20	19	18	16	13	14	15	18	19	18	19	21	23	27	21	28	13
7	28	31	33	37	39	43	42	48	46	40	34	33	31	33	34	33	34	36	40	45	45	47	35	24	37	48	24
8	25	25	20	18	24	28	27	27	22	18	15	13	12	20	25	29	26	31	35	39	25	23	27	25	24	39	12
9	22	19	22	21	23	26	26	27	27	15	13	13	13	11	10	10	11	13	16	15	15	14	13	13	17	27	10
10	14	15	15	16	17	19	19	20	21	21	21	17	17	18	19	21	22	23	24	28	32	39	59	86	25	86	14
11	90	77	72	63	64	66	68	70	68	62	58	51	42	37	32	26	24	26	33	35	35	40	44	46	51	90	24
12	46	45	45	45	39	38	45	44	46	34	31	28	24	21	21	20	20	23	28	36	35	39	36	39	35	46	20
13	38	36	34	31	30	30	31	29	29	27	25	21	21	21	22	21	21	25	28	32	37	39	36	33	29	39	21
14	37	35	36	37	38	40	36	36	--	--	--	25	23	--	25	24	25	28	29	33	38	38	37	40	33	40	23
15	36	26	23	19	22	25	25	24	18	17	16	14	14	14	12	12	12	13	15	18	20	19	19	19	19	36	12
16	20	22	23	26	23	23	23	25	25	22	20	19	18	17	16	16	16	18	21	23	20	17	16	17	20	26	16
17	16	15	16	15	15	16	16	17	16	14	13	14	13	13	13	13	13	14	15	16	16	17	17	17	15	17	13
18	17	17	17	18	19	20	21	22	21	19	18	17	16	16	15	14	14	15	16	17	16	17	16	17	17	22	14
19	18	19	20	20	21	22	21	22	24	22	16	14	14	12	12	11	11	12	14	17	18	18	19	17	17	24	11
20	14	15	15	14	15	16	16	16	15	14	14	14	14	13	13	13	14	15	18	16	16	18	19	19	15	19	13
21	20	21	18	18	19	18	18	17	17	15	15	15	15	14	14	14	15	16	16	19	18	16	17	16	17	21	14
22	16	16	17	17	16	17	16	15	15	15	14	14	14	14	14	14	15	17	21	22	23	16	15	17	16	23	14
23	16	16	16	16	15	15	16	17	17	16	15	15	14	14	14	14	14	15	17	17	17	18	17	17	16	18	14
24	19	18	19	19	19	20	20	21	26	26	22	29	32	37	34	32	33	39	40	46	48	43	42	43	30	48	18
25	47	48	48	48	50	49	49	50	49	45	41	37	34	31	31	31	33	44	45	38	36	36	39	43	42	50	31
26	52	58	68	74	75	87	83	92	88	90	93	91	87	86	88	92	92	91	90	88	87	86	89	94	84	94	52
27	94	95	96	97	97	98	98	97	95	86	73	71	68	63	70	70	65	69	74	78	82	87	83	82	83	98	63
28	83	84	81	86	87	86	87	94	91	87	79	76	81	70	61	59	54	55	59	71	73	77	77	78	76	94	54
29	86	80	80	81	84	83	81	85	81	68	61	52	50	50	47	43	41	42	48	53	53	58	60	60	64	86	41
30	63	64	65	68	68	62	57	52	44	37	28	23	27	31	31	34	36	35	39	49	46	52	47	49	46	68	23
31	46	49	44	47	47	48	42	38	38	38	30	24	20	19	21	17	19	26	47	46	43	36	39	40	36	49	17
Avg	38	38	38	39	39	39	39	40	39	35	32	30	29	28	27	27	27	30	33	35	35	35	35	37	34	--	--
Max	94	95	96	97	97	98	98	97	95	90	93	91	87	86	88	92	92	91	90	88	87	87	89	94	--	98	--
Min	14	15	15	14	15	15	16	15	15	14	13	13	12	11	10	10	11	12	14	15	15	14	13	13	--	--	10

-- Indicates Invalid Data

SAROAD for Resolution, West_Plant
"Component, Channel: Table100, RH_Percent"
Month: Feb 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	43	39	34	36	37	36	35	36	30	26	22	21	19	17	24	29	32	36	41	46	47	48	47	48	35	48	17
2	44	44	42	39	32	37	33	25	32	24	18	14	13	15	13	13	14	21	19	19	24	17	21	15	25	44	13
3	17	17	16	15	15	15	15	15	17	17	18	24	29	26	30	30	29	39	47	51	48	47	52	50	28	52	15
4	53	55	61	64	63	63	65	66	57	44	36	35	34	42	43	41	41	43	47	52	50	56	59	58	51	66	34
5	58	53	50	41	45	43	42	39	35	28	26	27	31	36	37	34	34	37	42	46	45	42	44	48	40	58	26
6	43	49	50	52	56	58	57	58	55	45	43	39	37	47	45	41	42	46	52	54	57	61	63	63	51	63	37
7	64	65	64	66	69	70	60	58	55	51	45	40	36	39	37	36	37	39	43	48	52	52	48	45	51	70	36
8	44	43	44	46	47	47	47	47	42	31	30	29	27	25	26	26	29	35	44	46	45	37	37	38	38	47	25
9	43	41	41	57	83	91	83	85	82	75	67	58	57	52	50	46	46	46	47	54	60	62	57	54	60	91	41
10	51	53	62	61	66	63	61	59	55	48	42	38	35	32	37	37	35	38	44	50	47	55	54	50	49	66	32
11	47	47	45	43	42	42	55	58	59	66	74	65	68	72	62	65	73	70	70	71	79	85	87	88	64	88	42
12	90	91	92	93	93	94	95	77	72	54	46	34	30	31	32	40	37	35	39	43	49	51	45	46	59	95	30
13	51	44	41	41	40	41	40	37	32	25	20	19	19	28	28	27	28	29	32	37	39	40	38	41	34	51	19
14	38	40	40	42	38	38	40	39	38	30	25	21	22	28	28	27	27	28	33	34	28	27	23	23	31	42	21
15	21	19	18	14	12	14	16	16	13	12	14	13	10	9	8	6	6	7	9	9	11	11	14	16	12	21	6
16	14	10	9	11	10	10	11	9	7	6	7	8	8	7	7	7	5	6	7	9	6	6	6	9	8	14	5
17	10	9	10	9	10	11	11	12	11	11	10	10	10	11	12	11	11	12	13	14	17	16	20	16	12	20	9
18	18	21	22	22	24	24	22	23	21	19	17	16	14	11	12	12	13	14	15	18	18	17	16	15	18	24	11
19	15	16	17	20	22	24	25	24	22	16	15	15	13	11	11	10	10	11	15	19	21	22	28	35	18	35	10
20	47	57	61	75	80	74	71	68	69	83	88	93	95	95	91	78	80	90	95	94	89	89	87	90	81	95	47
21	91	90	88	84	89	86	84	81	73	71	69	64	61	61	56	53	55	54	58	62	61	63	71	74	71	91	53
22	72	74	73	77	72	74	77	77	62	53	50	49	47	47	44	40	41	38	43	50	53	51	56	52	57	77	38
23	58	54	53	50	53	51	52	42	40	35	33	27	25	24	27	27	27	28	35	40	44	47	51	48	41	58	24
24	50	51	47	52	52	53	61	61	56	55	45	36	27	23	30	25	17	17	17	20	21	23	29	30	37	61	17
25	33	41	43	43	44	44	42	46	35	24	23	23	21	22	23	24	24	24	27	30	34	38	41	42	33	46	21
26	39	41	42	44	41	38	43	41	33	23	22	24	24	23	23	21	20	21	24	28	28	19	14	12	29	44	12
27	8	8	9	9	9	10	11	11	10	10	11	11	10	9	9	9	9	11	15	18	15	13	12	13	11	18	8
28	16	15	14	14	17	12	9	10	12	11	10	10	8	9	8	7	6	7	10	12	11	11	11	12	11	17	6
Avg	42	42	42	44	45	45	45	44	40	35	33	31	30	30	30	29	30	32	35	38	39	40	40	40	38	--	--
Max	91	91	92	93	93	94	95	85	82	83	88	93	95	95	91	78	80	90	95	94	89	89	87	90	--	95	--
Min	8	8	9	9	9	10	9	9	7	6	7	8	8	7	7	6	5	6	7	9	6	6	6	9	--	--	5

SAROAD for Resolution, West_Plant
"Component, Channel: Table100, RH_Percent"
Month: Mar 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	13	15	14	15	16	15	18	16	13	13	14	14	14	12	13	13	16	19	23	26	25	20	16	16	26	12
2	21	20	17	18	20	22	22	20	16	14	12	12	11	10	15	15	14	15	20	23	27	28	30	29	19	30	10
3	30	30	30	30	31	30	27	25	25	21	18	16	15	15	16	14	15	19	19	21	19	23	22	27	22	31	14
4	26	26	29	27	25	27	27	29	26	29	27	28	28	26	25	25	24	26	29	31	35	37	36	36	28	37	24
5	40	38	39	36	36	35	35	39	33	24	21	18	16	16	14	17	20	20	22	23	27	30	30	31	27	40	14
6	28	29	32	33	32	35	35	34	30	25	21	20	17	14	14	14	15	17	19	20	24	26	24	24	24	35	14
7	27	28	28	29	31	34	35	33	27	23	20	20	19	17	17	15	18	19	22	23	21	21	23	25	24	35	15
8	30	49	51	67	77	82	85	92	84	83	85	77	76	79	83	78	92	91	83	87	87	90	88	83	78	92	30
9	81	83	84	84	86	84	83	81	80	82	78	76	74	75	77	72	73	74	73	80	79	80	82	83	79	86	72
10	81	82	--	83	82	83	85	78	66	56	44	40	36	33	31	29	30	31	35	43	54	54	54	54	55	85	29
11	47	44	36	32	40	32	34	36	31	27	24	26	27	30	31	29	30	32	35	41	46	47	45	49	35	49	24
12	49	48	42	44	42	34	37	35	28	19	17	17	15	31	31	31	28	30	34	40	42	31	21	27	32	49	15
13	27	27	26	29	27	26	21	20	19	14	14	13	13	12	12	11	10	10	10	13	13	12	16	13	17	29	10
14	14	14	16	15	18	19	19	20	17	11	10	11	10	9	9	9	9	11	15	19	22	21	20	22	15	22	9
15	24	22	25	27	24	20	19	20	18	20	17	12	10	17	15	12	13	13	17	22	24	26	25	23	19	27	10
16	24	25	27	27	29	25	25	27	20	19	16	14	14	13	13	14	13	15	19	20	21	23	26	26	21	29	13
17	26	24	23	25	28	28	26	22	18	17	17	18	18	17	16	15	15	14	16	20	20	22	21	20	20	28	14
18	19	21	23	27	30	29	31	30	26	20	18	17	17	15	15	14	14	15	17	18	21	24	26	28	21	31	14
19	29	29	30	29	34	33	36	32	30	24	23	23	20	17	17	18	17	18	21	21	23	27	28	30	25	36	17
20	30	31	28	30	28	27	28	27	27	24	22	18	15	14	15	16	17	19	21	22	25	28	27	27	24	31	14
21	26	26	26	27	27	30	34	32	31	25	24	23	22	21	21	21	21	22	25	27	26	27	29	28	26	34	21
22	30	32	32	34	33	33	34	33	30	28	26	25	24	24	24	21	19	18	21	23	26	26	26	26	27	34	18
23	31	32	32	34	36	40	41	41	38	29	25	19	6	5	4	6	5	5	7	9	10	11	11	12	20	41	4
24	13	14	14	16	14	13	14	12	12	10	8	7	8	9	9	9	9	10	11	13	15	15	15	16	12	16	7
25	16	16	14	15	13	12	10	8	7	7	8	8	8	8	9	9	9	10	11	12	15	17	17	17	11	17	7
26	15	14	13	15	15	15	14	13	12	11	10	10	9	8	9	8	7	7	9	11	13	14	14	15	12	15	7
27	14	15	15	13	14	14	15	13	13	11	10	10	10	10	11	10	9	9	10	12	14	16	17	19	13	19	9
28	19	17	14	14	13	14	14	13	11	10	8	9	9	9	9	9	8	8	10	12	13	17	15	16	12	19	8
29	17	18	19	19	21	21	18	18	15	11	12	11	9	9	8	7	7	7	9	10	12	12	14	15	13	21	7
30	15	15	16	16	17	18	16	17	18	17	12	10	11	10	11	11	12	12	13	14	17	19	20	21	15	21	10
31	20	21	22	24	24	24	24	23	19	15	14	13	12	12	11	12	12	13	15	17	17	20	22	22	18	24	11
Avg	28	29	27	30	31	31	31	30	27	24	22	20	19	19	19	19	19	20	22	25	27	28	28	28	25	--	--
Max	81	83	84	84	86	84	85	92	84	83	85	77	76	79	83	78	92	91	83	87	87	90	88	83	--	92	--
Min	13	13	13	13	13	12	10	8	7	7	8	7	6	5	4	6	5	5	7	9	10	11	11	12	--	--	4

-- Indicates Invalid Data

SAROAD for Resolution, West_Plant
"Component, Channel: Table100, Precip_Inches"
Month: Jan 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	0.004	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.004	0.004	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.008	0	0.008	0	0.016	0.008	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	0	0	0	0	0	0	0	0	0	0	0	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	0.02	0.08	0.1	0.08	0
11	0.028	0.004	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.032	0.028	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
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	0	0	0	0	0	0	0	0	0	0	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	0.004	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
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	0.091	0	0	0	0	0	0.004	0.004	0	0	0.099	0.091	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	0.032	0.004	0	0	0	0	0	0	0.004	0	0	0	0	0	0.091	0	0	0	0	0	0.012	0.004	0.028	0.08	0.255	--	--
Max	0.028	0.004	0	0	0	0	0	0	0.004	0	0	0	0	0	0.091	0	0	0	0	0	0.008	0.004	0.02	0.08	--	0.091	--
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, West_Plant
"Component, Channel: Table100, Precip_Inches"
Month: Feb 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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	0.044	0.044	0.004	0.004	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.096	0.044	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	0.004	0	0.016	0.008	0	0	0	0	0	0	0	0.028	0.016	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	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	0.059	0.004	0	0	0	0	0.048	0.079	0.016	0.104	0.072	0.044	0.044	0.032	0.024	0.08	0.036	0.02	0	0	0	0.662	0.104	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	0	0	0	0	0	0	0	0	0	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
Total	0	0	0	0.059	0.048	0.044	0.004	0.004	0	0.048	0.079	0.016	0.104	0.076	0.044	0.06	0.04	0.024	0.08	0.036	0.02	0	0	0	0.786	--	--
Max	0	0	0	0.059	0.044	0.044	0.004	0.004	0	0.048	0.079	0.016	0.104	0.072	0.044	0.044	0.032	0.024	0.08	0.036	0.02	0	0	0	--	0.104	--
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: Mar 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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	0.008	0.012	0.052	0.008	0.008	0.044	0.095	0.052	0.032	0.099	0.004	0.036	0.024	0.059	0.055	0.162	0.154	0.04	0.189	0.177	0.032	0.008	0	1.35	0.189	0
9	0.004	0.008	0	0.012	0	0	0	0	0	0	0	0	0	0	0	0	0.004	0	0	0	0	0	0	0	0.028	0.012	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
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	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	0	0	0	0	0	0	0	0	0	0	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
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	0.016	0.012	0.064	0.008	0.008	0.044	0.095	0.052	0.032	0.099	0.004	0.036	0.024	0.059	0.055	0.166	0.154	0.04	0.189	0.177	0.032	0.008	0	1.38	--	--
Max	0.004	0.008	0.012	0.052	0.008	0.008	0.044	0.095	0.052	0.032	0.099	0.004	0.036	0.024	0.059	0.055	0.162	0.154	0.04	0.189	0.177	0.032	0.008	0	--	0.189	--
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, West_Plant
"Component, Channel: Table100, BP_mmHg"
Month: Jan 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	686	686	687	687	687	686	687	687	687	687	687	687	686	686	685	685	685	685	685	685	685	685	685	685	686	687	685
2	685	684	684	684	683	683	684	684	684	684	684	684	683	682	682	682	682	682	682	682	682	683	683	683	683	685	682
3	682	683	683	683	682	683	683	683	683	684	684	684	684	684	684	684	684	684	684	684	685	685	685	686	684	686	682
4	686	686	686	687	687	687	687	688	688	688	689	688	687	687	687	687	687	687	687	687	687	688	688	688	687	689	686
5	688	688	688	688	688	688	689	689	689	690	690	689	688	688	687	687	687	687	687	687	687	687	687	687	688	690	687
6	687	687	687	686	686	685	686	686	686	686	686	685	684	683	683	682	682	682	681	681	681	681	681	681	684	687	681
7	681	680	680	680	680	680	680	680	680	680	680	680	679	679	679	679	679	680	680	680	680	680	679	680	680	681	679
8	680	680	680	680	680	680	681	681	682	683	683	683	682	682	682	682	682	682	683	684	684	684	685	685	682	685	680
9	684	684	684	685	685	685	685	686	687	687	687	686	685	685	685	684	684	684	684	684	683	683	683	683	685	687	683
10	683	683	682	682	681	681	682	682	682	682	681	681	680	679	679	679	679	678	678	678	678	678	678	679	680	683	678
11	680	680	681	681	681	682	682	682	683	683	683	683	682	682	682	682	681	682	682	681	681	681	681	681	682	683	680
12	681	681	681	681	680	681	681	682	682	683	683	683	682	682	682	682	682	682	683	683	683	683	684	684	682	684	680
13	684	684	683	683	683	683	683	684	684	684	684	683	682	682	682	682	682	682	682	682	682	682	682	682	683	684	682
14	682	682	683	683	683	683	683	683	--	--	--	684	683	--	684	684	685	685	685	686	686	686	686	686	684	686	682
15	686	687	687	687	687	687	688	688	689	690	690	689	689	689	688	688	689	689	689	689	689	689	689	689	688	690	686
16	690	690	690	690	689	689	689	689	690	690	690	689	689	688	688	687	687	688	688	688	688	688	688	687	689	690	687
17	687	687	687	687	687	687	687	687	687	688	688	688	687	687	686	686	686	686	687	687	687	687	687	687	687	688	686
18	687	687	687	687	686	686	687	687	687	688	688	688	687	686	686	686	686	686	686	686	686	686	686	686	686	688	686
19	686	686	686	686	686	686	687	687	688	688	688	688	687	686	686	686	686	686	686	686	686	686	686	686	687	688	686
20	686	686	686	686	686	686	686	686	686	686	686	686	685	685	684	684	684	684	684	684	684	684	684	684	685	686	684
21	684	684	684	684	684	684	684	684	685	685	685	685	685	684	684	684	684	684	684	684	684	685	685	685	684	685	684
22	685	685	686	686	686	686	686	686	686	687	687	687	686	686	685	685	685	685	686	686	686	686	686	686	686	687	685
23	686	687	687	687	687	687	687	687	687	688	688	688	687	687	686	686	686	686	686	686	686	687	687	687	687	688	686
24	687	687	687	687	687	687	687	687	688	688	688	688	688	687	687	687	687	687	687	688	687	688	688	688	687	688	687
25	687	687	687	686	686	686	686	686	686	687	687	687	686	685	684	684	684	684	683	683	683	682	682	683	685	687	682
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27	682	682	682	682	682	682	682	683	683	683	683	683	682	682	681	681	681	681	681	681	681	681	681	681	682	683	681
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29	682	682	682	682	682	682	683	683	683	684	684	684	684	683	683	683	683	684	684	685	685	686	686	686	684	686	682
30	687	687	687	687	688	688	688	689	689	689	690	690	689	688	688	688	688	687	687	687	687	687	687	687	688	690	687
31	688	688	688	687	687	687	687	687	687	687	687	687	687	686	686	685	685	685	685	686	686	685	686	686	686	688	685
Avg	685	685	685	685	684	684	685	685	685	686	686	685	685	684	684	684	684	684	684	684	684	684	685	685	685	--	--
Max	690	690	690	690	689	689	689	689	690	690	690	690	689	689	688	688	689	689	689	689	689	689	689	689	--	690	--
Min	680	680	680	680	680	680	680	680	680	680	680	680	679	679	679	679	679	678	678	678	678	678	678	679	--	--	678

-- Indicates Invalid Data

SAROAD for Resolution, West_Plant
"Component, Channel: Table100, BP_mmHg"
Month: Feb 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	686	686	686	686	686	686	686	686	687	687	687	687	687	686	686	686	686	686	686	687	687	687	687	687	686	687	686
2	687	687	687	687	687	687	687	688	688	688	689	688	687	687	686	686	686	686	686	686	686	686	686	686	687	689	686
3	686	685	685	684	684	684	684	684	685	685	685	684	683	683	682	682	682	682	683	683	683	683	683	683	684	686	682
4	683	683	683	683	682	682	683	683	683	683	684	684	683	682	682	682	682	682	682	682	683	683	683	683	683	684	682
5	683	683	683	682	682	682	682	683	683	683	683	683	683	682	682	681	682	681	681	681	681	681	681	681	682	683	681
6	681	681	681	681	681	681	681	681	681	682	682	682	681	681	681	681	681	682	682	682	683	683	683	683	682	683	681
7	683	683	684	684	684	684	684	684	685	685	685	685	684	684	683	683	683	683	682	682	682	682	682	681	683	685	681
8	681	681	681	680	680	680	680	680	680	680	681	681	680	679	679	678	678	677	677	677	677	677	678	677	679	681	677
9	677	677	677	678	678	678	678	679	679	680	680	681	681	681	681	681	681	681	681	682	682	682	682	682	680	682	677
10	683	683	682	682	682	682	682	682	682	683	683	682	682	681	681	681	681	681	681	681	681	681	681	681	682	683	681
11	681	681	681	681	681	681	681	681	682	683	683	683	683	683	682	682	682	683	683	684	684	685	685	685	682	685	681
12	685	686	685	686	686	686	686	687	687	688	688	688	687	687	686	686	686	686	686	687	687	687	687	687	686	688	685
13	686	686	686	685	685	685	686	686	686	686	686	686	686	685	685	685	685	685	685	685	685	685	685	685	685	686	685
14	685	685	685	685	685	685	685	685	685	685	685	685	685	685	684	684	684	684	684	684	685	685	684	685	685	685	684
15	685	685	685	685	684	685	686	686	687	687	688	688	688	687	687	687	687	687	687	687	688	688	689	689	687	689	684
16	689	689	689	688	688	688	688	688	688	688	688	688	687	686	685	685	684	684	684	684	683	683	683	683	686	689	683
17	683	682	682	681	681	681	681	681	681	681	681	681	680	680	680	679	679	679	680	680	680	680	681	681	681	683	679
18	682	682	682	682	682	682	682	683	683	684	684	684	683	682	682	682	681	681	681	681	681	681	681	681	682	684	681
19	680	680	680	680	680	680	680	680	680	680	680	679	679	678	677	677	676	676	676	676	676	676	676	676	678	680	676
20	676	676	676	675	675	675	675	675	675	675	675	676	676	676	676	676	676	677	677	678	679	679	680	680	676	680	675
21	680	681	681	681	681	681	681	682	682	682	683	683	682	682	681	681	681	681	681	681	682	682	682	682	681	683	680
22	682	682	682	682	682	682	683	683	684	684	684	685	684	684	684	684	684	684	684	685	685	685	685	685	684	685	682
23	685	685	685	684	684	684	684	684	684	684	684	683	682	681	680	680	679	679	679	679	679	679	679	679	682	685	679
24	679	678	678	678	677	678	678	678	679	679	679	679	680	680	680	681	681	681	682	682	683	683	683	684	680	684	677
25	684	684	685	685	685	685	685	686	686	687	686	686	685	685	684	684	684	684	684	683	683	683	683	683	685	687	683
26	683	683	682	682	681	682	682	682	682	683	683	682	682	682	682	682	682	682	682	682	683	683	684	684	682	684	681
27	684	684	685	685	685	685	685	686	687	687	687	687	687	686	686	685	685	685	686	686	686	687	687	687	686	687	684
28	687	687	687	686	687	687	688	688	689	689	689	689	688	688	688	688	688	688	688	689	689	689	690	690	688	690	686
Avg	683	683	683	683	683	683	683	683	684	684	684	684	683	683	683	682	682	682	683	683	683	683	683	683	683	--	--
Max	689	689	689	688	688	688	688	688	689	689	689	689	688	688	688	688	688	688	688	689	689	689	690	690	--	690	--
Min	676	676	676	675	675	675	675	675	675	675	675	676	676	676	676	676	676	676	676	676	676	676	676	676	--	--	675

SAROAD for Resolution, West_Plant
"Component, Channel: Table100, BP_mmHg"
Month: Mar 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	690	690	690	689	689	689	689	690	690	690	690	690	689	688	688	688	688	688	688	688	688	689	689	688	689	690	688
2	689	689	689	688	688	689	689	689	689	689	689	689	688	688	687	687	686	686	686	686	686	686	686	685	688	689	685
3	685	685	685	684	684	684	684	684	685	684	684	684	684	684	683	682	682	682	682	682	682	682	682	681	683	685	681
4	681	681	680	680	680	680	680	681	681	681	681	682	682	682	681	682	682	682	683	683	684	684	685	685	682	685	680
5	685	685	685	684	684	684	685	685	685	685	685	685	685	684	683	683	683	683	683	683	683	684	684	683	684	685	683
6	683	683	683	683	683	683	683	683	684	684	684	684	683	682	682	681	681	681	681	681	681	681	681	681	682	684	681
7	681	681	681	680	680	681	681	682	682	682	682	682	682	681	681	681	680	680	680	681	680	680	681	681	681	682	680
8	681	681	680	680	679	679	680	680	680	680	680	679	679	678	678	678	679	680	680	681	681	681	681	681	680	681	678
9	681	681	681	681	681	681	682	682	683	683	683	683	683	683	683	683	683	683	684	684	684	684	684	684	683	684	681
10	684	684	--	684	685	685	685	686	686	686	686	686	686	685	685	685	685	685	685	685	685	686	686	686	685	686	684
11	686	686	686	685	685	686	686	686	687	687	686	686	686	685	685	684	684	684	684	684	684	684	684	684	685	687	684
12	684	684	684	684	684	683	684	684	685	685	685	685	685	684	684	684	684	684	684	684	684	685	685	685	684	685	683
13	685	685	685	685	685	685	686	686	687	687	687	687	686	686	685	685	685	685	685	685	685	685	686	685	685	687	685
14	685	685	685	685	685	685	686	686	687	687	687	686	686	685	685	684	684	684	684	684	684	684	684	684	685	687	684
15	684	684	684	684	684	684	684	684	684	684	684	684	684	683	683	682	682	682	681	681	682	682	681	681	683	684	681
16	681	681	681	681	680	680	680	681	681	681	681	680	680	679	679	678	678	678	678	678	679	679	679	679	680	681	678
17	679	679	679	679	679	679	679	680	680	681	680	680	680	680	679	679	679	679	679	680	680	680	681	681	680	681	679
18	681	681	681	681	681	681	682	682	683	683	683	683	683	682	682	682	682	682	682	682	682	682	682	682	682	683	681
19	682	682	682	681	681	682	682	682	683	683	683	683	683	683	682	682	682	682	683	683	683	684	684	684	683	684	681
20	684	684	684	684	683	684	684	684	684	684	684	684	683	683	682	681	681	681	681	681	681	681	680	680	682	684	680
21	679	679	679	679	678	678	678	679	679	679	679	679	678	678	677	677	677	677	677	677	677	677	677	677	678	679	677
22	677	677	676	676	676	677	677	677	678	678	678	678	677	677	677	676	676	676	677	677	677	678	678	678	677	678	676
23	678	678	678	678	678	679	680	680	681	681	682	682	682	681	681	680	680	681	681	681	682	682	682	682	680	682	678
24	682	682	682	682	682	682	682	683	683	683	683	682	682	681	681	680	680	680	680	681	681	681	681	681	682	683	680
25	681	681	681	681	681	682	682	683	683	683	683	683	682	682	682	681	681	681	681	682	682	682	682	682	682	683	681
26	682	682	681	681	681	682	682	682	683	683	682	682	682	681	681	680	680	680	679	680	680	680	681	681	681	683	679
27	681	681	681	680	681	681	681	682	682	682	682	682	682	682	681	681	681	681	681	681	682	682	682	682	681	682	680
28	683	683	683	683	683	683	683	684	684	684	685	684	684	684	683	683	683	683	683	683	683	684	684	684	683	685	683
29	684	684	684	684	684	685	685	685	686	686	686	686	685	685	684	684	684	684	684	684	684	684	685	685	684	686	684
30	685	684	684	684	684	684	684	684	685	685	685	684	684	684	684	683	683	683	683	683	683	683	683	683	684	685	683
31	683	683	683	683	683	683	683	684	684	684	684	684	684	683	682	682	682	681	681	681	681	682	682	682	683	684	681
Avg	683	683	683	682	682	683	683	683	684	684	684	683	683	683	682	682	682	682	682	682	682	683	683	682	683	--	--
Max	690	690	690	689	689	689	689	690	690	690	690	690	689	688	688	688	688	688	688	688	688	689	689	688	--	690	--
Min	677	677	676	676	676	677	677	677	678	678	678	678	677	677	677	676	676	676	677	677	677	677	677	677	--	--	676

-- Indicates Invalid Data

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: Jan 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	7.4	6.3	4.2	5.3	5.3	4.2	5.3	5.3	5.3	8.5	10.7	11.8	10.8	10.8	7.6	5.4	7.6	6.5	7.5	7.5	6.4	6.4	4.3	3.2	6.8	11.8	3.2
2	2.1	2.1	1.1	3.2	4.3	4.3	11.7	86.4	232.0	87.0	37.7	32.5	52.3	25.2	--	30.7	14.2	9.8	6.5	10.9	9.8	7.6	11.9	18.4	30.5	232.0	1.1
3	5.4	34.5	33.3	53.7	11.8	23.6	31.0	58.8	34.3	42.9	35.6	30.4	28.3	25.1	41.5	16.4	13.1	9.8	9.7	11.8	10.7	6.4	4.3	3.2	24.0	58.8	3.2
4	6.4	7.5	5.3	4.3	4.2	6.4	6.4	7.4	7.4	7.5	7.5	7.5	11.9	10.9	8.7	10.9	14.1	9.7	7.5	7.5	6.4	5.4	5.4	5.3	7.6	14.1	4.2
5	7.5	5.3	2.1	4.3	6.4	8.5	9.6	8.5	7.5	7.5	11.8	17.4	18.6	5.5	9.9	11.1	12.1	9.9	5.4	5.4	3.3	2.2	4.3	7.6	8.0	18.6	2.1
6	8.6	5.4	5.4	8.6	6.5	7.5	6.4	3.2	3.2	3.2	9.8	12.0	9.9	7.7	4.4	2.2	2.2	6.6	4.4	4.4	6.6	7.6	6.5	4.4	6.1	12.0	2.2
7	4.3	3.2	5.4	5.4	6.5	6.5	10.8	11.9	18.4	21.8	20.8	16.6	14.4	22.2	20.0	15.5	21.0	23.1	35.1	27.4	12.1	12.1	13.2	12.1	15.0	35.1	3.2
8	23.1	12.1	7.7	5.5	6.5	5.5	7.6	5.4	16.3	12.1	13.3	14.5	7.8	19.1	6.8	6.8	5.6	7.8	8.9	8.9	7.7	6.6	11.0	47.3	11.4	47.3	5.4
9	7.7	49.6	20.9	2.2	4.4	4.4	1.1	3.3	6.6	11.0	18.8	12.3	19.1	6.8	22.6	18.0	19.1	13.4	10.0	6.6	4.4	3.3	3.3	4.4	11.4	49.6	1.1
10	2.2	0.0	3.3	5.5	6.6	5.5	6.6	10.9	19.8	24.2	16.6	22.3	6.7	10.1	16.8	38.1	81.7	32.4	42.5	127.0	96.5	40.8	32.9	37.7	28.6	127.0	0.0
11	26.8	82.6	131.0	103.0	93.1	43.8	26.6	26.6	28.7	28.7	24.5	21.4	18.3	17.2	15.1	15.1	12.9	8.6	7.5	8.6	6.4	6.4	7.5	8.5	32.0	131.0	6.4
12	8.5	7.4	8.5	6.4	5.3	4.2	4.2	4.2	6.3	8.5	8.6	9.6	7.5	3.2	1.1	3.2	7.5	8.6	8.5	10.7	9.6	9.5	8.5	6.4	6.9	10.7	1.1
13	7.4	5.3	2.1	3.2	4.2	3.2	3.2	4.2	5.3	6.4	4.3	3.2	3.2	2.2	4.3	4.3	6.4	9.6	10.7	8.5	4.3	6.4	7.4	5.3	5.2	10.7	2.1
14	4.2	5.3	5.3	5.3	9.5	8.4	7.3	17.8	29.4	16.9	8.5	9.6	9.6	7.5	7.5	11.7	--	12.7	9.5	7.4	9.5	9.4	4.2	3.1	9.5	29.4	3.1
15	6.3	6.3	7.3	6.2	43.7	23.9	37.3	47.7	34.3	24.0	--	--	--	8.5	8.6	16.1	11.8	9.6	7.4	4.2	2.1	5.3	9.5	29.6	16.7	47.7	2.1
16	82.5	58.1	16.9	8.4	25.3	13.7	12.7	11.7	--	30.0	16.2	21.7	36.0	12.0	12.1	8.8	7.7	6.6	9.8	11.9	5.4	8.7	17.3	8.7	19.2	82.5	5.4
17	11.9	14.1	10.8	13.0	14.0	22.7	29.2	34.6	72.6	34.9	37.2	63.8	34.3	58.9	56.8	67.9	41.1	21.0	16.5	13.2	8.8	7.7	6.6	5.5	29.0	72.6	5.5
18	7.6	16.4	15.3	21.8	20.7	14.1	10.9	32.6	41.4	15.3	15.4	18.8	14.4	15.6	15.6	20.1	22.3	26.6	9.9	8.8	8.8	8.8	9.9	11.0	16.8	41.4	7.6
19	18.7	9.9	10.9	9.8	5.4	3.3	4.3	7.6	12.0	19.8	33.2	25.5	30.1	11.2	19.1	40.5	19.1	31.3	8.9	7.7	6.6	9.9	9.9	8.8	15.1	40.5	3.3
20	7.6	6.5	4.4	4.4	3.3	1.1	2.2	6.5	34.1	29.8	33.3	12.3	12.4	22.6	35.1	31.7	13.5	14.6	12.3	7.8	5.6	7.8	13.3	11.0	13.9	35.1	1.1
21	7.7	6.6	5.5	6.6	8.8	12.1	41.8	27.4	72.8	24.4	45.5	15.6	22.5	33.9	23.8	24.9	12.4	12.4	14.6	13.4	7.8	5.6	6.6	3.3	19.0	72.8	3.3
22	2.2	4.4	4.4	5.5	5.5	6.6	3.3	3.3	7.7	12.2	11.2	12.3	14.6	14.8	23.9	17.1	16.0	9.0	9.0	11.2	7.8	6.7	6.7	5.6	9.2	23.9	2.2
23	5.5	5.5	6.6	6.6	3.3	4.4	5.5	16.6	23.3	6.7	21.2	17.9	12.4	20.3	18.1	14.8	11.4	24.7	13.4	11.2	6.7	6.7	6.7	5.6	11.5	24.7	3.3
24	4.4	6.7	10.0	7.8	2.2	3.3	6.6	7.7	12.2	25.5	30.1	11.2	10.0	5.6	4.5	6.7	12.2	12.2	7.8	7.8	7.7	7.7	6.6	7.7	9.3	30.1	2.2
25	6.6	4.4	6.6	6.6	4.4	4.4	8.8	7.7	6.6	10.0	11.2	11.2	7.9	6.8	7.9	7.9	9.1	9.0	10.1	9.0	7.9	6.7	4.5	5.6	7.5	11.2	4.4
26	6.7	6.7	4.5	4.5	4.5	5.6	6.7	2.2	2.2	3.3	3.3	2.2	2.2	2.2	2.2	2.2	1.1	1.1	1.1	5.5	6.6	5.5	5.5	5.5	3.9	6.7	1.1
27	4.4	2.2	3.3	3.3	2.2	3.3	3.3	1.1	2.2	3.3	2.2	3.3	4.5	6.7	5.6	4.5	3.3	4.5	6.7	5.6	5.5	6.7	6.6	5.5	4.2	6.7	1.1
28	5.5	4.4	1.1	1.1	1.1	3.3	5.5	4.4	2.2	3.2	3.2	4.3	5.4	5.4	4.3	5.4	6.5	7.6	7.6	7.6	7.5	5.4	5.4	5.4	4.7	7.6	1.1
29	6.5	7.5	8.6	8.6	6.4	8.5	12.8	9.6	4.3	4.3	4.3	2.2	3.2	5.4	6.5	7.6	8.7	7.6	6.5	6.5	6.5	6.5	5.4	4.3	6.6	12.8	2.2
30	2.2	2.2	2.2	2.2	3.2	3.2	2.1	5.3	7.5	6.5	6.5	6.5	6.5	5.4	2.2	3.3	5.4	4.3	6.5	6.5	4.3	5.4	5.4	5.4	4.6	7.5	2.1
31	2.2	1.1	2.1	2.2	5.4	8.6	6.5	3.2	20.6	29.4	15.3	14.3	8.9	--	--	20.0	6.7	11.1	13.2	8.8	4.4	3.3	6.6	6.6	9.1	29.4	1.1
Avg	10.0	12.6	11.5	10.8	10.8	9.0	10.9	15.6	25.9	18.4	17.3	15.5	14.8	13.6	14.2	15.8	14.2	12.3	10.8	12.9	9.8	7.9	8.3	9.7	13.0	--	--
Max	82.5	82.6	131.0	103.0	93.1	43.8	41.8	86.4	232.0	87.0	45.5	63.8	52.3	58.9	56.8	67.9	81.7	32.4	42.5	127.0	96.5	40.8	32.9	47.3	--	232.0	--
Min	2.1	0.0	1.1	1.1	1.1	1.1	1.1	1.1	2.2	3.2	2.2	2.2	2.2	2.2	1.1	2.2	1.1	1.1	1.1	4.2	2.1	2.2	3.3	3.1	--	--	0.0

-- Indicates Invalid Data

SAROAD for Resolution, East_Plant

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

Month: Feb 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	6.6	6.6	5.5	5.5	2.2	2.2	6.5	6.6	9.9	11.0	8.8	6.7	7.8	9.0	5.6	6.7	10.1	12.2	18.8	13.2	12.1	8.8	6.6	3.3	8.0	18.8	2.2
2	3.3	4.4	3.3	4.4	4.4	2.2	4.4	2.2	4.4	10.0	11.1	11.1	9.0	10.1	12.4	11.3	9.0	9.0	6.7	5.6	4.5	2.2	2.2	5.6	6.4	12.4	2.2
3	10.0	8.9	6.7	4.5	3.3	6.7	7.8	6.7	6.7	7.8	5.6	4.5	5.6	6.7	5.6	6.7	9.0	6.7	5.6	6.7	5.5	8.9	8.9	6.7	6.7	10.0	3.3
4	4.4	2.2	3.3	2.2	2.2	2.2	6.6	6.6	3.3	5.6	5.6	9.0	11.3	7.9	9.0	12.4	11.2	7.9	7.8	7.8	5.6	4.4	4.4	5.5	6.2	12.4	2.2
5	5.5	3.3	3.3	4.4	3.3	2.2	1.1	2.2	4.4	8.9	10.1	6.8	4.5	9.0	10.2	5.7	4.5	5.6	5.6	3.4	1.1	5.5	3.3	-1.1	4.7	10.2	-1.1
6	1.1	3.3	3.3	3.3	5.5	7.7	8.8	11.0	26.5	12.2	11.2	11.2	12.4	16.8	14.6	16.8	21.3	19.0	21.2	24.4	14.4	17.7	16.5	18.8	13.3	26.5	1.1
7	15.5	15.5	13.2	11.0	9.9	8.7	9.8	8.7	9.9	13.3	13.4	12.2	13.4	12.3	12.3	18.0	14.6	13.4	12.3	13.3	12.2	9.9	11.0	12.1	12.3	18.0	8.7
8	11.0	8.8	9.9	9.9	7.7	7.7	8.8	7.7	8.9	8.9	7.8	7.8	7.8	7.8	22.4	17.9	24.6	25.7	46.6	50.9	41.9	26.5	25.3	23.1	17.7	50.9	7.7
9	17.5	16.4	16.4	22.8	10.8	8.6	4.3	3.2	4.3	5.4	3.2	1.1	1.1	1.1	4.3	6.5	6.5	4.3	5.4	7.6	9.7	9.7	7.6	7.6	7.7	22.8	1.1
10	7.6	7.6	6.5	6.4	6.4	8.6	11.7	10.7	10.7	10.8	13.0	12.0	8.7	7.6	8.8	13.1	10.9	8.7	12.0	13.0	14.0	11.9	8.6	8.6	9.9	14.0	6.4
11	9.7	11.8	10.7	8.6	8.6	6.5	6.5	8.6	11.8	12.9	9.7	7.5	6.5	9.7	11.9	10.8	9.7	7.5	3.2	3.2	4.3	3.2	5.3	4.3	8.0	12.9	3.2
12	3.2	5.3	5.3	2.1	2.1	5.3	5.3	5.3	3.2	1.1	3.2	3.2	3.2	4.4	5.5	6.5	5.4	4.3	5.4	6.5	5.4	6.4	7.5	7.5	4.7	7.5	1.1
13	6.4	7.5	4.3	3.2	3.2	3.2	6.4	4.3	5.4	11.9	9.8	20.8	20.9	12.1	11.0	9.9	7.7	17.6	9.8	8.7	8.7	7.6	5.4	3.3	8.7	20.9	3.2
14	3.3	4.3	4.3	2.2	3.2	5.4	4.3	3.2	5.5	6.6	8.8	7.8	11.1	10.0	8.9	11.2	13.4	11.1	6.7	6.6	7.7	401.0	126.0	24.2	29.0	401.0	2.2
15	38.3	23.0	101.0	180.0	14.2	8.7	8.7	28.3	25.2	77.8	35.3	53.3	34.6	10.1	21.3	30.4	21.3	13.4	13.3	11.1	8.8	9.9	9.9	9.8	32.8	180.0	8.7
16	10.9	7.6	7.6	13.1	12.0	12.0	88.4	18.5	36.1	11.0	29.9	42.4	7.8	11.3	13.6	9.1	4.5	4.5	6.7	4.5	3.3	6.7	6.7	4.4	15.5	88.4	3.3
17	8.8	11.0	7.7	9.9	9.9	7.7	6.6	9.9	13.3	12.3	11.2	11.3	12.4	13.6	15.8	24.9	24.8	19.1	32.5	20.1	17.9	6.7	8.9	12.2	13.7	32.5	6.6
18	8.8	6.6	9.9	9.9	9.8	9.8	9.8	10.9	12.1	13.3	12.2	13.4	14.6	10.1	6.8	9.0	10.1	13.5	12.3	10.0	8.9	7.7	11.1	8.8	10.4	14.6	6.6
19	5.5	6.6	5.5	6.6	5.5	3.3	7.7	19.8	16.6	11.2	7.8	11.2	11.3	12.5	14.8	49.9	38.5	34.9	19.1	21.3	19.0	17.8	17.8	17.7	15.9	49.9	3.3
20	13.2	17.6	8.8	31.8	10.9	7.7	4.4	5.5	2.2	2.2	3.3	4.3	4.3	2.2	5.4	5.4	2.2	1.1	0.0	1.1	5.4	6.4	2.1	2.1	6.2	31.8	0.0
21	4.3	3.2	4.3	4.3	4.3	7.5	7.5	5.3	3.2	5.3	7.5	8.6	9.7	8.6	9.8	12.0	10.9	9.8	9.7	10.8	11.8	14.0	11.8	9.7	8.1	14.0	3.2
22	8.6	8.6	19.3	9.6	11.8	11.8	12.8	13.9	11.8	18.4	11.9	16.3	8.7	10.9	21.8	10.9	13.1	14.1	18.4	15.2	14.1	16.1	15.0	13.9	13.6	21.8	8.6
23	11.8	8.6	7.5	7.5	6.4	7.5	6.4	7.5	9.7	10.9	11.0	6.6	1.1	3.3	4.5	5.6	8.9	10.0	8.9	7.7	9.9	13.2	9.9	7.7	8.0	13.2	1.1
24	6.6	4.4	5.5	6.6	9.9	7.6	6.5	6.5	5.4	6.5	5.4	6.5	6.5	2.2	1.1	4.4	5.5	5.5	4.3	2.2	3.3	4.3	5.4	7.6	5.4	9.9	1.1
25	6.5	5.4	8.6	9.6	6.4	4.3	6.4	37.4	14.0	11.9	6.5	4.3	6.6	7.7	8.8	6.6	4.4	7.7	9.8	9.8	8.7	5.4	6.5	7.6	8.8	37.4	4.3
26	7.6	9.7	8.6	10.8	11.8	7.5	6.5	6.5	33.8	10.9	9.9	11.0	11.0	11.1	12.2	20.0	16.6	15.5	19.8	20.9	21.9	14.1	17.3	18.4	13.9	33.8	6.5
27	41.2	14.1	29.2	121.0	31.2	50.6	135.0	190.0	71.1	96.3	16.3	38.3	7.7	8.8	6.6	18.8	13.3	7.7	2.2	4.4	6.5	4.3	9.7	10.8	39.0	190.0	2.2
28	6.5	4.3	4.3	8.6	74.7	1.1	33.4	76.5	51.9	41.3	97.2	52.7	50.8	42.2	--	6.7	7.8	6.7	2.2	4.4	4.4	20.7	4.4	5.4	26.4	97.2	1.1
Avg	10.1	8.5	11.5	18.6	10.4	8.0	15.4	18.7	15.0	16.3	13.8	14.4	11.1	10.0	10.5	13.1	12.1	11.3	11.7	11.2	10.4	24.0	13.4	9.5	12.9	--	--
Max	41.2	23.0	101.0	180.0	74.7	50.6	135.0	190.0	71.1	96.3	97.2	53.3	50.8	42.2	22.4	49.9	38.5	34.9	46.6	50.9	41.9	401.0	126.0	24.2	--	401.0	--
Min	1.1	2.2	3.3	2.1	2.1	1.1	1.1	2.2	2.2	1.1	3.2	1.1	1.1	1.1	1.1	4.4	2.2	1.1	0.0	1.1	1.1	2.2	2.1	-1.1	--	--	-1.1

SAROAD for Resolution, East_Plant

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

Month: Mar 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	8.7	6.5	1.1	6.5	6.5	17.4	70.9	14.2	12.1	11.0	12.2	10.0	10.1	9.0	5.7	5.7	7.9	7.9	6.7	7.8	5.6	4.4	5.5	6.6	10.8	70.9	1.1
2	7.7	6.7	5.5	5.5	6.6	4.4	4.4	5.5	20.0	11.2	11.2	10.2	6.8	5.7	9.1	10.3	10.3	10.3	12.5	14.7	9.0	6.7	8.9	8.9	8.8	20.0	4.4
3	8.9	7.8	6.7	7.8	6.7	5.5	5.5	3.3	6.7	9.0	7.9	5.7	6.8	6.8	7.9	9.1	10.2	10.2	7.9	7.9	10.2	6.8	5.6	6.8	7.4	10.2	3.3
4	7.9	6.8	1.1	0.0	4.5	10.1	11.2	10.0	8.9	16.7	17.9	20.2	16.9	23.6	23.7	20.3	25.9	16.9	14.5	12.3	12.2	14.4	16.5	12.1	13.5	25.9	0.0
5	13.2	16.5	14.3	18.7	11.0	18.7	18.7	18.8	16.6	17.8	20.2	10.2	11.3	20.5	12.5	18.2	7.9	7.9	9.0	10.1	9.0	20.2	14.6	14.5	14.6	20.5	7.9
6	12.3	13.4	13.4	11.1	6.7	7.8	10.0	13.3	13.4	11.3	12.4	14.7	14.8	12.6	8.0	8.0	11.4	17.1	18.1	17.0	14.7	11.2	10.1	9.0	12.1	18.1	6.7
7	10.1	11.2	10.1	11.1	12.2	14.4	15.5	14.4	14.5	12.3	13.5	11.3	9.1	9.1	8.0	6.9	11.4	19.3	18.1	12.4	11.3	9.0	9.0	10.1	11.9	19.3	6.9
8	12.3	7.8	4.5	5.5	3.3	1.1	3.3	5.5	6.6	5.5	3.3	3.3	4.4	7.8	8.8	6.6	6.5	4.3	3.2	3.2	2.2	2.2	6.5	10.8	5.4	12.3	1.1
9	9.7	11.9	19.4	25.9	26.9	29.1	33.4	31.2	31.2	24.7	15.1	10.8	8.6	10.8	9.7	9.7	8.6	8.6	8.6	8.6	9.7	8.7	8.7	7.6	15.7	33.4	7.6
10	8.6	--	--	7.5	8.6	5.4	3.2	7.5	9.8	5.5	6.6	11.0	7.7	5.5	4.4	6.7	6.7	3.3	4.4	2.2	1.1	6.6	9.8	7.6	6.4	11.0	1.1
11	6.5	5.4	3.3	4.4	5.5	6.6	10.9	10.9	7.7	7.7	11.1	11.2	7.8	9.0	10.1	10.1	7.9	5.6	10.1	12.3	7.8	6.6	7.7	4.4	7.9	12.3	3.3
12	3.3	6.6	4.4	1.1	3.3	3.3	4.4	7.8	9.0	52.8	18.0	15.9	11.4	11.4	12.5	11.4	14.8	21.6	15.8	15.8	12.3	7.9	5.6	6.7	11.5	52.8	1.1
13	7.8	4.5	4.4	5.5	4.4	3.3	7.8	14.5	58.3	23.6	26.0	182.0	52.6	31.1	24.2	20.8	17.3	5.8	5.7	4.5	6.8	9.0	9.0	10.1	22.5	182.0	3.3
14	12.3	9.0	48.6	3.4	3.4	4.5	7.8	20.2	12.5	11.4	27.4	23.0	19.7	10.4	10.5	12.8	15.1	15.1	11.5	12.6	11.4	6.8	4.5	6.8	13.4	48.6	3.4
15	7.9	6.8	5.6	9.0	11.2	7.9	6.7	6.7	30.7	11.5	10.4	10.4	11.6	14.0	16.3	19.7	9.3	9.3	10.4	12.6	13.8	13.8	18.3	12.5	11.9	30.7	5.6
16	11.3	10.2	9.1	10.2	12.4	16.9	13.5	10.2	11.3	12.5	9.2	10.4	12.7	12.8	11.6	23.2	22.0	11.6	18.4	11.5	12.6	14.9	14.9	12.6	13.2	23.2	9.1
17	11.3	12.5	11.3	11.3	13.5	13.5	10.1	9.0	12.5	12.5	9.1	21.7	21.7	27.5	33.3	33.3	28.7	35.5	27.4	31.9	29.5	22.6	22.6	18.1	20.0	35.5	9.0
18	23.6	19.1	18.0	21.3	23.5	24.5	20.0	18.9	37.0	18.1	20.4	18.2	12.5	26.3	22.9	26.3	21.7	21.7	22.8	19.3	21.5	22.5	21.3	25.9	22.0	37.0	12.5
19	22.4	23.6	18.0	18.0	17.9	17.9	21.2	25.7	22.4	16.9	18.1	17.0	22.7	13.7	20.6	19.4	17.1	15.9	22.7	19.2	21.5	24.8	25.8	23.5	20.3	25.8	13.7
20	17.9	17.9	16.7	16.7	23.3	16.7	16.7	18.9	19.0	32.7	23.8	19.3	17.2	12.6	11.5	10.3	13.7	14.8	22.8	19.3	20.5	20.5	13.6	12.5	17.9	32.7	10.3
21	13.7	14.8	14.8	18.2	20.4	17.0	20.3	37.2	36.2	26.1	30.8	22.9	21.8	21.9	23.0	21.9	31.1	27.6	22.9	29.7	24.0	22.8	19.4	17.1	23.1	37.2	13.7
22	21.6	23.8	20.3	13.5	14.6	14.6	12.3	18.0	22.6	21.6	19.3	16.0	14.9	20.7	26.4	24.2	24.1	27.6	27.5	17.1	15.9	19.3	15.8	14.7	19.4	27.6	12.3
23	27.0	16.9	19.1	16.7	25.6	22.2	19.9	18.9	21.2	19.0	21.3	24.8	31.7	31.8	38.6	30.7	37.4	29.4	28.2	33.7	30.3	33.6	30.2	24.6	26.4	38.6	16.7
24	24.5	26.6	23.2	19.7	19.7	15.3	14.2	16.5	18.9	14.6	16.9	11.3	13.6	19.3	11.4	11.4	18.2	18.1	13.6	13.5	14.6	14.6	14.6	18.0	16.8	26.6	11.3
25	14.6	17.8	15.5	18.8	15.5	13.3	9.9	11.1	13.4	23.7	20.4	19.4	3.4	6.9	13.7	11.5	8.0	10.3	11.4	10.2	10.2	11.3	9.0	9.0	12.8	23.7	3.4
26	9.0	7.8	6.7	5.6	5.6	8.9	26.7	24.5	31.4	30.5	31.8	18.2	16.0	23.0	16.1	13.9	8.1	5.8	10.3	12.6	11.4	13.6	12.4	12.4	15.1	31.8	5.6
27	12.5	12.4	11.2	12.3	12.3	12.3	13.4	11.2	21.4	13.7	21.7	19.5	17.3	--	34.6	34.6	24.2	13.8	12.6	18.3	14.8	19.3	17.0	19.2	17.4	34.6	11.2
28	15.7	19.0	15.7	14.5	12.2	11.1	12.3	123.0	7.9	10.2	11.4	11.4	8.0	5.7	5.7	9.2	12.6	13.7	14.8	13.6	13.5	19.1	10.1	11.2	16.7	123.0	5.7
29	11.2	11.2	14.6	14.5	10.1	7.8	11.1	23.4	20.3	18.2	12.5	17.2	11.5	12.6	19.6	15.0	16.1	13.8	17.1	19.4	19.2	12.4	13.5	14.6	14.9	23.4	7.8
30	13.5	13.5	12.4	12.4	10.1	10.1	17.9	13.4	16.9	13.6	14.8	13.7	12.6	20.7	18.3	17.2	11.5	5.7	5.7	10.3	17.1	7.9	10.1	9.0	12.8	20.7	5.7
31	7.9	7.9	10.1	11.3	9.0	9.0	10.1	10.1	10.2	11.3	13.7	16.0	13.8	33.4	13.8	12.7	12.7	19.6	16.1	17.2	18.2	14.7	11.4	10.2	13.3	33.4	7.9
Avg	12.7	12.5	12.6	11.5	11.8	12.0	14.9	18.5	18.7	17.0	16.4	20.2	14.6	15.9	15.9	15.8	15.4	14.5	14.5	14.5	13.9	13.8	13.0	12.5	14.7	--	--
Max	27.0	26.6	48.6	25.9	26.9	29.1	70.9	123.0	58.3	52.8	31.8	182.0	52.6	33.4	38.6	34.6	37.4	35.5	28.2	33.7	30.3	33.6	30.2	25.9	--	182.0	--
Min	3.3	4.5	1.1	0.0	3.3	1.1	3.2	3.3	6.6	5.5	3.3	3.3	3.4	5.5	4.4	5.7	6.5	3.3	3.2	2.2	1.1	2.2	4.5	4.4	--	--	0.0

-- Indicates Invalid Data

SAROAD for Resolution, East_Plant

"Component, Channel: Table126, conc_PM2.5_µg/m^3 Actual"

Month: Jan 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	6.0	6.0	6.0	5.0	4.0	5.0	5.0	5.0	6.0	6.0	8.0	9.0	8.0	7.0	6.0	6.0	6.0	6.0	7.0	7.0	8.0	6.0	3.0	4.0	6.0	9.0	3.0
2	4.0	4.0	5.0	8.0	7.0	4.0	3.0	7.0	10.0	7.0	4.0	5.0	7.0	3.0	--	5.0	5.0	2.0	4.0	2.0	2.0	3.0	5.0	4.0	4.8	10.0	2.0
3	0.0	1.0	5.0	9.0	11.0	8.0	6.0	8.0	9.0	8.0	8.0	34.0	30.0	15.0	33.0	11.0	8.0	5.0	5.0	7.0	9.0	11.0	8.0	6.0	10.6	34.0	0.0
4	8.0	7.0	6.0	5.0	5.0	5.0	6.0	4.0	5.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	7.0	4.0	2.0	5.0	6.0	7.0	6.0	5.7	8.0	2.0
5	5.0	5.0	5.0	5.0	6.0	4.0	3.0	4.0	6.0	6.0	6.0	6.0	6.0	6.0	4.0	3.0	5.0	4.0	2.0	3.0	3.0	2.0	-1.0	1.0	4.1	6.0	-1.0
6	4.0	2.0	2.0	4.0	5.0	5.0	5.0	6.0	3.0	3.0	1.0	2.0	3.0	2.0	2.0	0.0	-1.0	0.0	2.0	3.0	1.0	2.0	4.0	2.0	2.6	6.0	-1.0
7	1.0	2.0	3.0	6.0	5.0	1.0	6.0	8.0	8.0	8.0	6.0	6.0	7.0	9.0	10.0	9.0	9.0	11.0	16.0	9.0	7.0	5.0	4.0	4.0	6.7	16.0	1.0
8	5.0	3.0	0.0	0.0	1.0	4.0	1.0	1.0	4.0	4.0	5.0	6.0	3.0	0.0	1.0	2.0	2.0	1.0	3.0	1.0	-1.0	1.0	1.0	2.0	2.1	6.0	-1.0
9	1.0	4.0	8.0	5.0	8.0	8.0	4.0	2.0	2.0	4.0	0.0	-2.0	0.0	1.0	2.0	2.0	1.0	1.0	3.0	3.0	5.0	4.0	2.0	-1.0	2.8	8.0	-2.0
10	0.0	2.0	3.0	4.0	1.0	2.0	2.0	3.0	4.0	4.0	3.0	2.0	3.0	1.0	2.0	4.0	4.0	4.0	5.0	6.0	9.0	8.0	6.0	7.0	3.7	9.0	0.0
11	8.0	10.0	11.0	11.0	10.0	7.0	4.0	5.0	6.0	5.0	3.0	4.0	6.0	6.0	4.0	3.0	3.0	3.0	5.0	2.0	0.0	2.0	3.0	4.0	5.2	11.0	0.0
12	3.0	1.0	1.0	-1.0	1.0	3.0	3.0	4.0	4.0	5.0	4.0	1.0	1.0	1.0	1.0	2.0	2.0	6.0	6.0	2.0	1.0	1.0	3.0	4.0	2.5	6.0	-1.0
13	4.0	4.0	0.0	2.0	5.0	4.0	3.0	3.0	5.0	4.0	2.0	2.0	4.0	6.0	3.0	3.0	2.0	3.0	6.0	4.0	4.0	5.0	4.0	3.0	3.5	6.0	0.0
14	1.0	2.0	4.0	4.0	5.0	5.0	5.0	6.0	5.0	5.0	6.0	4.0	2.0	0.0	2.0	4.0	4.0	5.0	3.0	3.0	6.0	6.0	5.0	4.0	4.0	6.0	0.0
15	3.0	2.0	2.0	3.0	4.0	5.0	6.0	5.0	2.0	3.0	8.0	--	6.0	0.0	3.0	6.0	4.0	0.0	-1.0	1.0	2.0	4.0	4.0	1.0	3.2	8.0	-1.0
16	4.0	6.0	5.0	3.0	3.0	3.0	1.0	4.0	4.0	6.0	5.0	1.0	1.0	1.0	-1.0	-1.0	0.0	1.0	3.0	3.0	1.0	0.0	2.0	5.0	2.5	6.0	-1.0
17	2.0	0.0	2.0	4.0	5.0	6.0	6.0	3.0	4.0	5.0	6.0	6.0	9.0	10.0	4.0	4.0	5.0	3.0	2.0	3.0	4.0	2.0	0.0	1.0	4.0	10.0	0.0
18	0.0	2.0	4.0	6.0	7.0	2.0	0.0	4.0	6.0	6.0	4.0	4.0	5.0	3.0	3.0	3.0	2.0	4.0	3.0	3.0	5.0	3.0	0.0	2.0	3.4	7.0	0.0
19	5.0	5.0	4.0	3.0	5.0	5.0	2.0	1.0	3.0	3.0	2.0	4.0	6.0	3.0	1.0	3.0	1.0	1.0	5.0	7.0	5.0	3.0	3.0	4.0	3.5	7.0	1.0
20	2.0	1.0	4.0	2.0	1.0	3.0	2.0	3.0	5.0	5.0	5.0	3.0	2.0	2.0	4.0	4.0	3.0	4.0	1.0	2.0	3.0	3.0	4.0	2.0	2.9	5.0	1.0
21	5.0	6.0	4.0	2.0	1.0	3.0	5.0	6.0	5.0	3.0	3.0	4.0	1.0	2.0	6.0	6.0	5.0	4.0	4.0	4.0	4.0	2.0	3.0	2.0	3.8	6.0	1.0
22	2.0	2.0	3.0	4.0	3.0	3.0	3.0	4.0	6.0	6.0	4.0	5.0	4.0	2.0	2.0	2.0	4.0	3.0	2.0	3.0	3.0	4.0	2.0	1.0	3.2	6.0	1.0
23	2.0	2.0	1.0	3.0	4.0	1.0	0.0	2.0	4.0	5.0	4.0	2.0	2.0	5.0	5.0	2.0	4.0	5.0	3.0	4.0	4.0	2.0	3.0	2.0	3.0	5.0	0.0
24	2.0	3.0	4.0	2.0	1.0	3.0	6.0	6.0	6.0	7.0	7.0	6.0	4.0	3.0	4.0	4.0	4.0	2.0	2.0	4.0	4.0	3.0	5.0	5.0	4.0	7.0	1.0
25	3.0	2.0	3.0	4.0	4.0	6.0	6.0	4.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.3	6.0	2.0
26	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
27	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
28	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.0	7.0	6.0	6.0	6.0	3.0	5.0	6.0	3.0	-1.0	2.0	3.6	7.0	-1.0
29	5.0	4.0	6.0	4.0	2.0	4.0	6.0	6.0	4.0	3.0	1.0	0.0	1.0	3.0	6.0	5.0	2.0	5.0	6.0	5.0	5.0	4.0	3.0	3.0	3.9	6.0	0.0
30	1.0	-1.0	-2.0	-1.0	2.0	3.0	4.0	4.0	2.0	2.0	3.0	1.0	1.0	3.0	2.0	0.0	2.0	4.0	3.0	3.0	6.0	4.0	3.0	3.0	2.2	6.0	-2.0
31	3.0	2.0	1.0	3.0	4.0	1.0	0.0	2.0	2.0	3.0	3.0	2.0	3.0	--	--	0.0	0.0	2.0	2.0	4.0	2.0	2.0	3.0	3.0	2.1	4.0	0.0
Avg	3.2	3.2	3.5	3.8	4.2	3.9	3.6	4.2	4.6	4.7	4.2	4.5	4.6	3.8	4.5	3.7	3.5	3.6	3.8	3.7	3.9	3.6	3.1	3.1	3.8	--	--
Max	8.0	10.0	11.0	11.0	11.0	8.0	6.0	8.0	10.0	8.0	8.0	34.0	30.0	15.0	33.0	11.0	9.0	11.0	16.0	9.0	9.0	11.0	8.0	7.0	--	34.0	--
Min	0.0	-1.0	-2.0	-1.0	1.0	1.0	0.0	1.0	2.0	2.0	0.0	-2.0	0.0	0.0	-1.0	-1.0	-1.0	0.0	-1.0	1.0	-1.0	0.0	-1.0	-1.0	--	--	-2.0

-- Indicates Invalid Data

SAROAD for Resolution, East_Plant

"Component, Channel: Table126, conc_PM2.5_µg/m^3 Actual"

Month: Feb 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	4.0	5.0	1.0	0.0	6.0	6.0	4.0	1.0	-1.0	1.0	4.0	4.0	1.0	1.0	0.0	0.0	3.0	6.0	8.0	11.0	11.0	7.0	5.0	4.0	3.8	11.0	-1.0
2	6.0	6.0	2.0	2.0	2.0	1.0	4.0	5.0	4.0	3.0	2.0	3.0	2.0	1.0	2.0	3.0	3.0	3.0	4.0	3.0	3.0	1.0	1.0	4.0	2.9	6.0	1.0
3	3.0	2.0	2.0	4.0	4.0	3.0	1.0	1.0	2.0	4.0	5.0	3.0	2.0	2.0	4.0	5.0	1.0	2.0	4.0	6.0	5.0	4.0	4.0	4.0	3.2	6.0	1.0
4	4.0	4.0	4.0	3.0	3.0	6.0	4.0	1.0	1.0	1.0	2.0	4.0	3.0	3.0	5.0	5.0	3.0	4.0	5.0	4.0	4.0	4.0	4.0	4.0	3.5	6.0	1.0
5	4.0	4.0	3.0	2.0	2.0	1.0	1.0	1.0	3.0	4.0	4.0	5.0	3.0	2.0	2.0	5.0	4.0	3.0	1.0	1.0	1.0	3.0	4.0	3.0	2.8	5.0	1.0
6	4.0	4.0	3.0	2.0	4.0	8.0	9.0	8.0	10.0	7.0	3.0	5.0	7.0	8.0	7.0	6.0	17.0	8.0	10.0	12.0	13.0	11.0	8.0	10.0	7.7	17.0	2.0
7	13.0	12.0	11.0	10.0	8.0	7.0	8.0	9.0	8.0	7.0	8.0	7.0	5.0	5.0	6.0	7.0	8.0	7.0	6.0	5.0	5.0	7.0	8.0	7.0	7.7	13.0	5.0
8	6.0	5.0	5.0	3.0	1.0	4.0	6.0	6.0	6.0	4.0	4.0	4.0	5.0	5.0	4.0	6.0	6.0	7.0	10.0	8.0	5.0	5.0	6.0	6.0	5.3	10.0	1.0
9	5.0	5.0	4.0	5.0	5.0	4.0	2.0	2.0	3.0	1.0	4.0	4.0	1.0	3.0	3.0	1.0	0.0	1.0	2.0	0.0	1.0	2.0	4.0	6.0	2.8	6.0	0.0
10	4.0	4.0	5.0	6.0	5.0	3.0	5.0	4.0	4.0	5.0	5.0	7.0	6.0	4.0	3.0	2.0	4.0	6.0	6.0	7.0	5.0	5.0	5.0	6.0	4.8	7.0	2.0
11	5.0	5.0	7.0	6.0	6.0	5.0	3.0	4.0	6.0	4.0	4.0	4.0	6.0	7.0	9.0	8.0	8.0	6.0	6.0	4.0	3.0	6.0	5.0	5.0	5.5	9.0	3.0
12	3.0	3.0	3.0	5.0	4.0	3.0	4.0	6.0	7.0	7.0	5.0	4.0	2.0	3.0	5.0	4.0	4.0	5.0	6.0	6.0	5.0	5.0	5.0	1.0	4.4	7.0	1.0
13	1.0	6.0	5.0	2.0	4.0	5.0	6.0	6.0	6.0	5.0	3.0	2.0	3.0	3.0	0.0	1.0	2.0	6.0	8.0	7.0	6.0	5.0	5.0	5.0	4.3	8.0	0.0
14	2.0	2.0	5.0	4.0	2.0	2.0	4.0	5.0	3.0	3.0	4.0	5.0	4.0	3.0	6.0	7.0	2.0	2.0	5.0	4.0	3.0	8.0	29.0	6.0	5.0	29.0	2.0
15	6.0	16.0	10.0	21.0	5.0	6.0	6.0	2.0	6.0	10.0	5.0	4.0	7.0	3.0	0.0	2.0	2.0	1.0	1.0	2.0	3.0	5.0	4.0	2.0	5.4	21.0	0.0
16	3.0	3.0	4.0	5.0	2.0	3.0	22.0	11.0	8.0	3.0	1.0	3.0	4.0	3.0	3.0	3.0	4.0	4.0	3.0	2.0	2.0	2.0	2.0	4.0	4.3	22.0	1.0
17	3.0	2.0	5.0	6.0	2.0	1.0	2.0	4.0	4.0	3.0	3.0	5.0	5.0	2.0	3.0	3.0	3.0	2.0	0.0	5.0	5.0	0.0	3.0	4.0	3.1	6.0	0.0
18	3.0	3.0	3.0	6.0	6.0	3.0	5.0	5.0	3.0	3.0	5.0	6.0	6.0	4.0	3.0	5.0	5.0	5.0	3.0	1.0	3.0	5.0	4.0	4.0	4.1	6.0	1.0
19	5.0	4.0	2.0	2.0	2.0	3.0	3.0	1.0	2.0	3.0	4.0	4.0	5.0	4.0	4.0	5.0	4.0	4.0	4.0	3.0	3.0	2.0	2.0	2.0	3.2	5.0	1.0
20	5.0	6.0	6.0	5.0	4.0	3.0	2.0	2.0	3.0	2.0	1.0	2.0	2.0	2.0	2.0	3.0	3.0	2.0	3.0	4.0	4.0	4.0	5.0	5.0	3.3	6.0	1.0
21	5.0	3.0	3.0	4.0	5.0	5.0	5.0	5.0	3.0	2.0	4.0	6.0	7.0	3.0	3.0	6.0	6.0	6.0	6.0	6.0	6.0	7.0	7.0	6.0	5.0	7.0	2.0
22	6.0	6.0	4.0	5.0	6.0	7.0	7.0	8.0	9.0	6.0	7.0	8.0	7.0	7.0	7.0	8.0	6.0	5.0	9.0	9.0	6.0	7.0	8.0	9.0	7.0	9.0	4.0
23	6.0	5.0	5.0	4.0	4.0	3.0	3.0	5.0	5.0	4.0	4.0	2.0	0.0	1.0	4.0	3.0	3.0	4.0	2.0	1.0	2.0	3.0	5.0	7.0	3.5	7.0	0.0
24	5.0	5.0	7.0	7.0	5.0	5.0	7.0	6.0	4.0	4.0	5.0	3.0	2.0	3.0	4.0	3.0	1.0	2.0	0.0	-1.0	2.0	3.0	2.0	2.0	3.6	7.0	-1.0
25	3.0	5.0	5.0	6.0	5.0	2.0	1.0	4.0	4.0	3.0	3.0	3.0	4.0	4.0	1.0	1.0	3.0	4.0	5.0	4.0	4.0	4.0	4.0	3.0	3.5	6.0	1.0
26	5.0	4.0	3.0	6.0	7.0	5.0	3.0	3.0	6.0	7.0	6.0	7.0	6.0	7.0	5.0	6.0	7.0	3.0	4.0	8.0	9.0	6.0	3.0	2.0	5.3	9.0	2.0
27	3.0	2.0	1.0	5.0	6.0	3.0	5.0	7.0	6.0	5.0	4.0	3.0	4.0	3.0	1.0	0.0	2.0	5.0	5.0	2.0	2.0	2.0	3.0	3.0	3.4	7.0	0.0
28	0.0	3.0	2.0	0.0	4.0	3.0	1.0	2.0	8.0	14.0	10.0	7.0	5.0	2.0	--	2.0	3.0	4.0	3.0	0.0	0.0	1.0	2.0	2.0	3.4	14.0	0.0
Avg	4.4	4.8	4.3	4.9	4.3	3.9	4.8	4.4	4.8	4.5	4.3	4.4	4.1	3.5	3.6	3.9	4.2	4.2	4.6	4.4	4.3	4.4	5.3	4.5	4.4	--	--
Max	13.0	16.0	11.0	21.0	8.0	8.0	22.0	11.0	10.0	14.0	10.0	8.0	7.0	8.0	9.0	8.0	17.0	8.0	10.0	12.0	13.0	11.0	29.0	10.0	--	29.0	--
Min	0.0	2.0	1.0	0.0	1.0	1.0	1.0	1.0	-1.0	1.0	1.0	2.0	0.0	1.0	0.0	0.0	0.0	1.0	0.0	-1.0	0.0	0.0	1.0	1.0	--	--	-1.0

SAROAD for Resolution, East_Plant

"Component, Channel: Table126, conc_PM2.5_µg/m^3 Actual"

Month: Mar 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	4.0	2.0	-1.0	2.0	3.0	4.0	4.0	3.0	3.0	4.0	--	4.0	2.0	1.0	-1.0	0.0	-1.0	-1.0	2.0	1.0	1.0	0.0	-2.0	1.6	4.0	-2.0
2	1.0	5.0	4.0	1.0	0.0	2.0	3.0	2.0	5.0	5.0	1.0	0.0	0.0	2.0	3.0	5.0	5.0	4.0	3.0	3.0	3.0	3.0	4.0	4.0	2.8	5.0	0.0
3	5.0	6.0	5.0	2.0	0.0	1.0	3.0	4.0	4.0	5.0	6.0	4.0	2.0	2.0	3.0	3.0	2.0	2.0	5.0	6.0	2.0	2.0	3.0	2.0	3.3	6.0	0.0
4	1.0	3.0	3.0	0.0	3.0	5.0	3.0	6.0	6.0	5.0	5.0	5.0	6.0	6.0	4.0	6.0	9.0	7.0	5.0	3.0	3.0	6.0	6.0	6.0	4.7	9.0	0.0
5	6.0	5.0	4.0	5.0	6.0	6.0	5.0	5.0	7.0	5.0	4.0	6.0	7.0	3.0	5.0	4.0	1.0	4.0	6.0	6.0	3.0	3.0	4.0	5.0	4.8	7.0	1.0
6	5.0	2.0	2.0	5.0	7.0	8.0	5.0	4.0	3.0	3.0	5.0	6.0	5.0	5.0	4.0	4.0	3.0	1.0	6.0	6.0	5.0	5.0	2.0	2.0	4.3	8.0	1.0
7	4.0	3.0	5.0	5.0	5.0	6.0	5.0	5.0	6.0	6.0	6.0	6.0	5.0	4.0	3.0	3.0	4.0	5.0	5.0	5.0	3.0	2.0	3.0	3.0	4.5	6.0	2.0
8	4.0	4.0	4.0	6.0	6.0	6.0	7.0	3.0	2.0	4.0	5.0	6.0	6.0	5.0	3.0	2.0	2.0	1.0	1.0	2.0	3.0	2.0	2.0	5.0	3.8	7.0	1.0
9	6.0	4.0	4.0	6.0	7.0	8.0	8.0	7.0	4.0	5.0	6.0	3.0	4.0	4.0	2.0	1.0	1.0	4.0	6.0	7.0	9.0	7.0	4.0	4.0	5.0	9.0	1.0
10	6.0	--	7.0	7.0	6.0	4.0	2.0	1.0	5.0	5.0	6.0	6.0	3.0	4.0	3.0	5.0	4.0	2.0	5.0	4.0	2.0	4.0	4.0	3.0	4.3	7.0	1.0
11	4.0	5.0	4.0	3.0	4.0	4.0	5.0	4.0	3.0	3.0	4.0	5.0	5.0	4.0	4.0	3.0	2.0	1.0	4.0	6.0	6.0	4.0	2.0	3.0	3.8	6.0	1.0
12	3.0	4.0	3.0	-1.0	2.0	4.0	4.0	5.0	6.0	6.0	7.0	5.0	1.0	5.0	7.0	8.0	7.0	6.0	7.0	8.0	5.0	4.0	5.0	5.0	4.8	8.0	-1.0
13	4.0	3.0	2.0	1.0	2.0	5.0	6.0	4.0	4.0	4.0	3.0	6.0	7.0	4.0	3.0	3.0	4.0	3.0	3.0	3.0	2.0	4.0	5.0	4.0	3.7	7.0	1.0
14	2.0	2.0	3.0	6.0	5.0	4.0	4.0	3.0	3.0	4.0	4.0	3.0	2.0	2.0	2.0	4.0	6.0	3.0	2.0	4.0	2.0	2.0	4.0	4.0	3.3	6.0	2.0
15	4.0	3.0	1.0	4.0	5.0	4.0	3.0	4.0	7.0	4.0	3.0	2.0	2.0	5.0	3.0	1.0	1.0	2.0	4.0	5.0	3.0	4.0	5.0	3.0	3.4	7.0	1.0
16	4.0	5.0	4.0	4.0	4.0	7.0	7.0	5.0	5.0	6.0	5.0	4.0	6.0	4.0	5.0	6.0	2.0	3.0	4.0	2.0	5.0	5.0	3.0	6.0	4.6	7.0	2.0
17	5.0	4.0	5.0	6.0	4.0	5.0	6.0	5.0	6.0	6.0	3.0	4.0	7.0	8.0	7.0	8.0	9.0	8.0	9.0	7.0	6.0	7.0	7.0	6.0	6.2	9.0	3.0
18	6.0	5.0	4.0	6.0	8.0	7.0	7.0	7.0	9.0	9.0	10.0	8.0	5.0	7.0	9.0	8.0	7.0	6.0	6.0	8.0	7.0	6.0	6.0	6.0	7.0	10.0	4.0
19	9.0	11.0	10.0	8.0	7.0	8.0	8.0	7.0	7.0	7.0	6.0	7.0	9.0	9.0	8.0	6.0	7.0	7.0	8.0	10.0	10.0	8.0	8.0	8.0	8.0	11.0	6.0
20	7.0	5.0	4.0	6.0	9.0	8.0	8.0	7.0	6.0	6.0	9.0	9.0	5.0	5.0	5.0	4.0	4.0	6.0	6.0	5.0	5.0	6.0	8.0	7.0	6.3	9.0	4.0
21	7.0	6.0	5.0	6.0	8.0	8.0	6.0	5.0	8.0	10.0	7.0	6.0	7.0	4.0	5.0	6.0	5.0	7.0	9.0	8.0	6.0	4.0	5.0	5.0	6.4	10.0	4.0
22	6.0	7.0	5.0	6.0	6.0	6.0	4.0	4.0	6.0	6.0	5.0	3.0	5.0	6.0	7.0	6.0	8.0	9.0	6.0	5.0	5.0	6.0	6.0	6.0	5.8	9.0	3.0
23	6.0	6.0	6.0	6.0	7.0	7.0	7.0	6.0	6.0	7.0	9.0	11.0	13.0	12.0	12.0	13.0	17.0	11.0	12.0	16.0	14.0	14.0	12.0	12.0	10.1	17.0	6.0
24	12.0	11.0	11.0	10.0	9.0	8.0	8.0	7.0	8.0	8.0	8.0	9.0	9.0	5.0	4.0	5.0	5.0	5.0	5.0	7.0	7.0	8.0	10.0	10.0	7.9	12.0	4.0
25	9.0	9.0	9.0	9.0	9.0	9.0	7.0	5.0	4.0	6.0	5.0	3.0	3.0	2.0	1.0	1.0	0.0	3.0	3.0	1.0	2.0	5.0	6.0	3.0	4.8	9.0	0.0
26	2.0	2.0	3.0	3.0	2.0	2.0	3.0	5.0	6.0	6.0	5.0	5.0	4.0	5.0	4.0	2.0	2.0	0.0	0.0	3.0	4.0	5.0	5.0	6.0	3.5	6.0	0.0
27	6.0	5.0	6.0	7.0	5.0	4.0	5.0	5.0	5.0	6.0	6.0	7.0	7.0	--	6.0	5.0	5.0	5.0	5.0	5.0	6.0	6.0	7.0	6.0	5.7	7.0	4.0
28	3.0	5.0	7.0	5.0	4.0	4.0	2.0	7.0	10.0	3.0	2.0	5.0	5.0	3.0	1.0	2.0	4.0	5.0	6.0	6.0	4.0	2.0	5.0	5.0	4.4	10.0	1.0
29	3.0	4.0	6.0	7.0	5.0	5.0	3.0	3.0	4.0	6.0	6.0	8.0	9.0	6.0	3.0	3.0	2.0	0.0	4.0	6.0	4.0	3.0	3.0	4.0	4.5	9.0	0.0
30	4.0	4.0	5.0	5.0	3.0	3.0	4.0	4.0	4.0	5.0	6.0	5.0	5.0	5.0	4.0	4.0	3.0	3.0	2.0	4.0	6.0	6.0	6.0	6.0	4.4	6.0	2.0
31	3.0	3.0	5.0	6.0	5.0	4.0	5.0	6.0	6.0	5.0	4.0	3.0	4.0	6.0	7.0	6.0	6.0	6.0	4.0	3.0	5.0	6.0	4.0	5.0	4.9	7.0	3.0
Avg	4.8	4.8	4.8	4.8	5.0	5.3	5.1	4.8	5.4	5.5	5.3	5.3	5.2	4.8	4.5	4.4	4.4	4.1	4.8	5.4	4.8	4.8	5.0	4.9	4.9	--	--
Max	12.0	11.0	11.0	10.0	9.0	9.0	8.0	7.0	10.0	10.0	10.0	11.0	13.0	12.0	12.0	13.0	17.0	11.0	12.0	16.0	14.0	14.0	12.0	12.0	--	17.0	--
Min	1.0	2.0	1.0	-1.0	0.0	1.0	2.0	1.0	2.0	3.0	1.0	0.0	0.0	2.0	1.0	-1.0	0.0	-1.0	-1.0	1.0	1.0	1.0	0.0	-2.0	--	--	-2.0

-- Indicates Invalid Data

SAROAD for Resolution, West_Plant

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

Month: Jan 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	3.1	6.2	6.1	5.1	7.2	7.2	5.1	4.1	3.1	5.2	8.3	9.4	8.3	6.3	5.3	5.3	4.2	7.3	6.3	5.2	5.2	4.2	0.0	0.0	5.3	9.4	0.0
2	0.0	1.0	4.2	5.2	4.2	3.1	5.2	7.3	8.4	7.3	7.4	6.3	2.1	2.1	6.4	3.2	1.1	1.1	4.3	6.4	6.4	6.4	6.3	6.3	4.7	8.4	0.0
3	5.3	4.2	4.2	15.7	9.4	8.4	10.5	21.0	24.1	28.3	22.0	18.9	15.8	10.6	11.6	13.8	12.7	9.5	7.4	9.4	10.4	11.4	10.4	8.3	12.6	28.3	4.2
4	11.4	10.4	5.2	2.1	4.1	7.2	7.2	7.2	6.2	6.2	5.2	6.3	7.3	4.2	4.2	4.2	5.3	7.3	7.3	4.2	0.0	2.1	1.0	0.0	5.3	11.4	0.0
5	5.2	7.3	4.1	3.1	4.1	5.2	6.2	7.2	8.3	7.3	4.2	5.3	9.5	9.6	6.4	6.4	9.6	9.5	10.6	7.4	4.2	4.2	5.3	4.2	6.4	10.6	3.1
6	4.2	3.2	3.1	3.1	8.4	27.4	29.5	37.9	37.8	51.6	8.5	25.5	9.6	5.4	1.1	3.2	4.3	6.4	4.3	7.5	9.6	6.4	6.4	6.4	12.9	51.6	1.1
7	2.1	2.1	3.2	3.2	4.2	16.7	9.4	17.7	14.6	16.8	11.7	11.7	11.8	11.8	19.3	13.9	18.2	24.4	37.0	34.8	35.8	38.9	13.7	18.1	16.3	38.9	2.1
8	6.4	6.4	10.7	8.6	5.3	8.4	5.3	17.9	4.2	7.5	5.3	3.2	5.4	19.4	12.9	16.1	16.1	19.2	26.5	22.2	4.3	4.3	4.2	4.3	10.2	26.5	3.2
9	59.8	31.2	13.9	8.5	6.4	6.4	6.4	16.8	19.0	10.7	7.5	6.5	10.9	13.1	9.8	3.3	4.4	7.6	9.7	7.6	4.3	4.3	8.6	7.5	11.8	59.8	3.3
10	4.3	20.4	4.3	6.4	4.3	4.3	8.5	11.7	9.6	11.8	10.8	7.6	9.8	10.9	7.6	29.3	65.0	29.2	36.7	123.0	52.4	28.7	27.5	70.7	24.8	123.0	4.3
11	50.7	77.7	126.0	85.9	88.9	37.1	24.7	25.7	29.8	25.8	21.7	16.6	14.6	15.6	11.5	9.4	8.3	7.3	8.3	10.3	6.2	7.2	9.2	9.2	30.3	126.0	6.2
12	10.2	8.2	10.2	9.2	6.1	6.1	4.1	5.1	6.1	7.2	11.3	9.3	6.2	3.1	4.2	7.3	6.2	6.2	7.2	6.2	6.2	5.1	6.1	6.1	6.8	11.3	3.1
13	4.1	4.1	5.1	4.1	3.1	5.1	5.1	6.1	3.1	1.0	6.2	5.2	3.1	5.2	8.3	8.3	7.3	9.3	10.3	10.3	8.2	6.1	5.1	4.1	5.7	10.3	1.0
14	18.4	11.2	9.2	7.1	7.1	8.1	5.1	7.1	--	--	--	--	--	--	7.2	10.3	6.1	3.1	5.1	7.1	6.1	9.1	12.1	9.1	8.2	18.4	3.1
15	8.1	6.1	3.0	2.0	3.0	4.0	4.0	18.0	25.1	0.0	6.1	9.2	4.1	2.1	2.1	0.0	-1.0	1.0	2.1	0.0	-1.0	4.1	6.2	6.2	4.8	25.1	-1.0
16	19.5	6.1	5.1	3.1	165.0	183.0	25.6	10.3	--	24.8	4.2	4.2	4.2	5.3	6.4	3.2	2.1	5.3	6.3	4.2	4.2	4.2	6.3	8.4	22.2	183.0	2.1
17	11.6	10.6	5.3	4.2	16.9	13.8	18.0	37.1	15.9	14.9	10.7	7.5	6.5	6.5	7.6	9.7	9.7	18.3	16.1	11.8	7.5	5.4	5.3	6.4	11.6	37.1	4.2
18	6.4	6.4	7.5	9.6	10.6	8.5	9.5	9.5	9.5	9.6	8.6	7.5	6.5	6.5	7.6	12.0	11.9	7.6	5.4	8.6	7.5	5.4	4.3	4.3	7.9	12.0	4.3
19	5.4	6.4	6.4	6.4	5.3	4.3	4.3	7.4	10.6	19.1	11.8	9.7	8.7	8.7	8.7	8.8	7.6	6.5	8.7	4.3	0.0	2.2	5.4	5.4	7.2	19.1	0.0
20	2.1	0.0	0.0	2.1	2.1	5.4	3.2	2.1	5.4	9.7	11.9	9.8	12.0	17.5	7.7	8.8	13.2	9.8	17.4	6.5	5.4	5.4	8.6	8.6	7.3	17.5	0.0
21	8.6	6.4	3.2	4.3	2.1	2.1	5.3	10.7	24.6	16.2	11.9	17.4	27.3	14.3	16.5	12.1	8.8	7.7	8.8	8.7	7.6	2.2	-2.2	1.1	9.4	27.3	-2.2
22	3.2	2.2	3.2	3.2	1.1	2.1	7.5	9.6	5.4	5.4	6.5	6.5	7.7	9.9	11.0	7.7	7.7	9.9	12.0	16.2	9.7	4.3	1.1	4.3	6.6	16.2	1.1
23	6.5	4.3	4.3	6.5	5.4	4.3	6.5	7.6	5.4	6.5	7.6	10.9	14.2	13.2	11.0	12.1	13.2	14.3	14.2	6.5	2.2	3.3	3.3	3.3	7.8	14.3	2.2
24	4.3	2.2	3.3	4.3	5.4	6.5	8.7	8.7	18.3	14.0	11.9	16.2	14.1	13.0	17.3	9.7	10.8	11.8	8.6	7.5	5.4	5.4	8.6	7.5	9.3	18.3	2.2
25	5.4	2.2	1.1	1.1	3.2	2.2	1.1	0.0	1.1	2.2	4.3	6.5	5.5	6.6	6.6	4.4	4.4	7.7	7.6	4.4	2.2	4.4	6.6	3.3	3.9	7.7	0.0
26	6.5	9.8	5.4	4.3	5.4	4.3	4.3	6.4	8.6	3.2	3.2	8.5	5.4	1.1	0.0	5.4	7.5	7.5	7.5	6.4	9.6	8.6	4.3	3.2	5.7	9.8	0.0
27	4.3	6.4	2.1	-3.2	-4.3	-2.1	2.1	0.0	0.0	1.1	4.3	8.6	6.5	3.2	5.4	3.2	2.2	3.2	4.3	7.5	4.3	2.1	3.2	4.3	2.9	8.6	-4.3
28	3.2	2.1	3.2	1.1	-1.1	1.1	2.1	2.1	5.2	6.2	6.2	8.4	10.4	6.3	6.3	8.4	6.3	6.3	3.1	2.1	2.1	1.0	2.1	5.2	4.1	10.4	-1.1
29	6.2	6.2	7.2	4.1	2.1	4.1	4.1	6.1	6.2	4.1	4.1	2.1	3.1	6.3	7.3	9.4	7.3	5.2	3.1	0.0	1.0	3.1	4.1	3.1	4.6	9.4	0.0
30	--	--	--	--	--	--	--	--	--	--	--	--	--	2.1	2.1	2.1	2.1	2.1	4.2	4.2	4.2	4.2	3.1	4.2	--	4.2	2.1
31	2.1	1.0	2.1	-1.0	0.0	1.0	2.1	5.2	5.2	7.4	7.4	3.2	1.1	1.1	5.4	6.5	--	6.5	7.5	6.4	4.2	5.3	5.3	2.1	3.8	7.5	-1.0
Avg	9.6	9.1	9.1	7.3	12.8	13.2	8.0	11.1	11.5	11.4	8.7	9.2	8.7	8.0	7.9	8.3	9.4	9.0	10.2	11.8	7.6	6.7	6.2	7.6	9.3	--	--
Max	59.8	77.7	126.0	85.9	165.0	183.0	29.5	37.9	37.8	51.6	22.0	25.5	27.3	19.4	19.3	29.3	65.0	29.2	37.0	123.0	52.4	38.9	27.5	70.7	--	183.0	--
Min	0.0	0.0	0.0	-3.2	-4.3	-2.1	1.1	0.0	0.0	0.0	3.2	2.1	1.1	1.1	0.0	0.0	-1.0	1.0	2.1	0.0	-1.0	1.0	-2.2	0.0	--	--	-4.3

-- Indicates Invalid Data

SAROAD for Resolution, West_Plant

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

Month: Feb 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	1.1	5.3	4.2	2.1	3.2	2.1	5.3	6.3	3.2	2.1	4.3	2.2	2.2	8.7	8.7	6.5	11.8	11.8	11.7	11.7	10.6	9.5	5.3	5.8	11.8	0.0
2	1.1	1.1	3.2	2.1	1.1	1.1	1.1	0.0	1.1	3.2	7.6	6.5	3.3	5.5	6.6	5.5	5.5	8.7	5.4	0.0	-3.2	0.0	5.4	6.5	3.3	8.7	-3.2
3	3.3	2.2	3.3	2.2	2.2	4.3	4.3	4.3	4.3	4.3	5.4	4.4	7.6	8.7	7.6	6.5	6.5	8.6	10.8	11.8	7.5	4.3	6.4	6.4	5.7	11.8	2.2
4	4.3	5.3	4.3	1.1	1.1	2.1	7.4	9.5	7.5	6.4	7.6	7.6	6.5	5.4	9.8	10.9	10.9	8.7	5.4	8.6	8.6	5.4	6.4	6.4	6.6	10.9	1.1
5	3.2	-1.1	1.1	2.1	-1.1	0.0	4.3	8.5	8.5	6.5	5.4	7.6	9.8	16.4	8.7	6.6	6.6	7.6	5.4	5.4	6.5	5.4	2.2	1.1	5.3	16.4	-1.1
6	2.2	1.1	4.3	5.3	6.4	9.6	21.3	14.9	14.9	11.8	8.6	9.8	14.2	16.3	14.1	13.1	21.7	17.3	21.5	10.7	13.9	16.0	11.7	18.1	12.5	21.7	1.1
7	12.7	19.1	15.9	14.8	14.8	12.7	10.6	11.7	10.6	11.7	11.8	11.9	11.9	9.8	17.4	14.1	13.0	9.7	10.8	13.9	13.9	12.8	9.6	8.6	12.7	19.1	8.6
8	11.8	9.7	7.5	8.6	9.6	8.5	10.7	11.7	11.7	10.8	8.7	8.7	9.8	17.4	20.7	17.4	22.8	29.2	49.3	39.5	42.6	25.6	24.4	19.1	18.2	49.3	7.5
9	20.1	21.1	13.7	28.3	2.1	3.1	3.1	3.1	7.3	9.4	9.4	9.4	5.2	2.1	5.2	5.2	5.2	4.2	3.1	7.3	8.3	9.4	6.3	6.3	8.3	28.3	2.1
10	6.3	4.2	6.2	6.2	6.2	6.2	9.3	11.4	10.4	9.4	10.5	13.7	8.5	4.2	8.5	10.6	6.3	8.4	12.6	11.5	11.5	10.4	7.3	5.2	8.5	13.7	4.2
11	7.3	9.4	7.3	8.4	8.4	7.3	7.3	7.3	6.2	4.1	7.2	10.4	9.4	6.2	9.4	10.4	8.3	7.3	5.2	2.1	2.1	4.1	6.2	7.2	7.0	10.4	2.1
12	10.2	10.2	11.2	13.3	11.2	11.2	9.1	5.1	6.1	5.1	4.1	5.2	5.2	6.3	4.2	2.1	4.2	3.1	4.2	5.2	6.2	7.2	5.2	6.2	6.7	13.3	2.1
13	3.1	5.2	5.2	2.1	0.0	1.0	4.1	4.1	3.1	5.2	4.2	3.2	7.5	10.6	7.4	6.4	17.0	11.7	12.7	10.5	5.2	7.3	6.3	2.1	6.1	17.0	0.0
14	3.1	4.2	4.2	3.1	1.0	2.1	2.1	6.3	8.3	3.2	3.2	5.4	7.5	6.4	9.7	14.0	14.0	18.3	19.2	17.0	8.5	89.6	118.0	19.2	16.1	118.0	1.0
15	0.0	7.5	35.1	38.4	12.8	11.7	19.1	0.0	21.2	23.4	-1.1	4.3	10.8	8.7	9.8	10.9	7.6	6.5	4.3	9.7	12.9	11.8	14.9	6.4	11.9	38.4	-1.1
16	4.3	6.4	3.2	0.0	2.1	11.7	13.8	10.7	33.2	22.6	8.6	9.7	8.7	7.7	8.8	7.7	6.6	5.5	3.3	3.3	1.1	0.0	1.1	6.5	7.8	33.2	0.0
17	8.6	18.3	5.4	5.4	4.3	5.4	8.6	9.6	8.6	7.6	9.8	8.8	7.7	12.1	14.3	14.2	19.7	24.0	29.2	22.6	33.2	12.9	59.9	16.1	15.3	59.9	4.3
18	23.5	12.7	12.7	13.8	11.6	7.4	9.6	13.8	12.8	10.7	12.9	18.4	20.6	15.3	41.5	43.7	18.6	10.9	43.3	20.5	7.5	9.7	8.6	6.5	16.9	43.7	6.5
19	7.5	9.7	7.5	7.5	10.7	13.8	43.5	27.7	9.6	8.6	8.7	10.9	9.9	8.8	19.8	53.9	31.8	39.3	18.5	29.2	21.6	15.1	12.9	11.8	18.3	53.9	7.5
20	13.8	15.9	14.9	20.1	8.5	8.5	5.3	2.1	6.3	5.2	1.1	-1.0	-5.2	-1.0	4.2	5.2	2.1	1.0	1.0	2.1	3.1	0.0	2.1	4.1	5.0	20.1	-5.2
21	4.1	6.1	6.2	5.1	6.2	8.2	7.2	6.2	6.2	6.2	9.3	10.4	9.4	7.3	8.4	9.5	11.6	9.5	8.4	7.3	5.2	7.3	10.4	13.5	7.9	13.5	4.1
22	13.5	11.4	11.4	11.4	20.7	12.4	13.4	13.4	13.5	21.9	15.7	13.6	11.6	11.6	21.1	8.4	24.3	6.3	9.4	11.5	10.4	9.4	11.4	11.4	13.3	24.3	6.3
23	10.3	10.3	8.3	7.3	5.2	4.1	8.3	9.4	6.3	7.4	11.6	8.5	3.2	3.2	4.3	6.5	6.5	3.2	5.3	10.6	9.6	9.5	8.4	7.4	7.3	11.6	3.2
24	9.5	8.4	5.3	4.2	4.2	22.1	11.6	9.4	7.3	7.3	6.3	4.2	3.2	5.3	4.2	5.3	5.3	4.2	5.3	2.1	0.0	3.1	7.3	8.3	6.4	22.1	0.0
25	8.3	9.3	6.2	5.1	5.1	15.4	6.2	15.3	6.2	5.2	6.3	6.3	7.4	6.4	7.4	9.6	5.3	4.2	8.4	7.4	7.3	8.4	9.4	11.5	7.8	15.4	4.2
26	7.3	6.2	9.3	9.3	10.4	14.6	20.7	23.8	11.5	10.5	15.9	12.8	10.7	22.5	12.9	12.9	11.8	10.7	10.7	29.7	10.6	11.6	9.5	5.3	13.0	29.7	5.3
27	46.4	17.9	2.1	6.3	6.3	6.3	27.2	10.5	7.3	8.4	8.4	18.0	5.3	6.4	9.6	12.9	6.4	2.1	7.4	7.4	3.2	4.2	6.3	9.5	10.2	46.4	2.1
28	7.3	5.2	4.2	1.1	1.0	-2.1	156.0	9.4	16.7	6.3	9.5	10.6	--	25.8	18.3	4.3	4.3	0.0	5.4	9.6	3.2	3.2	6.3	5.3	13.5	156.0	-2.1
Avg	9.0	8.5	8.0	8.5	6.2	7.6	16.0	9.4	9.8	8.8	7.8	8.7	7.8	9.2	11.5	12.0	11.1	10.1	12.0	11.7	9.7	11.2	14.0	8.6	9.9	--	--
Max	46.4	21.1	35.1	38.4	20.7	22.1	156.0	27.7	33.2	23.4	15.9	18.4	20.6	25.8	41.5	53.9	31.8	39.3	49.3	39.5	42.6	89.6	118.0	19.2	--	156.0	--
Min	0.0	-1.1	1.1	0.0	-1.1	-2.1	1.1	0.0	1.1	3.2	-1.1	-1.0	-5.2	-1.0	4.2	2.1	2.1	0.0	1.0	0.0	-3.2	0.0	1.1	1.1	--	--	-5.2

SAROAD for Resolution, West_Plant

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

Month: Mar 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	5.3	5.2	0.0	-2.1	3.1	9.4	16.8	21.9	56.9	34.1	10.8	10.8	9.8	7.6	7.7	3.3	2.2	5.5	9.7	14.0	8.6	2.1	6.4	8.6	10.7	56.9	-2.1
2	20.3	9.6	5.4	7.5	8.6	5.3	8.5	5.3	3.2	21.7	2.2	4.4	4.4	6.6	24.3	14.4	12.2	35.3	26.3	6.5	36.8	10.8	19.4	7.6	12.8	36.8	2.2
3	6.5	7.5	16.1	8.6	40.7	35.4	26.8	5.4	7.5	6.5	8.8	14.3	14.3	20.9	5.5	7.7	11.0	53.6	22.9	12.0	7.6	7.6	11.9	11.9	15.5	53.6	5.4
4	9.8	89.0	7.6	9.7	34.7	9.7	31.2	48.2	14.0	15.1	18.4	18.4	28.3	18.5	36.0	20.7	19.6	18.5	19.5	17.3	11.8	12.8	10.7	10.7	22.1	89.0	7.6
5	10.6	8.5	10.7	11.8	17.1	17.1	13.9	27.7	18.3	9.8	13.1	13.1	9.9	9.9	13.3	16.5	13.2	12.1	17.5	9.8	10.8	20.5	14.0	20.4	14.2	27.7	8.5
6	15.1	14.0	10.8	7.5	6.5	18.2	39.6	13.9	12.9	16.3	14.2	15.4	12.1	8.9	22.2	21.1	7.7	8.8	16.5	15.3	14.1	24.9	10.8	9.8	14.9	39.6	6.5
7	22.7	25.9	14.0	12.9	12.9	19.3	33.2	26.8	19.5	9.8	12.0	11.0	11.0	8.8	8.9	13.3	14.3	16.5	25.2	26.2	13.1	13.1	13.0	8.7	16.3	33.2	8.7
8	7.6	8.6	3.2	3.2	5.3	1.1	1.1	3.2	3.2	3.2	1.1	0.0	4.3	1.1	0.0	5.3	3.1	-1.0	-2.1	-1.0	0.0	-1.0	1.0	5.2	2.3	8.6	-2.1
9	7.3	7.3	16.7	14.6	20.8	23.9	30.2	26.0	31.2	21.8	13.5	8.3	4.2	6.3	7.3	3.1	3.1	9.4	10.4	7.3	6.3	11.5	13.5	9.4	13.1	31.2	3.1
10	9.4	--	--	5.2	5.2	6.2	8.3	6.2	5.2	6.3	7.4	5.3	4.3	6.4	4.3	4.3	4.3	4.3	2.1	1.1	3.2	3.2	2.1	2.1	4.8	9.4	1.1
11	1.1	2.1	4.2	5.3	4.2	5.3	6.3	5.3	8.5	9.6	7.5	6.5	9.7	15.2	15.2	12.0	6.5	5.4	6.5	6.5	5.3	7.5	10.7	9.6	7.3	15.2	1.1
12	6.4	5.3	1.1	-2.1	1.1	7.5	9.6	26.6	9.7	49.0	8.7	6.6	7.7	27.5	45.1	17.6	12.1	13.2	13.1	22.8	9.7	7.6	4.4	6.5	13.2	49.0	-2.1
13	7.6	5.4	5.4	4.3	1.1	5.4	9.7	10.8	13.0	16.4	16.5	16.6	31.1	5.6	17.9	11.2	11.2	10.1	33.3	8.8	6.6	2.2	4.4	6.6	10.9	33.3	1.1
14	4.4	6.6	7.7	5.5	3.3	6.5	9.8	21.7	32.8	19.9	15.5	22.3	12.3	12.4	12.4	14.7	15.8	19.1	23.5	14.4	9.9	6.6	6.6	7.7	13.0	32.8	3.3
15	8.8	7.7	8.7	10.9	7.6	6.6	9.9	52.5	7.7	12.2	16.7	21.3	23.7	40.5	28.2	16.9	11.2	13.5	37.9	15.5	14.3	12.1	11.0	11.0	16.9	52.5	6.6
16	9.9	23.0	16.4	13.1	16.3	21.8	30.5	26.1	14.3	14.4	20.0	12.3	11.2	13.5	19.1	12.4	21.4	9.0	32.3	80.9	16.6	58.3	17.5	18.6	22.0	80.9	9.0
17	67.6	9.8	56.8	12.0	45.7	8.7	45.6	12.0	13.2	14.3	14.3	27.6	25.5	32.2	32.3	31.2	29.0	27.8	28.8	60.4	20.8	39.3	30.5	19.6	29.4	67.6	8.7
18	17.4	24.9	22.7	47.4	77.5	28.1	28.0	38.9	29.3	26.3	22.0	23.2	19.9	27.7	38.8	25.5	18.9	26.6	35.3	56.0	35.0	22.8	19.5	29.3	30.9	77.5	17.4
19	21.7	20.6	21.6	19.5	53.9	20.5	69.9	30.3	27.1	20.8	35.1	24.2	16.6	23.2	22.1	13.3	13.3	17.7	43.9	29.6	37.1	15.2	19.5	18.4	26.5	69.9	13.3
20	23.8	32.4	21.7	16.2	17.3	19.5	23.8	18.4	15.2	18.6	26.4	26.5	17.8	20.0	21.1	14.4	14.4	15.5	39.7	45.2	20.8	19.7	41.6	20.8	22.9	45.2	14.4
21	16.4	14.3	25.2	13.2	13.1	30.6	40.3	62.2	37.2	26.4	28.7	25.5	30.1	31.2	35.7	13.4	26.8	31.2	15.5	27.7	25.4	23.1	15.4	14.3	26.0	62.2	13.1
22	14.2	16.4	17.4	7.6	9.8	20.6	13.0	12.0	23.0	27.5	16.6	19.9	27.7	74.7	39.0	26.8	27.9	13.4	23.3	17.6	17.5	15.3	17.5	15.3	21.4	74.7	7.6
23	15.2	19.4	19.4	34.4	15.0	20.3	25.7	26.8	18.4	17.3	23.9	27.3	73.5	35.2	35.2	31.9	36.3	27.4	45.8	35.8	35.6	85.0	36.5	33.2	32.3	85.0	15.0
24	23.5	29.8	24.5	56.3	31.9	36.1	77.5	23.4	24.8	18.4	14.1	15.3	17.6	17.6	12.1	13.2	13.2	18.7	20.8	16.3	15.2	15.1	35.6	19.4	24.6	77.5	12.1
25	21.5	15.0	15.1	18.3	16.2	17.2	10.8	11.9	14.1	14.2	14.3	13.2	12.2	13.3	24.4	11.1	10.0	6.7	36.4	25.2	21.8	12.0	36.9	15.2	17.0	36.9	6.7
26	9.8	6.6	6.6	6.5	8.7	9.8	16.3	29.3	28.3	26.3	20.9	22.1	16.6	25.6	19.0	13.4	13.5	13.4	29.0	13.3	12.1	16.4	12.0	13.1	16.2	29.3	6.5
27	13.1	12.0	22.8	4.4	7.6	13.0	18.5	14.2	15.3	15.5	18.9	17.8	25.7	36.9	57.1	--	23.5	22.3	23.3	46.4	23.1	37.2	33.8	189.0	30.1	189.0	4.4
28	42.3	15.2	14.1	9.7	7.6	9.7	18.4	23.9	13.1	14.3	17.7	12.2	18.9	32.3	28.9	16.7	21.1	13.3	30.9	11.0	16.4	27.2	25.0	33.7	19.7	42.3	7.6
29	33.6	10.8	9.7	9.7	11.9	26.9	28.1	18.4	9.8	12.1	16.5	17.7	16.7	15.6	14.5	15.6	22.3	11.1	31.0	14.3	26.3	7.6	18.5	9.8	17.0	33.6	7.6
30	17.3	32.6	35.8	39.1	61.9	45.5	34.8	16.3	20.7	20.8	22.0	19.9	20.0	22.2	16.6	25.5	1.1	2.2	46.5	6.6	42.8	10.9	17.4	45.6	26.0	61.9	1.1
31	26.1	5.4	69.3	14.1	47.6	15.1	95.0	9.8	13.1	15.4	18.8	15.5	16.7	24.6	21.3	12.3	13.4	17.9	35.6	76.3	28.7	16.5	50.3	48.0	29.4	95.0	5.4
Avg	16.6	16.4	17.0	13.7	19.8	16.8	26.8	21.8	18.1	17.9	16.0	16.0	17.9	20.7	22.1	15.3	14.6	16.1	25.2	23.8	17.8	18.2	18.3	21.9	18.7	--	--
Max	67.6	89.0	69.3	56.3	77.5	45.5	95.0	62.2	56.9	49.0	35.1	27.6	73.5	74.7	57.1	31.9	36.3	53.6	46.5	80.9	42.8	85.0	50.3	189.0	--	189.0	--
Min	1.1	2.1	0.0	-2.1	1.1	1.1	1.1	3.2	3.2	3.2	1.1	0.0	4.2	1.1	0.0	3.1	1.1	-1.0	-2.1	-1.0	0.0	-1.0	1.0	2.1	--	--	-2.1

-- Indicates Invalid Data

SAROAD for Resolution, West_Plant

"Component, Channel: Table126, conc_PM2.5_μg/m^3 Actual"

Month: Jan 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	1.0	2.0	2.0	2.0	4.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.0	1.0
2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.0	-1.0	-3.0	1.0	3.0	2.0	-1.0	--	3.0	-3.0
3	-3.0	-1.0	4.0	2.0	-1.0	0.0	-2.0	0.0	2.0	0.0	0.0	1.0	0.0	-1.0	0.0	-2.0	-2.0	0.0	1.0	2.0	3.0	2.0	1.0	1.0	0.3	4.0	-3.0
4	2.0	2.0	2.0	2.0	1.0	0.0	2.0	-1.0	-1.0	5.0	4.0	0.0	-1.0	-1.0	-1.0	-1.0	-1.0	1.0	1.0	1.0	2.0	2.0	1.0	2.0	1.0	5.0	-1.0
5	2.0	3.0	3.0	2.0	-2.0	-1.0	1.0	1.0	2.0	-3.0	-4.0	-1.0	1.0	0.0	-1.0	2.0	1.0	-1.0	0.0	0.0	-2.0	-1.0	0.0	-2.0	0.0	3.0	-4.0
6	0.0	2.0	-2.0	-3.0	-1.0	-1.0	1.0	0.0	0.0	-1.0	-3.0	-3.0	-3.0	-2.0	-4.0	-5.0	-3.0	-1.0	0.0	-2.0	-1.0	-1.0	-2.0	0.0	-1.5	2.0	-5.0
7	3.0	0.0	-3.0	0.0	3.0	4.0	2.0	4.0	4.0	2.0	-1.0	1.0	4.0	3.0	2.0	3.0	6.0	9.0	12.0	17.0	13.0	17.0	2.0	0.0	4.5	17.0	-3.0
8	-2.0	-1.0	0.0	0.0	-1.0	0.0	1.0	1.0	1.0	0.0	-1.0	-2.0	-3.0	-1.0	-1.0	1.0	4.0	3.0	5.0	6.0	2.0	-1.0	1.0	2.0	0.6	6.0	-3.0
9	2.0	-1.0	0.0	1.0	1.0	-1.0	-2.0	-1.0	0.0	-2.0	-4.0	-3.0	-2.0	-4.0	-6.0	-5.0	-3.0	-1.0	-3.0	-3.0	0.0	1.0	1.0	-2.0	-1.5	2.0	-6.0
10	-3.0	1.0	0.0	-2.0	-1.0	-3.0	-3.0	0.0	-1.0	-1.0	-4.0	-5.0	-2.0	0.0	0.0	2.0	2.0	1.0	-1.0	3.0	4.0	1.0	3.0	16.0	0.3	16.0	-5.0
11	13.0	10.0	9.0	8.0	5.0	4.0	0.0	0.0	3.0	1.0	0.0	-1.0	-2.0	0.0	1.0	2.0	0.0	2.0	3.0	0.0	1.0	3.0	3.0	2.0	2.8	13.0	-2.0
12	0.0	0.0	1.0	2.0	2.0	-1.0	-1.0	--	0.0	0.0	-1.0	-1.0	-2.0	-3.0	-2.0	-1.0	2.0	4.0	3.0	2.0	2.0	0.0	2.0	4.0	0.5	4.0	-3.0
13	1.0	1.0	2.0	-1.0	-1.0	2.0	4.0	1.0	0.0	1.0	-2.0	-2.0	-3.0	-3.0	-1.0	-1.0	-1.0	1.0	2.0	0.0	-1.0	2.0	2.0	2.0	0.2	4.0	-3.0
14	4.0	4.0	2.0	2.0	3.0	4.0	3.0	6.0	--	--	--	2.0	-5.0	--	-5.0	-4.0	-9.0	-8.0	-6.0	-3.0	2.0	5.0	4.0	-1.0	0.0	6.0	-9.0
15	1.0	1.0	-1.0	1.0	-1.0	0.0	3.0	1.0	0.0	-3.0	-5.0	-6.0	-6.0	-3.0	-3.0	-4.0	-4.0	-1.0	-1.0	0.0	1.0	2.0	1.0	-2.0	-1.2	3.0	-6.0
16	-3.0	-1.0	0.0	0.0	3.0	4.0	1.0	-1.0	1.0	1.0	-4.0	-7.0	-7.0	-10.0	-10.0	-7.0	-4.0	-2.0	-1.0	3.0	4.0	2.0	1.0	1.0	-1.5	4.0	-10.0
17	2.0	1.0	1.0	1.0	-1.0	-1.0	0.0	-2.0	-1.0	-1.0	-2.0	-4.0	-6.0	-4.0	-3.0	-3.0	-4.0	-4.0	2.0	1.0	0.0	1.0	2.0	2.0	-1.0	2.0	-6.0
18	2.0	2.0	0.0	0.0	1.0	-1.0	0.0	2.0	-1.0	-4.0	-5.0	-3.0	-3.0	-3.0	-5.0	-5.0	-3.0	-2.0	0.0	-1.0	-2.0	-3.0	-3.0	-3.0	-1.7	2.0	-5.0
19	-2.0	0.0	0.0	-1.0	-3.0	0.0	2.0	3.0	1.0	-1.0	-2.0	-4.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	1.0	1.0	1.0	0.0	1.0	-0.6	3.0	-4.0
20	2.0	1.0	0.0	1.0	0.0	0.0	0.0	-1.0	-1.0	-3.0	-4.0	-5.0	-4.0	-5.0	-7.0	-8.0	-5.0	-3.0	0.0	2.0	1.0	0.0	1.0	0.0	-1.6	2.0	-8.0
21	-1.0	2.0	2.0	1.0	0.0	-1.0	0.0	1.0	-1.0	-3.0	1.0	2.0	-3.0	-3.0	-2.0	-3.0	-1.0	-1.0	0.0	1.0	0.0	0.0	-2.0	0.0	-0.5	2.0	-3.0
22	0.0	-2.0	1.0	2.0	1.0	0.0	0.0	0.0	-2.0	-4.0	-4.0	-6.0	-5.0	-5.0	-5.0	-5.0	-4.0	-2.0	-2.0	-2.0	-1.0	0.0	0.0	2.0	-1.8	2.0	-6.0
23	3.0	-1.0	0.0	1.0	0.0	-2.0	-1.0	0.0	-1.0	-2.0	-4.0	-2.0	4.0	3.0	-4.0	-5.0	-3.0	-2.0	-4.0	-2.0	0.0	1.0	0.0	-2.0	-1.0	4.0	-5.0
24	-2.0	-3.0	-4.0	-4.0	-3.0	-3.0	-2.0	-4.0	-3.0	-2.0	0.0	1.0	-4.0	-4.0	-1.0	-1.0	0.0	0.0	0.0	0.0	-1.0	-2.0	-2.0	0.0	-1.8	1.0	-4.0
25	0.0	-1.0	-2.0	-2.0	-2.0	-2.0	-4.0	-5.0	-2.0	-3.0	-3.0	-3.0	-4.0	-3.0	-4.0	-4.0	-6.0	-7.0	-4.0	-2.0	-2.0	-4.0	-4.0	2.0	-3.0	2.0	-7.0
26	3.0	-3.0	-3.0	-4.0	-3.0	0.0	3.0	2.0	-2.0	-2.0	-3.0	-2.0	-3.0	-4.0	-5.0	-5.0	-4.0	-4.0	-3.0	0.0	-2.0	0.0	1.0	-1.0	-1.8	3.0	-5.0
27	1.0	0.0	0.0	2.0	0.0	-2.0	-3.0	-4.0	-6.0	-3.0	-5.0	-6.0	-3.0	-4.0	-4.0	-5.0	-5.0	-3.0	0.0	1.0	1.0	0.0	1.0	4.0	-1.8	4.0	-6.0
28	2.0	0.0	-1.0	-4.0	-5.0	-3.0	-3.0	2.0	7.0	5.0	5.0	2.0	-2.0	-1.0	-1.0	-1.0	-1.0	-1.0	0.0	1.0	1.0	0.0	1.0	-1.0	0.1	7.0	-5.0
29	-1.0	1.0	-1.0	-3.0	-1.0	2.0	2.0	0.0	3.0	3.0	-2.0	-3.0	-4.0	-3.0	-1.0	-1.0	3.0	5.0	3.0	-1.0	2.0	4.0	2.0	2.0	0.5	5.0	-4.0
30	4.0	2.0	-2.0	0.0	4.0	2.0	1.0	1.0	-2.0	-5.0	-8.0	-7.0	-3.0	-3.0	-6.0	-7.0	-4.0	-3.0	1.0	3.0	0.0	1.0	1.0	2.0	-1.2	4.0	-8.0
31	2.0	-1.0	-2.0	-1.0	-3.0	0.0	2.0	-1.0	-2.0	-3.0	-6.0	-6.0	-4.0	-4.0	-4.0	-3.0	--	-1.0	-1.0	-1.0	2.0	-2.0	-4.0	0.0	-1.9	2.0	-6.0
Avg	1.1	0.6	0.3	0.2	-0.1	0.1	0.2	0.2	-0.1	-1.0	-2.4	-2.5	-2.6	-2.5	-2.9	-2.7	-1.8	-0.7	0.2	0.8	1.0	1.1	0.5	1.0	-0.5	--	--
Max	13.0	10.0	9.0	8.0	5.0	4.0	4.0	6.0	7.0	5.0	5.0	2.0	4.0	3.0	2.0	3.0	6.0	9.0	12.0	17.0	13.0	17.0	4.0	16.0	--	17.0	--
Min	-3.0	-3.0	-4.0	-4.0	-5.0	-3.0	-4.0	-5.0	-6.0	-5.0	-8.0	-7.0	-7.0	-10.0	-10.0	-8.0	-9.0	-8.0	-6.0	-3.0	-2.0	-4.0	-4.0	-3.0	--	--	-10.0

-- Indicates Invalid Data

SAROAD for Resolution, West_Plant

"Component, Channel: Table126, conc_PM2.5_μg/m^3 Actual"

Month: Feb 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	-1.0	-2.0	0.0	-2.0	-2.0	-2.0	-4.0	-6.0	-5.0	-3.0	-4.0	-5.0	-5.0	-5.0	-3.0	1.0	4.0	4.0	4.0	5.0	4.0	1.0	-1.1	5.0	-6.0
2	-2.0	-2.0	-1.0	-4.0	-4.0	-4.0	-1.0	-3.0	-3.0	-3.0	-8.0	-8.0	-4.0	-3.0	-3.0	-2.0	-4.0	-4.0	-4.0	-1.0	3.0	0.0	-2.0	-2.0	-2.9	3.0	-8.0
3	-5.0	-6.0	-3.0	-2.0	-3.0	-4.0	-4.0	-4.0	-4.0	-3.0	-4.0	-6.0	-4.0	-2.0	-5.0	-7.0	-3.0	1.0	0.0	1.0	1.0	-3.0	-2.0	-1.0	-3.0	1.0	-7.0
4	-1.0	-1.0	-3.0	-3.0	-3.0	-1.0	-5.0	-6.0	-1.0	-4.0	-7.0	-7.0	--	-7.0	-4.0	-5.0	-5.0	0.0	1.0	2.0	2.0	4.0	3.0	-3.0	-2.4	4.0	-7.0
5	-2.0	0.0	-2.0	-2.0	-4.0	-2.0	2.0	1.0	0.0	-1.0	-1.0	-1.0	-5.0	-7.0	-5.0	-4.0	-5.0	-4.0	-3.0	-3.0	-1.0	1.0	0.0	0.0	-2.0	2.0	-7.0
6	-1.0	-3.0	-4.0	-2.0	3.0	4.0	3.0	6.0	4.0	-3.0	-3.0	-3.0	-3.0	-3.0	-2.0	-1.0	3.0	4.0	5.0	5.0	5.0	4.0	5.0	4.0	1.1	6.0	-4.0
7	3.0	4.0	4.0	6.0	7.0	6.0	7.0	7.0	6.0	3.0	-3.0	-5.0	-5.0	3.0	4.0	6.0	3.0	-1.0	1.0	3.0	2.0	3.0	5.0	6.0	3.1	7.0	-5.0
8	6.0	3.0	-2.0	-1.0	1.0	0.0	-1.0	1.0	-1.0	--	-4.0	-8.0	-6.0	-3.0	-3.0	-3.0	-2.0	-1.0	1.0	4.0	5.0	6.0	3.0	1.0	-0.2	6.0	-8.0
9	2.0	1.0	2.0	3.0	3.0	4.0	1.0	-3.0	-2.0	-3.0	-4.0	-3.0	-3.0	-3.0	-2.0	1.0	1.0	-2.0	-4.0	0.0	2.0	1.0	0.0	0.0	-0.3	4.0	-4.0
10	2.0	2.0	3.0	4.0	4.0	4.0	3.0	2.0	2.0	0.0	-3.0	-4.0	-4.0	-4.0	0.0	2.0	3.0	5.0	2.0	-1.0	5.0	7.0	4.0	3.0	1.7	7.0	-4.0
11	3.0	3.0	2.0	3.0	4.0	0.0	1.0	2.0	-1.0	2.0	2.0	1.0	-2.0	-2.0	-1.0	-1.0	4.0	5.0	3.0	5.0	6.0	4.0	3.0	6.0	2.2	6.0	-2.0
12	7.0	5.0	7.0	7.0	7.0	8.0	6.0	5.0	5.0	-1.0	--	--	--	--	--	--	-2.0	0.0	1.0	-2.0	-3.0	-1.0	-1.0	-2.0	2.6	8.0	-3.0
13	1.0	4.0	5.0	3.0	1.0	2.0	2.0	2.0	1.0	-1.0	-4.0	-7.0	-8.0	-4.0	1.0	2.0	5.0	4.0	3.0	1.0	3.0	5.0	5.0	4.0	1.3	5.0	-8.0
14	1.0	2.0	4.0	4.0	1.0	0.0	0.0	1.0	1.0	-4.0	-10.0	-7.0	-6.0	-3.0	2.0	1.0	0.0	5.0	16.0	5.0	4.0	3.0	2.0	3.0	1.0	16.0	-10.0
15	2.0	2.0	1.0	-3.0	-1.0	1.0	2.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-0.5	2.0	-3.0
16	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
17	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
18	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	3.0	3.0	3.0	-6.0	-5.0	-2.0	-2.0	0.0	2.0	0.0	4.0	8.0	3.0	0.0	8.0	-6.0
19	1.0	0.0	2.0	2.0	0.0	1.0	0.0	-1.0	-1.0	-1.0	--	-2.0	-2.0	-3.0	-3.0	2.0	2.0	1.0	2.0	2.0	0.0	-3.0	0.0	0.0	0.0	2.0	-3.0
20	2.0	4.0	2.0	2.0	4.0	2.0	-1.0	-1.0	1.0	1.0	0.0	0.0	-2.0	-4.0	-2.0	-4.0	-4.0	0.0	2.0	3.0	3.0	-1.0	-2.0	0.0	0.2	4.0	-4.0
21	0.0	1.0	2.0	4.0	3.0	0.0	1.0	4.0	0.0	-1.0	4.0	2.0	-2.0	-4.0	-2.0	-1.0	-1.0	4.0	6.0	5.0	3.0	5.0	7.0	7.0	2.0	7.0	-4.0
22	3.0	0.0	2.0	5.0	7.0	6.0	5.0	3.0	3.0	2.0	-2.0	-2.0	1.0	1.0	1.0	2.0	6.0	8.0	8.0	9.0	7.0	8.0	7.0	3.0	3.9	9.0	-2.0
23	4.0	8.0	5.0	3.0	3.0	3.0	4.0	3.0	1.0	-3.0	-7.0	-7.0	-5.0	-1.0	1.0	-2.0	-2.0	-1.0	2.0	6.0	5.0	0.0	1.0	2.0	1.0	8.0	-7.0
24	1.0	1.0	3.0	2.0	0.0	1.0	1.0	1.0	4.0	-1.0	-4.0	-2.0	-2.0	-3.0	-2.0	0.0	-1.0	-1.0	2.0	0.0	-2.0	2.0	3.0	1.0	0.2	4.0	-4.0
25	3.0	1.0	-2.0	3.0	4.0	2.0	3.0	1.0	-1.0	-3.0	-4.0	-6.0	-5.0	-4.0	-1.0	-1.0	-1.0	-1.0	0.0	2.0	3.0	1.0	3.0	6.0	0.1	6.0	-6.0
26	6.0	4.0	2.0	3.0	6.0	5.0	3.0	5.0	3.0	-2.0	-4.0	-7.0	-5.0	1.0	2.0	1.0	2.0	4.0	4.0	7.0	11.0	8.0	3.0	2.0	2.7	11.0	-7.0
27	1.0	1.0	1.0	2.0	1.0	-1.0	0.0	0.0	-1.0	-2.0	-4.0	-3.0	-3.0	-3.0	-4.0	-5.0	-3.0	-3.0	-3.0	-3.0	0.0	3.0	0.0	-2.0	-1.3	3.0	-5.0
28	0.0	1.0	0.0	-2.0	0.0	1.0	2.0	3.0	0.0	-2.0	-3.0	-4.0	--	-6.0	-9.0	-12.0	-8.0	-3.0	-1.0	2.0	1.0	1.0	2.0	-2.0	-1.7	3.0	-12.0
Avg	1.2	1.1	0.9	1.1	1.5	1.2	1.0	0.8	0.3	-1.5	-3.2	-3.4	-3.2	-2.6	-1.9	-1.6	-0.7	0.6	1.6	2.0	2.4	2.3	2.1	1.3	0.2	--	--
Max	7.0	8.0	7.0	7.0	7.0	8.0	7.0	7.0	6.0	3.0	4.0	3.0	3.0	3.0	4.0	6.0	6.0	8.0	16.0	9.0	11.0	8.0	8.0	7.0	--	16.0	--
Min	-5.0	-6.0	-4.0	-4.0	-4.0	-4.0	-5.0	-6.0	-4.0	-6.0	-10.0	-8.0	-8.0	-7.0	-9.0	-12.0	-8.0	-4.0	-4.0	-3.0	-3.0	-3.0	-2.0	-3.0	--	--	-12.0

-- Indicates Invalid Data

SAROAD for Resolution, West_Plant

"Component, Channel: Table126, conc_PM2.5_μg/m^3 Actual"

Month: Mar 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	2.0	0.0	0.0	4.0	2.0	0.0	2.0	0.0	-1.0	-4.0	-9.0	-9.0	-5.0	-5.0	-6.0	-3.0	-1.0	1.0	1.0	0.0	-1.0	-1.0	0.0	-1.5	4.0	-9.0
2	0.0	-1.0	-2.0	-3.0	-4.0	0.0	-1.0	-3.0	-2.0	-4.0	-5.0	-5.0	-3.0	-6.0	-5.0	-3.0	-4.0	0.0	2.0	-1.0	1.0	1.0	-2.0	2.0	-2.0	2.0	-6.0
3	0.0	-3.0	-1.0	-1.0	1.0	0.0	-1.0	0.0	1.0	-3.0	-6.0	-7.0	-5.0	-3.0	-1.0	1.0	0.0	2.0	1.0	1.0	2.0	-2.0	-4.0	-1.0	-1.2	2.0	-7.0
4	1.0	2.0	0.0	-1.0	1.0	1.0	3.0	6.0	2.0	-4.0	3.0	5.0	-5.0	-9.0	-7.0	-1.0	4.0	2.0	3.0	4.0	3.0	3.0	5.0	3.0	1.0	6.0	-9.0
5	1.0	1.0	0.0	0.0	1.0	4.0	1.0	0.0	4.0	0.0	-1.0	-1.0	-6.0	-7.0	-4.0	-3.0	-2.0	2.0	3.0	1.0	-1.0	-1.0	1.0	2.0	-0.2	4.0	-7.0
6	1.0	0.0	0.0	0.0	-1.0	1.0	4.0	-1.0	-3.0	-5.0	-6.0	-2.0	-2.0	-4.0	-4.0	-3.0	-3.0	0.0	2.0	1.0	0.0	0.0	0.0	2.0	-1.0	4.0	-6.0
7	2.0	1.0	0.0	-3.0	-3.0	0.0	2.0	5.0	4.0	-2.0	-3.0	-5.0	-4.0	-2.0	-4.0	-3.0	-2.0	0.0	2.0	2.0	2.0	0.0	0.0	1.0	-0.4	5.0	-5.0
8	3.0	2.0	2.0	4.0	3.0	1.0	-1.0	-1.0	-1.0	1.0	1.0	-1.0	-3.0	-3.0	-1.0	2.0	3.0	4.0	4.0	2.0	1.0	0.0	1.0	-1.0	0.9	4.0	-3.0
9	-2.0	-1.0	1.0	1.0	2.0	1.0	2.0	5.0	5.0	4.0	3.0	0.0	-2.0	-2.0	-3.0	-1.0	4.0	3.0	1.0	2.0	7.0	7.0	8.0	6.0	2.1	8.0	-3.0
10	1.0	--	2.0	3.0	4.0	4.0	3.0	4.0	--	3.0	-1.0	-3.0	-3.0	-6.0	-3.0	1.0	-1.0	-2.0	0.0	3.0	3.0	2.0	2.0	1.0	0.8	4.0	-6.0
11	3.0	2.0	-1.0	2.0	4.0	2.0	1.0	0.0	0.0	-3.0	--	-5.0	-4.0	-1.0	-1.0	-4.0	-3.0	--	--	2.0	1.0	0.0	4.0	2.0	0.0	4.0	-5.0
12	1.0	2.0	0.0	2.0	1.0	-1.0	1.0	0.0	-4.0	-4.0	-3.0	-4.0	-4.0	-2.0	2.0	0.0	0.0	4.0	2.0	-1.0	3.0	4.0	1.0	-1.0	0.0	4.0	-4.0
13	-2.0	-1.0	1.0	0.0	-1.0	-4.0	0.0	3.0	-1.0	-5.0	-5.0	-3.0	-1.0	0.0	-1.0	-1.0	-2.0	-2.0	-3.0	-3.0	-2.0	-1.0	-1.0	0.0	-1.5	3.0	-5.0
14	0.0	-4.0	-4.0	-1.0	-2.0	-2.0	-1.0	2.0	0.0	-4.0	-3.0	0.0	0.0	-2.0	-4.0	-1.0	-2.0	-4.0	-3.0	-2.0	0.0	0.0	0.0	1.0	-1.5	2.0	-4.0
15	2.0	0.0	-1.0	1.0	-1.0	-2.0	0.0	-1.0	-2.0	-4.0	-8.0	-6.0	-2.0	-1.0	-1.0	-4.0	-5.0	-3.0	-2.0	-2.0	-4.0	-2.0	3.0	0.0	-1.9	3.0	-8.0
16	1.0	6.0	4.0	0.0	2.0	5.0	4.0	1.0	-1.0	-1.0	-3.0	-5.0	-2.0	-2.0	-4.0	-4.0	-4.0	-1.0	1.0	1.0	2.0	6.0	5.0	1.0	0.5	6.0	-5.0
17	2.0	4.0	8.0	6.0	1.0	-2.0	-2.0	-1.0	-3.0	-3.0	-1.0	1.0	2.0	0.0	1.0	1.0	2.0	2.0	1.0	5.0	5.0	4.0	4.0	2.0	1.6	8.0	-3.0
18	5.0	2.0	-1.0	4.0	6.0	6.0	3.0	3.0	3.0	0.0	-3.0	-1.0	2.0	4.0	5.0	2.0	1.0	3.0	5.0	7.0	7.0	6.0	3.0	4.0	3.2	7.0	-3.0
19	8.0	8.0	6.0	5.0	4.0	7.0	10.0	6.0	4.0	3.0	5.0	5.0	3.0	3.0	1.0	2.0	0.0	-1.0	4.0	4.0	6.0	7.0	6.0	6.0	4.7	10.0	-1.0
20	4.0	4.0	7.0	7.0	6.0	7.0	6.0	4.0	8.0	6.0	-2.0	-4.0	-4.0	-2.0	-1.0	1.0	4.0	3.0	3.0	5.0	3.0	2.0	2.0	2.0	3.0	8.0	-4.0
21	3.0	2.0	2.0	1.0	2.0	6.0	5.0	2.0	1.0	1.0	1.0	2.0	3.0	2.0	3.0	4.0	2.0	2.0	3.0	4.0	2.0	0.0	1.0	2.0	2.3	6.0	0.0
22	4.0	3.0	3.0	6.0	4.0	-1.0	1.0	5.0	2.0	-1.0	-1.0	3.0	4.0	0.0	1.0	4.0	2.0	2.0	2.0	1.0	1.0	4.0	4.0	2.0	2.3	6.0	-1.0
23	3.0	6.0	4.0	5.0	5.0	5.0	5.0	3.0	4.0	2.0	0.0	4.0	9.0	12.0	13.0	10.0	15.0	10.0	16.0	8.0	11.0	17.0	7.0	10.0	7.7	17.0	0.0
24	14.0	11.0	8.0	10.0	10.0	7.0	5.0	6.0	4.0	1.0	0.0	0.0	1.0	-1.0	0.0	2.0	-1.0	1.0	5.0	6.0	5.0	2.0	3.0	7.0	4.4	14.0	-1.0
25	7.0	6.0	6.0	7.0	8.0	7.0	5.0	5.0	1.0	-4.0	-4.0	-4.0	-4.0	-2.0	1.0	2.0	0.0	0.0	1.0	4.0	5.0	4.0	3.0	4.0	2.4	8.0	-4.0
26	2.0	0.0	2.0	4.0	2.0	-1.0	2.0	1.0	1.0	2.0	-1.0	-1.0	1.0	2.0	1.0	0.0	3.0	4.0	2.0	2.0	2.0	1.0	3.0	3.0	1.5	4.0	-1.0
27	2.0	3.0	5.0	6.0	2.0	2.0	2.0	2.0	0.0	-1.0	1.0	1.0	0.0	-1.0	3.0	--	3.0	1.0	0.0	-1.0	2.0	2.0	4.0	8.0	2.0	8.0	-1.0
28	7.0	4.0	4.0	3.0	3.0	1.0	-1.0	-1.0	-1.0	-4.0	-4.0	-2.0	-2.0	-2.0	-2.0	-2.0	0.0	1.0	3.0	4.0	3.0	0.0	1.0	3.0	0.7	7.0	-4.0
29	4.0	4.0	3.0	3.0	3.0	4.0	2.0	3.0	2.0	-3.0	-4.0	-1.0	0.0	-1.0	-1.0	-1.0	-1.0	-2.0	-2.0	-1.0	2.0	5.0	6.0	4.0	1.2	6.0	-4.0
30	0.0	2.0	4.0	2.0	4.0	6.0	5.0	3.0	-2.0	-2.0	2.0	0.0	-1.0	0.0	1.0	3.0	0.0	-2.0	0.0	1.0	3.0	2.0	3.0	3.0	1.5	6.0	-2.0
31	0.0	1.0	3.0	5.0	2.0	1.0	5.0	5.0	-2.0	-4.0	5.0	7.0	0.0	-3.0	-3.0	-2.0	-3.0	0.0	3.0	3.0	3.0	3.0	1.0	3.0	1.4	7.0	-4.0
Avg	2.4	2.3	2.1	2.5	2.4	2.2	2.3	2.2	0.8	-1.3	-1.6	-1.3	-1.3	-1.4	-0.7	-0.1	0.2	0.9	2.0	2.0	2.5	2.4	2.4	2.6	1.1	--	--
Max	14.0	11.0	8.0	10.0	10.0	7.0	10.0	6.0	8.0	6.0	5.0	7.0	9.0	12.0	13.0	10.0	15.0	10.0	16.0	8.0	11.0	17.0	8.0	10.0	--	17.0	--
Min	-2.0	-4.0	-4.0	-3.0	-4.0	-4.0	-2.0	-3.0	-4.0	-5.0	-8.0	-9.0	-9.0	-9.0	-7.0	-6.0	-5.0	-4.0	-3.0	-3.0	-4.0	-2.0	-4.0	-1.0	--	--	-9.0

-- 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: Jan 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	0.3	0.1	0.3	-0.4	-0.2	0.0	0.0	0.7	0.3	1.4	1.9	2.6	2.2	1.3	1.3	1.5	1.4	1.0	1.0	3.0	1.0	0.6	-0.1	-0.6	0.9	3.0	-0.6
2	-0.7	-0.8	-0.4	-0.9	-0.8	-0.7	-0.5	0.3	0.7	1.2	1.5	1.8	0.8	0.3	0.2	0.4	0.1	0.1	0.9	0.9	0.2	-0.1	0.1	0.2	0.2	1.8	-0.9
3	-0.1	-0.2	0.2	-0.4	-0.5	-0.3	-0.3	0.5	0.9	1.2	2.3	2.1	0.8	0.5	1.0	0.5	0.1	0.1	1.0	0.4	0.5	0.4	0.3	0.7	0.5	2.3	-0.5
4	0.6	1.1	1.1	0.4	0.5	0.6	0.5	0.8	1.8	1.8	1.6	0.7	1.2	2.5	2.0	2.7	1.8	2.3	4.6	3.4	0.8	1.1	1.9	1.7	1.6	4.6	0.4
5	1.3	1.2	1.5	0.7	0.6	0.5	0.2	0.4	0.9	1.4	3.2	4.2	3.6	2.2	2.1	2.2	1.3	1.2	3.3	0.6	0.4	0.6	1.2	1.4	1.5	4.2	0.2
6	1.0	1.1	1.4	1.2	1.3	1.3	1.4	0.8	1.3	0.8	1.6	1.3	0.8	-0.1	-0.6	-0.7	-0.7	-0.1	0.0	0.1	0.1	0.5	0.4	-0.3	0.6	1.6	-0.7
7	0.6	1.5	1.9	1.1	1.3	3.2	3.7	5.9	9.6	6.2	6.9	6.0	3.8	3.6	3.3	2.1	4.9	8.5	22.5	15.8	3.7	1.0	0.5	0.5	4.9	22.5	0.5
8	0.1	0.1	0.6	0.3	0.6	0.4	0.7	2.4	1.4	0.9	2.8	-0.1	-0.1	0.4	0.6	1.2	-0.5	-0.6	0.0	0.3	0.1	-0.4	0.1	0.2	0.5	2.8	-0.6
9	0.2	-0.4	-0.1	-0.5	-0.5	-0.4	-0.2	0.3	1.0	1.2	3.0	3.5	2.8	0.2	0.6	0.9	0.8	3.2	1.9	2.7	1.2	0.6	-0.1	0.2	0.9	3.5	-0.5
10	5.4	2.5	1.1	-0.6	-0.1	0.9	1.4	2.2	3.7	1.7	0.6	0.2	-0.2	0.0	0.4	0.6	-0.1	-0.6	-0.8	-0.8	1.3	4.4	4.6	-0.2	1.1	5.4	-0.8
11	-0.7	-0.7	-0.4	-0.5	-0.5	-0.3	-0.1	0.6	0.8	0.1	0.4	0.0	-0.1	-0.2	-0.2	0.4	2.0	2.5	2.9	2.2	1.5	2.0	0.6	0.8	0.5	2.9	-0.7
12	1.2	0.5	0.7	1.4	0.4	-0.4	-1.0	-0.1	0.6	2.8	0.5	-0.1	-0.4	-0.6	-0.6	-0.4	-0.2	0.1	0.2	0.2	0.4	0.7	0.5	0.0	0.3	2.8	-1.0
13	2.0	1.2	0.6	0.7	0.8	0.6	2.9	7.1	2.9	2.3	0.1	0.3	-0.2	-0.2	-0.7	-0.7	-0.7	-0.4	0.3	-0.2	0.2	0.4	0.8	0.2	0.8	7.1	-0.7
14	3.0	0.4	1.3	1.4	4.9	1.3	3.1	11.6	7.1	4.6	2.3	0.9	0.0	-0.1	0.4	1.4	2.0	2.2	1.9	3.3	4.6	1.6	0.9	0.4	2.5	11.6	-0.1
15	0.6	-0.9	-0.7	-1.2	-0.7	-0.8	0.2	0.0	0.8	1.2	0.3	-0.5	0.1	0.0	--	--	--	0.8	0.9	1.0	1.4	1.6	0.8	1.0	0.3	1.6	-1.2
16	-0.3	-0.5	--	-0.4	1.7	1.4	--	--	--	--	--	--	2.6	1.7	2.0	1.9	2.0	3.3	4.0	1.9	2.0	3.4	3.6	2.7	--	--	--
17	1.4	1.3	--	1.8	1.7	2.3	2.1	1.8	3.5	1.9	1.7	1.6	1.1	1.1	1.1	1.1	1.3	0.8	0.8	1.0	1.2	1.0	0.7	1.2	1.5	3.5	0.7
18	1.1	1.2	--	2.0	2.8	3.0	2.6	2.1	3.7	4.1	3.8	3.2	2.1	1.7	2.7	2.8	3.2	6.3	4.7	4.6	2.2	3.0	1.8	1.7	2.9	6.3	1.1
19	2.4	1.5	--	1.1	1.8	2.1	2.7	2.7	3.2	1.8	2.6	3.9	4.6	3.6	3.5	3.7	3.1	3.3	2.9	3.0	2.4	1.8	1.5	1.8	2.7	4.6	1.1
20	2.1	2.2	--	1.3	1.2	1.4	1.6	1.4	12.2	3.4	3.4	4.0	5.4	4.7	3.5	3.1	3.0	2.6	2.1	2.8	2.0	2.8	1.9	1.7	3.0	12.2	1.2
21	1.5	2.2	--	1.8	1.6	1.3	2.7	7.2	2.0	2.0	4.0	4.7	4.4	5.2	3.9	2.8	1.3	1.9	3.5	2.4	1.2	0.9	1.9	1.4	2.7	7.2	0.9
22	1.5	1.9	--	1.0	1.3	1.7	2.4	3.3	2.7	2.4	3.7	4.4	6.8	5.9	5.7	3.3	2.4	1.6	3.4	2.3	1.2	1.5	1.8	1.3	2.8	6.8	1.0
23	0.8	0.9	--	0.8	1.0	1.4	1.9	4.2	3.4	3.4	4.2	6.9	6.7	6.7	5.9	2.8	2.2	8.5	7.3	4.0	1.5	1.1	1.3	0.9	3.4	8.5	0.8
24	1.5	1.1	--	1.4	1.8	2.2	3.0	4.7	5.8	8.1	5.5	4.5	3.0	3.4	2.5	5.8	5.8	4.1	2.7	5.2	5.5	6.2	3.8	3.6	4.0	8.1	1.1
25	2.6	2.3	--	2.2	2.5	4.0	5.2	3.2	2.5	2.4	2.2	1.8	0.9	1.1	1.7	1.5	2.3	2.9	4.3	2.6	1.8	1.1	2.3	1.9	2.4	5.2	0.9
26	1.7	1.9	--	1.9	4.3	1.4	2.0	1.8	1.1	0.9	0.6	0.1	0.1	0.1	0.0	-0.1	0.1	0.2	0.2	0.1	-0.1	-0.1	-0.1	0.2	0.8	4.3	-0.1
27	-0.1	-0.1	--	0.0	-0.1	-0.1	-0.2	-0.2	-0.2	0.0	0.5	0.6	0.5	0.5	0.2	0.3	0.2	0.3	0.1	0.3	0.4	0.2	0.2	0.2	0.2	0.6	-0.2
28	0.2	0.1	--	-0.1	-0.1	-0.1	0.0	0.3	0.8	0.9	0.6	1.0	0.9	0.4	0.6	0.7	0.6	0.4	0.7	1.0	0.7	0.3	0.3	0.8	0.5	1.0	-0.1
29	1.9	1.2	--	5.2	2.8	3.4	6.0	3.5	2.1	2.5	2.6	2.0	2.3	3.7	4.6	3.5	2.4	2.4	3.0	2.0	1.5	1.0	0.9	1.2	2.7	6.0	0.9
30	1.1	0.5	--	0.0	0.4	1.7	1.8	4.7	4.0	1.8	4.5	6.0	1.2	0.8	0.8	0.7	0.6	1.1	2.0	2.6	2.6	1.4	0.9	1.2	1.8	6.0	0.0
31	0.5	0.7	--	0.3	0.6	1.2	1.7	2.8	2.0	3.0	2.7	2.2	1.5	--	2.8	1.8	2.2	2.4	5.2	2.5	1.1	1.0	0.8	1.2	1.8	5.2	0.3
Avg	1.1	0.8	0.6	0.7	1.1	1.1	1.6	2.6	2.8	2.2	2.4	2.3	1.9	1.7	1.7	1.6	1.5	2.0	2.8	2.3	1.4	1.3	1.2	0.9	1.7	--	--
Max	5.4	2.5	1.9	5.2	4.9	4.0	6.0	11.6	12.2	8.1	6.9	6.9	6.8	6.7	5.9	5.8	5.8	8.5	22.5	15.8	5.5	6.2	4.6	3.6	--	22.5	--
Min	-0.7	-0.9	-0.7	-1.2	-0.8	-0.8	-1.0	-0.2	-0.2	0.0	0.1	-0.5	-0.4	-0.6	-0.7	-0.7	-0.7	-0.6	-0.8	-0.8	-0.1	-0.4	-0.1	-0.6	--	--	-1.2

-- Indicates Invalid Data

SAROAD for Resolution, East_Plant
"Component, Channel: TableAmbient_Hourly, NO2_ppb"
Month: Feb 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	1.4	1.3	--	0.5	0.4	0.7	1.0	1.1	2.5	2.9	2.6	3.1	3.2	2.9	2.6	3.1	2.0	5.7	9.8	8.0	5.3	2.8	2.4	1.2	2.9	9.8	0.4
2	0.5	0.6	--	0.8	1.8	0.9	1.1	0.8	0.9	0.5	0.9	2.7	1.9	2.2	1.0	1.2	1.4	3.3	2.1	1.1	0.6	0.9	2.0	2.3	1.4	3.3	0.5
3	1.4	0.7	--	1.0	1.4	2.0	2.1	1.8	4.4	3.5	1.9	1.7	3.1	5.4	3.5	1.7	1.7	1.4	1.4	1.6	0.6	0.3	0.4	1.2	1.9	5.4	0.3
4	0.1	0.5	--	0.6	0.8	1.5	2.0	1.4	1.5	1.8	2.7	3.7	3.2	2.0	2.1	2.1	1.2	0.9	0.6	0.6	0.7	1.1	0.7	0.5	1.4	3.7	0.1
5	0.4	0.2	--	0.5	0.3	0.8	1.9	0.8	1.9	1.6	2.0	1.5	1.3	1.2	1.2	0.8	0.5	0.3	0.1	0.6	0.9	0.4	0.2	0.5	0.9	2.0	0.1
6	0.1	0.0	--	0.7	1.2	1.6	3.1	3.4	5.5	3.7	1.9	2.8	3.0	1.7	1.1	1.3	2.9	2.0	2.7	2.5	2.9	3.5	3.7	4.2	2.4	5.5	0.0
7	3.7	3.3	--	2.9	2.2	2.2	2.1	2.2	4.1	3.0	3.1	4.1	2.8	2.6	2.1	1.6	1.1	0.8	0.8	2.0	4.1	3.1	1.0	1.2	2.4	4.1	0.8
8	0.8	0.6	--	1.4	1.4	0.9	0.8	1.0	1.0	1.2	1.2	0.9	0.9	0.7	0.8	0.6	0.5	0.7	0.9	1.2	1.6	2.1	2.4	2.0	1.1	2.4	0.5
9	1.2	1.1	--	1.2	0.5	0.0	0.1	0.2	0.3	0.5	0.6	0.5	0.4	0.5	0.5	0.4	0.4	0.4	0.5	0.6	0.8	1.3	1.6	0.5	0.6	1.6	0.0
10	0.5	0.5	--	0.7	0.6	0.9	0.9	2.9	7.2	2.6	2.1	1.4	0.9	0.7	0.8	0.8	0.7	0.7	1.0	1.5	1.7	1.3	0.9	0.8	1.4	7.2	0.5
11	0.5	0.4	--	0.7	0.5	0.6	1.3	4.6	3.7	3.7	2.2	1.7	1.4	1.5	1.3	1.3	1.8	1.2	1.1	0.7	0.8	1.2	1.4	1.6	1.5	4.6	0.4
12	1.0	0.9	--	0.6	1.9	3.4	2.6	2.6	1.9	2.5	--	1.7	1.5	1.4	1.6	1.4	1.3	1.3	1.4	1.4	2.0	1.7	2.1	3.2	1.8	3.4	0.6
13	1.5	2.6	--	1.0	0.8	1.7	1.6	1.1	1.4	1.2	2.5	3.2	4.9	2.4	1.3	1.3	1.9	4.7	5.5	5.2	4.4	3.1	3.4	2.0	2.5	5.5	0.8
14	1.0	0.7	--	0.7	0.4	0.7	1.2	1.2	1.5	1.4	0.7	1.4	0.8	1.9	2.3	1.9	1.5	2.3	3.5	0.9	1.2	0.5	0.3	0.3	1.2	3.5	0.3
15	0.1	0.1	--	0.0	-0.1	0.0	0.3	0.2	0.9	2.8	3.1	3.8	1.3	0.7	--	1.0	0.9	0.8	0.8	0.9	0.9	1.2	2.3	3.6	1.2	3.8	-0.1
16	3.4	2.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
19	--	--	--	0.1	0.1	0.2	1.9	3.9	2.3	0.5	0.8	0.7	0.6	1.6	0.1	0.1	0.0	0.0	0.0	-0.3	-0.1	0.0	-0.1	0.0	0.6	3.9	-0.3
20	-0.1	0.0	--	0.1	-0.1	-0.1	0.0	0.0	0.0	0.1	0.0	0.6	0.5	0.4	1.1	0.7	0.4	0.1	0.0	0.3	0.2	0.5	0.4	0.2	0.2	1.1	-0.1
21	0.2	0.5	--	0.7	1.1	1.2	2.0	1.6	1.0	1.6	1.5	3.1	3.0	2.4	1.6	1.2	1.1	1.1	1.6	1.8	1.7	1.6	1.4	1.5	1.5	3.1	0.2
22	4.1	1.1	--	1.0	1.1	1.0	1.3	1.2	2.2	1.9	1.9	1.5	1.6	1.7	1.8	2.1	2.9	3.9	6.6	6.6	5.2	5.3	4.6	4.8	2.8	6.6	1.0
23	4.0	3.4	--	2.3	2.0	1.9	1.9	3.1	3.6	2.9	1.9	1.6	1.4	1.6	1.3	1.1	0.8	0.5	0.9	1.3	1.9	3.5	1.0	1.0	2.0	4.0	0.5
24	1.5	1.1	--	1.2	1.3	1.6	1.0	1.3	1.7	1.4	0.6	0.5	0.4	0.2	0.2	0.1	0.1	-0.1	0.0	0.1	0.0	0.1	0.2	0.1	0.6	1.7	-0.1
25	0.2	0.6	--	0.3	0.2	0.6	3.3	6.8	6.7	5.7	1.1	0.9	0.6	0.6	0.6	0.5	0.5	0.8	1.1	1.3	1.6	2.0	2.0	2.3	1.7	6.8	0.2
26	2.5	2.0	--	5.4	3.6	1.7	1.3	2.1	5.1	2.7	3.9	3.5	2.8	2.7	3.2	4.1	4.3	4.7	6.3	6.2	8.1	4.5	2.8	1.7	3.7	8.1	1.3
27	0.8	0.1	--	0.1	0.0	0.1	0.5	0.5	0.6	0.9	1.8	1.9	1.2	1.1	0.9	0.7	1.4	0.0	0.2	1.2	1.8	2.1	1.7	1.5	0.9	2.1	0.0
28	1.2	1.3	--	0.2	0.0	0.3	0.8	1.2	1.2	1.3	2.7	1.2	1.4	1.4	1.1	0.2	0.2	0.0	0.4	1.0	1.6	2.0	1.0	0.8	1.0	2.7	0.0
Avg	1.3	1.0	--	1.0	0.9	1.1	1.4	1.9	2.5	2.1	1.8	2.0	1.8	1.7	1.4	1.3	1.3	1.5	2.0	1.9	2.0	1.8	1.6	1.6	1.6	--	--
Max	4.1	3.4	--	5.4	3.6	3.4	3.3	6.8	7.2	5.7	3.9	4.1	4.9	5.4	3.5	4.1	4.3	5.7	9.8	8.0	8.1	5.3	4.6	4.8	--	9.8	--
Min	-0.1	0.0	--	0.0	-0.1	-0.1	0.0	0.0	0.0	0.1	0.0	0.5	0.4	0.2	0.1	0.1	0.0	-0.1	0.0	-0.3	-0.1	0.0	-0.1	0.0	--	--	-0.3

-- Indicates Invalid Data

SAROAD for Resolution, East_Plant
"Component, Channel: TableAmbient_Hourly, NO2_ppb"
Month: Mar 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	2.1	2.3	--	2.0	0.2	0.9	1.0	0.9	1.5	0.6	--	1.5	1.6	0.6	0.1	0.0	0.0	0.4	0.5	0.5	0.4	1.7	1.1	0.7	0.9	2.3	0.0
2	0.5	-0.1	--	0.5	0.3	0.5	0.8	0.6	0.8	1.1	2.2	1.7	0.4	0.2	0.4	0.6	0.7	0.8	0.6	0.7	1.1	0.5	0.4	0.3	0.7	2.2	-0.1
3	0.2	0.0	--	0.2	0.1	0.2	0.1	0.3	0.5	1.0	0.7	1.0	0.7	0.2	0.2	0.2	0.0	0.5	0.1	-0.1	0.1	0.3	0.2	0.0	0.3	1.0	-0.1
4	-0.1	0.0	--	-0.2	0.1	0.4	0.5	1.0	1.0	1.2	1.1	0.9	0.9	0.7	1.2	4.4	2.4	1.5	1.4	1.1	0.7	0.6	1.3	0.9	1.0	4.4	-0.2
5	0.7	1.0	--	1.3	1.3	3.5	3.0	--	0.3	-0.2	1.6	-1.3	-2.7	-2.4	-2.7	-2.9	-3.2	-3.3	-2.7	-2.3	-3.0	-2.7	-2.4	-2.4	-1.0	3.5	-3.3
6	-2.9	-3.0	--	-3.1	-3.1	-3.0	-2.6	-2.3	-1.2	-2.4	-2.8	-2.4	-2.9	-3.0	-3.2	-3.2	-3.3	-3.2	-3.0	-3.0	-3.4	-3.0	-3.1	-3.0	-2.9	-1.2	-3.4
7	-3.3	-3.4	--	-3.2	-2.9	-2.5	-3.1	-2.4	-2.1	-2.7	-2.9	-3.2	-2.9	-3.1	-3.0	-3.3	-3.2	-3.3	-3.2	-3.5	-3.7	-3.7	-3.7	-3.7	-3.1	-2.1	-3.7
8	-3.7	-3.7	--	-3.7	-2.9	-2.8	-2.3	-3.4	-3.2	-3.3	-3.3	-3.1	-3.2	-3.5	-3.5	-3.4	-2.1	-2.8	-3.5	-3.5	-3.5	-3.7	-3.7	-3.7	-3.3	-2.1	-3.7
9	-3.6	-3.7	--	-3.6	-3.7	-3.6	-3.6	-3.5	-3.5	-3.4	-3.1	-3.1	-2.7	-2.8	-2.8	-2.8	-2.9	-2.4	-2.0	-1.6	-1.8	-2.2	-2.4	-2.4	-2.9	-1.6	-3.7
10	-2.0	--	-0.9	-1.9	-2.6	-2.6	-2.6	-2.1	-1.8	-1.1	13.1	-2.1	-2.4	-2.6	-2.8	-2.9	-3.0	-2.9	-3.3	-2.9	-2.8	-0.9	-2.2	-2.5	-1.6	13.1	-3.3
11	-2.2	--	-0.8	-0.2	-1.2	-2.4	-2.3	-1.4	-1.6	-2.0	-0.3	0.0	-0.8	-1.5	-2.0	-2.2	-2.7	-2.5	-1.0	-0.6	-0.7	-2.1	-2.4	-3.1	-1.6	0.0	-3.1
12	-3.0	--	-2.9	-2.6	-2.7	-2.0	-1.6	-2.1	-2.8	-2.3	-2.1	-1.2	-2.3	-1.2	-1.5	-1.7	-1.9	-1.3	-0.3	-0.3	-1.0	-2.4	-2.7	-2.2	-1.9	-0.3	-3.0
13	-2.1	--	-3.0	-2.7	-2.7	-2.4	-1.9	-1.5	-0.5	-0.2	0.4	0.6	--	-0.9	-1.1	-1.9	-2.1	-2.4	-2.3	-1.7	-1.9	-2.1	-2.3	-1.1	-1.6	0.6	-3.0
14	-0.9	--	-3.0	-2.7	-2.5	-2.3	-1.9	-2.5	-2.6	-1.9	0.0	0.4	-1.5	-2.2	-2.8	-2.8	-2.6	-2.7	-2.2	-1.0	-1.2	-2.7	-2.4	-2.8	-2.0	0.4	-3.0
15	-3.0	--	-3.2	-3.2	-3.0	-2.5	-2.3	-1.5	0.5	-1.3	-2.7	-2.6	-2.2	-2.3	-2.7	-3.2	-2.9	-2.8	-2.6	-2.5	-2.3	-2.3	-1.3	-1.1	-2.3	0.5	-3.2
16	-1.8	--	-2.3	-2.2	-2.1	-1.9	-2.0	-1.7	-1.5	-1.9	-3.0	-2.5	-1.9	-2.8	-3.1	-3.3	-3.0	-3.2	-3.0	-2.8	-1.9	-2.3	-2.9	-2.9	-2.4	-1.5	-3.3
17	-2.5	--	-2.7	-2.8	-3.1	-2.9	-2.9	-2.8	-2.1	-2.9	-3.1	-2.8	-2.7	-2.7	-2.9	-2.9	-2.9	-3.0	-2.7	-2.8	-2.4	-2.4	-3.0	-3.2	-2.8	-2.1	-3.2
18	-2.3	--	-3.0	-3.0	-2.9	-3.0	-2.9	-2.5	-0.1	-2.0	-2.7	-2.4	-2.6	-3.0	-3.0	-3.1	-3.0	-3.1	-3.0	-2.8	-2.4	-2.5	-2.3	-1.1	-2.5	-0.1	-3.1
19	-1.1	--	-1.8	-2.2	-1.8	-1.8	-1.7	0.2	-1.1	-2.3	-2.9	-2.9	-2.6	-3.0	-3.0	-3.1	-3.2	-3.2	-3.0	-2.5	-2.5	-1.8	-1.4	-1.4	-2.2	0.2	-3.2
20	-1.6	--	-1.9	-1.8	-1.7	-1.7	-0.8	-0.1	0.6	1.0	2.7	-1.7	-2.0	-2.8	-3.1	-3.1	-2.9	-2.8	-2.6	-2.5	-2.6	-2.8	-2.9	-3.0	-1.8	2.7	-3.1
21	-3.1	--	-3.3	-3.3	-3.1	-2.5	-0.6	-1.3	-1.7	-1.9	-1.9	-2.3	-2.2	-2.7	-2.8	-2.7	-2.6	-2.7	-2.8	-2.9	-3.0	-3.2	-3.2	-2.7	-2.5	-0.6	-3.3
22	-2.4	--	-1.9	-2.9	-3.1	-3.1	-2.8	-1.9	-1.3	-2.1	-2.3	-2.2	-2.6	-2.3	-2.5	-2.5	-2.9	-3.1	-3.1	-2.9	-2.9	-2.4	-2.7	-2.8	-2.6	-1.3	-3.1
23	-1.8	--	-2.2	-1.4	-1.1	-0.9	-0.5	-0.8	-1.8	-2.6	-2.5	-2.6	-2.9	-3.0	-3.0	-2.8	-2.4	-2.7	-2.2	-1.3	-1.8	-1.8	-2.0	-2.1	-2.0	-0.5	-3.0
24	-1.7	--	-1.6	-2.3	-2.8	-3.0	-2.8	-2.0	-1.9	2.7	-0.9	-2.8	-3.1	-3.1	-3.1	-3.1	-3.1	-2.7	-2.3	-1.2	-1.4	-1.7	-2.4	-2.9	-2.1	2.7	-3.1
25	-3.0	--	-2.8	-1.6	-1.4	-1.2	-1.3	-1.8	-1.2	0.4	-0.6	-1.3	-2.8	-2.5	-2.9	-3.1	-3.1	-3.1	-3.0	-2.5	-2.4	-2.6	-2.8	-3.0	-2.1	0.4	-3.1
26	-3.3	--	-2.9	-1.8	-0.2	-1.6	-0.8	-1.7	-1.2	-1.4	-3.0	-2.8	-2.4	-2.2	-2.9	-3.2	-3.4	-3.5	-3.3	-3.3	-3.3	-2.9	-2.7	-2.9	-2.5	-0.2	-3.5
27	-3.0	--	-2.8	-2.8	-3.1	-3.1	-2.3	-2.3	-1.0	-2.8	-2.5	-3.3	-3.2	--	-2.9	-3.3	-3.6	-3.5	-3.2	-2.9	-2.2	-1.2	-1.0	-1.6	-2.6	-1.0	-3.6
28	-1.5	--	-2.6	-2.1	-2.9	-3.3	-3.1	0.3	-2.3	-2.8	-2.8	-2.7	-3.1	-3.5	-3.5	-3.3	-3.5	-3.5	-3.3	-2.9	-2.7	-3.2	-3.3	-3.4	-2.8	0.3	-3.5
29	-3.3	--	-2.8	-2.6	-2.8	-2.9	-2.7	-0.7	-2.0	-1.4	-2.7	-2.5	-2.5	-3.2	-3.1	-3.5	-2.8	-3.3	-2.5	-3.0	-2.4	-2.8	-3.1	-3.0	-2.7	-0.7	-3.5
30	-2.8	--	-3.2	-3.1	-3.1	-1.3	-2.0	-1.9	-0.7	-0.7	-2.0	-2.5	-2.6	-2.9	-3.0	-3.0	-3.6	-3.6	-3.6	-3.3	-2.9	-1.9	-2.5	-3.3	-2.6	-0.7	-3.6
31	-3.3	--	-2.9	-2.4	-2.5	-2.8	-2.8	-2.3	-1.7	-2.5	-1.9	-2.6	-3.0	-3.1	-3.2	-3.3	-3.2	-3.3	-3.2	-2.5	-2.3	-2.9	-3.2	-2.9	-2.8	-1.7	-3.3
Avg	-2.0	-1.2	-2.5	-2.0	-2.0	-1.9	-1.6	-1.5	-1.1	-1.3	-1.0	-1.7	-2.1	-2.2	-2.4	-2.4	-2.5	-2.5	-2.3	-2.0	-2.0	-2.0	-2.2	-2.2	-1.9	--	--
Max	2.1	2.3	-0.8	2.0	1.3	3.5	3.0	1.0	1.5	2.7	13.1	1.7	1.6	0.7	1.2	4.4	2.4	1.5	1.4	1.1	1.1	1.7	1.3	0.9	--	13.1	--
Min	-3.7	-3.7	-3.3	-3.7	-3.7	-3.6	-3.6	-3.5	-3.5	-3.4	-3.3	-3.3	-3.2	-3.5	-3.5	-3.5	-3.6	-3.6	-3.6	-3.5	-3.7	-3.7	-3.7	-3.7	--	--	-3.7

-- Indicates Invalid Data

SAROAD for Resolution, East_Plant
"Component, Channel: TableAmbient_Hourly, SO2_ppb"
Month: Jan 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	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.7	1.1	1.3	1.0	0.8	0.9	1.9	1.7	3.2	1.3	0.6	0.9	2.2	1.2	0.9	0.7	1.1	3.2	0.6
2	0.8	0.8	0.7	0.7	0.7	0.7	0.8	0.9	1.8	2.7	2.0	1.6	1.6	0.8	0.7	0.7	0.6	0.7	0.7	1.9	2.5	0.9	0.9	1.4	1.1	2.7	0.6
3	1.0	1.6	1.0	0.9	1.0	1.1	1.1	1.3	1.6	1.2	2.3	1.3	0.7	0.6	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.9	2.3	0.5
4	0.5	1.4	0.5	0.5	0.5	0.6	0.6	0.5	0.6	0.6	0.5	0.5	0.6	0.6	0.6	0.6	0.5	0.5	0.6	0.6	0.6	0.5	0.7	0.6	0.6	1.4	0.5
5	0.6	0.7	0.6	0.6	0.7	0.6	1.7	1.4	1.8	2.3	2.4	3.2	2.6	1.0	0.7	0.7	0.6	0.6	0.7	0.6	0.6	0.6	1.3	2.1	1.2	3.2	0.6
6	2.0	1.4	1.4	0.8	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.6	0.6	0.6	0.7	0.6	0.6	0.6	0.7	0.7	2.0	0.5
7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.9	0.8	1.0	0.9	0.9	1.3	1.3	1.1	1.1	0.9	1.0	1.0	0.9	1.0	0.8	0.9	0.9	1.3	0.7
8	0.9	0.9	0.9	0.8	0.8	0.7	0.8	0.8	0.8	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	1.6	0.8	0.7	0.7	0.7	0.8	1.6	0.6
9	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7	1.2	1.4	1.3	2.4	1.5	0.8	1.1	1.5	1.1	0.9	0.7	0.6	0.6	0.6	0.6	0.6	1.0	2.4	0.6
10	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.7	0.8	0.7	0.7	0.8	1.2	1.8	1.9	1.5	0.9	0.8	0.9	1.3	1.2	1.3	1.1	0.7	1.0	1.9	0.6
11	0.8	0.8	0.7	0.7	0.7	0.6	0.7	0.6	0.7	0.6	0.6	0.7	0.7	0.7	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.6
12	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.7	0.6	2.3	5.8	8.2	2.6	1.6	1.1	0.8	0.8	0.7	0.7	0.7	0.8	0.7	0.7	0.7	1.4	8.2	0.6
13	0.7	0.6	0.6	0.7	1.2	1.7	1.8	2.1	3.3	4.2	1.9	1.2	0.9	1.1	1.2	1.3	1.6	1.9	1.5	1.2	1.0	0.9	0.8	0.8	1.4	4.2	0.6
14	0.8	0.9	0.8	0.7	0.6	0.7	0.7	0.7	1.0	1.5	3.0	3.8	2.1	1.0	0.8	0.7	0.8	0.7	0.8	0.7	0.8	0.7	0.7	0.7	1.1	3.8	0.6
15	0.7	0.8	0.7	0.6	0.7	0.8	0.9	0.8	0.8	1.0	0.5	0.5	0.6	0.7	--	--	--	0.0	-0.1	0.1	0.2	0.0	0.1	0.1	0.5	1.0	-0.1
16	0.2	--	0.1	0.2	0.7	1.8	--	--	--	--	--	--	0.1	0.4	0.4	0.3	0.2	0.3	0.3	0.3	1.3	1.4	1.4	0.9	--	--	--
17	1.1	--	3.1	3.0	1.6	1.8	1.0	0.4	0.3	0.2	0.2	0.1	0.2	0.1	-0.1	0.4	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.2	0.6	3.1	-0.1
18	0.2	--	0.2	0.2	0.2	0.3	0.6	0.6	1.3	1.2	0.4	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.0	0.2	0.7	0.7	1.4	0.4	1.4	0.0
19	1.7	--	0.8	0.5	0.7	0.6	0.6	0.6	0.5	0.5	0.6	0.8	1.2	1.9	2.3	2.8	2.8	1.9	0.9	1.2	6.1	1.7	2.3	0.5	1.5	6.1	0.5
20	0.5	--	0.5	0.5	0.6	0.7	0.6	0.8	1.2	1.4	1.0	1.0	1.9	0.9	0.3	0.4	0.5	0.4	0.2	0.6	1.5	1.1	0.6	0.5	0.8	1.9	0.2
21	0.5	--	0.6	0.5	0.5	0.3	0.4	0.5	0.3	0.4	0.6	1.6	1.6	0.4	0.0	0.3	0.3	0.4	0.6	2.1	1.1	0.5	0.4	0.4	0.6	2.1	0.0
22	0.6	--	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.6	0.7	0.7	0.7	0.7	0.7	0.3	0.3	0.3	0.4	0.4	0.3	0.4	0.4	0.4	0.5	0.7	0.3
23	0.3	--	0.3	0.3	0.4	0.6	0.6	0.7	0.6	0.6	0.7	1.3	0.8	0.3	0.3	-0.2	0.2	1.0	1.5	0.9	0.2	0.2	0.3	0.3	0.5	1.5	-0.2
24	0.4	--	0.3	0.3	0.3	1.1	1.3	1.1	1.1	0.7	0.5	0.6	0.8	0.5	0.7	2.5	2.8	1.4	0.6	0.5	1.6	1.5	0.9	0.7	1.0	2.8	0.3
25	0.5	--	0.4	0.5	1.0	5.0	3.1	1.9	1.1	1.2	1.4	2.0	0.4	0.4	0.4	0.4	0.5	0.4	0.5	4.4	2.7	3.0	2.7	1.5	1.5	5.0	0.4
26	1.0	--	0.7	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	1.0	0.4
27	0.5	--	0.4	0.5	0.4	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.5	0.4	0.5	0.4	0.4	0.5	0.4	0.4	0.3	0.5	0.4	0.4	0.4	0.5	0.3
28	0.5	--	0.5	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.4
29	0.5	--	0.6	0.6	0.5	0.6	0.6	0.5	0.4	0.4	0.5	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.5	0.5	0.5	0.6	0.4
30	0.4	--	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.3	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.3
31	0.4	--	0.4	0.4	0.4	0.5	0.5	0.6	1.1	1.8	1.6	1.3	0.8	1.3	16.1	3.3	11.4	16.9	11.4	2.2	0.6	1.1	2.2	2.2	3.4	16.9	0.4
Avg	0.7	0.9	0.7	0.6	0.6	0.9	0.8	0.8	0.9	1.1	1.1	1.3	0.9	0.7	1.3	0.9	1.2	1.2	1.0	0.9	1.0	0.8	0.8	0.7	0.9	--	--
Max	2.0	1.6	3.1	3.0	1.6	5.0	3.1	2.1	3.3	4.2	5.8	8.2	2.6	1.9	16.1	3.3	11.4	16.9	11.4	4.4	6.1	3.0	2.7	2.2	--	16.9	--
Min	0.2	0.6	0.1	0.2	0.2	0.3	0.4	0.4	0.3	0.2	0.2	0.1	0.1	0.1	-0.1	-0.2	0.2	0.0	-0.1	0.0	0.2	0.0	0.1	0.1	--	--	-0.2

-- Indicates Invalid Data

SAROAD for Resolution, East_Plant
"Component, Channel: TableAmbient_Hourly, SO2_ppb"
Month: Feb 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	2.1	--	1.3	1.2	0.8	0.8	1.5	0.9	1.2	1.5	2.4	1.8	1.5	1.0	0.8	1.1	1.0	0.8	0.6	0.5	0.5	0.6	0.7	0.5	1.1	2.4	0.5
2	0.5	--	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	1.1	2.5	1.5	1.0	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.9	0.6	2.5	0.3
3	0.8	--	1.1	1.9	2.0	1.5	1.0	0.9	0.6	0.6	0.4	0.4	0.5	4.2	3.2	1.7	1.8	1.6	1.4	1.0	0.6	0.5	0.4	0.5	1.2	4.2	0.4
4	0.4	--	0.4	0.4	0.5	0.5	0.5	0.6	0.5	1.0	0.8	0.9	1.0	0.8	0.6	0.7	0.7	1.0	1.2	1.3	1.2	0.8	0.7	0.6	0.7	1.3	0.4
5	0.5	--	0.5	0.4	0.5	0.5	0.6	0.5	0.5	0.4	0.5	0.5	0.4	0.5	0.8	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.8	0.4
6	0.5	--	0.5	0.6	0.7	0.7	0.7	0.8	0.8	1.7	3.7	4.0	2.2	2.4	1.6	0.8	1.4	1.0	0.8	0.8	0.6	0.5	0.4	0.5	1.2	4.0	0.4
7	0.5	--	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	6.7	4.6	2.8	4.4	3.8	2.2	1.6	1.2	1.1	0.9	0.7	0.9	0.9	1.6	6.7	0.4
8	1.1	--	1.3	1.3	1.6	1.8	3.0	3.7	2.3	3.6	3.1	1.2	0.9	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.5	1.4	3.7	0.5
9	0.5	--	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.4	0.5	0.5	0.5	0.4	0.4	0.5	0.5	0.5	0.4	0.4	0.4	0.5	0.5	0.6	0.4
10	0.4	--	0.4	0.4	0.5	0.5	0.4	0.5	0.7	1.0	4.4	1.9	1.0	0.5	0.6	0.5	0.4	0.5	0.5	0.5	0.4	0.5	0.5	0.4	0.8	4.4	0.4
11	0.5	--	0.4	0.5	0.5	0.6	0.7	0.7	1.4	3.1	2.0	1.9	0.9	0.6	0.6	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.8	3.1	0.4
12	0.5	--	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4
13	0.5	--	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.8	1.2	3.0	1.2	0.7	0.8	1.0	0.9	0.7	0.6	0.5	0.3	0.4	0.4	0.7	3.0	0.3
14	0.4	--	0.4	0.4	0.4	0.5	0.4	0.3	0.4	0.3	0.3	0.3	0.3	1.5	3.6	2.2	0.8	0.8	0.6	0.4	0.4	0.5	0.5	0.4	0.7	3.6	0.3
15	0.4	--	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.1	0.3	0.7	0.3	0.2	--	--	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.7	0.1
16	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2	0.2	0.2
17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
25	--	--	--	--	--	--	--	--	--	--	--	--	-0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	-0.1	0.0	0.1	-0.1
26	0.0	--	0.0	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.4	0.6	0.4	0.0	0.0	0.1	0.1	0.1	0.0	-0.1	0.0	0.1	0.6	-0.1
27	0.0	--	0.0	0.0	-0.1	-0.1	-0.1	0.0	-0.2	-0.2	0.6	1.6	0.5	0.8	0.4	0.1	-0.5	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1	0.0	0.1	1.6	-0.5
28	-0.1	--	-0.1	-0.1	-0.2	-0.2	-0.1	-0.2	-0.1	0.0	-0.1	0.2	0.1	-0.1	-0.2	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0.2	-0.2
Avg	0.5	--	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.8	1.2	1.5	1.0	1.0	1.1	0.9	0.6	0.6	0.5	0.5	0.4	0.4	0.4	0.4	0.6	--	--
Max	2.1	--	1.3	1.9	2.0	1.8	3.0	3.7	2.3	3.6	4.4	6.7	4.6	4.2	4.4	3.8	2.2	1.6	1.4	1.3	1.2	0.8	0.9	0.9	--	6.7	--
Min	-0.1	--	-0.1	-0.1	-0.2	-0.2	-0.1	-0.2	-0.2	-0.2	-0.1	0.1	-0.1	-0.1	-0.2	0.0	-0.5	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	--	--	-0.5

-- Indicates Invalid Data

SAROAD for Resolution, East_Plant
"Component, Channel: TableAmbient_Hourly, SO2_ppb"
Month: Mar 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	-0.1	--	0.3	1.9	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	--	--	8.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.1	0.4	8.2	-0.2
2	-0.1	--	-0.1	-0.1	-0.1	0.0	0.0	0.4	0.4	0.8	0.8	0.1	-0.2	-0.1	0.2	0.4	0.4	0.3	0.5	0.4	0.3	0.2	0.3	0.3	0.2	0.8	-0.2
3	0.4	--	0.5	0.4	0.3	0.3	0.4	0.7	4.1	3.9	2.2	1.1	1.8	1.4	1.4	0.4	0.1	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.9	4.1	0.1
4	0.2	--	0.1	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.1	0.2	0.0
5	0.0	--	0.0	0.1	0.8	4.9	1.4	1.6	1.0	0.7	1.5	1.0	0.2	0.4	1.8	1.1	0.7	0.7	0.6	0.5	0.5	0.3	0.2	0.1	0.9	4.9	0.0
6	0.1	--	0.1	0.1	0.1	0.0	-0.1	0.1	0.4	2.0	2.2	2.0	1.1	0.9	0.6	0.4	0.2	0.2	0.3	0.3	0.2	0.1	0.2	0.2	0.5	2.2	-0.1
7	0.2	--	0.2	0.3	0.9	3.2	2.1	2.0	0.9	0.9	1.5	0.4	0.2	0.3	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.3	0.3	0.2	0.7	3.2	0.1
8	0.2	--	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.1
9	0.2	--	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.0	0.1	0.1	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.0
10	0.1	--	--	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.4	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.4	0.0
11	--	0.1	0.1	1.2	0.9	0.4	0.1	0.1	0.0	0.0	0.3	0.9	0.8	0.9	1.1	0.8	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.4	1.2	0.0
12	--	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.4	0.7	0.8	0.9	1.0	0.6	0.3	0.1	0.3	0.4	0.4	0.2	0.2	0.3	1.0	0.0
13	--	0.1	0.2	0.2	0.3	0.5	1.7	1.3	1.0	1.4	0.9	0.1	--	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.4	0.2	0.2	0.4	1.7	0.1
14	--	0.6	1.1	0.4	0.5	0.7	0.7	0.6	0.6	1.1	0.8	1.4	0.3	0.3	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.7	1.2	0.5	1.4	0.1
15	--	0.5	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.6	1.2	1.0	0.5	0.6	0.7	0.6	0.8	0.7	0.7	0.6	0.5	1.2	0.2
16	--	0.4	0.4	0.4	0.5	1.0	1.5	4.4	4.2	7.9	6.8	2.2	1.5	2.9	2.0	1.2	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.5	1.8	7.9	0.3
17	--	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.6	0.5	0.4	0.3	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.4	0.6	0.2
18	--	0.2	0.2	0.3	0.2	0.4	0.8	0.8	0.7	0.8	0.8	1.1	1.7	1.0	0.4	0.4	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.4	0.6	1.7	0.2
19	--	0.2	0.3	0.4	0.3	0.3	0.4	0.5	0.9	0.5	0.5	0.6	0.5	0.4	0.4	0.3	0.3	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.9	0.2
20	--	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.2
21	--	0.4	0.3	0.4	0.4	0.4	0.3	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.3	0.4	0.4	0.3	0.3	0.2	0.4	0.5	0.2
22	--	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.5	0.5	0.6	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.6	0.2
23	--	0.3	0.3	0.2	0.3	0.3	0.2	0.3	0.4	0.4	0.3	0.5	0.5	0.4	0.3	0.4	0.4	0.3	0.0	0.3	0.4	0.4	0.3	0.3	0.3	0.5	0.0
24	--	0.3	0.3	0.3	0.2	0.3	0.3	0.2	0.3	0.3	0.4	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.4	0.2
25	--	0.3	0.3	0.3	0.4	0.3	0.3	3.1	2.9	1.5	0.9	2.0	0.3	0.6	0.6	0.5	0.3	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.7	3.1	0.1
26	--	0.2	0.7	8.7	2.5	0.6	0.3	0.3	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.7	8.7	0.1
27	--	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.3	--	--	13.5	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.4	0.4	0.9	13.5	0.2
28	--	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.0	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.0
29	--	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.1	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.3	0.3	0.2	0.2	0.1	0.2	0.3	0.1
30	--	0.2	0.1	0.2	0.2	0.3	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.1
31	--	0.2	0.3	0.4	0.3	0.3	0.3	0.2	0.2	0.3	0.2	0.3	0.2	0.3	0.2	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.2
Avg	0.1	0.3	0.3	0.6	0.4	0.5	0.4	0.6	0.7	0.8	0.8	0.6	0.7	0.5	0.9	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.5	--	--
Max	0.4	0.6	1.1	8.7	2.5	4.9	2.1	4.4	4.2	7.9	6.8	2.2	8.2	2.9	13.5	1.2	0.7	0.7	0.7	0.6	0.8	0.7	0.7	1.2	--	13.5	--
Min	-0.1	0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0.0	0.1	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.1	--	--	-0.2

-- Indicates Invalid Data

SAROAD for Resolution, East_Plant, rolling 8-hour average
"Component, Channel: TableAmbient_Hourly, O3_ppm"
Month: Jan 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	0.031	0.031	0.031	0.032	0.032	0.033	0.034	0.035	0.036	0.036	0.037	0.036	0.036	0.036	0.035	0.035	0.035	0.035	0.035	0.036	0.036	0.037	0.037	0.037	0.035	0.037	0.031
2	0.037	0.037	0.037	0.037	0.037	0.038	0.038	0.038	0.038	0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.039	0.038	0.039	0.037
3	0.039	0.039	0.039	0.039	0.039	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.037	0.036	0.035	0.035	0.034	0.034	0.033	0.033	0.033	0.032	0.037	0.039	0.032
4	0.032	0.032	0.032	0.032	0.032	0.032	0.033	0.033	0.034	0.035	0.036	0.036	0.035	0.036	0.036	0.035	0.035	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.036	0.032
5	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.035	0.035	0.035	0.035	0.035	0.036	0.037	0.037	0.037	0.036	0.036	0.037	0.037	0.036	0.036	0.035	0.034	0.035	0.037	0.034
6	0.034	0.033	0.033	0.033	0.033	0.033	0.034	0.035	0.036	0.037	0.037	0.038	0.038	0.038	0.038	0.038	0.037	0.037	0.036	0.035	0.035	0.035	0.034	0.034	0.035	0.038	0.033
7	0.033	0.033	0.033	0.033	0.033	0.033	0.034	0.034	0.035	0.036	0.036	0.035	0.034	0.034	0.034	0.034	0.034	0.034	0.035	0.037	0.038	0.038	0.039	0.039	0.035	0.039	0.033
8	0.039	0.039	0.039	0.039	0.040	0.041	0.041	0.042	0.043	0.043	0.043	0.043	0.043	0.043	0.043	0.043	0.042	0.042	0.041	0.041	0.041	0.041	0.041	0.041	0.041	0.043	0.039
9	0.040	0.040	0.040	0.040	0.039	0.039	0.039	0.039	0.040	0.040	0.040	0.039	0.039	0.039	0.038	0.038	0.038	0.037	0.037	0.037	0.038	0.038	0.038	0.037	0.039	0.040	0.037
10	0.037	0.037	0.036	0.036	0.037	0.037	0.038	0.039	0.040	0.041	0.041	0.042	0.042	0.042	0.040	0.039	0.039	0.039	0.038	0.038	0.037	0.036	0.037	0.037	0.039	0.042	0.036
11	0.036	0.035	0.034	0.034	0.034	0.035	0.035	0.036	0.037	0.038	0.038	0.038	0.038	0.037	0.036	0.036	0.035	0.035	0.034	0.034	0.033	0.032	0.032	0.032	0.035	0.038	0.032
12	0.032	0.031	0.031	0.031	0.033	0.033	0.034	0.035	0.036	0.038	0.039	0.039	0.039	0.039	0.038	0.038	0.037	0.036	0.035	0.034	0.033	0.033	0.033	0.032	0.035	0.039	0.031
13	0.031	0.031	0.031	0.032	0.033	0.034	0.035	0.036	0.038	0.039	0.040	0.040	0.040	0.039	0.039	0.037	0.036	0.035	0.034	0.033	0.031	0.030	0.030	0.030	0.035	0.040	0.030
14	0.029	0.029	0.029	0.029	0.030	0.031	0.032	0.032	0.034	0.035	0.035	0.035	0.035	0.034	0.033	0.033	0.033	0.033	0.033	0.034	0.034	0.035	0.036	0.036	0.033	0.036	0.029
15	0.036	0.036	0.036	0.036	0.037	0.037	0.038	0.038	0.038	--	--	--	--	--	--	0.038	0.038	0.038	0.038	0.038	0.038	--	--	--	--	--	--
16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
21	--	--	--	--	--	--	--	--	0.037	0.038	0.038	0.038	0.039	0.039	0.039	0.038	0.038	0.037	0.036	0.035	0.035	0.034	0.034	0.034	--	--	--
22	0.034	0.033	0.034	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.034	0.034	0.035	0.035	0.035	0.036	0.036	0.036	0.034	0.036	0.033
23	0.035	0.035	0.035	0.034	0.034	0.033	0.032	0.032	0.032	0.032	0.031	0.031	0.031	0.032	0.032	0.032	0.032	0.032	0.032	0.033	0.033	0.032	0.032	0.031	0.033	0.035	0.031
24	0.030	0.030	0.028	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.028	0.027	0.026	0.025	0.025	0.025	0.025	0.025	0.024	0.025	0.025	0.025	0.024	0.026	0.030	0.024
25	0.024	0.024	0.023	0.023	0.023	0.023	0.024	0.025	0.025	0.026	0.026	0.026	0.026	0.026	0.026	0.025	0.025	0.024	0.023	0.023	0.023	0.022	0.021	0.021	0.024	0.026	0.021
26	0.021	0.021	0.021	0.022	0.023	0.024	0.025	0.026	0.027	0.028	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.030	0.030	0.027	0.030	0.021
27	0.031	0.031	0.032	0.032	0.032	0.033	0.033	0.033	0.034	0.034	0.034	0.035	0.035	0.035	0.034	0.034	0.033	0.033	0.032	0.032	0.031	0.031	0.032	0.032	0.033	0.035	0.031
28	0.032	0.033	0.034	0.035	0.035	0.036	0.037	0.038	0.039	0.040	0.041	0.041	0.041	0.041	0.042	0.041	0.041	0.040	0.039	0.039	0.038	0.037	0.035	0.033	0.038	0.042	0.032
29	0.032	0.031	0.030	0.030	0.030	0.031	0.031	0.032	0.033	0.034	0.035	0.036	0.036	0.037	0.037	0.038	0.038	0.037	0.037	0.037	0.037	0.037	0.036	0.035	0.035	0.038	0.030
30	0.034	0.033	0.033	0.033	0.033	0.034	0.035	0.036	0.038	0.040	0.040	0.041	0.041	0.040	0.039	0.039	0.038	0.038	0.037	0.036	0.036	0.036	0.036	0.035	0.037	0.041	0.033
31	0.035	0.034	0.034	0.033	0.033	0.034	0.034	0.034	0.035	0.036	0.036	0.036	0.035	0.035	0.034	0.035	0.035	0.035	0.035	0.035	0.036	0.036	0.036	0.036	0.035	0.036	0.033
Avg	0.033	0.033	0.033	0.033	0.033	0.033	0.034	0.035	0.035	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.035	0.035	0.035	0.035	0.034	0.034	0.034	0.034	0.035	--	--
Max	0.040	0.040	0.040	0.040	0.040	0.041	0.041	0.042	0.043	0.043	0.043	0.043	0.043	0.043	0.043	0.043	0.042	0.042	0.041	0.041	0.041	0.041	0.041	0.041	--	0.043	--
Min	0.021	0.021	0.021	0.022	0.023	0.023	0.024	0.025	0.025	0.026	0.026	0.026	0.026	0.026	0.025	0.025	0.025	0.024	0.023	0.023	0.023	0.022	0.021	0.021	--	--	0.021

-- Indicates Invalid Data

SAROAD for Resolution, East_Plant, rolling 8-hour average
"Component, Channel: TableAmbient_Hourly, O3_ppm"
Month: Feb 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	0.035	0.035	0.035	0.035	0.034	0.034	0.035	0.035	0.036	0.036	0.036	0.036	0.035	0.035	0.034	0.033	0.032	0.032	0.032	0.033	0.033	0.034	0.034	0.034	0.034	0.036	0.032
2	0.034	0.034	0.034	0.035	0.035	0.036	0.037	0.038	0.039	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.039	0.039	0.038	0.038	0.038	0.038	0.037	0.037	0.038	0.040	0.034
3	0.036	0.036	0.035	0.035	0.035	0.035	0.034	0.034	0.034	0.034	0.034	0.034	0.033	0.033	0.033	0.034	0.033	0.033	0.033	0.032	0.033	0.032	0.031	0.030	0.034	0.036	0.030
4	0.030	0.029	0.030	0.030	0.031	0.031	0.032	0.034	0.035	0.036	0.037	0.038	0.039	0.040	0.040	0.039	0.039	0.038	0.038	0.037	0.037	0.036	0.037	0.037	0.035	0.040	0.029
5	0.037	0.037	0.037	0.037	0.037	0.038	0.038	0.038	0.038	0.039	0.039	0.039	0.038	0.038	0.037	0.037	0.036	0.036	0.035	0.035	0.035	0.036	0.036	0.035	0.037	0.039	0.035
6	0.035	0.034	0.033	0.033	0.034	0.035	0.036	0.037	0.038	0.041	0.043	0.044	0.045	0.045	0.045	0.045	0.044	0.043	0.042	0.041	0.040	0.039	0.038	0.037	0.039	0.045	0.033
7	0.036	0.035	0.034	0.035	0.035	0.036	0.037	0.039	0.040	0.043	0.044	0.045	0.046	0.046	0.046	0.045	0.045	0.044	0.043	0.043	0.042	0.042	0.042	0.042	0.041	0.046	0.034
8	0.042	0.041	0.041	0.041	0.041	0.041	0.042	0.042	0.043	0.043	0.044	0.044	0.044	0.044	0.043	0.043	0.042	0.041	0.041	0.041	0.040	0.040	0.041	0.041	0.042	0.044	0.040
9	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.043	0.043	0.043	0.043	0.043	0.042	0.041	0.041	0.041	0.041	0.040	0.040	0.040	0.039	0.038	0.042	0.043	0.038
10	0.037	0.035	0.034	0.034	0.035	0.036	0.037	0.038	0.040	0.043	0.044	0.045	0.045	0.045	0.044	0.044	0.043	0.042	0.041	0.039	0.039	0.038	0.038	0.037	0.040	0.045	0.034
11	0.036	0.036	0.035	0.035	0.036	0.036	0.037	0.037	0.039	0.040	0.041	0.041	0.041	0.041	0.040	0.039	0.038	0.036	0.035	0.034	0.033	0.032	0.031	0.031	0.037	0.041	0.031
12	0.032	0.030	0.029	0.031	0.032	0.033	0.034	0.036	0.037	0.039	0.040	0.040	0.040	0.039	0.039	0.038	0.037	0.038	0.037	0.037	0.037	0.037	0.037	0.038	0.036	0.040	0.029
13	0.038	0.038	0.038	0.038	0.039	0.039	0.039	0.039	0.040	0.041	0.040	0.040	0.040	0.039	0.039	0.038	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.038	0.038	0.041	0.037
14	0.038	0.038	0.038	0.039	0.039	0.039	0.039	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.041	0.041	0.041	0.041	0.042	0.040	0.042	0.038
15	0.042	0.042	0.042	0.041	0.041	0.041	0.041	0.041	0.041	0.042	0.042	0.043	0.044	0.044	0.043	0.043	0.042	0.041	0.041	0.040	0.040	0.040	0.040	0.040	0.041	0.044	0.040
16	0.041	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.041	0.041	0.041	0.040	0.039	0.039	0.039	0.038	0.038	0.041	0.042	0.038
17	0.037	0.036	0.037	0.037	0.038	0.039	0.040	0.042	0.043	0.045	0.046	0.047	0.048	0.048	0.048	0.048	0.048	0.047	0.047	0.047	0.047	0.046	0.045	0.044	0.044	0.048	0.036
18	0.043	0.042	0.041	0.041	0.042	0.043	0.044	0.045	0.047	0.048	0.049	0.050	0.049	0.048	0.047	0.046	0.046	0.045	0.044	0.043	0.043	0.044	0.043	0.043	0.045	0.050	0.041
19	0.042	0.042	0.042	0.042	0.042	0.042	0.041	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.041	0.041	0.041	0.040	0.040	0.040	0.040	0.040	0.041	0.042	0.040
20	0.041	0.041	0.041	0.041	0.041	0.041	0.042	0.042	0.042	0.043	0.043	0.043	0.044	0.044	0.044	0.043	0.043	0.043	0.042	0.041	0.041	0.041	0.040	0.040	0.042	0.044	0.040
21	0.039	0.039	0.039	0.039	0.039	0.038	0.038	0.039	0.040	0.040	0.041	0.041	0.040	0.039	0.038	0.037	0.036	0.035	0.034	0.034	0.034	0.035	0.035	0.035	0.038	0.041	0.034
22	0.036	0.035	0.036	0.036	0.037	0.038	0.038	0.039	0.040	0.041	0.042	0.041	0.041	0.040	0.040	0.038	0.037	0.036	0.035	0.034	0.033	0.032	0.032	0.032	0.037	0.042	0.032
23	0.032	0.032	0.033	0.034	0.035	0.036	0.038	0.039	0.041	0.042	0.043	0.044	0.044	0.044	0.044	0.044	0.044	0.044	0.044	0.043	0.043	0.043	0.043	0.042	0.040	0.044	0.032
24	0.041	0.041	0.041	0.041	0.041	0.041	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.041	0.041	0.041	0.040	0.039	0.039	0.038	0.037	0.035	0.041	0.042	0.035
25	0.035	0.034	0.034	0.034	0.035	0.036	0.037	0.038	0.039	0.041	0.042	0.042	0.043	0.042	0.042	0.042	0.041	0.040	0.039	0.038	0.037	0.036	0.036	0.036	0.038	0.043	0.034
26	0.036	0.035	0.036	0.036	0.037	0.038	0.039	0.039	0.040	0.041	0.042	0.042	0.042	0.042	0.041	0.041	0.041	0.041	0.041	0.042	0.042	0.043	0.043	0.044	0.040	0.044	0.035
27	0.044	0.044	0.043	0.043	0.043	0.043	0.043	0.044	0.045	0.045	0.046	0.047	0.047	0.046	0.046	0.045	0.044	0.043	0.042	0.041	0.041	0.041	0.041	0.042	0.044	0.047	0.041
28	0.042	0.042	0.042	0.042	0.043	0.043	0.043	0.043	0.044	0.044	0.044	0.044	0.044	0.044	0.043	0.043	0.043	0.042	0.041	0.041	0.041	0.042	0.042	0.042	0.043	0.044	0.041
Avg	0.038	0.037	0.037	0.037	0.038	0.038	0.039	0.040	0.040	0.041	0.042	0.042	0.042	0.042	0.042	0.041	0.040	0.040	0.039	0.039	0.039	0.039	0.038	0.038	0.040	--	--
Max	0.044	0.044	0.043	0.043	0.043	0.043	0.044	0.045	0.047	0.048	0.049	0.050	0.049	0.048	0.048	0.048	0.048	0.047	0.047	0.047	0.047	0.046	0.045	0.044	--	0.050	--
Min	0.030	0.029	0.029	0.030	0.031	0.031	0.032	0.034	0.034	0.034	0.034	0.034	0.033	0.033	0.033	0.033	0.032	0.032	0.032	0.032	0.033	0.032	0.031	0.030	--	--	0.029

SAROAD for Resolution, East_Plant, rolling 8-hour average
"Component, Channel: TableAmbient_Hourly, O3_ppm"
Month: Mar 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	0.043	0.043	0.044	0.044	0.044	0.042	0.042	0.041	0.039	0.038	0.037	0.037	0.037	0.037	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.035	0.039	0.044	0.035
2	0.035	0.034	0.034	0.034	0.034	0.035	0.036	0.037	0.038	0.039	0.040	0.041	0.042	0.042	0.042	0.042	0.041	0.041	0.041	0.041	0.040	0.040	0.040	0.040	0.039	0.042	0.034
3	0.040	0.039	0.038	0.038	0.039	0.039	0.040	0.041	0.041	0.042	0.043	0.043	0.043	0.043	0.042	0.042	0.042	0.041	0.041	0.040	0.040	0.039	0.039	0.038	0.041	0.043	0.038
4	0.038	0.037	0.037	0.037	0.037	0.037	0.038	0.040	0.041	0.043	0.045	0.046	0.047	0.048	0.048	0.047	0.046	0.045	0.043	0.042	0.041	0.041	0.041	0.041	0.042	0.048	0.037
5	0.041	0.041	0.041	0.042	0.042	0.043	0.044	0.045	0.046	0.047	0.048	0.048	0.048	0.048	0.048	0.047	0.047	0.046	0.046	0.045	0.046	0.045	0.044	0.043	0.045	0.048	0.041
6	0.043	0.042	0.042	0.042	0.042	0.043	0.044	0.045	0.045	0.047	0.048	0.049	0.049	0.049	0.049	0.049	0.048	0.047	0.047	0.045	0.045	0.043	0.043	0.042	0.045	0.049	0.042
7	0.042	0.041	0.040	0.040	0.040	0.040	0.041	0.041	0.041	0.042	0.043	0.043	0.043	0.043	0.043	0.042	0.041	0.039	0.038	0.037	0.036	0.035	0.033	0.032	0.040	0.043	0.032
8	0.032	0.031	0.031	0.030	0.030	0.030	0.030	0.031	0.031	0.032	0.033	0.034	0.036	0.038	0.040	0.042	0.043	0.044	0.045	0.044	0.044	0.044	0.043	0.042	0.037	0.045	0.030
9	0.041	0.040	0.040	0.039	0.039	0.039	0.039	0.039	0.039	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.039	0.038	0.038	0.036	0.035	0.034	0.032	0.031	0.038	0.041	0.031
10	0.030	0.030	0.031	0.031	0.032	0.033	0.034	0.036	0.038	0.040	0.041	0.042	0.043	0.043	0.042	0.041	0.040	0.039	0.039	0.038	0.037	0.037	0.038	0.038	0.037	0.043	0.030
11	0.037	0.037	0.037	0.037	0.038	0.038	0.038	0.039	0.040	0.041	0.042	0.043	0.044	0.044	0.043	0.042	0.042	0.041	0.040	0.039	0.038	0.037	0.036	0.036	0.040	0.044	0.036
12	0.035	0.036	0.036	0.037	0.037	0.038	0.039	0.040	0.042	0.042	0.043	0.044	0.045	0.045	0.044	0.043	0.042	0.040	0.039	0.038	0.036	0.035	0.035	0.034	0.039	0.045	0.034
13	0.034	0.034	0.034	0.035	0.036	0.036	0.037	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18	--	--	--	--	--	--	0.045	0.046	0.047	0.049	0.051	0.052	0.053	0.053	0.053	0.053	0.052	0.051	0.050	0.049	0.048	0.047	0.046	0.044	0.049	0.053	0.044
19	0.043	0.042	0.042	0.042	0.041	0.042	0.042	0.043	0.044	0.045	0.046	0.047	0.048	0.050	0.050	0.051	0.050	0.050	0.050	0.050	0.049	0.048	0.047	0.046	0.046	0.051	0.041
20	0.045	0.044	0.042	0.042	0.042	0.042	0.043	0.044	0.045	0.046	0.048	0.050	0.051	0.052	0.053	0.053	0.054	0.053	0.053	0.053	0.052	0.051	0.049	0.047	0.048	0.054	0.042
21	0.046	0.044	0.043	0.044	0.043	0.044	0.044	0.045	0.047	0.048	0.049	0.050	0.051	0.051	0.051	0.051	0.050	0.049	0.048	0.047	0.046	0.045	0.044	0.043	0.047	0.051	0.043
22	0.042	0.041	0.042	0.042	0.043	0.044	0.046	0.047	0.049	0.051	0.051	0.051	0.051	0.051	0.050	0.049	0.049	0.048	0.048	0.048	0.047	0.046	0.045	0.044	0.047	0.051	0.041
23	0.042	0.041	0.040	0.041	0.042	0.044	0.046	0.048	0.050	0.053	0.055	0.056	0.058	0.058	0.058	0.057	0.056	0.055	0.053	0.052	0.050	0.049	0.048	0.047	0.050	0.058	0.040
24	0.046	0.046	0.046	0.046	0.047	0.048	0.049	0.049	0.050	0.050	0.051	0.052	0.052	0.052	0.052	0.053	0.053	0.053	0.052	0.052	0.051	0.050	0.049	0.047	0.050	0.053	0.046
25	0.046	0.045	0.045	0.045	0.045	0.046	0.046	0.047	0.048	0.049	0.050	0.051	0.051	0.051	0.051	0.050	0.049	0.048	0.046	0.045	0.044	0.042	0.041	0.040	0.047	0.051	0.040
26	0.040	0.040	0.040	0.040	0.041	0.042	0.044	0.045	0.046	0.048	0.049	0.050	0.050	0.051	0.050	0.050	0.049	0.049	0.048	0.048	0.047	0.046	0.046	0.046	0.046	0.051	0.040
27	0.045	0.044	0.043	0.044	0.045	0.045	0.046	0.046	0.047	0.048	0.049	0.049	0.048	0.047	0.046	0.046	0.045	0.044	0.043	0.042	0.042	0.041	0.041	0.041	0.045	0.049	0.041
28	0.040	0.041	0.042	0.042	0.043	0.043	0.044	0.044	0.046	0.047	0.047	0.048	0.048	0.047	0.047	0.047	0.047	0.046	0.045	0.045	0.044	0.044	0.044	0.044	0.045	0.048	0.040
29	0.042	0.042	0.042	0.043	0.044	0.045	0.046	0.047	0.048	0.049	0.050	0.051	0.051	0.051	0.051	0.051	0.050	0.050	0.049	0.051	0.050	0.050	--	--	0.048	0.051	0.042
30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
31	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Avg	0.040	0.040	0.040	0.040	0.040	0.041	0.042	0.043	0.044	0.045	0.046	0.047	0.047	0.047	0.047	0.047	0.046	0.046	0.045	0.044	0.044	0.043	0.042	0.041	0.044	--	--
Max	0.046	0.046	0.046	0.046	0.047	0.048	0.049	0.049	0.050	0.053	0.055	0.056	0.058	0.058	0.058	0.057	0.056	0.055	0.053	0.053	0.052	0.051	0.049	0.047	--	0.058	--
Min	0.030	0.030	0.031	0.030	0.030	0.030	0.030	0.031	0.031	0.032	0.033	0.034	0.036	0.037	0.036	0.036	0.036	0.036	0.036	0.036	0.035	0.034	0.032	0.031	--	--	0.030

-- Indicates Invalid Data

SAROAD for Resolution, East_Plant
"Component, Channel: TableAmbient_Hourly, O3_ppm"
Month: Jan 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	0.032	0.029	0.031	0.028	0.032	0.031	0.033	0.032	0.032	0.033	0.033	0.034	0.036	0.039	0.039	0.039	0.038	0.035	0.032	0.030	0.034	0.036	0.037	0.037	0.034	0.039	0.028
2	0.037	0.037	0.037	0.036	0.038	0.038	0.038	0.038	0.038	0.037	0.037	0.037	0.039	0.040	0.039	0.041	0.040	0.039	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.041	0.036
3	0.038	0.038	0.037	0.037	0.041	0.041	0.040	0.039	0.038	0.037	0.036	0.037	0.039	0.040	0.040	0.040	0.039	0.038	0.036	0.035	0.034	0.034	0.034	0.033	0.038	0.041	0.033
4	0.034	0.033	0.032	0.031	0.032	0.032	0.032	0.032	0.031	0.031	0.032	0.034	0.035	0.036	0.038	0.037	0.038	0.036	0.032	0.031	0.036	0.036	0.035	0.034	0.034	0.038	0.031
5	0.035	0.034	0.034	0.032	0.034	0.035	0.035	0.034	0.034	0.034	0.033	0.032	0.035	0.037	0.038	0.037	0.037	0.035	0.032	0.038	0.039	0.039	0.036	0.035	0.035	0.039	0.032
6	0.037	0.037	0.036	0.033	0.033	0.032	0.032	0.033	0.033	0.034	0.033	0.034	0.036	0.038	0.040	0.040	0.040	0.038	0.037	0.037	0.037	0.036	0.037	0.037	0.036	0.040	0.032
7	0.034	0.033	0.033	0.034	0.034	0.033	0.033	0.032	0.030	0.033	0.032	0.034	0.037	0.038	0.038	0.041	0.037	0.034	0.023	0.027	0.037	0.037	0.037	0.037	0.034	0.041	0.023
8	0.040	0.040	0.039	0.038	0.037	0.041	0.040	0.037	0.039	0.042	0.042	0.043	0.044	0.044	0.044	0.043	0.044	0.043	0.042	0.041	0.043	0.043	0.041	0.040	0.041	0.044	0.037
9	0.040	0.041	0.041	0.040	0.042	0.041	0.040	0.039	0.039	0.039	0.038	0.037	0.039	0.042	0.042	0.042	0.041	0.037	0.036	0.034	0.037	0.038	0.039	0.040	0.039	0.042	0.034
10	0.036	0.037	0.038	0.038	0.038	0.037	0.036	0.035	0.035	0.035	0.037	0.040	0.044	0.043	0.042	0.042	0.042	0.042	0.042	0.043	0.037	0.033	0.033	0.040	0.039	0.044	0.033
11	0.041	0.039	0.037	0.034	0.035	0.035	0.034	0.032	0.033	0.034	0.036	0.037	0.039	0.039	0.039	0.039	0.038	0.037	0.036	0.036	0.035	0.033	0.036	0.034	0.036	0.041	0.032
12	0.033	0.032	0.031	0.029	0.031	0.033	0.034	0.031	0.028	0.030	0.036	0.037	0.039	0.040	0.040	0.040	0.040	0.040	0.039	0.039	0.037	0.034	0.033	0.035	0.035	0.040	0.028
13	0.031	0.032	0.033	0.031	0.034	0.032	0.030	0.026	0.031	0.033	0.038	0.039	0.040	0.040	0.041	0.041	0.040	0.040	0.039	0.038	0.036	0.034	0.031	0.033	0.035	0.041	0.026
14	0.029	0.032	0.029	0.026	0.029	0.034	0.029	0.023	0.027	0.031	0.033	0.035	0.037	0.038	0.036	0.035	0.035	0.034	0.034	0.032	0.029	0.032	0.033	0.035	0.032	0.038	0.023
15	0.035	0.037	0.037	0.036	0.037	0.037	0.035	0.036	0.036	0.036	0.038	0.039	0.039	0.040	--	--	--	0.040	0.038	0.037	0.037	0.037	0.038	0.038	0.037	0.040	0.035
16	0.039	0.038	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
21	--	--	--	--	--	--	--	--	--	--	0.037	0.034	0.036	0.037	0.039	0.040	0.040	0.040	0.038	0.038	0.039	0.037	0.034	0.034	--	--	--
22	0.033	0.033	0.034	--	0.035	0.034	0.033	0.032	0.033	0.034	0.033	0.033	0.031	0.032	0.032	0.033	0.033	0.033	0.034	0.033	0.033	0.034	0.036	0.037	0.033	0.037	0.031
23	0.036	0.035	0.035	--	0.035	0.036	0.035	0.033	0.034	0.034	0.033	0.030	0.030	0.031	0.032	0.035	0.034	0.027	0.028	0.031	0.034	0.034	0.034	0.034	0.033	0.036	0.027
24	0.032	0.033	0.032	--	0.030	0.029	0.029	0.027	0.028	0.025	0.025	0.027	0.027	0.028	0.031	0.027	0.026	0.027	0.027	0.023	0.021	0.022	0.025	0.026	0.027	0.033	0.021
25	0.026	0.026	0.025	--	0.024	0.022	0.022	0.023	0.024	0.024	0.024	0.024	0.026	0.027	0.027	0.028	0.027	0.024	0.023	0.025	0.025	0.026	0.025	0.022	0.025	0.028	0.022
26	0.022	0.020	0.021	--	0.018	0.022	0.020	0.021	0.022	0.023	0.025	0.031	0.030	0.029	0.029	0.029	0.028	0.028	0.029	0.029	0.030	0.030	0.030	0.027	0.026	0.031	0.018
27	0.030	0.030	0.029	--	0.030	0.031	0.033	0.033	0.033	0.034	0.034	0.034	0.033	0.035	0.035	0.034	0.036	0.035	0.036	0.035	0.032	0.031	0.031	0.031	0.033	0.036	0.029
28	0.031	0.032	0.032	--	0.032	0.032	0.033	0.035	0.036	0.038	0.039	0.038	0.037	0.040	0.041	0.042	0.044	0.043	0.042	0.040	0.040	0.041	0.040	0.039	0.038	0.044	0.031
29	0.038	0.037	0.035	--	0.030	0.029	0.026	0.028	0.032	0.031	0.031	0.034	0.034	0.034	0.034	0.037	0.039	0.039	0.037	0.037	0.037	0.038	0.038	0.037	0.034	0.039	0.026
30	0.037	0.037	0.038	--	0.037	0.032	0.031	0.025	0.029	0.037	0.039	0.039	0.042	0.041	0.041	0.041	0.041	0.042	0.041	0.039	0.036	0.035	0.037	0.036	0.037	0.042	0.025
31	0.037	0.036	0.036	--	0.035	0.034	0.032	0.032	0.032	0.033	0.034	0.036	0.038	0.038	--	0.036	0.036	0.035	0.031	0.033	0.034	0.035	0.038	0.036	0.035	0.038	0.031
Avg	0.034	0.034	0.034	0.034	0.033	0.033	0.033	0.032	0.032	0.033	0.034	0.035	0.036	0.037	0.037	0.038	0.037	0.036	0.035	0.035	0.035	0.035	0.035	0.035	0.035	--	--
Max	0.041	0.041	0.041	0.040	0.042	0.041	0.040	0.039	0.039	0.042	0.042	0.043	0.044	0.044	0.044	0.043	0.044	0.043	0.042	0.043	0.043	0.043	0.041	0.040	--	0.044	--
Min	0.022	0.020	0.021	0.026	0.018	0.022	0.020	0.021	0.022	0.023	0.024	0.024	0.026	0.027	0.027	0.027	0.026	0.024	0.023	0.023	0.021	0.022	0.025	0.022	--	--	0.018

-- Indicates Invalid Data

SAROAD for Resolution, East_Plant
"Component, Channel: TableAmbient_Hourly, O3_ppm"
Month: Feb 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	0.036	0.035	0.036	--	0.036	0.036	0.035	0.035	0.033	0.034	0.034	0.033	0.035	0.038	0.040	0.037	0.038	0.034	0.030	0.029	0.030	0.032	0.031	0.034	0.034	0.040	0.029
2	0.036	0.035	0.035	--	0.032	0.033	0.033	0.034	0.035	0.038	0.038	0.037	0.039	0.039	0.042	0.042	0.042	0.039	0.039	0.039	0.041	0.040	0.038	0.036	0.037	0.042	0.032
3	0.037	0.037	0.037	--	0.037	0.036	0.035	0.035	0.034	0.034	0.034	0.035	0.035	0.031	0.033	0.035	0.035	0.036	0.035	0.029	0.031	0.034	0.035	0.033	0.034	0.037	0.029
4	0.033	0.032	0.030	--	0.028	0.027	0.028	0.029	0.031	0.034	0.034	0.033	0.035	0.036	0.037	0.040	0.042	0.042	0.041	0.040	0.040	0.035	0.036	0.036	0.035	0.042	0.027
5	0.036	0.037	0.038	--	0.037	0.037	0.037	0.039	0.036	0.038	0.039	0.038	0.039	0.039	0.039	0.039	0.039	0.039	0.038	0.036	0.033	0.035	0.036	0.034	0.037	0.039	0.033
6	0.035	0.037	0.037	--	0.037	0.035	0.032	0.032	0.030	0.031	0.036	0.038	0.043	0.043	0.042	0.044	0.047	0.047	0.047	0.047	0.045	0.042	0.037	0.039	0.039	0.047	0.030
7	0.040	0.040	0.037	--	0.036	0.034	0.033	0.033	0.029	0.038	0.040	0.037	0.042	0.045	0.047	0.047	0.048	0.048	0.048	0.046	0.043	0.040	0.043	0.041	0.041	0.048	0.029
8	0.044	0.043	0.043	--	0.041	0.040	0.040	0.040	0.042	0.042	0.041	0.043	0.043	0.045	0.044	0.045	0.044	0.044	0.044	0.043	0.041	0.041	0.040	0.040	0.042	0.045	0.040
9	0.039	0.040	0.041	--	0.041	0.045	0.043	0.042	0.041	0.041	0.041	0.042	0.043	0.044	0.044	0.044	0.044	0.043	0.042	0.041	0.040	0.039	0.039	0.042	0.042	0.045	0.039
10	0.042	0.041	0.040	--	0.037	0.034	0.034	0.031	0.026	0.035	0.040	0.043	0.043	0.044	0.045	0.046	0.046	0.047	0.047	0.045	0.040	0.039	0.040	0.038	0.040	0.047	0.026
11	0.039	0.039	0.036	--	0.037	0.037	0.036	0.031	0.034	0.035	0.037	0.038	0.041	0.040	0.042	0.042	0.042	0.042	0.041	0.041	0.038	0.036	0.034	0.028	0.038	0.042	0.028
12	0.032	0.033	0.031	--	0.031	0.031	0.032	0.032	0.019	--	0.040	0.039	0.039	0.040	0.040	0.039	0.040	0.040	0.040	0.040	0.037	0.034	0.032	0.036	0.035	0.040	0.019
13	0.041	0.038	0.040	--	0.038	0.037	--	0.034	0.040	0.041	0.041	0.040	0.039	0.040	0.041	0.042	0.041	0.038	0.038	0.038	0.037	0.035	0.034	0.037	0.039	0.042	0.034
14	0.039	0.038	0.038	--	0.038	0.038	0.037	0.038	0.038	0.040	0.042	0.041	0.041	0.040	0.040	0.040	0.041	0.040	0.038	0.041	0.040	0.041	0.041	0.040	0.039	0.042	0.037
15	0.041	0.042	0.042	--	0.043	0.042	0.042	0.042	0.041	0.041	0.040	0.040	0.042	0.043	--	--	0.044	0.044	0.044	0.043	0.043	0.041	0.038	0.037	0.042	0.044	0.037
16	0.038	0.041	0.041	--	0.042	0.042	0.042	0.043	0.042	0.040	0.041	0.042	0.042	0.044	0.043	0.043	0.042	0.042	0.041	0.041	0.040	0.039	0.040	0.041	0.041	0.044	0.038
17	0.040	0.038	0.037	--	0.037	0.037	0.036	0.034	0.036	0.039	0.040	0.043	0.045	0.047	0.049	0.050	0.049	0.049	0.048	0.047	0.046	0.046	0.049	0.049	0.043	0.050	0.034
18	0.047	0.047	0.044	--	0.041	0.042	0.041	0.039	0.038	0.043	0.046	0.047	0.050	0.051	0.050	0.051	0.051	0.050	0.048	0.042	0.042	0.044	0.044	0.043	0.045	0.051	0.038
19	0.043	0.043	0.044	--	0.044	0.043	0.041	0.039	0.039	0.043	0.043	0.042	0.043	0.043	0.042	0.042	0.042	0.042	0.042	0.042	0.041	0.041	0.041	0.040	0.042	0.044	0.039
20	0.041	0.040	0.038	--	0.041	0.041	0.042	0.042	0.041	0.041	0.041	0.038	0.043	0.047	0.045	0.044	0.043	0.042	0.045	0.044	0.044	0.043	0.041	0.041	0.042	0.047	0.038
21	0.041	0.039	0.039	--	0.041	0.040	0.038	0.039	0.038	0.038	0.039	0.039	0.038	0.040	0.042	0.044	0.044	0.044	0.037	0.032	0.031	0.032	0.035	0.033	0.038	0.044	0.031
22	0.033	0.036	0.038	--	0.036	0.037	0.035	0.035	0.032	0.039	0.042	0.041	0.041	0.041	0.042	0.043	0.042	0.041	0.038	0.037	0.038	0.035	0.033	0.031	0.038	0.043	0.031
23	0.033	0.032	0.031	--	0.033	0.033	0.031	0.031	0.034	0.037	0.041	0.042	0.042	0.043	0.044	0.045	0.045	0.044	0.044	0.043	0.044	0.042	0.045	0.045	0.039	0.045	0.031
24	0.044	0.044	0.041	--	0.041	0.039	0.041	0.040	0.041	0.041	0.044	0.042	0.042	0.042	0.041	0.041	0.042	0.043	0.042	0.042	0.042	0.040	0.038	0.039	0.041	0.044	0.038
25	0.039	0.036	0.035	--	0.034	0.034	0.031	0.033	0.034	0.036	0.039	0.040	0.041	0.042	0.042	0.042	0.043	0.044	0.044	0.044	0.040	0.038	0.039	0.037	0.039	0.044	0.031
26	0.037	0.036	0.035	--	0.032	0.037	0.036	0.037	0.034	0.040	0.039	0.040	0.041	0.042	0.042	0.043	0.044	0.043	0.042	0.041	0.037	0.038	0.040	0.042	0.039	0.044	0.032
27	0.045	0.046	0.045	--	0.044	0.043	0.043	0.043	0.042	0.043	0.042	0.043	0.045	0.046	0.048	0.049	0.048	0.049	0.048	0.043	0.040	0.040	0.040	0.041	0.044	0.049	0.040
28	0.042	0.041	0.041	--	0.044	0.041	0.042	0.043	0.043	0.043	0.042	0.044	0.044	0.044	0.044	0.045	0.046	0.045	0.043	0.040	0.041	0.041	0.042	0.042	0.043	0.046	0.040
Avg	0.039	0.039	0.038	--	0.038	0.037	0.037	0.037	0.036	0.039	0.040	0.040	0.041	0.042	0.043	0.043	0.043	0.043	0.042	0.041	0.039	0.039	0.039	0.038	0.040	--	--
Max	0.047	0.047	0.045	--	0.044	0.045	0.043	0.043	0.043	0.043	0.046	0.047	0.050	0.051	0.050	0.051	0.051	0.050	0.048	0.047	0.046	0.046	0.049	0.049	--	0.051	--
Min	0.032	0.032	0.030	--	0.028	0.027	0.028	0.029	0.019	0.031	0.034	0.033	0.035	0.031	0.033	0.035	0.035	0.034	0.030	0.029	0.030	0.032	0.031	0.028	--	--	0.019

-- Indicates Invalid Data

SAROAD for Resolution, East_Plant
"Component, Channel: TableAmbient_Hourly, O3_ppm"
Month: Mar 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	0.040	--	0.046	0.045	0.044	0.044	0.043	0.044	0.042	--	0.035	0.038	0.037	0.036	0.036	0.037	0.037	0.036	0.036	0.033	0.035	0.037	0.039	0.046	0.033
2	0.037	0.038	0.036	--	0.034	0.033	0.033	0.033	0.034	0.034	0.035	0.037	0.039	0.040	0.041	0.043	0.043	0.043	0.043	0.043	0.039	0.040	0.040	0.040	0.038	0.043	0.033
3	0.041	0.041	0.041	--	0.040	0.039	0.039	0.038	0.036	0.037	0.040	0.044	0.044	0.043	0.044	0.043	0.043	0.042	0.042	0.042	0.042	0.041	0.041	0.039	0.041	0.044	0.036
4	0.039	0.039	0.038	--	0.038	0.037	0.037	0.036	0.037	0.037	0.037	0.038	0.040	0.044	0.047	0.047	0.051	0.051	0.050	0.047	0.045	0.043	0.040	0.041	0.042	0.051	0.036
5	0.041	0.040	0.041	--	0.043	0.039	0.040	0.043	0.043	0.042	0.041	0.046	0.048	0.049	0.050	0.049	0.049	0.049	0.046	0.043	0.045	0.049	0.048	0.045	0.045	0.050	0.039
6	0.045	0.044	0.044	--	0.043	0.042	0.042	0.042	0.038	0.043	0.044	0.045	0.049	0.048	0.048	0.048	0.049	0.051	0.052	0.051	0.049	0.045	0.045	0.044	0.046	0.052	0.038
7	0.044	0.043	0.043	--	0.040	0.039	0.042	0.040	0.036	0.040	0.043	0.041	0.041	0.042	0.042	0.045	0.046	0.045	0.043	0.042	0.040	0.038	0.036	0.035	0.041	0.046	0.035
8	0.035	0.035	0.034	--	0.030	0.030	0.027	0.031	0.032	0.031	0.032	0.031	0.029	0.028	0.032	0.034	0.036	0.040	0.043	0.044	0.046	0.047	0.045	0.045	0.036	0.047	0.027
9	0.044	0.043	0.041	--	0.041	0.040	0.039	0.039	0.039	0.038	0.039	0.040	0.039	0.040	0.040	0.041	0.042	0.041	0.040	0.039	0.038	0.041	0.039	0.034	0.040	0.044	0.034
10	0.032	--	0.027	--	0.030	0.031	0.030	0.030	0.033	0.034	0.030	0.037	0.040	0.042	0.043	0.045	0.045	0.044	0.044	0.041	0.037	0.038	0.038	0.038	0.037	0.045	0.027
11	0.038	0.036	--	0.036	0.039	0.040	0.038	0.035	0.035	0.037	0.038	0.041	0.040	0.042	0.044	0.045	0.043	0.045	0.045	0.045	0.041	0.039	0.036	0.040	0.040	0.045	0.035
12	0.038	0.035	--	0.036	0.034	0.033	0.034	0.037	0.040	0.040	0.039	0.039	0.042	0.042	0.044	0.046	0.047	0.047	0.048	0.045	0.037	0.037	0.038	0.037	0.040	0.048	0.033
13	0.036	0.035	--	0.032	0.033	0.034	0.034	0.035	0.035	0.036	0.038	0.042	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18	--	--	--	--	--	--	--	--	0.036	0.042	0.045	0.047	0.048	0.050	0.052	0.053	0.055	0.056	0.055	0.055	0.051	0.050	0.048	0.049	--	--	--
19	0.046	0.045	--	0.048	0.042	0.042	0.040	0.039	0.039	0.041	0.043	0.044	0.046	0.047	0.048	0.048	0.048	0.049	0.051	0.051	0.055	0.053	0.050	0.046	0.046	0.055	0.039
20	0.047	0.048	--	0.047	0.046	0.045	0.042	0.041	0.038	0.039	0.040	0.046	0.048	0.049	0.049	0.050	0.052	0.053	0.054	0.055	0.055	0.054	0.053	0.053	0.048	0.055	0.038
21	0.050	0.049	--	0.048	0.047	0.045	0.040	0.040	0.042	0.043	0.045	0.047	0.047	0.048	0.050	0.051	0.053	0.054	0.052	0.052	0.050	0.048	0.046	0.045	0.048	0.054	0.040
22	0.044	0.045	--	0.042	0.042	0.041	0.040	0.037	0.043	0.046	0.048	0.049	0.050	0.052	0.053	0.054	0.052	0.050	0.049	0.047	0.047	0.046	0.049	0.050	0.047	0.054	0.037
23	0.047	0.047	--	0.042	0.041	0.039	0.038	0.037	0.039	0.045	0.046	0.049	0.055	0.056	0.057	0.058	0.060	0.059	0.059	0.058	0.057	0.054	0.052	0.051	0.050	0.060	0.037
24	0.049	0.047	--	0.044	0.046	0.046	0.046	0.046	0.047	0.047	0.050	0.052	0.052	0.051	0.050	0.050	0.052	0.054	0.055	0.052	0.052	0.052	0.053	0.054	0.050	0.055	0.044
25	0.053	0.048	--	0.045	0.045	0.044	0.043	0.045	0.045	0.045	0.046	0.048	0.049	0.050	0.052	0.052	0.051	0.052	0.052	0.051	0.052	0.047	0.044	0.042	0.048	0.053	0.042
26	0.043	0.040	--	0.040	0.038	0.040	0.039	0.040	0.040	0.042	0.045	0.047	0.048	0.048	0.050	0.051	0.052	0.052	0.052	0.051	0.049	0.046	0.046	0.048	0.045	0.052	0.038
27	0.049	0.047	--	0.044	0.045	0.045	0.042	0.042	0.040	0.046	0.047	0.049	0.050	0.050	--	0.049	0.048	0.047	0.047	0.046	0.044	0.044	0.043	0.043	0.046	0.050	0.040
28	0.038	0.038	--	0.042	0.041	0.043	0.043	0.037	0.043	0.045	0.046	0.045	0.046	0.047	0.048	0.049	0.050	0.049	0.049	0.045	0.043	0.045	0.045	0.045	0.044	0.050	0.037
29	0.045	0.044	--	0.044	0.043	0.043	0.041	0.037	0.043	0.044	0.048	0.050	0.050	0.051	0.050	0.051	0.051	0.052	0.053	0.053	0.049	0.048	0.049	0.048	0.047	0.053	0.037
30	0.047	0.048	0.063	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
31	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Avg	0.043	0.042	0.041	0.042	0.040	0.040	0.039	0.038	0.039	0.041	0.042	0.044	0.045	0.046	0.047	0.047	0.048	0.048	0.048	0.047	0.046	0.045	0.044	0.044	0.044	--	--
Max	0.053	0.049	0.063	0.048	0.047	0.046	0.046	0.046	0.047	0.047	0.050	0.052	0.055	0.056	0.057	0.058	0.060	0.059	0.059	0.058	0.057	0.054	0.053	0.054	--	0.060	--
Min	0.032	0.035	0.027	0.032	0.030	0.030	0.027	0.030	0.032	0.031	0.030	0.031	0.029	0.028	0.032	0.034	0.036	0.037	0.037	0.036	0.036	0.033	0.035	0.034	--	--	0.027

-- 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: 01.04.2013 Time: 11:51 am 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: RPA DATE: 1/9/13
AUDITED BY: KJD DATE: 1/4/13

Parameter	Estimated	Logger	Audit
Speed 10m (m/s)	5 m/s	4.6	5.653
Direction* 10m (deg)	NE	39.7	49.31
Ambient Temperature (°C)	10°	9.3	8.94
Relative Humidity (%)	31%	36.1	36.87
Aspirated Temp 2m	10°	9.5	9.1
Aspirated Temp 10m	8°	7.5	7.464
Delta Temperature (°C)	N/A	-1.9	-1.637
Solar Radiation (w/m²)	Sunny Partly cloudy Cloudy	617.7	616.9
Barometric Pressure (mmHg)	N/A	687.9	687.8
Battery Voltage (V)	N/A	13.1	13.07
Time (MST)	N/A	11:53	12:00 L.T.
Date	N/A	01/04/2013	1/4/13

*Direction wind is from

Comments/Unusual Occurrences or Weather: Tipped precip. gauge & filled evap. pan. Invalidated precip. at 12:00 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: Kami Ballard

West Plant

~~EAST PLANT~~ -KJD

MET SITE CHECK FORM
Resolution
PROJECT NO. 262-1

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 01/11/2013 Time: 8:30 Operator: Kami McCall

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 1/30/13 DATE

KJD AUDITED BY 1/24/13 DATE

Parameter	Estimated	Logger	Audit
Speed 10m (m/s)	1 m/s	.7 m/s	0.984
Direction* 10m (deg)		233.3	291.9
Ambient Temperature (°C)	2°	2.2	2.35
Relative Humidity (%)	60%	65.9%	66.46
Aspirated Temp 2m	2°	1.9°	1.983
Aspirated Temp 10m	1°	1.7°	1.842
Delta Temperature (°C)	N/A	-.15	-0.142
Solar Radiation (w/m²)	Sunny Partly cloudy Cloudy	171.9	114.5
Barometric Pressure (mmHg)	N/A	683.0	683.0
Battery Voltage (V)	N/A	13.3	13.26
Time (MST)	N/A	8:38	8:45 L.T.
Date	N/A	01/11/13	1/11/13

291.8
310.2
266.6
260.9

*Direction wind is from

Comments/Unusual Occurrences or Weather: Tipped precip. guage.
Invalidated precip. at 8:45 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: Kami McCall

AIR SCIENCES INC.

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

Date: 01/23/2013 Time: 1243 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
REVIEWED BY RPA 1/30/13 DATE
AUDITED BY KJD 1/30/13 DATE

Parameter	Estimated	Logger	Audit	
Speed 10m (m/s)	6 m/s	5.7 m/s	5.547	86.1, 83.6
Direction* 10m (deg)	SE	129.6	79.05	73.97, 64.51
Ambient Temperature (°C)	20°	21.9°	21.96	
Relative Humidity (%)	15%	13.8	13.94	
Aspirated Temp 2m	20°	22.0°	21.97	
Aspirated Temp 10m	19°	21.4°	21.21	
Delta Temperature (°C)	N/A	-.65	-0.759	
Solar Radiation (w/m²)	Sunny Partly cloudy Cloudy	390.2	553.8	581.2, 546.0, 298.6, 300.7
Barometric Pressure (mmHg)	N/A	686.98	687.0	
Battery Voltage (V)	N/A	12.83	12.83	
Time (MST)	N/A	12:44	12:45 L.T.	
Date	N/A	01/23/2013	1/23/13	

*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: Kara Ballard

AIR SCIENCES INC.

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

Date: 01.31.2013 Time: 4:08 Operator: Kara 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
RPA 2-4-13
REVIEWED BY DATE
KJD 2/4/13
AUDITED BY DATE

Parameter	Estimated	Logger	Audit
Speed 10m (m/s)	5 m/s	4.5 m/s	5.221
Direction* 10m (deg)	E	37.9	52.12
Ambient Temperature (°C)	16°	17.4°	17.23
Relative Humidity (%)	20%	20.8%	20.11
Aspirated Temp 2m	16°	17.6°	17.27
Aspirated Temp 10m	15°	16.8°	16.8
Delta Temperature (°C)	N/A	-.75	-0.471
Solar Radiation (w/m²)	Sunny (Partly cloudy) Cloudy	167.5	242.4
Barometric Pressure (mmHg)	N/A	685.6	685.6
Battery Voltage (V)	N/A	12.92	12.93
Time (MST)	N/A	4:14	16:15 L.T.
Date	N/A	01.31.2013	1/31/13

*Direction wind is from

Comments/Unusual Occurrences or Weather: Ripped precip gauge
Invalidated precip. at 16:30 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: Kara BaCard

AIR SCIENCES INC.

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

Date: 02-06-2013 Time: 10:34 Operator: Karen BeCard

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 2-7-13
AUDITED BY KJD DATE 2/7/13

Parameter	Estimated	Logger	Audit
Speed 10m (m/s)	1 m/s	1.2	1.691
Direction* 10m (deg)	SE	145.9	180.7
Ambient Temperature (°C)	15°	16.2	16.4
Relative Humidity (%)	45%	43.7	43.35
Aspirated Temp 2m	15°	16.2	16.09
Aspirated Temp 10m	13°	14.7	14.8
Delta Temperature (°C)	N/A	-1.4	-1.299
Solar Radiation (w/m²)	Sunny Partly cloudy Cloudy	345.4	408.8
Barometric Pressure (mmHg)	N/A	682.04	682.0
Battery Voltage (V)	N/A	12.9	12.94
Time (MST)	N/A	10:38	10:45 L.T.
Date	N/A	02/06/2013	2/6/13

10:15 - 186.9
10:30 - 196.4
10:00 - 153.5
11:15 - 191.2

*Direction wind is from

Comments/Unusual Occurrences or Weather: Tipped precip. gauge
Invalidated precip. at 10:45 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: Karen BeCard

AIR SCIENCES INC.

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

Date: 02-15-2013 Time: 10:30 Operator: Kami

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 2/20/13
REVIEWED BY DATE

KJD 2/20/13
AUDITED BY DATE

Parameter	Estimated	Logger	Audit	
Speed 10m (m/s)	3 m/s	5.7	4.754	
Direction* 10m (deg)	NE	28.5	37.41	
Ambient Temperature (°C)	12°	15°	14.41	
Relative Humidity (%)	25%	15 %	13.94	
Aspirated Temp 2m	12°	14.4°	14.06	-0.551 10:00
Aspirated Temp 10m	11°	13.6°	13.57	-0.586 10:15
Delta Temperature (°C)	N/A	-1.01	-0.488	-0.745 10:45
Solar Radiation (w/m²)	(Sunny) Partly cloudy Cloudy	691.7	604.0 *	-0.872 11:00
Barometric Pressure (mmHg)	N/A	687.9	687.9	
Battery Voltage (V)	N/A	12.9	12.97	
Time (MST)	N/A	10:34	10:30 L.T.	
Date	N/A	02/15/2013	2/15/13	

*Direction wind is from

Comments/Unusual Occurrences or Weather: * Solar Rad @ 1045 - 15 min Ave was 685.8 w/m² - RPA

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

Site Operator Signature: Kami McCord

AIR SCIENCES INC.

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

Date: Kami Ballard Time: 10:45 Operator: 02/22/2013

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: 2/22/13
AUDITED BY: KJD DATE: 2/22/13

Parameter	Estimated	Logger	Audit
Speed 10m (m/s)	2 m/s	2.2	2.45
Direction* 10m (deg)	"	201.2	195.4
Ambient Temperature (°C)	8°	9.3	9.31
Relative Humidity (%)	55%	46%	47.24
Aspirated Temp 2m	8°	8.7°	8.69
Aspirated Temp 10m	7°	7.6°	7.561
Delta Temperature (°C)	N/A	-1.02	-1.129
Solar Radiation (w/m²)	Sunny (Partly cloudy) Cloudy	736.4	733.0
Barometric Pressure (mmHg)	N/A	684.4	684.4
Battery Voltage (V)	N/A	13.04	13.04
Time (MST)	N/A	10:55	11:00 L.T.
Date	N/A	02/22/2013	2/22/13

*Direction wind is from

Comments/Unusual Occurrences or Weather: Topped precip. gauge & Refilled evap. tank
* 02/20/2013 → heavy snowfall & rain for most of the day.

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

Invalidated precip. at 11:00 L.T. due to site oper. maint. - KJD

Site Operator Signature: Kami Ballard

AIR SCIENCES INC.

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

Date: 02/28/2013 Time: 12:10 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 REVIEWED BY 3/8/13 DATE
KJD AUDITED BY 3/7/13 DATE

Parameter	Estimated	Logger	Audit
Speed 10m (m/s)	4 m/s	5.3	4.313
Direction* 10m (deg)	SE	134.9	101.2
Ambient Temperature (°C)	14°	14.8	14.89
Relative Humidity (%)	10°	8.4	8.68
Aspirated Temp 2m	14°	15.1	15.03
Aspirated Temp 10m	13°	13.6	13.55
Delta Temperature (°C)	N/A	−1.5	−1.486
Solar Radiation (w/m²)	Sunny Partly cloudy Cloudy	873.1	870.0
Barometric Pressure (mmHg)	N/A	688.4	688.7
Battery Voltage (V)	N/A	12.97	12.97
Time (MST)	N/A	12:12	12:15 L.T.
Date	N/A	02/28/2013	2/28/13

11:45 - 333.5
12:00 - 44.83
12:30 - 40.09
12:45 - 35.43

*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: Kara Ballard

AIR SCIENCES INC.

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

Date: 03/08/2013 Time: 12:48 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 3/11/13 DATE
KJD AUDITED BY 3/8/13 DATE

Parameter	Estimated	Logger	Audit
Speed 10m (m/s)	3m/s	1.8 m/s	2.924
Direction* 10m (deg)	N	209.4	221.1
Ambient Temperature (°C)	21°	21.9	21.98
Relative Humidity (%)	15%	17.8	17.76
Aspirated Temp 2m	21°	20.9	21.29
Aspirated Temp 10m	20°	19.7	19.95
Delta Temperature (°C)	N/A	-.93	-1.343
Solar Radiation (w/m²)	(Sunny) Partly cloudy Cloudy	874.8	875.0
Barometric Pressure (mmHg)	N/A	681.7	681.6
Battery Voltage (V)	N/A	12.83	12.83
Time (MST)	N/A	12:51	13:00 L.T.
Date	N/A	03/08/2013	3/7/13

confirmed that this date is wrong. Should be 3/7/13. -KJD

*Direction wind is from

Comments/Unusual Occurrences or Weather: Filled evap pan & topped precip gauge. Invalidated precip. at 13:00 L.T. due to site oper. maint. -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: 3/13/2013 Time: 1:11 Operator: Kam 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

RPA REVIEWED BY 3/19/13 DATE

KJD AUDITED BY 3/13/13 DATE

Parameter	Estimated	Logger	Audit
Speed 10m (m/s)	2 m/s	2.6	1.687
Direction* 10m (deg)	NW	299.5	40.37
Ambient Temperature (°C)	24°	27.2	26.53
Relative Humidity (%)	15%	12.7	12.17
Aspirated Temp 2m	26°	26.4	26.17
Aspirated Temp 10m	25°	25.4	25.04
Delta Temperature (°C)	N/A	-1.04	-1.128
Solar Radiation (w/m²)	(Sunny) Partly cloudy Cloudy	888.01	892.0
Barometric Pressure (mmHg)	N/A	685.92	685.9
Battery Voltage (V)	N/A	12.8	12.78
Time (MST)	N/A	1:14	13:15 L.T.
Date	N/A	3·13·2013	3/13/13

12:45 - 29.46
13:00 - 72.47
13:30 - 150.6
13:45 - 124.9

*Direction wind is from

Comments/Unusual Occurrences or Weather: Invalidated precip. at 13:15 L.T. due to site op. maint. -KJD

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

Site Operator Signature:

AIR SCIENCES INC.

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

Date: 3·27·2013 Time: 2:55 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
REVIEWED BY RPA DATE 3·28·13
AUDITED BY KJD DATE 3/28/13

Parameter	Estimated	Logger	Audit
Speed 10m (m/s)	7 m/s	7.8	4.262
Direction* 10m (deg)		220.03	229.4
Ambient Temperature (°C)	24°	25.5	25.8
Relative Humidity (%)	~~??~~ 12%	10.7	10.79
Aspirated Temp 2m	24°	25.3	25.48
Aspirated Temp 10m	23°	24.6	24.6
Delta Temperature (°C)	N/A	-0.85	-0.881
Solar Radiation (w/m²)	Sunny Partly cloudy Cloudy	424.7	462.5
Barometric Pressure (mmHg)	N/A	681.2	681.2
Battery Voltage (V)	N/A	12.77	12.78
Time (MST)	N/A	2:57	15:00 L.T.
Date	N/A	3·27·2013	3/27/13

14:30 - 5.655
14:45 - 5.096
15:15 - 5.212
15:30 - 4.159

*Direction wind is from

Comments/Unusual Occurrences or Weather: Filled Evap pan.

* Enclosure seems HOTTER than normal. All equipment hot to the touch.

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

Site Operator Signature: Kami Ballard

- REQUESTED SITE OPERATOR TO INVESTIGATE THE A/C UNIT ON THE ENCLOSURE FOR PROPER OPERATION - RPA

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: 01/04/2013 Time: 11:55 Operator: Kami BaCCard

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

KJD

AIR SCIENCES INC.
DENVER • PORTLAND
REVIEWED BY RPA DATE 1/9/13
AUDITED BY KJD DATE 1/4/13

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

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 BaCCard

West - KJD

~~EAST~~ PLANT

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

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 01/11/2013 Time: 8:40 Operator: Kami 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).
✓		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 1/20/13
REVIEWED BY DATE
KJD 1/24/13
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 BaCard

WEST PLANT

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

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 01/23/2013 Time: 12:25 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). 1/16 -> 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		
	✓ 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	1/30/13
REVIEWED BY	DATE
KJD	1/30/13
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: Kane Ballard

WEST PLANT

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

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 01·31·2013 Time: 4:20 Operator: Karen 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). 01/30 – 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 particle trap cleaned
✓		5.	Inlet nozzle and nozzle are cleaned

AIR SCIENCES INC.
DENVER • PORTLAND
REVIEWED BY: RPA DATE: 2-4-13
AUDITED BY: KJD DATE: 2/4/13

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 > 01·30·2013
✓		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 BeCard

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: M8712
Firmware:
Calibrator: Delta Cal S/N:

Date of Flow Audit: 01-31-2013
Time of Flow Audit: 4:22 pm

	BAM	STD
Ambient Temperature (AT) °c	16.9	18.8
Berometric Pressure mmHg	685	686

	Set Point (lpm)	BAM	% Diff (1)	STD Flow Meter	% Diff (2)
(1) Actual Flow	15	15.0	0	15.11	-0.728
Acceptable Differential		*14.700 - 15.300*	*+/- 2%*	*14.250 - 15.750*	*+/- 5%*
(2) Actual Flow	18.4	18.4	0	18.56	-0.862
Acceptable Differential		*18.032 - 18.768*	*+/- 2%*	*17.480 - 19.320*	*+/- 5%*
(3) Actual Flow	16.7	16.7	0	16.78	-0.477
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	0.1	**Should be < 1.0 LPM**

AIR SCIENCES INC. DENVER · PORTLAND
RPA 2-4-13
REVIEWED BY DATE
KJD 2/4/13
AUDITED BY DATE

Comments/Abnormalities: Invalidated conc. at 17:00 due to maintenance. -KJD

Signature: Kara Beck

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: 02·06·2013 Time: 10:39 Operator: Kami BoClard

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). 01/31 → Delta Pressure @ 4:20
✓		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 — REVIEWED BY — 2-7-13 — DATE
KJD — AUDITED BY — 2/7/13 — 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		
	✓	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 BoClard

WEST PLANT

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

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 02/15/2013 Time: 10:36 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). 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			
		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 2/20/13
REVIEWED BY DATE
KJD 2/20/13
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: 2/22/2013 Time: 10:54 Operator: John BeClard

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			
		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

VERIFIED BY: RPA DATE: 2/22/13
ENTERED BY: KJD DATE: 2/22/13

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			
		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: _____

WEST PLANT

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

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 02/28/2013 Time: 12:14 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). 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
RPA 3/8/13
REVIEWED BY DATE
KJD 3/7/13
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		
	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

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: M8712
Firmware:
Calibrator: S/N:

Date of Flow Audit: Delta Cal
Time of Flow Audit: Approximately 1200-1300 hrs. -KJD

	BAM	STD
Ambient Temperature (AT) °c	16.1	16.7
Berometric Pressure mmHg	689	687

	Set Point (lpm)	BAM	% Diff (1)	STD Flow Meter	% Diff (2)
(1) Actual Flow	15	15	0.0	14.96	0.267
Acceptable Differential		*14.700 - 15.300*	*+/- 2%*	*14.250 - 15.750*	*+/- 5%*
(2) Actual Flow	18.4	18.4	0.0	18.45	-0.271
Acceptable Differential		*18.032 - 18.768*	*+/- 2%*	*17.480 - 19.320*	*+/- 5%*
(3) Actual Flow	16.7	16.7	0.0	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%)

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

AIR SCIENCES INC.
DENVER • PORTLAND

RPA — REVIEWED BY — 3/8/13 — DATE
KJD — AUDITED BY — 3/7/13 — DATE

Comments/Abnormalities: Invalidated 13:00 conc. due to flow verification. -KJD

Signature: Kevin Pollard

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: 03/05/2013 Time: 12:53 Operator: Hans 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). 02/28 → Tape Latch
✓		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 3/11/13
REVIEWED BY DATE

KJD 3/8/13
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: _____

WEST PLANT

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

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 3-13-2013 Time: 1:15 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).
✓		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 — REVIEWED BY — 3/19/13 — DATE

KJD — AUDITED BY — 3/13/13 — 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: _____

Signature: _____

WEST PLANT

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

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 3·27·2013 Time: 2:58 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). 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.*

AIR SCIENCES INC.
DENVER • PORTLAND
RPA 3·28·13
REVIEWED BY DATE
KJD 3/28/13
AUDITED 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 (Will clean nozzle when I change tape next week)

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: 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: M8712
Firmware:
Calibrator: Delta Cal S/N:

Date of Flow Audit: 3·27·2013
Time of Flow Audit: 3:02 PM

	BAM	STD
Ambient Temperature (AT) °c	26.4	27.1
Berometric Pressure mmHg	676	681.5

	Set Point (lpm)	BAM	% Diff (1)	STD Flow Meter	% Diff (2)
(1) Actual Flow	15	15.0	0.0	15.10	-0.662
Acceptable Differential		*14.700 - 15.300*	*+/- 2%*	*14.250 - 15.750*	*+/- 5%*
(2) Actual Flow	18.4	18.4	0.0	18.55	-0.809
Acceptable Differential		*18.032 - 18.768*	*+/- 2%*	*17.480 - 19.320*	*+/- 5%*
(3) Actual Flow	16.7	16.7	0.0	16.85	-0.890
Acceptable Differential		*16.336 - 17.034*	*+/- 2%*	*15.865 - 17.535*	*+/- 5%*

KJD

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

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

Comments/Abnormalities: Invalidated conc. at 16:00 L.T. due to site op. maint. -KJD

Signature: Karen DeCarli

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

AIR SCIENCES INC.
DENVER PORTLAND

RPA — 3-28-13
REVIEWED BY — DATE

KJD — 3/28/13
AUDITED BY — DATE

WEST PLANT

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

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 01/04/2013 Time: 11:58 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). 01/02 Tape Tension
✓		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 1/9/13
REVIEWED BY DATE
KJD 1/4/13
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: K. Ballard

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

West KJD
~~EAST~~ PLANT

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

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 01/11/2013 Time: 8:38 Operator: Kara 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	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 1/30/13
REVIEWED BY DATE
KJD 1/24/13
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: _____

**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: 01/23/2013 Time: 12:22 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). 1/14 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

RPR 1/30/13
REVIEWED BY DATE

KJD 1/30/13
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

**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: 01.31.2013 Time: 4:18 Operator: Kam 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). 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: 2-4-13
AUDITED BY: KJD DATE: 2/4/13

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) 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: Kam BaClard

**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: 01.31.2013

Time of Flow Audit: 4:33

	BAM	STD
Ambient Temperature (AT) °c	16.4	17.7
Berometric Pressure mmHg	688	686

	Set Point (lpm)	BAM	% Diff (1)	STD Flow Meter	% Diff (2)
(1) Actual Flow	15	15.0	0	15.13	-0.859
Acceptable Differential		*14.700 - 15.300*	*+/- 2%*	*14.250 - 15.750*	*+/- 5%*
(2) Actual Flow	18.4	18.4	0	18.47	-0.379
Acceptable Differential		*18.032 - 18.768*	*+/- 2%*	*17.480 - 19.320*	*+/- 5%*
(3) Actual Flow	16.7	16.7	0	16.73	-0.179
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**

AIR SCIENCES INC. DENVER · PORTLAND

RPA 2-4-13

REVIEWED BY DATE

KJD 2/4/13

AUDITED BY DATE

Comments/Abnormalities: Invalidate conc. at 17:00 L.T. due to maintenance. -KJD

Signature: Kane Bacon

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: 02-06-2013 Time: 10:37 Operator: Kane 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). 02/04 count failed 12:01
✓		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 — REVIEWED BY — 2-7-13 — DATE
KJD — AUDITED BY — 2/7/13 — 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: _____

Signature: Kane 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: 02/15/2013 Time: 10:33 Operator: Tami 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). 02/12/14 ⇒ 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			
		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 2/20/13
REVIEWED BY DATE

KJD 2/20/13
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: _____

**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: 2/22/2013 Time: 10:53 Operator: ~~Kara~~ 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). 2/19 → 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		
	✓ 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 — REVIEWED BY — DATE 2/22/13
KJD — AUDITED BY — DATE 2/22/13

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		
	✓ 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: Kara 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: 2/28/2013 Time: 12:12 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). 2/19 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		
✓		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 3/8/13
REVIEWED BY DATE

KJD 3/7/13
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: Kara Ballard

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

AIR SCIENCES INC.
DENVER · PORTLAND

Monthly Flow Verification $PM_{2.5}$

~~East~~ West Plant

PARTICULATE MONITORING PROJECT

PROJECT NO. 262-1

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

Firmware:

Calibrator: Delta Cal S/N:

Date of Flow Audit: 02/28/2013

Time of Flow Audit: 12:40

	BAM	STD
Ambient Temperature (AT) °c	16.1	16.2
Berometric Pressure mmHg	691	689

	Set Point (lpm)	BAM	% Diff (1)	STD Flow Meter	% Diff (2)
(1) Actual Flow	15	15.0	0.0	15.08	-0.531
Acceptable Differential		*14.700 - 15.300*	*+/- 2%*	*14.250 - 15.750*	*+/- 5%*
(2) Actual Flow	18.4	18.4	0.0	18.40	0.000
Acceptable Differential		*18.032 - 18.768*	*+/- 2%*	*17.480 - 19.320*	*+/- 5%*
(3) Actual Flow	16.7	16.7	0.0	16.68	0.120
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	.1	**Should be < 1.0 LPM**

AIR SCIENCES INC. DENVER · PORTLAND

KPA — REVIEWED BY — 3/8/13 DATE

KJD — AUDITED BY — 3/7/13 DATE

Comments/Abnormalities: Invalidated 13:00 conc. due to flow verification. -KJD

Signature: Lynne McCord

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: 03/08/2013 Time: 12:49 Operator: Karen McCoy

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). 02/28 ⇒ 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

KJD

AIR SCIENCES INC.
DENVER · PORTLAND

RPA — 3/11/13
REVIEWED BY — DATE

KJD — 3/8/13
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: _____

**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: 3/13/2013 Time: 1:11 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). 3/10 to 3/11 flow AT disconnected
✓		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 — REVIEWED BY — DATE 3/19/13

KJD — AUDITED BY — DATE 3/13/13

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

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: _____

**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: 3.27.2013 Time: 3:00 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).
✓		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 3-28-13
REVIEWED BY DATE
KJD 3/28/13
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 (Will clean during tape change next week)

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)
	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		
	KJD	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: Kami BaClard

**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. 282-1

Met One BAM 1020 $PM_{2.5}$: S/N: M8193
Firmware:
Calibrator: Delta Cal S/N: 1034

Date of Flow Audit: 3-27-2013
Time of Flow Audit: 3:13

	BAM	STD
Ambient Temperature (AT) °c	25.6	25.8
Barometric Pressure mmHg	684	682

	Set Point (lpm)	BAM	% Diff (1)	STD Flow Meter	% Diff (2)
(1) Actual Flow	15	15.0	0.0	15.14	-0.925
Acceptable Differential		*14.700 - 15.300*	*+/- 2%*	*14.250 - 15.750*	*+/- 5%*
(2) Actual Flow	18.4	18.14	0.0	18.44	-0.217
Acceptable Differential		*18.032 - 18.768*	*+/- 2%*	*17.480 - 19.320*	*+/- 5%*
(3) Actual Flow	16.7	16.7	0.0	16.82	-0.713
Acceptable Differential		*16.336 - 17.034*	*+/- 2%*	*15.865 - 17.535*	*+/- 5%*

KJD

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

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

Comments/Abnormalities: Invalidated conc. at 16:00 L.T. due to site op. maint. -KJD

Signature: Kami Ballard

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

AIR SCIENCES INC.
DENVER · PORTLAND

RPA 3-28-13
REVIEWED BY DATE
KJD 3/28/13
AUDITED BY DATE

Appendix H: East Plant Meteorological Site Check Forms

AIR SCIENCES INC.

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

Date: 01/02/2013 Time: 1:56 Operator: Karen Bal Cook

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 1/9/12
AUDITED BY KJD DATE 1/4/12

Parameter	Estimated	Logger	Audit
Speed 10m (m/s)	9m/s	8.3	8.2
Direction* 10m (deg)	~~N~~E	28.5	36.16
Ambient Temperature (°C)	7'	7.6°	7.623
Relative Humidity (%)	30%	33.5%	33.0
Aspirated Temp 2m	7'	7.4'	7.494
Aspirated Temp 10m	6	6.9'	6.913
Delta Temperature (°C)	N/A	-.58	-0.581
Solar Radiation (w/m²)	Sunny Partly cloudy Cloudy	553.3	570.3
Barometric Pressure (mmHg)	N/A	651.7	651.8
Battery Voltage (V)	N/A	13.1	13.07
Time (MST)	N/A	2:02	14:00 L.T.
Date	N/A	01.02.2013	1/2/13

*Direction wind is from

Comments/Unusual Occurrences or Weather: Appd precip. guage
Invalidated precip. at 14:00 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: Karen Bal Cook

East Plant -KJD

AIR SCIENCES INC.

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

Date: 01/11/2013 Time: 7:56 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. → snow & iced over
✓		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 1/30/13
AUDITED BY KJD DATE 1/24/13

Parameter	Estimated	Logger	Audit
Speed 10m (m/s)	1 m/s	1.1 m/s	~~1.314~~ 1.199
Direction* 10m (deg)	160.	160.	~~194.2~~ 168.1
Ambient Temperature (°C)	1°	-1.5°	~~-1.615~~ -1.615
Relative Humidity (%)	80%	82.2%	81.4
Aspirated Temp 2m	1°	-1.7°	-1.691
Aspirated Temp 10m	-1°	-1.7°	-1.629
Delta Temperature (°C)	N/A	.05	0.062
Solar Radiation (w/m²)	Sunny Partly cloudy (Cloudy)	87.9	5.189
Barometric Pressure (mmHg)	N/A	650.5	650.5
Battery Voltage (V)	N/A	11.7	11.7
Time (MST)	N/A	7:59	7:45 L.T.
Date	N/A	01/11/2013	1/11/13

~~167.7~~ ~~225.1~~ ~~241.8~~ ~~31.0.2~~

*Direction wind is from

Comments/Unusual Occurrences or Weather: Snow; Ripped precip. gauge; evap tank iced over. Invalidated precip at 8:15 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: Kami BaCard

AIR SCIENCES INC.

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

****** 01/25/2013 BR

Date: ~~01/24/2013~~ Time: 9:03 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.

AIR SCIENCES INC. DENVER • PORTLAND
REVIEWED BY RPA DATE 1/30/13
AUDITED BY BR DATE 1/30/2013

Parameter	Estimated	Logger	Audit
Speed 10m (m/s)	1.5 m/s	3.9	2.79_ws (m/s)
Direction* 10m (deg)	E	66°	67.5_WD (deg)
Ambient Temperature (°C)	13°	13.05	12.4_°C
Relative Humidity (%)	68%	41.8	64.4_%
Aspirated Temp 2m	13°	12.7°	12.1_°C
Aspirated Temp 10m	12°	12.5°	12.1_°C
Delta Temperature (°C)	N/A	-.13	-0.073_°C
Solar Radiation (w/m²)	Sunny Partly cloudy Cloudy	110.8	188_W/m²
Barometric Pressure (mmHg)	N/A	456.5	657_mmHG
Battery Voltage (V)	N/A	12.7	12.8_V
Time (MST)	N/A	9:09	9:00_LT
Date	N/A	01/25/2013	25_JD

*Direction wind is from

Comments/Unusual Occurrences or Weather: Filled Evap Tank

★ Invalidated Total Evap 1/25/2013 10:00 thru 15:00 for operator maintenance (BR)

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

**. Site operator filled the wrong date on worksheet data and date from data logger parameters recorded by Site operator confirms the site visit took place 1/25/2013 (BR)

Site Operator Signature: Kane Ballard

AIR SCIENCES INC.

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

Date: 01·31·2013 Time: 1:22 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
REVIEWED BY RPA DATE 2-7-13
AUDITED BY BR DATE 2/4/2013

Parameter	Estimated	Logger	Audit
Speed 10m (m/s)	8 m/s	8.6	9._WS (m/s)
Direction* 10m (deg)	E	19.4	34.5_WD (deg)
Ambient Temperature (°C)	13.°	12.2°	12_°C
Relative Humidity (%)	30 %	30.9%	30.7_%
Aspirated Temp 2m	13°	12.1°	11.9_°C
Aspirated Temp 10m	12°	11.3°	11.2_°C
Delta Temperature (°C)	N/A	-.85	-.76_°C
Solar Radiation (w/m²)	Sunny (Partly cloudy) Cloudy	573.9	634_w/m²
Barometric Pressure (mmHg)	N/A	655.7	656_mmHG
Battery Voltage (V)	N/A	12.9	12.9_V
Time (MST)	N/A	1:28	13:30_LT
Date	N/A	01·31·2013	031_JD

*Direction wind is from

Comments/Unusual Occurrences or Weather: Topped precip. gauge
* Invalidated the 14:15 hour precipitation data (BR)

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

Site Operator Signature: Kara Ballard

AIR SCIENCES INC.
DENVER • PORTLAND
KJD 2/7/13
REVIEWED BY DATE
RPA 2-7-13
AUDITED BY DATE

AIR SCIENCES INC.

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

Date: 02-06-2013 Time: 9:38 Operator: Kara Ba Clard

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	1.1	1.212
Direction* 10m (deg)	SE	127.1	101.0
Ambient Temperature (°C)	9°	11.2	11.3
Relative Humidity (%)	50%	56.7%	57.04
Aspirated Temp 2m	9°	10.5°	10.6
Aspirated Temp 10m	8°	10.3°	10.17
Delta Temperature (°C)	N/A	-.36	-0.427
Solar Radiation (w/m²)	Sunny Partly cloudy (Cloudy)	284.9	300.8
Barometric Pressure (mmHg)	N/A	651.5	651.5
Battery Voltage (V)	N/A	12.98	12.99
Time (MST)	N/A	9:43am	0945 Hrs
Date	N/A	02.06.2013	2-6-2013

15 min Ave
0915 – 1015
109.3
96.9
73.8
108.7

*Direction wind is from

Comments/Unusual Occurrences or Weather: Tapped precip. gauge *
* 0.008" PRECIP RECORDED @ 0945 HRS WAS INVALIDATED -RPA

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

Site Operator Signature: Kara Ba

AIR SCIENCES INC.
DENVER · FORTLAND
REVIEWED BY RPA DATE 2-18-13
AUDITED BY DATE 2-18-13

AIR SCIENCES INC.

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

Date: 02/15/2013 Time: 2:19 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)	4 m/s	7.1	5.199
Direction* 10m (deg)	NE	33.2	21.47
Ambient Temperature (°C)	16°	16.7°	16.41
Relative Humidity (%)	60%	10.2%	10.52
Aspirated Temp 2m	16°	16.6°	16.42
Aspirated Temp 10m	15°	15.2°	15.27
Delta Temperature (°C)	N/A	-1.2	-1.156
Solar Radiation (w/m²)	(Sunny) Partly cloudy Cloudy	704.1	704.4
Barometric Pressure (mmHg)	N/A	656.78	656.8
Battery Voltage (V)	N/A	12.9	12.89
Time (MST)	N/A	2:23	1430 HRS LT.
Date	N/A	12/15/2013	12-15-2013

*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: 02/22/2013 Time: 11:35 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 2/22/13 DATE
KJD AUDITED BY 2/22/13 DATE

Parameter	Estimated	Logger	Audit
Speed 10m (m/s)	3m/s	2.9	2.402
Direction* 10m (deg)		204.5	193.4
Ambient Temperature (°C)	5°	5.9°	5.953
Relative Humidity (%)	~~45%~~	54.4%	54.1
Aspirated Temp 2m	5°	5.3°	5.33
Aspirated Temp 10m	4°	4.2°	4.373
Delta Temperature (°C)	N/A	-1.04	-0.957
Solar Radiation (w/m²)	Sunny (Partly cloudy) Cloudy	1014.9	853.0
Barometric Pressure (mmHg)	N/A	653.3	653.3
Battery Voltage (V)	N/A	13.04	13.05
Time (MST)	N/A	11:40	11:45 L.T.
Date	N/A	02/22/2013	2/22/13

11:15 - 804
11:30 - 800
12:00 - 589.3
12:15 - 572.1

*Direction wind is from

Comments/Unusual Occurrences or Weather: * 02/20/2013 → Heavy snowfall and rain for a majority of the day.

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 [signature] DATE 3-6-13
AUDITED BY APA DATE 3.4.13

AIR SCIENCES INC.

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

Date: 02/28/2013 Time: 2:13 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.

RPM

Parameter	Estimated	Logger	Audit
Speed 10m (m/s)	6m/s	6.8	3.31
Direction* 10m (deg)		37.6	13.2
Ambient Temperature (°C)	14°	14.3	14.18
Relative Humidity (%)	10%	9.9	10.88
Aspirated Temp 2m	14°	14.1	13.94
Aspirated Temp 10m	13°	12.6	12.51
Delta Temperature (°C)	N/A	-1.55	-1.426
Solar Radiation (w/m²)	Sunny Partly cloudy Cloudy	768.9	786.9
Barometric Pressure (mmHg)	N/A	657.4	657.4
Battery Voltage (V)	N/A	12.94	12.94
Time (MST)	N/A	2:17	1415 L.T.
Date	N/A	02/28/2013	02-28-2013

2 ABOVE & Below
22.55
14.91
28.11
32.42

*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.
DENVER · PORTLAND
BR 3/19/2013
REVIEWED BY DATE
RPA 3/11/13
AUDITED BY DATE

AIR SCIENCES INC.

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

Date: 03.08.2013 Time: 2:32 Operator: Kami BaClard

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)	5m/s	4.9	6.44
Direction* 10m (deg)	SW	203.1	194.0
Ambient Temperature (°C)	60°	6.5	6.82 ← 6.83 BR
Relative Humidity (%)	90%	89.2	91.6
Aspirated Temp 2m	6°	6.4	6.74
Aspirated Temp 10m	5°	6.3	6.69
Delta Temperature (°C)	N/A	-0.04	-0.053
Solar Radiation (w/m²)	Sunny Partly cloudy Cloudy	96.5	125.0
Barometric Pressure (mmHg)	N/A	647.03	647.0
Battery Voltage (V)	N/A	13.08	12.65
Time (MST)	N/A	2:34	14:30 L.T.
Date	N/A	03/08/2013	3-8-13

*Direction wind is from

Comments/Unusual Occurrences or Weather: Heavy wind & rain. * NOTED ↑ PRECIP. -RPA

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

Site Operator Signature: Kami BaClard

AIR SCIENCES INC.
DENVER • PORTLAND

REVIEWED BY BR DATE 3/19/2013
AUDITED BY RPA DATE 3/15/13

AIR SCIENCES INC.

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

Date: 03/13/2013 Time: 11:59 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)	6 ms	5.7	6.636
Direction* 10m (deg)	NE	22.8	28.48
Ambient Temperature (°C)	20°	21.3	20.85
Relative Humidity (%)	15%	17%	17%
Aspirated Temp 2m	20°	21.4	20.77
Aspirated Temp 10m	19°	19.9	19.58
Delta Temperature (°C)	N/A	-1.5	-1.198
Solar Radiation (w/m²)	~~Sunny~~ Partly cloudy Cloudy	935.4	932
Barometric Pressure (mmHg)	N/A	657.1	657.2
Battery Voltage (V)	N/A	12.8	12.79
Time (MST)	N/A	12:02	1200 HRS L.T.
Date	N/A	3/13/2013	3/13/13

*Direction wind is from

Comments/Unusual Occurrences or Weather: Refilled evap. pan. - INVALIDATED TOTAL EVAP RECORDED FOR 1200 HRS - RAA

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 4-2-13
AUDITED BY DATE 3.28.13

AIR SCIENCES INC.

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

Date: 03.27.2013 Time: 1:20 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.

Parameter	Estimated	Logger	Audit
Speed 10m (m/s)	4 m/s	3.9	3.87
Direction* 10m (deg)		213.4	213.3
Ambient Temperature (°C)	21°	21.7	21.83
Relative Humidity (%)	15%	12.2	12.12
Asplrated Temp 2m	21°	21.3	21.38
Aspirated Temp 10m	20°	20.2	20.4
Delta Temperature (°C)	N/A	-1.18	-0.989
Solar Radiation (w/m²)	Sunny Partly cloudy Cloudy	786.7	652.2 → Out of Range
Barometric Pressure (mmHg)	N/A	652.4	652.3
Battery Voltage (V)	N/A	12.8	12.75
Time (MST)	N/A	1:22	1330 HRS L.T.
Date	N/A	03/27/2013	3.27.2013

*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 Kara Bell

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: 01/02/2013 Time: 2:04 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). 12/20 → Power fail @ 5:22 & 18:25
✓		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 1/9/12
REVIEWED BY DATE

KJD 1/4/12
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		
	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

East - KJD

~~WEST~~ PLANT

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

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 01/11/2013 Time: 8:00 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). 01/02 – 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 particle trap cleaned
		5.	Inlet nozzle and nozzle are cleaned

AIR SCIENCES INC.
DENVER • PORTLAND

REVIEWED BY RPA DATE 1/30/13
AUDITED BY KJD DATE 1/24/13

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: Kami Ballard

EAST PLANT

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

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 01/27/2013 Time: 9:11 Operator: Kara 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). 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 (BR)		
	↓	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 1/30/13
REVIEWED BY DATE
BR 1/30/2013
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 (BR)		
	↓	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 (BR)		
	↓	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 (BR)		
	↓	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 BaCon

EAST PLANT

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

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 01·31·2013 Time: 1:29 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
RPA 2-7-13
REVIEWED BY DATE
BR 2/4/2013
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 BR		
	✓	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 BR		
	✓	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

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: Delta Cal S/N:

AIR SCIENCES INC. DENVER • PORTLAND
RPA 2-7-13 DATE
BR 2/4/13 DATE

Date of Flow Audit: 01.31.2013
Time of Flow Audit: 2:17

	BAM	STD	Calibrated
Ambient Temperature (AT) °c	12.5	15.1	15.1
Berometric Pressure mmHg	660	656.5	656

	Set Point (lpm)	BAM	% Diff (1)	STD Flow Meter	% Diff (2)
(1) Actual Flow	15	15	0 BR	14.67	2.2 BR
Acceptable Differential		*14.700 - 15.300*	*+/- 2%*	*14.250 - 15.750*	*+/- 5%*
(2) Actual Flow	18.4	18.4	0 BR	18.21	1.03 BR
Acceptable Differential		*18.032 - 18.768*	*+/- 2%*	*17.480 - 19.320*	*+/- 5%*
(3) Actual Flow	16.7	16.7	0 BR	14.31	2.34 BR
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:

Signature: Karen BrCard

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

AIR SCIENCES INC.
DENVER • PORTLAND

KJD 2/7/13
REVIEWED BY DATE
RPA 2-7-13
AUDITED BY DATE

EAST PLANT

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

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 02·06·2013 Time: 9:46 Operator: Kami BaClaire

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). 1/31 – Tape Latch *
✓		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

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: * TAPE ERROR IS A RESULT OF THE MONTHLY FLOW VERIFICATION CONDUCTED ON 1/31/13 – RPA

Signature: Kami BaClaire

AIR SCIENCES INC.
DENVER · PORTLAND
REVIEWED BY RPA 2-18-13 DATE
AUDITED BY 2-18-13 DATE

EAST PLANT

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

AIR SCIENCES INC.
DENVER · PORTLAND

Date: 02/15/2013 Time: 2:26 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). 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	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

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 Ballard

EAST PLANT

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

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 02/22/2013 Time: 11:41 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.	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 2/22/13
REVIEWED BY DATE
KJD 2/22/13
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 Ballard

AIR SCIENCES INC. DENVER • PORTLAND
REVIEWED BY RPA DATE 3-6-13
AUDITED BY DATE 3-4-13

EAST PLANT

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

AIR SCIENCES INC. DENVER • PORTLAND

Date: 02/28/2013 Time: 2:20 Operator: Kane

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). 01/31 – Tape latch
✓		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

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: 01-31-13 ERROR INVALIDATED -RPA

Signature: Kane Bacon

AIR SCIENCES INC.
DENVER • PORTLAND
REVIEWED BY RPA DATE 3-6-13
AUDITED BY DATE 3.4.13

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 cal date:

Date of Flow Audit: 02.28.2013
Time of Flow Audit: 2:26

	BAM	STD	After CAL
Ambient Temperature (AT) °c	17.1	16.1	15.1
Berometric Pressure mmHg	666	658.	666

	Set Point (lpm)	BAM	% Diff (1)	STD Flow Meter	% Diff (2)
(1) Actual Flow	15	15.0	0.0	14.98	0.1
Acceptable Differential		*14.700 - 15.300*	*+/- 2%*	*14.250 - 15.750*	*+/- 5%*
(2) Actual Flow	18.4	18.4	0.0	18.43	-0.2
Acceptable Differential		*18.032 - 18.768*	*+/- 2%*	*17.480 - 19.320*	*+/- 5%*
(3) Actual Flow	16.7	16.7	0.0	16.68	0.1
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:

Signature: Kam Bolton

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

AIR SCIENCES INC.
DENVER • PORTLAND

REVIEWED BY BR DATE 3/19/13
AUDITED BY RPA DATE 3/19/13

EAST PLANT

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

AIR SCIENCES INC.

Date: 03/08/2013 Time: 2:39 Operator: Kami 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). 02/28 → 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

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)

*Comments/Unusual Occurrences: _____

Signature: Kami Bond

AIR SCIENCES INC.
DENVER • PORTLAND

BR 3/19/13
REVIEWED BY DATE
RPA 3/15/13
AUDITED BY DATE

EAST PLANT

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

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 3/13/2013 Time: 12:05 Operator: Kara Bo Clark

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

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: 3/27/2013 Time: 1:23 Operator: K. Bell

AIR SCIENCES INC.
DENVER • PORTLAND
REVIEWED BY RPA DATE 4-3-13
AUDITED BY DATE 3-28-13

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 (Will clean when I do tape change next week)

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
	✓ RPA	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)
	✓ RPA	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)
	✓ RPA	2.	Inlet system cleaned (*Work performed by Air Sciences)

**Comments/Unusual Occurrences: _____

Signature: _____

AIR SCIENCES INC.
DENVER • PORTLAND

REVIEWED BY: RPA — DATE: 3-28-13
AUDITED BY: — DATE: 4-2-13

AIR SCIENCES INC.
DENVER • PORTLAND

Monthly Flow Verification PM_{10}

East Plant
PARTICULATE MONITORING PROJECT
PROJECT NO. 262-1

Met One — PM_{10}: 1 — S/N: M8714
Firmware:
Calibrator: Delta Cal — S/N: Need Serial #

Date of Flow Audit: 03.27.2013
Time of Flow Audit: 1:24

	BAM	STD
Ambient Temperature (AT) °c	23.9	22.5
Berometric Pressure mmHg	668	652.5 → A little off ???

	Set Point (lpm)	BAM	% Diff (1)	STD Flow Meter	% Diff (2)
(1) Actual Flow	15	15.1	0.7	15.08	0.1
Acceptable Differential		*14.700 - 15.300*	*+/- 2%*	*14.250 - 15.750*	*+/- 5%*
(2) Actual Flow	18.4	18.3	-0.5	18.43	-0.1
Acceptable Differential		*18.032 - 18.768*	*+/- 2%*	*17.480 - 19.320*	*+/- 5%*
(3) Actual Flow	16.7	16.7	0.0	16.76	-0.4
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: 3AM BP REQUIRES ADJUSTMENT – RPA
1400 HRS PM CONCENTRATION INITIATED ON 3-27-13

Signature: Ryan Boldt

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: 01/02/2013 Time: 2:07 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). 12/30 Power fail 5:23 12/31 Count Fail 11:27
✓		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 1/9/12
AUDITED BY KJD DATE 1/4/12

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: Checked Tape — Installed correctly. Ran Tape Test → Passed. Screen was not in ~~Update~~ normal mode

Signature: Karen Ballard

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

East - KJD
~~WEST~~ PLANT

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

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 01/11/2013 Time: 8:06 Operator: Kara Baldwin

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). 01/02 – Maintenance 01/08 thru 01/11 → Bam Cal Membrane Ck
	✓	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 1/30/13
REVIEWED BY DATE

KJD 1/24/13
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: _____

**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: 01/25/2013 Time: 9:14 Operator: Kami McCall

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). 1/25 & 1/24 → 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 (BR)	
	✓	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: 1/30/13
AUDITED BY: BR DATE: 1/30/2013

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 (BR)	
	✓	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 (BR)	
	✓	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 (BR)	
	✓	1. Carbon vanes in pump checked/replaced (*Work performed by Air Sciences)
	✓	2. Inlet system cleaned (*Work performed by Air Sciences)

"Comments/Unusual Occurrences: ASI is aware of the ongoing BAM Cal Errors and is currently working on a solution. BR

Signature: Kami McCall

**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: 01·31·2013 Time: 1:46 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). 01-22 thru 01-31 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: RPA DATE: 2-7-13
SUBMITTED BY: BR DATE: 2/4/13

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 BR		
	↓	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 BR		
	↓	1.	Carbon vanes in pump checked/replaced (*Work performed by Air Sciences)
	↓	2.	Inlet system cleaned (*Work performed by Air Sciences)

**Comments/Unusual Occurrences: ☆ Referenc membrane error has been Corrected by Site operator 1/31/13 (BR)

Signature: K B

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

AIR SCIENCES INC.

Monthly Flow Verification $PM_{2.5}$

East Plant
PARTICULATE MONITORING PROJECT
PROJECT NO. 262-1

AIR SCIENCES INC. DENVER • PORTLAND
REVIEWED BY RWA 2-7-13 DATE
AUDITED BY BR 2/4/13 DATE

Met One $PM_{2.5}$: S/N: M6466
Firmware:
Calibrator: Delta Cal S/N:

Date of Flow Audit: 01.31.2013
Time of Flow Audit: 2:28

	BAM	STD
Ambient Temperature (AT) °c	12.8	13.1
Berometric Pressure mmHg	654	654

	Set Point (lpm)	BAM	% Diff (1)	STD Flow Meter	% Diff (2)	
(1) Actual Flow	15	15	0 BR	14.77	1.53	BR
Acceptable Differential		*14.700 - 15.300*	*+/- 2%*	*14.250 - 15.750*	*+/- 5%*	
(2) Actual Flow	18.4	18.4	0 BR	18.08	1.74	BR
Acceptable Differential		*18.032 - 18.768*	*+/- 2%*	*17.480 - 19.320*	*+/- 5%*	
(3) Actual Flow	16.7	16.7	0 BR	16.43	1.62	BR
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	.4	**Should be < 1.0 LPM**

Comments/Abnormalities:

Signature: Kam Bolla

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

AIR SCIENCES INC.
DENVER • PORTLAND

KJP 2/7/13
REVIEWED BY DATE
RPA 2-7-13
AUDITED BY DATE

EAST PLANT

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

AIR SCIENCES INC.
DENVER • PORTLAND

Date: 02 · 06 · 2013 Time: 9:48 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).
✓		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

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 Ballard

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

AIR SCIENCES INC.
DENVER • PORTLAND
REVIEWED BY RPA DATE 2-18-13
AUDITED BY DATE 2-18-13

EAST PLANT

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

AIR SCIENCES INC.

Date: 02.15.2013 Time: 2:27 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). 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 RPA
	✓	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

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 RPA
	✓	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) RPA
	✓	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) RPA
	✓	2. Inlet system cleaned (*Work performed by Air Sciences)

**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.
DENVER • PORTLAND

Date: 02/22/2013 Time: 11:47 Operator: Kara 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). 02/15 – 02/22 → 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 and 2.5 cyclone particle trap cleaned
		5.	Inlet nozzle and nozzle are cleaned

AIR SCIENCES INC.
DENVER • PORTLAND
RPA — REVIEWED BY — 2/33/13 — DATE
KJD — AUDITED BY — 2/22/13 — 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: _____

Signature: _____

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

AIR SCIENCES INC. DENVER · PORTLAND

REVIEWED BY RPA DATE 3-6-13

AUDITED BY DATE 3-4-13

EAST PLANT

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

AIR SCIENCES INC.

Date: 02/28/2012 Time: 2:22 Operator: [signature]

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). 02/24 – 02/28 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

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: Removed, cleaned, & inspected reference membrane. Cleaned membrane housing & entered new ABS value. Ran self-test function. KB
INVALIDATED MAINT ON 2/28/13 – RPA

Signature: [signature]

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

AIR SCIENCES INC.
DENVER • PORTLAND

REVIEWED BY RPA 3-6-13 DATE

AUDITED BY 3-4-13 DATE

AIR SCIENCES INC.

Monthly Flow Verification $PM_{2.5}$

~~West Plant~~ EAST PLANT RPA

PARTICULATE MONITORING PROJECT

PROJECT NO. 262-1

Met One BAM 1020 $PM_{2.5}$: S/N: 6466

Firmware:

Calibrator: Delta Cal S/N: 1034 cal date:

Date of Flow Audit: 02/28/2013

Time of Flow Audit: 2:30

	BAM	STD
Ambient Temperature (AT) °c	16.1	~~16.1~~ 15.0
Berometric Pressure mmHg	658	658.0

	Set Point (lpm)	BAM	% Diff (1)	STD Flow Meter	% Diff (2)
(1) Actual Flow	15	15.0	0.0	14.97	0.2
Acceptable Differential		*14.700 - 15.300*	*+/- 2%*	*14.250 - 15.750*	*+/- 5%*
(2) Actual Flow	18.4	18.4	0.0	18.2	1.1
Acceptable Differential		*18.032 - 18.768*	*+/- 2%*	*17.480 - 19.320*	*+/- 5%*
(3) Actual Flow	16.7	16.7	0.0	16.53	1.0
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:

Signature: Kami Bacon

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

AIR SCIENCES INC.

BR 3/19/13
REVIEWED BY DATE
RPA 3/11/13
AUDITED BY DATE

EAST PLANT

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

AIR SCIENCES INC.

Date: 03/08/2013 Time: 2:41 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). 03/02 → 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	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

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 McCord

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

AIR SCIENCES INC.
DENVER | PORTLAND
REVIEWED BY BR DATE 3/19/13
AUDITED BY RPA DATE 3/15/13

EAST PLANT

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

AIR SCIENCES INC.
DENVER | PORTLAND

Date: 3/13/2013 Time: 12:07 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). 3/11 to 3/13 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 RPA
	✓	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

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 RPA
	✓	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) RPA
	✓	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) RPA
	✓	2.	Inlet system cleaned (*Work performed by Air Sciences)

**Comments/Unusual Occurrences: INTERMITTENT DENSITY ERRORS NOTED IN THE RAW DATA, —RPA

Signature:

**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: 3/27/2013 Time: 1:24 Operator: K. BaClard

AIR SCIENCES INC. DENVER • PORTLAND 4-2-13
REVIEWED BY RPA DATE 3.28.13
AUDITED BY DATE

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). ~~3/21~~ 3/21 thru 3/27 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		
✓		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 (will clean during tape change next week)

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 RPA
		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) RPA
		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) RPA
		2.	Inlet system cleaned (*Work performed by Air Sciences)

**Comments/Unusual Occurrences: _____

Signature: K. BaClard

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

AIR SCIENCES INC.
DENVER • PORTLAND

REVIEWED BY RPA DATE 3-28-13

AUDITED BY DATE 4-2-13

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: 6466 Need to fill serial #.
Firmware:
Calibrator: Delta Cal S/N:

Date of Flow Audit: 03.27.2013
Time of Flow Audit: 1:27

	BAM	STD
Ambient Temperature (AT) °c	23.9	22.0
Berometric Pressure mmHg	652	652.5

	Set Point (lpm)	BAM	% Diff (1)	STD Flow Meter	% Diff (2)
(1) Actual Flow	15	15.0	0.0	14.85	1.0
Acceptable Differential		*14.700 - 15.300*	*+/- 2%*	*14.250 - 15.750*	*+/- 5%*
(2) Actual Flow	18.4	18.2	-1.1	17.89	1.7
Acceptable Differential		*18.032 - 18.768*	*+/- 2%*	*17.480 - 19.320*	*+/- 5%*
(3) Actual Flow	16.7	16.7	0.0	16.43	1.6
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: 1400 HRS PM CONCENTRATION INVALIDATED ON 3.27.13 – RPA

Signature: Kevin McCord

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.
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REVIEWED BY 2-11-13 DATE
AUDITED BY RAA DATE 2-4-13

AIR SCIENCES INC.
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Resolution EAST
SO_2 Monitoring Form

Site Operator: Kami Ballard Date: 01·31·2013

Sampler Make/Model		T100
Sampler SN		SN 193
Dilution Calibrator Model/SN	Primary	T706/SN 191
	Transfer	—

Instrument Check Start Time	2:41
Instrument Check Stop Time	2:56
Filter Replacement Y/N	Yes
Shelter Temp (5 to 40 °C)	20.7
Instrument Range	500 PPB
Source Gas Conc.	~~40% SO_2~~ 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	-.0496	—	± 3% of Full Scale (-15 to 15 PPB)	N
100	99.083	—	≤ ± 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	-0.496	-0.48	± 2 PPB	N
100 PPB	99.083	99.38	± 2 PPB	N

Verify instrument parameters:

Sample Flow (450 ± 45 cc/min)	384	*Sample Press. (Ambient ± 2 in-Hg)*	23.5
UV Lamp (1000 - 4800 mV)	3030.2	*Lamp Ratio (30 - 120%)*	84.5
Slope (1 ± 0.3)	1.115	*BOX Temp. (Ambient ± 5°C)*	30.3
Offset (< 250 mV)	18.0	*HVPS (400 - 900 V)*	571

Operator comments/observations:
Sample Flow not in Range.
* FLOW WILL BE VERIFIED Remotely —
INVALIDATED THE 1500 HRS HOURLY AVERAGE DUE TO LEVEL. - RPA

Operator Signature: Kami Ballard

AIR SCIENCES INC.
DENVER • PORTLAND

REVIEWED BY RPA DATE 2-18-13
AUDITED BY DATE

AIR SCIENCES INC.
DENVER • PORTLAND

Resolution EAST
SO_2 Monitoring Form

Site Operator: Kami Ballard Date: 02·15·2013

Sampler Make /Model		T100
Sampler SN		SN 193
Dilution Calibrator Model/SN	Primary	T700 / SN191
	Transfer	

Instrument Check Start Time	2:45
Instrument Check Stop Time	3:00
Filter Replacement Y/N	Yes
Shelter Temp (5 to 40 °C)	25°
Instrument Range	500 PPB
Source Gas Conc.	40% 50k

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	-.096	—	± 3% of Full Scale (-15 to 15 PPB)	N
100	99.12	—	≤ ± 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	-.096	.06	± 2 PPB	No
100 PPB	99.12	99.80	± 2 PPB	No

Verify instrument parameters: *

Sample Flow (450 ± 45 cc/min)	383	*Sample Press. (Ambient ± 2 in-Hg)*	23.9
UV Lamp (1000 - 4800 mV)	3009.3	*Lamp Ratio (30 - 120%)*	84%
Slope (1 ± 0.3)	1.115	*BOX Temp. (Ambient ± 5°C)*	33.3 *
Offset (< 250 mV)	18.0	*HVPS (400 - 900 V)*	571

Operator comments/observations:
*Ambient "Shelter" temp vs Box Temp = Box Temp ↑ Apx 3.3°C - RPA
Operator Signature: Kami Ballard

* Please verify SO_2 instrument flow. MJ

AIR SCIENCES INC.
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REVIEWED BY RPA 3-6-13 DATE
AUDITED BY 3-4-13 DATE

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Resolution EAST
SO_2 Monitoring Form

Site Operator: Kami Ballard Date: 03/01/2013

Sampler Make /Model		T100
Sampler SN		SN 193
Dilution Calibrator Model/SN	Primary	T700/ SN191
	Transfer	—

Instrument Check Start Time	11:54
Instrument Check Stop Time	12:07
Filter Replacement Y/N	Yes
Shelter Temp (5 to 40 °C)	25.5
Instrument Range	500 PPB
Source Gas Conc.	~~40 % SO_2~~ 40 PPM 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	-.67	—	± 3% of Full Scale (-15 to 15 PPB)	N
100	99.97	—	≤ ± 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	-.67	-.4	± 2 PPB	N
100 PPB	99.97	99.99	± 2 PPB	N

Verify instrument parameters:

Sample Flow (450 ± 45 cc/min)	377 *	*Sample Press. (Ambient ± 2 in-Hg)*	24.0
UV Lamp (1000 - 4800 mV)	2999.2	*Lamp Ratio (30 - 120%)*	83.7
Slope (1 ± 0.3)	1.137	*BOX Temp. (Ambient ± 5°C)*	35.1
Offset (< 250 mV)	18.8	*HVPS (400 - 900 V)*	571

Operator comments/observations:
ZERO/SPAN 10:56 - 11:03 HRS, 1100 to 1200 HRS HOURLY FILES INVALIDATED - RPA

Operator Signature: Kami Ballard

* out of range. The SO_2 analyzer will be verified remotely and by the site operator.

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REVIEWED BY BK DATE 3/19/13
AUDITED BY RPA DATE 3/15/13

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Resolution EAST

SO_2 Monitoring Form

Site Operator: Kami Ballard Date: 3/18/2013

Sampler Make /Model		T100
Sampler SN		SN193
Dilution Calibrator Model/SN	Primary	T700/SN191
	Transfer	

Instrument Check Start Time	12:25 LT
Instrument Check Stop Time	12:36 LT
Filter Replacement Y/N	Yes
Shelter Temp (5 to 40 °C)	26.4
Instrument Range	500 PPB
Source Gas Conc.	SO_2 40%

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	-.28	—	± 3% of Full Scale (-15 to 15 PPB)	N
100	100.8	—	≤ ± 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	-.28	.33	± 2 PPB	No
100 PPB	100.8	101.4	± 2 PPB	No

Verify instrument parameters:

Sample Flow (450 ± 45 cc/min)	370	*Sample Press. (Ambient ± 2 in-Hg)*	24
UV Lamp (1000 - 4800 mV)	2991.9	*Lamp Ratio (30 - 120%)*	83.3
Slope (1 ± 0.3)	1.136	*BOX Temp. (Ambient ± 5°C)*	34.3
Offset (< 250 mV)	18.5	*HVPS (400 - 900 V)*	571

Operator comments/observations:

Operator Signature: KB

AIR SCIENCES INC.
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REVIEWED BY RPA DATE 4-2-13
AUDITED BY DATE 3-28-13

Resolution EAST
SO_2 Monitoring Form

Site Operator: Kara Bellard Date: 3/27/2013

Sampler Make /Model		T100
Sampler SN		SN 193
Dilution Calibrator Model/SN	Primary	T700/SN191
	Transfer	—

Instrument Check Start Time	1:48 LT
Instrument Check Stop Time	2:09 LT
Filter Replacement Y/N	Yes
Shelter Temp (5 to 40 °C)	21.4
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	-0.4	—	± 3% of Full Scale (-15 to 15 PPB)	No
100	100.8	—	≤ ± 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	-0.4	.099	± 2 PPB	No
100 PPB	100.8	101.4	± 2 PPB	No

Verify instrument parameters:

Sample Flow (450 ± 45 cc/min)	369	*Sample Press. (Ambient ± 2 in-Hg)*	23.8
UV Lamp (1000 - 4800 mV)	2979.9	*Lamp Ratio (30 - 120%)*	83.1
Slope (1 ± 0.3)	1.136	*BOX Temp (Ambient ± 5°C)*	31.5
Offset (< 250 mV)	18.5	*HVPS (400 - 900 V)*	571

Operator comments/observations:
* Sample Flow Warning (03/27- KB)

Operator Signature: Kara Bellard

* - REMOTE ACCESS OF THE T100 SO_2 ANALYZER @ 0850 HRS ON 3/28/13 DISCOVERED THE ANALYZER FREE OF WARNINGS AND THE SAMPLE FLOW @ 455 cc/min. — R. ATTRIDGE
1300-1400 HRS ENVALIDATED FOR SO_2 ON 3-27-13

AIR SCIENCES INC.
DENVER · PORTLAND
REVIEWED BY RPA DATE 2-1-13
AUDITED BY DATE 2-4-13

AIR SCIENCES INC.
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Resolution EAST
NO_x Monitoring Form

Site Operator: Kami Ballard Date: 01/31/2012 2013

Sampler Make /Model		T200
Sampler SN		SN 197
Dilution Calibrator Model/SN	Primary	T700 /SN191
	Transfer	

Instrument Check Start Time	1:29
Instrument Check Stop Time	1:50
Filter Replacement Y/N	Yes
Shelter Temp (5 to 40 °C)	24.4
Instrument Range	500 PPB
Source Gas Conc.	~~40% NOx~~ 40 ppm NOx

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	1.4	1.5	—	±3% of full Scale (±15 PPB)	No
100 PPB	98.6	1.7	100.3	—	≤±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	.06	±2 PPB	No
	NO_2	1.4	NO_2	1.1		
	NO_x	1.5	NO_x	1.4		
100 PPB	NO	98.6	NO	99.6	±2 PPB	No
	NO_2	1.7	NO_2	1.6		
	NO_x	100.3	NO_x	100.7		

Verify instrument parameters:

Sample Flow (500 ± 50 cc/min)	487	*Moly Temp. (315 ± 5°C)*	316.3
Ozone Flow (80 ± 15 cc/min)	76	*HVPS (400 - 900 V)*	600
NOx Slope (1 ± 0.3)	1.132	*NO Slope (1 ± 0.3)*	1.146
NOx Offset (0 ± 100)	0.4	*NO Offset (0 ± 100)*	.6

Operator comments/observations:

INVALIDATED THE 1400 HRS HOURLY AVERAGE DUE TO LEVEL 1. -RPA

Operator Signature: Kami Ballard

AIR SCIENCES INC.
DENVER • PORTLAND
REVIEWED BY RPA DATE 2-18-13
AUDITED BY DATE 2-18-13

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Resolution EAST
NO_x Monitoring Form

Site Operator: Kara Pollard Date: 02.15.2013

Sampler Make /Model		T200
Sampler SN		SN197
Dilution Calibrator Model/SN	Primary	T700 / SN191
	Transfer	

Instrument Check Start Time	2:28
Instrument Check Stop Time	2:44
Filter Replacement Y/N	Yes
Shelter Temp (5 to 40 °C)	76° 24.4 C
Instrument Range	500 PPB
Source Gas Conc.	40% NOx 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	1.0	1.0	—	±3% of full Scale (±15 PPB)	N
100 PPB	93.8	0.1	93.9	—	≤±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	Adjustment Required? Y/N
Zero Air	NO	0.0	NO	-0.2	±2 PPB	No
	NO_2	1.0	NO_2	.8		
	NO_x	1.0	NO_x	.9		
100 PPB	NO	93.8	NO	93.8	±2 PPB	NO
	NO_2	0.1	NO_2	-.04		
	NO_x	93.9	NO_x	94		

Verify instrument parameters:

Sample Flow (500 ± 50 cc/min)	497	*Moly Temp. (315 ± 5°C)*	315.2
Ozone Flow (80 ± 15 cc/min)	77	*HVPS (400 - 900 V)*	600
NOx Slope (1 ± 0.3)	1.098	*NO Slope (1 ± 0.3)*	1.118
NOx Offset (0 ± 100)	.4	*NO Offset (0 ± 100)*	0.6

Operator comments/observations:

Operator Signature: Kara Pollard

AIR SCIENCES INC.
DENVER • PORTLAND
REVIEWED BY RPA DATE 3-6-13
AUDITED BY DATE 3-4-13

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DENVER • PORTLAND

Resolution EAST

NO_x Monitoring Form

Site Operator: Kami BaCord Date: 3/01/2013

Sampler Make/Model		T200
Sampler SN		SN 197
Dilution Calibrator Model/SN	Primary	T700/SN 191
	Transfer	

Instrument Check Start Time	11:38
Instrument Check Stop Time	12:54
Filter Replacement Y/N	Yes
Shelter Temp (5 to 40 °C)	23.8
Instrument Range	500PPB
Source Gas Conc.	40% Nox 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	.1	.5	.6	—	±3% of full Scale (±15 PPB)	No
100 PPB	95.0	-0.8	94.3	—	≤±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	.1	NO	-0.1	±2 PPB	No
	NO_2	.5	NO_2	0.2		
	NO_x	.6	NO_x	0.5		
100 PPB	NO	95.0	NO	94.9	±2 PPB	No
	NO_2	-0.8	NO_2	-0.8		
	NO_x	94.3	NO_x	94.1		

Verify instrument parameters:

Sample Flow (500 ± 50 cc/min)	499	*Moly Temp. (315 ± 5°C)*	314
Ozone Flow (80 ± 15 cc/min)	77	*HVPS (400 - 900 V)*	600
NOx Slope (1 ± 0.3)	1.098	*NO Slope (1 ± 0.3)*	1.118
NOx Offset (0 ± 100)	.4	*NO Offset (0 ± 100)*	.6

Operator comments/observations:

LEVEL 1 ZERO/SPAN LOGGED FROM 1044-1050 HRS. 1100 HRS Hourly File Initiated - RPA

Operator Signature: Kami BaCord

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DENVER • PORTLAND
REVIEWED BY BR DATE 3/19/13
AUDITED BY RPA DATE 3/15/13

AIR SCIENCES INC.
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Resolution EAST

NO_x Monitoring Form

Site Operator: Kami Ballard Date: 3/13/2013

Sampler Make/Model		T200
Sampler SN		SN197
Dilution Calibrator Model/SN	Primary	T700
	Transfer	SN 191

Instrument Check Start Time	12:08 LT
Instrument Check Stop Time	12:24 LT
Filter Replacement Y/N	Yes
Shelter Temp (5 to 40 °C)	23.3
Instrument Range	500 PPB
Source Gas Conc.	40% NOx

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	.4	-1.7	-1.3	—	±3% of full Scale (±15 PPB)	N
100 PPB	95.1	.5	95.6	—	≤±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	Adjustment Required? Y/N
Zero Air	NO	.4	NO	0.2	±2 PPB	N
	NO_2	-1.7	NO_2	-1.7		
	NO_x	-1.3	NO_x	-1.2		
100 PPB	NO	95.1	NO	94.9	±2 PPB	N
	NO_2	.5	NO_2	.2		
	NO_x	95.6	NO_x	95.4		

Verify instrument parameters:

Sample Flow (500 ± 50 cc/min)	498	*Moly Temp. (315 ± 5°C)*	315
Ozone Flow (80 ± 15 cc/min)	76	*HVPS (400 - 900 V)*	600 V
NOx Slope (1 ± 0.3)	1.133	*NO Slope (1 ± 0.3)*	1.115
NOx Offset (0 ± 100)	6.0	*NO Offset (0 ± 100)*	1.0

Operator comments/observations:

Operator Signature:

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REVIEWED BY RPA DATE 3-28-13
AUDITED BY DATE 4-2-13

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Resolution EAST
NO_x Monitoring Form

Site Operator: Kami BaCord Date: 03·27·2013

Sampler Make /Model		T200
Sampler SN		SN 197
Dilution Calibrator Model/SN	Primary	T700/SN191
	Transfer	—

Instrument Check Start Time	1:36 LT
Instrument Check Stop Time	1:45 LT
Filter Replacement Y/N	Yes
Shelter Temp (5 to 40 °C)	22.6
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	0.6	-1.9	-1.3	—	±3% of full Scale (±15 PPB)	No
100 PPB	94.4	0.6	95.1	—	≤±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	0.6	NO	.3	±2 PPB	N
	NO_2	-1.9	NO_2	-2.2		
	NO_x	-1.3	NO_x	-2.1		
100 PPB	NO	94.4	NO	94.8	±2 PPB	N
	NO_2	0.6	NO_2	.78		
	NO_x	95.1	NO_x	95.6		

Verify instrument parameters:

Sample Flow (500 ± 50 cc/min)	495	*Moly Temp. (315 ± 5°C)*	314.5
Ozone Flow (80 ± 15 cc/min)	75	*HVPS (400 - 900 V)*	600
NOx Slope (1 ± 0.3)	1.133	*NO Slope (1 ± 0.3)*	1.115
NOx Offset (0 ± 100)	6.0	*NO Offset (0 ± 100)*	1.0

Operator comments/observations:
INVALIDATED THE 1400 HRS HOURLY RECORD FOR NOx — RPA

Operator Signature: Kami BaCord

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REVIEWED BY RPA DATE 2-4-13
AUDITED BY DATE 2-11-13

AIR SCIENCES INC.
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Resolution EAST

O_3 Monitoring Form

Site Operator: Kami McCord Date: 01-31-2013

Sampler Make /Model		T400
Sampler SN		SN 224
Dilution Calibrator Model/SN	Primary	T700/SN 191
	Transfer	—

Instrument Check Start Time	3:01
Instrument Check Stop Time	3:13
Filter Replacement Y/N	Yes
Shelter Temp (5 to 40 °C)	22.2
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	-0.7	—	≤ ± 2% of Full Scale (±10 PPB)	N
100	101.6	—	≤ ± 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	-0.7	0.1	± 2 PPB	N
100 PPB	101.6	102.0	± 2 PPB	N

Verify instrument parameters:

Sample Flow (550 ± 55 cc/min)	568	*Sample Temp. (10 - 50 °C)*	39.1
Photo Lamp (58 ± 1 °C)	58.0	*BOX Temp. (30 ± 20 °C)*	27.7
Slope (1 ± 0.15)	.905	*O3 Measure (2500 - 4800 mV)*	3698.0
Offset (0.0 ± 5 PPB)	.5	*O3 Reference (2500 - 4800 mV)*	3701.8

Operator comments/observations:
INVALIDATED THE 1500 HRS HOURLY AVERAGES DUE TO LEVEL 1 - RPA

Operator Signature: Kami McCord

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REVIEWED BY RPA DATE 2-18-13
AUDITED BY DATE 2-18-13

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Resolution EAST

O_3 Monitoring Form

Site Operator: Kami Ballard Date: 02·15·2013

Sampler Make /Model		T400
Sampler SN		SN 224
Dilution Calibrator Model/SN	Primary	T700/ SN191
	Transfer	

Instrument Check Start Time	3:01
Instrument Check Stop Time	3:16
Filter Replacement Y/N	Yes
Shelter Temp (5 to 40 °C)	24.9
Instrument Range	500PPB

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	0.0	—	≤ ± 2% of Full Scale (±10 PPB)	NO
100	93.4	—	≤ ± 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	0.0	.62	± 2 PPB	NO
100 PPB	93.4	93.9	± 2 PPB	NO

Verify instrument parameters:

Sample Flow (550 ± 55 cc/min)	568	*Sample Temp. (10 - 50 °C)*	40.3
Photo Lamp (58 ± 1 °C)	58°	*BOX Temp. (30 ± 20 °C)*	28.4°
Slope (1 ± 0.15)	.884	*O3 Measure (2500 - 4800 mV)*	3664.7
Offset (0.0 ± 5 PPB)	.5	*O3 Reference (2500 - 4800 mV)*	3667.7

Operator comments/observations:

Operator Signature: Kami Ballard

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REVIEWED BY RPA DATE 3-6-13
AUDITED BY DATE 3-4-13

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Resolution EAST

O_3 Monitoring Form

Site Operator: Kami Ballard Date: 03.01.2013

Sampler Make/Model		T400
Sampler SN		8N224
Dilution Calibrator Model/SN	Primary	T700/SN 191
	Transfer	/

Instrument Check Start Time	12:07 LT
Instrument Check Stop Time	12 20 LT
Filter Replacement Y/N	Yes
Shelter Temp (5 to 40 °C)	22.6
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	-0.2	N	≤ ± 2% of Full Scale (±10 PPB)	N
100	100.2	—	≤ ± 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	-0.2	0.29	± 2 PPB	N
100 PPB	100.2	101.02	± 2 PPB	N

Verify instrument parameters:

Sample Flow (550 ± 55 cc/min)	569	*Sample Temp. (10 - 50 °C)*	41.2
Photo Lamp (58 ± 1 °C)	58	*BOX Temp. (30 ± 20 °C)*	28.5
Slope (1 ± 0.15)	.884	*O3 Measure (2500 - 4800 mV)*	3633.8
Offset (0.0 ± 5 PPB)	0.5	*O3 Reference (2500 - 4800 mV)*	3637.4

Operator comments/observations:
1200 HRS HOURLY DVE INVALIDATED - RPA
ZERO/SPAN LOGGED @ 11:14
11:20 RPA

Operator Signature: Kami Ballard

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BR 3/19/13
REVIEWED BY DATE
RPA 3/15/13
AUDITED BY DATE

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Resolution EAST

O_3 Monitoring Form

Site Operator: Kami Ballard Date: 3/13/2013

Sampler Make/Model		T400
Sampler SN		SN224
Dilution Calibrator Model/SN	Primary	T700/SN191
	Transfer	—

Instrument Check Start Time	12:37 LT
Instrument Check Stop Time	12:51 LT
Filter Replacement Y/N	Yes
Shelter Temp (5 to 40 °C)	23.5
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% of Full Scale (±10 PPB)	N
100	99	—	≤ ± 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	-.2	.29	± 2 PPB	N
100 PPB	99	100	± 2 PPB	N

Verify instrument parameters:

Sample Flow (550 ± 55 cc/min)	564	*Sample Temp. (10 - 50 °C)*	41.5 *
Photo Lamp (58 ± 1 °C)	58	*BOX Temp. (30 ± 20 °C)*	29.8
Slope (1 ± 0.15)	.884	*O3 Measure (2500 - 4800 mV)*	3613.6
Offset (0.0 ± 5 PPB)	.5	*O3 Reference (2500 - 4800 mV)*	3613.9

Operator comments/observations:

Operator Signature:

* Sample Temp reported @ 40.1° ON 3/15/13 @ 1150 HRS — RPA

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REVIEWED BY RPA DATE 3.28.13
AUDITED BY DATE

4-2-13

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Resolution EAST

O_3 Monitoring Form

Site Operator: Kara BaCard Date: 3.27.2013

Sampler Make /Model		T400
Sampler SN		SN 224
Dilution Calibrator Model/SN	Primary	T700/SN191
	Transfer	—

Instrument Check Start Time	2:10 LT
Instrument Check Stop Time	2:25 LT *
Filter Replacement Y/N	No - forgot filters
Shelter Temp (5 to 40 °C)	23.0
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	- 0.2	—	≤ ± 2% of Full Scale (±10 PPB)	N
100	100.6	—	≤ ± 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	- 0.2	.4	± 2 PPB	N
100 PPB	100.6	101.3	± 2 PPB	N

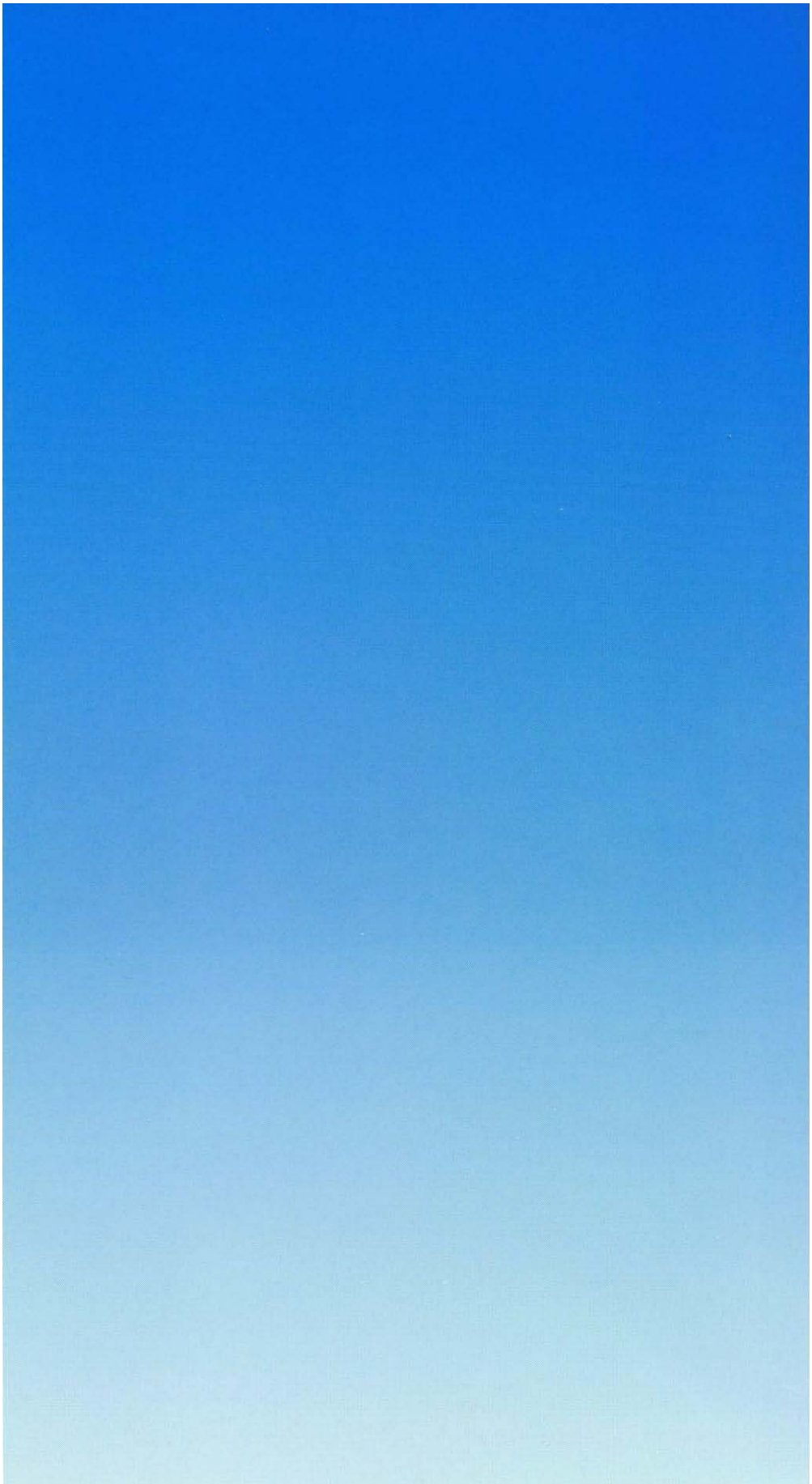
Verify instrument parameters:

Sample Flow (550 ± 55 cc/min)	565	*Sample Temp. (10 - 50 °C)*	38.8
Photo Lamp (58 ± 1 °C)	58.0	*BOX Temp. (30 ± 20 °C)*	26.7
Slope (1 ± 0.15)	0.899	*O3 Measure (2500 - 4800 mV)*	3585.1
Offset (0.0 ± 5 PPB)	0.3	*O3 Reference (2500 - 4800 mV)*	3588.7

Operator comments/observations:
1500 LTS HOURLY RECORDS INVALIDATED FOR O_3 — AVERAGE

Operator Signature: Kara BaCard

Appendix K: Audits and Calibrations



Air Quality Audit Report East Plant Monitoring Station

PREPARED FOR:
RESOLUTION COPPER MINING

PREPARED BY:
RORY ATTRIDGE
AIR SCIENCES INC.

PROJECT 262-5
JANUARY 2013

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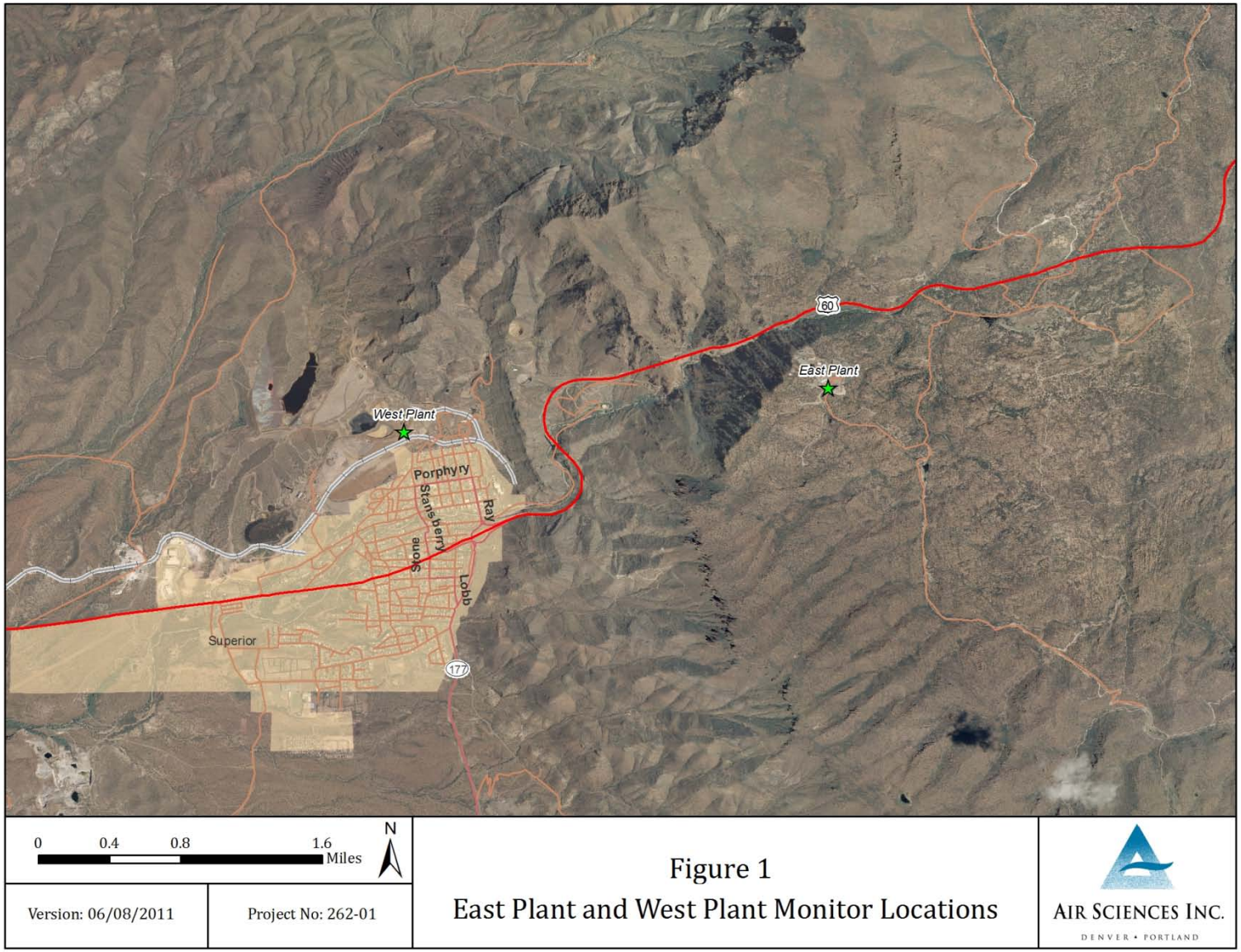
Appendix A: Audit Forms

1.0 INTRODUCTION

On January 14-16, 2013, the meteorological and air quality instrumentation was audited 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 audit procedures for the meteorological, particulate and ambient gas instrumentation at the East plant site. The audit 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-08-003, Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II: Ambient Air Quality Monitoring Program, December 2008
- EPA-454/B-08-002, Quality Assurance Handbook for Air Pollution Measurement Systems, Volume IV: Meteorological Measurements Version 2.0, March 2008
- Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II: Ambient Air Quality Monitoring Program (EPA-454/B-08-003, December 2008)
- Transfer Standards for the audit 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 AUDIT METHODOLOGY

This section provides the audit procedures for the meteorological, particulate and ambient gas instrumentation at the East monitoring site. Copies of the completed audit forms for each parameter are included in Appendix A.

3.1 Meteorological Sensor Audit Procedures

The wind speed sensor audit 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 audit 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 audit 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 audit 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 audit 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 audit of both sensors. A Precision Temperature Sensor was used to measure the bath temperatures. All audit data were recorded on standardized forms.

The solar radiation sensor audit 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.

The relative humidity sensor audit 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.

---

[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 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 audit 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 Audit 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 Audit Procedures

Audit of the Teledyne T100 SO_2 analyzer involved a Multi-Point Audit (MPA) and an Analog to Digital (A2D) verification. The MPA was performed by using the T700 calibrator to dilute NIST-traceable EPA-protocol audit gas with a clean zero-air source to calibrate the T100 analyzer at zero, and at five points within the instrument range—typically a points 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.

Audit 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 audit gas with a clean zero-air source to calibrate the T200 analyzer at zero, and five points within the instrument range—typically point 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.

Audit 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 audit 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

Failure to attain all the wind speed audit points of the East Plant RMY 05305 wind monitor was a result of standard auditing equipment failure. The standard variable-speed motor failed to attain the higher-RPM audit points due extreme cold ambient conditions. Due to the nature of the way the wind speed sensor outputs data (pulse count), a high confidence in the accuracy of the higher speed output can be assumed from the passing at lower RPMs.

All instruments and sensors were within their recommended tolerance parameters at the Resolution Copper East Plant monitoring site.

Appendix A: Audit Forms

METEOROLOGICAL AUDIT DATA

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Client : Resolution Copper Company
Job No. : 262-1
Site : East Plant
Date : 1/14/2013
Time: 1615-1715 hours
Auditors: R. Attridge

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			0.3
CW	600.0	3.07			0.4
CW	800.0	4.10			0.4
CW	1000.0	5.12			0.5
CW	2000.0	10.24			0.7
CW	3000.0	15.36			1.0
CW	4000.0	20.48			1.2
CW	5000.0	25.60			1.5
CCW	0.0	0.00	0.00	0.00	0.0
CCW	200.0	1.02	1.02	0.00	0.3
CCW	400.0	2.05			0.3
CCW	600.0	3.07			0.4
CCW	800.0	4.10			0.4
CCW	1000.0	5.12			0.5
CCW	2000.0	10.24			0.7
CCW	3000.0	15.36			1.0
CCW	4000.0	20.48			1.2
CCW	5000.0	25.60			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

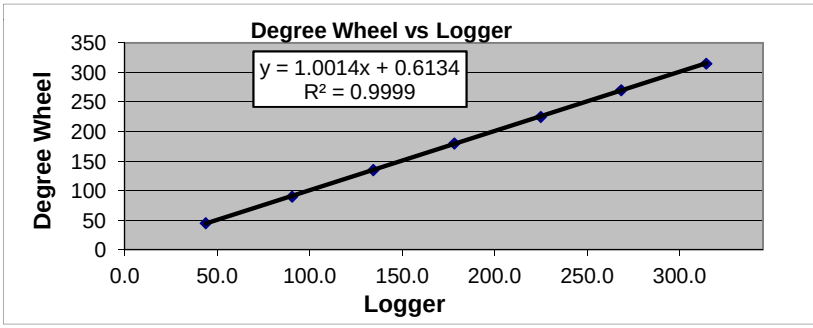
WIND DIRECTION, 10m

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	43.7	-1.3	44.6	-0.4	±3
90	90.4	0.4	91.3	1.3	±3
135	134.3	-0.7	135.2	0.2	±3
180	178.1	-1.9	179.0	-1.0	±3
225	224.8	-0.2	225.7	0.7	±3
270	268.3	-1.7	269.2	-0.8	±3
315	314.3	-0.7	315.2	0.2	±3
Avg		-0.9			
CCW					
45	43.6	-1.4	44.1	-0.9	±3
90	90.7	0.7	91.2	1.2	±3
135	134.1	-0.9	134.6	-0.4	±3
180	178.0	-2.0	178.5	-1.5	±3
225	225.9	0.9	226.4	1.4	±3
270	270.2	0.2	270.7	0.7	±3
315	314.1	-0.9	314.6	-0.4	±3
Avg		-0.5			



[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 Serial No: 60749863
Std Model: HMP45-AC Std Serial No: F4910006

System Linearity Check

	Measured (ºC)	Logger Reading (ºC)	Difference (ºC)	Acceptance Criteria
1.	1.5	1.8	-0.3	±0.5
2.	1.5	1.5	0.0	±0.5
3.	1.5	1.4	0.2	±0.5
4.	1.5	1.2	0.3	±0.5
5.	1.5	1.3	0.2	±0.5
6.	1.6	1.4	0.2	±0.5
7.	1.5	1.4	0.1	±0.5
8.	1.5	1.4	0.1	±0.5
9.	1.5	1.4	0.1	±0.5
10.	1.5	1.5	0.0	±0.5

Relative Humidity, 2m

Model: HC2S3 Serial No: 60749863
Std Model: HMP45-AC Std Serial No: F4910006

	Measured (%)	Logger Reading (%)	Difference (%)	Acceptance Criteria (%)
1.	26.3	26.6	-0.4	±7
2.	25.1	25.4	-0.3	±7
3.	25.5	25.3	0.2	±7
4.	25.5	25.5	-0.1	±7
5.	25.8	25.8	0.1	±7
6.	24.8	25.5	-0.7	±7
7.	23.5	23.2	0.3	±7
8.	22.9	23.8	-0.9	±7
9.	22.98	24.04	-1.1	±7
10.	22.31	23.42	-1.1	±7

Delta Temperature, 2m, 10m

Model: 41342 Serial No (2m): 020208

Serial No (10m): 020213

Std Model: 41342 Std Serial No: 6481

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	41.41	41.30	41.20	0.11	0.21	0.10
Bath 2	22.61	22.52	22.53	0.09	0.08	0.01
Bath 3	4.48	4.57	4.53	0.09	0.05	0.04

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: H1060060

System Linearity Check

	Measured (mmHg)	Reading (mmHg)	Difference (mmHg)	Criteria (mmHg)
1.	652.9	652.5	0.4	±2.3
2.	652.9	652.5	0.4	±2.3
3.	652.9	652.5	0.4	±2.3
4.	652.9	652.5	0.4	±2.3

SOLAR RADIATION, 2m

Model: CMP3 Serial No: 115422

Std Model: LiCor Std Serial No: PY545582

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.	14.2	13.2	1.0	-7.5	± 25 W/m^2 or 5%
2.	14.2	13.3	0.9	-6.7	± 25 W/m^2 or 5%
3.	14.1	13.3	0.8	-6.2	± 25 W/m^2 or 5%
4.	14.2	13.3	0.9	-6.7	± 25 W/m^2 or 5%
5.	14.1	13.2	0.9	-6.7	± 25 W/m^2 or 5%
6.	14.1	13.2	0.9	-6.7	± 25 W/m^2 or 5%
7.	14.0	13.2	0.8	-6.1	± 25 W/m^2 or 5%
8.	13.9	13.2	0.7	-5.2	± 25 W/m^2 or 5%
9.	13.99	13.2	0.8	-6.1	± 25 W/m^2 or 5%
10.	13.86	13.1	0.7	-5.6	± 25 W/m^2 or 5%
		Avg	0.8		

PRECIPITATION, GROUND LEVEL

Model: 5202 Serial No: 8721

System Linearity Check

	Water (cc)	Calculated Target* (inches)	Logger Reading (inches)	Difference (inches)
1.	2.20	0.004	0.004	0.000
2.	2.20	0.004	0.004	0.000
3.	2.40	0.005	0.004	0.001
4.	2.20	0.004	0.004	0.000
5.	2.20	0.004	0.004	0.000
6.	2.00	0.004	0.004	0.000
7.	2.20	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	21.60	0.049	0.040	0.009

Reading taken from final storage for period averaged data = 0.04 inches

***Target (RM Young gauge) = water (cc)/2.01 * 0.004 (inches)**

COMMENTS

Auditing of the RMY 05305 wind monitor was not completed due to an unresponsive STD motor in freezing conditions.

Signature: _____

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Resolution EAST

SO_2 Monitoring Form

Site Operator: R. Attridge **Date: 1-16-2013**

Sampler Make /Model		T100
Sampler SN		193
Dilution Calibrator Model/SN	**Primary**	T700/ 191
	Transfer	M700E / SN1098

Instrument Check Start Time	0700
Instrument Check Stop Time	1200
Filter Replacement Y/N	YES
Shelter Temp (5 to 40 °C)	22.9
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	0.04	0.060	± 3% of Full Scale (-15 to 15 PPB)	N
100	100.02	100.05	≤ ± 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	0.06	0.05	± 2	N
100	100.03	100.06	± 2	N

Verify Instrument Parameters:

Sample Flow (450 ± 45 cc/ min)	405	Sample Press. (Ambient ± 2 in-Hg)	23.5
UV Lamp (1000 – 4800 mV)	3006.9	Lamp Ratio (30 – 120%)	83.8
Slope (1 ± 0.3)	1.187	BOX Temp. (Ambient ± 5°C)	35.2
Offset (< 250 mV)	18.5	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	0.06	0.175	PASS, < 2% FS
100	100.00	100.24	99.91	PASS, 0.3%
200	200.00	199.80	199.64	PASS, 0.1%
300	300.00	299.60	299.37	PASS, 0.2%
400	400.00	399.20	399.10	PASS, 0%
500	500.00	498.60	498.83	PASS, 0.0%
			Best Fit Line (BFL)	
			Y = 0.9973x + 0.175	
			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	0.05	0.143	PASS, < 2% FS
100	103.00	101.22	103.20	PASS, 1.9%
200	202.00	202.40	202.25	PASS, 0.1%
300	301.00	300.77	301.31	PASS, 0.2%
400	400.00	401.90	400.36	PASS, 0.4%
500	499.00	498.50	499.41	PASS, 0.2%
			Best Fit Line (BFL)	
			Y = 1.0005x + 0.1432	
			R^2 = 0.9997	

Operator Comments/ observations: None

Operator Signature:

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Resolution EAST

O_3 Monitoring Form

Site Operator: R. Attridge **Date: 1-16-2013**

Sampler Make /Model		T400
Sampler SN		224
Dilution Calibrator Model/SN	**Primary**	T700/ 191
	Transfer	M700E/ 1098

Instrument Check Start Time	0700
Instrument Check Stop Time	1200
Filter Replacement Y/N	YES
Shelter Temp (5 to 40 °C)	22.9
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	0.400	0.300	≤ ± 2% of Full Scale (± 10 PPB)	N
100	100.700	100.200	≤ ± 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 (PPB)	Adjustment Required? Y/N
Zero Air	0.3	0.6	± 2	N
100	99.5	100.3	± 2	N

Verify Instrument Parameters:

Sample Flow (550 ± 55 cc/ min)	564	Sample Temp. (10 - 50°C)	44.3
Photo Lamp (58 ± 1°C)	58.0	BOX Temp. (30 ± 20°C)	31.8
Slope (1 ± 0.15)	1.013	O_3 Measure (2500 – 4800 mV)	3724.3
Offset (0.0 ± 5 PPB)	0.8	O_3 Reference (2500 – 4800 mV)	3727.8

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	0.0	0.8	20.5	PASS, < 2% FS
100	103.0	203.2	103.4	PASS, 0.4%
200	202.0	199.8	198.3	PASS, 0.1%
300	302.0	302.8	303.8	PASS, 0.3%
400	402.0	40465	404.3	PASS, 0.1%
500	503.0	506.1	505.7	PASS, 0.1%

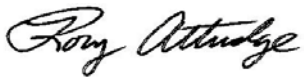
Best Fit Line (BFL)
Y = 1.0045x + 0.4541
R^2 = 0.99999

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	0.2	0.745	PASS, < 2% FS
100	100.0	101.4	100.4	PASS, 1%
200	200.0	199.0	200.1	PASS, 0.6%
300	300.0	300.5	299.8	PASS, 0.2%
400	400.0	400.8	399.5	PASS, 0.3%
500	501.0	498.7	500.2	PASS, 0.3%

Best Fit Line (BFL)
Y = 0.9969x + 0.7454
R^2 = 0.99997

Operator Comments / Observations: None

Operator Signature: 

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Resolution EAST

NO_x Monitoring Form

Site Operator: R. Attridge **Date: 1-16-2013**

Sampler Make /Model		T200
Sampler SN		197
Dilution Calibrator Model/SN	**Primary**	**T700/191**
	Transfer	**700E/1098**

Instrument Check Start Time	0700
Instrument Check Stop Time	1200
Filter Replacement Y/N	YES
Shelter Temp (5 to 40 °C)	22.9
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	0.3	-0.1	0.1	0.1	± 3% of full scale (± 15 PPB)	N
100 PPB	100.6	0.1	100.7	101.0	≤ ± 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	0.3	NO	-0.1	± 2	N
	NO_2	-0.1	NO_2	-0.01		
	NO_x	0.1	NO_x	0.2		
100	NO	100.6	NO	100.5	± 2	N
	NO_2	0.1	NO_2	-0.19		
	NO_x	100.7	NO_x	100.3		

Verify Instrument Parameters:

Sample Flow (500 ± 50 cc/min)	506	Moly Temp. (315 ± 5°C)	314.7
Ozone Flow (80 ± 15 cc/ min)	76	HVPS (400 – 900 V)	600

NO_x Slope (1 ± 0.3)	1.175	NO Slope (1 ± 0.3)	1.173
NO_x Offset (0 ± 100)	2.6	NO Offset (0 ± 100)	-0.2

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	0.1	-0.1	-0.2	0.2	PASS, 0 ± 5
100	101	101.5	0.7	102.2	101.2	PASS, 1%
200	202	201.2	-1.0	200.2	202.1	PASS, 1%
300	301	300.4	2.0	302.4	301.1	PASS, 0.4%
400	401	400.2	1.9	402.1	401.1	PASS, 0.2%
500	502	499.5	1.6	501.1	502.1	PASS, 0.2%

Best Fit Line (BFL)
Y = 1.09998x +0.1799
R^2 = 0.99995

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	0	0.2	0.2	-0.3	-1.8	PASS, 0 ± 5
100	103	100.1	0.2	100.3	101.4	PASS, 1%
200	202	200.4	0.3	200.7	200.5	PASS, 0.1%
300	301	298.0	0.0	298.0	299.6	PASS, 0.5%
400	400	396.7	1.1	397.6	398.7	PASS, 0.3%
500	498	497.3	1.5	498.8	496.8	PASS, 0.4%

Best Fit Line (BFL)
Y = 1.0013x + -1.8102
R^2 = 0.99994

Operator comments/ observations: None

Operator Signature:

East Plant BAM-1020 PM_{10} Audit Sheet

Model:	**BAM-1020**	**Serial Number:**	M8712
Audit Date:	1/15/2013	**Audited By:**	R. Attridge
Audit Time:	1008-1108hrs		

Firmware: 3236-06 V3.6.3

Flow Audits						
Flow Reference Standard Used:	Model:	Delta Cal	Serial No:	1103	Calibration Date:	4/9/2012
Temperature Standard Used:	Model:	Delta Cal	Serial No:	1103	Calibration Date:	4/9/2012
Barometric Pressure Standard Used:	Model:	Delta Cal	Serial No:	1103	Calibration Date:	4/9/2012

Leak Check Value:	as found:	0.3 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:	-0.6	-0.9	as left:	-0.8	-1.0	Adjusted	X
Barometric Pressure (mmHg):	as found:	639	658.3	as left:	658	658.9	Adjusted	X
Flow Rate (15.0 LPM):	as found:	15.1	15.29	as left:	15.1	15.04	Adjusted	X
Flow Rate (18.4 LPM):	as found:	18.4	18.72	as left:	18.4	18.50	Adjusted	X
Flow Rate (16.7 LPM):	as found:	16.7	16.98	as left:	16.7	16.75	Adjusted	X

Audit Notes: **Found in a clean, serviceable condition. Cleaned reference membrane.**

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		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: Roy Attridge

East Plant BAM-1020 $PM_{2.5}$ Audit Sheet

Model:	**BAM-1020**	**Serial Number:**	M3193
Audit Date:	1/15/2013	**Audited By:**	R. Attridge
Audit Time:	1108-1155hrs		

Firmware: 3236-06 V3.6.3

Flow Audits						
Flow Reference Standard Used:	Model:	Delta Cal	Serial No:	1103	Calibration Date:	4/9/2012
Temperature Standard Used:	Model:	Delta Cal	Serial No:	1103	Calibration Date:	4/9/2012
Barometric Pressure Standard Used:	Model:	Delta Cal	Serial No:	1103	Calibration Date:	4/9/2012

Leak Check Value:	as found:	0.4 LPM	Should Be: <1.0	as left:	0.4 LPM	Should Be: <1.0

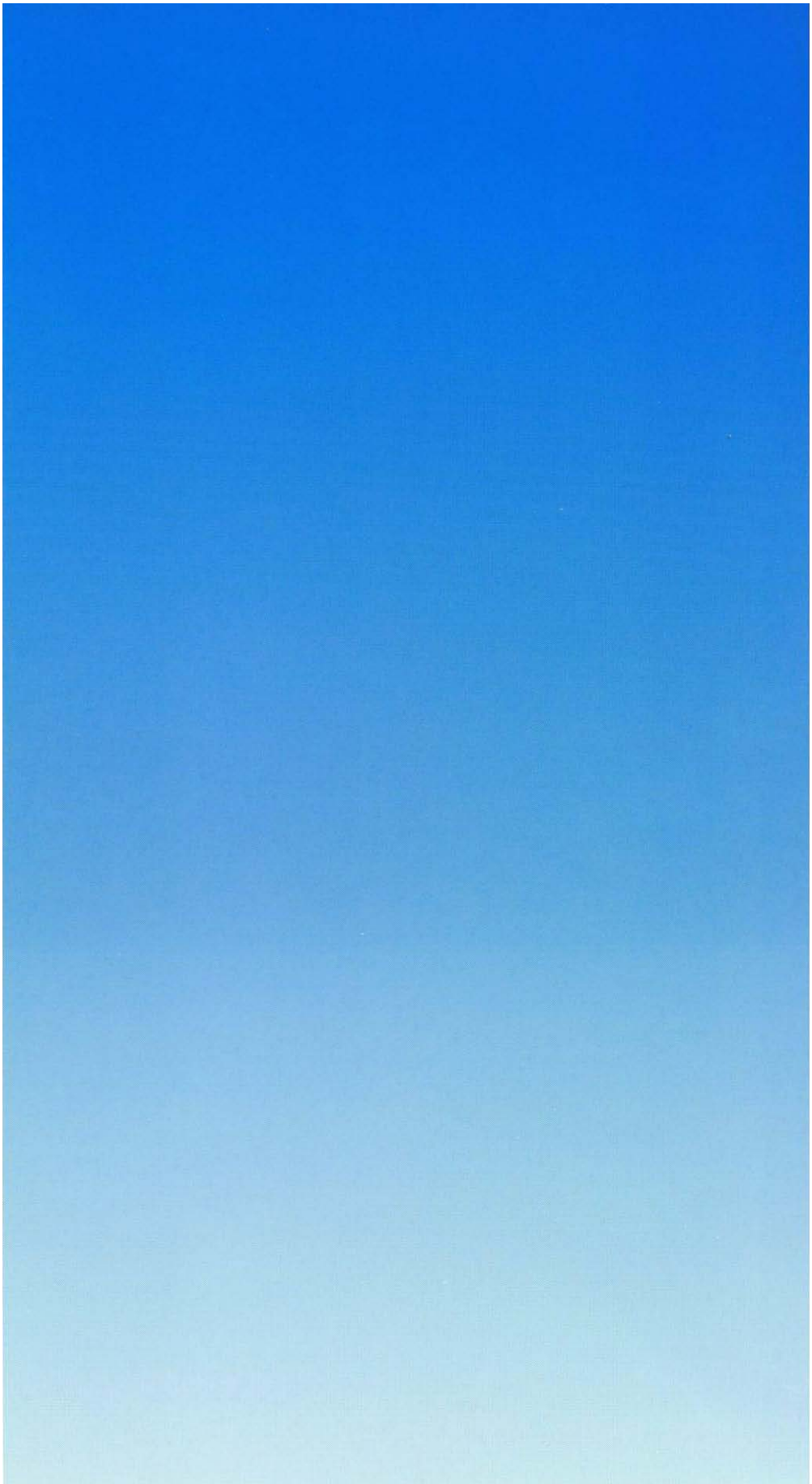
		BAM	Ref. Std.		BAM	Ref. Std.		
Ambient Temperature (°C):	as found:	-0.5	-0.6	as left:	-0.6	-0.6	Adjusted	
Barometric Pressure (mmHg):	as found:	660	658.4	as left:	658	658.6	Adjusted	X
Flow Rate (15.0 LPM):	as found:	15.1	15.32	as left:	15.0	15.13	Adjusted	X
Flow Rate (18.4 LPM):	as found:	18.4	18.73	as left:	18.4	18.36	Adjusted	X
Flow Rate (16.7 LPM):	as found:	16.7	17.01	as left:	16.7	16.73	Adjusted	X

Audit Notes: **Instrument found in a clean, serviceable condition. Cleaned reference membrane due to repeated membrane density errors.**

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	X	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	X	As left	X		
on	As found	X	As left	X	Inlet tube perpendicular to BAM:	As found	X	As left	x		

Signature: Roy Attridge



Air Quality Audit Report West Plant Monitoring Station

PREPARED FOR:
RESOLUTION COPPER MINING

Resolution Copper Mining

PREPARED BY:
RORY ATTRIDGE
AIR SCIENCES INC.

PROJECT 262-5
JANUARY 2013

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Appendices

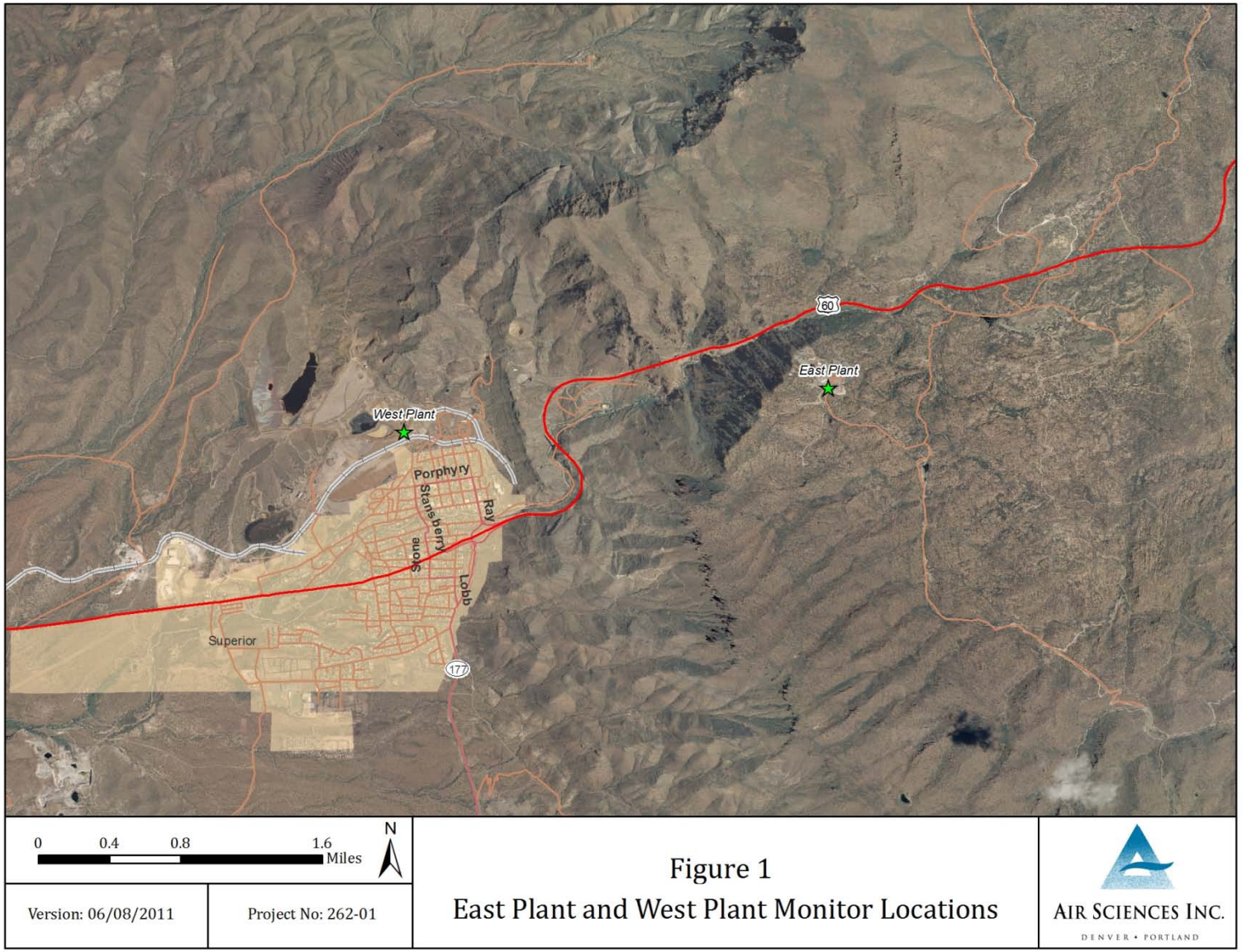
Appendix A: Audit Forms

1.0 INTRODUCTION

On January 14, 2013, the meteorological and air quality instrumentation was audited 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 audit 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-08-003, Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II: Ambient Air Quality Monitoring Program, December 2008
- EPA-454/B-08-002, Quality Assurance Handbook for Air Pollution Measurement Systems, Volume IV: Meteorological Measurements Version 2.0, March 2008
- Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II: Ambient Air Quality Monitoring Program (EPA-454/B-08-003, December 2008)
- Transfer Standards for the audit 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 AUDIT METHODOLOGY

This section provides the audit procedures for the meteorological and particulate instrumentation at the West monitoring site. Copies of the completed audit forms for each parameter are included in Appendix A.

3.1 Meteorological Sensor Audit Procedures

The wind speed sensor audit 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 audit 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 audit 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 audit 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 audit 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 audit of both sensors. A Precision Temperature Sensor was used to measure the bath temperatures. All audit data were recorded on standardized forms.

The solar radiation sensor audit 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.

The relative humidity sensor audit 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.

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 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 audit 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 Audit 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

Failure to attain all the wind speed audit points of the West Plant RMY 05305 wind monitor was a result of standard auditing equipment failure. The standard variable-speed motor failed to attain the higher-RPM audit points due extreme cold ambient conditions. Due to the nature of the way the wind speed sensor outputs data (pulse count), a high confidence in the accuracy of the higher speed output can be assumed from the passing at lower RPMs.

All instruments and sensors were within their recommended tolerance parameters at the Resolution Copper West Plant monitoring site.

Appendix A: Audit Forms

METEOROLOGICAL AUDIT DATA

AIR SCIENCES INC.

DENVER • PORTLAND

Client : Resolution Copper Company
Job No. : 262-5
Site : West Plant
Date : 1/14/2013
Time: 0800-1045 & 1300-1330 hours
Auditors: R. Attridge

Data Logger
Model : CR3000
Serial No : 6590

WIND SPEED, 10m

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			0.7
CW	3000.0	15.36			1.0
CW	4000.0	20.48			1.2
CW	5000.0	25.60			1.5
CCW	0.0	0.00	0.00	0.00	0.0
CCW	200.0	1.02	1.02	0.00	0.3
CCW	400.0	2.05	2.05	0.00	0.3
CCW	600.0	3.07	3.07	0.00	0.4
CCW	800.0	4.10	4.10	0.00	0.4
CCW	1000.0	5.12	5.12	0.00	0.5
CCW	2000.0	10.24			0.7
CCW	3000.0	15.36			1.0
CCW	4000.0	20.48			1.2
CCW	5000.0	25.60			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

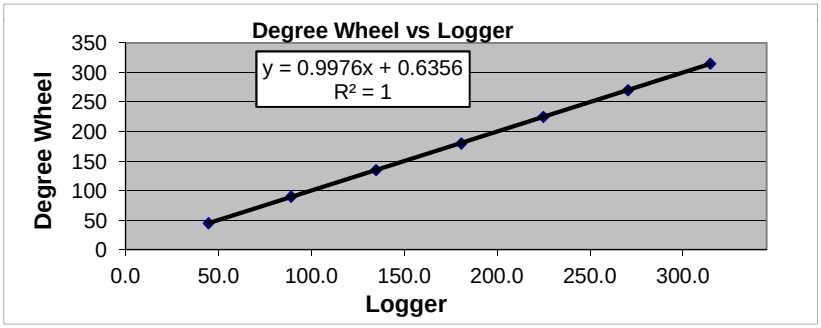
WIND DIRECTION, 10m

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	340.6	0.6	±5
Tail	160.0	160.0	158.1	-1.9	±5

CW	Initial Logger (Degrees)	Difference (Degrees)	Corrected Logger (Degrees)	Difference (Degrees)	Acceptance Criteria [2]
45	44.5	-0.5	44.7	-0.3	±3
90	89.0	-1.0	89.2	-0.8	±3
135	134.7	-0.3	134.9	-0.1	±3
180	180.6	0.6	180.8	0.8	±3
225	224.8	-0.2	225.0	0.0	±3
270	270.3	0.3	270.5	0.5	±3
315	314.6	-0.4	314.8	-0.2	±3
	Avg	-0.2			
CCW					
45	43.7	-1.3	0.0	-1.1	±3
90	88.5	-1.5	88.7	-1.3	±3
135	135.7	0.7	135.9	0.9	±3
180	181.0	1.0	181.2	1.2	±3
225	223.8	-1.2	224.0	-1.0	±3
270	271.8	1.8	272.0	2.0	±3
315	313.8	-1.2	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: HMP45-C Std Serial No: F4910006

System Linearity Check

	Measured (ºC)	Logger Reading (ºC)	Difference (ºC)	Acceptance Criteria
1.	7.3	7.7	-0.4	±0.5
2.	7.3	7.6	-0.3	±0.5
3.	7.1	7.4	-0.3	±0.5
4.	7.1	7.2	0.0	±0.5
5.	6.9	7.0	-0.1	±0.5
6.	6.8	6.9	-0.1	±0.5
7.	6.8	6.8	0.0	±0.5
8.	6.7	6.7	0.0	±0.5
9.	6.7	6.6	0.1	±0.5
10.	6.7	6.6	0.1	±0.5

Relative Humidity, 2m

Model: HC2S3 Serial No: 60749962
Std Model: HMP45-C Std Serial No: F4910006

	Measured (%)	Logger Reading (%)	Difference (%)	Acceptance Criteria (%)
1.	42.5	43.1	-0.6	±7
2.	40.3	42.6	-2.3	±7
3.	40.5	42.1	-1.7	±7
4.	40.3	41.9	-1.6	±7
5.	39.9	41.7	-1.8	±7
6.	39.1	41.4	-2.3	±7
7.	39.0	41.1	-2.1	±7
8.	38.7	41.0	-2.3	±7
9.	38.62	40.75	-2.1	±7
10.	38.32	40.59	-2.3	±7

Delta Temperature, 2m, 10m

Model: 41342 Serial No (2m): 020205

Serial No (10m): 020211

Std Model: 41342 Std Serial No: 6481

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	71.03	71.02	71.00	0.01	0.03	0.02
Bath 2	8.70	8.50	8.60	0.20	0.10	0.10
Bath 3	27.04	27.00	27.06	0.04	0.02	0.06

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)	Reading (mmHg)	Difference (mmHg)	Criteria (mmHg)
1.	685.9	683.7	2.2	±2.3
2.	685.9	683.7	2.2	±2.3
3.	685.9	683.7	2.2	±2.3
4.	685.9	683.7	2.2	±2.3

SOLAR RADIATION, 2m

Model: CMP3 Serial No: 115433

Std Model: LiCor Std Serial No: PY545582

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.	465.0	455.0	10.0	-2.2	± 25 W/m^2 or 5%
2.	466.0	457.0	9.0	-2.0	± 25 W/m^2 or 5%
3.	466.0	457.0	9.0	-2.0	± 25 W/m^2 or 5%
4.	458.0	457.0	1.0	-0.2	± 25 W/m^2 or 5%
5.	458.0	457.0	1.0	-0.2	± 25 W/m^2 or 5%
6.	458.0	458.0	0.0	0.0	± 25 W/m^2 or 5%
7.	460.0	458.0	2.0	-0.4	± 25 W/m^2 or 5%
8.	460.0	459.0	1.0	-0.2	± 25 W/m^2 or 5%
9.	458	459.0	-1.0	0.2	± 25 W/m^2 or 5%
10.	457	460.0	-3.0	0.7	± 25 W/m^2 or 5%
		Avg	2.9		

PRECIPITATION, GROUND LEVEL

Model: 52202 Serial No: 8730

System Linearity Check

	Water (cc)	Calculated Target* (inches)	Logger Reading (inches)	Difference (inches)
1.	2.20	0.004	0.004	0.000
2.	2.20	0.004	0.004	0.000
3.	2.20	0.004	0.004	0.000
4.	2.20	0.004	0.004	0.000
5.	2.20	0.004	0.004	0.000
6.	2.20	0.004	0.004	0.000
7.	2.00	0.004	0.004	0.000
8.	2.20	0.004	0.004	0.000
9.	2.00	0.004	0.004	0.000
10.	2.20	0.004	0.004	0.000
Total	21.60	0.043	0.040	0.003

Reading taken from final storage for period averaged data = 0.04 inches

***Target (RM Young gauge) = water (cc)/2.01 * 0.004 (inches)**

COMMENTS

Auditing of the RMY 05305 wind monitor was not complete due to an unresponsive STD motor in freezing conditions.

Signature: _____

West Plant BAM-1020 PM_{10} Audit Sheet

Model:	**BAM-1020**	**Serial Number:**	M8712
Audit Date:	1/14/2013	**Audited By:**	R. Attridge
Audit Time:	1100-1300 hrs		

Firmware: 3236-06 V3.6.3

Flow Audits						
Flow Reference Standard Used:	Model:	Delta Cal	Serial No:	1103	Calibration Date:	4/9/2012
Temperature Standard Used:	Model:	Delta Cal	Serial No:	1103	Calibration Date:	4/9/2012
Barometric Pressure Standard Used:	Model:	Delta Cal	Serial No:	1103	Calibration Date:	4/9/2012

Leak Check Value:	as found:	0.3 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:	1.9	2.7	as left:	3.1	3.0	Adjusted	X
Barometric Pressure (mmHg):	as found:	681	685.5	as left:	685	685	Adjusted	X
Flow Rate (15.0 LPM):	as found:	15.1	15.08	as left:	15.1	15.16	Adjusted	X
Flow Rate (18.4 LPM):	as found:	18.4	18.52	as left:	18.4	18.63	Adjusted	X
Flow Rate (16.7 LPM):	as found:	16.7	16.77	as left:	16.7	16.85	Adjusted	X

Audit Notes: **Monitor found in a very clean and serviceable condition; cleaned reference membrane and performed count test for 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	X	As left	X	PM10 drip jar empty:	As found		As left	X	N/A		
Tape support vane clean:	As found	X	As left	X	PM10 bug screen clear:	As found	X	As left	X	N/A		
Capstan shaft clean:	As found	X	As left	X	PM2.5 particle trap clean:	As found		As left		N/A	X	
Rubber pinch rollers clean:	As found	X	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 $PM_{2.5}$ Audit Sheet

Model:	**BAM-1020**	**Serial Number:**	M3193
Audit Date:	1/14/2013	**Audited By:**	R. Attridge
Audit Time:	1400 hr.		

Firmware: 3236-06 V3.6.3

Flow Audits						
Flow Reference Standard Used:	Model:	Delta Cal	Serial No:	1103	Calibration Date:	4/9/2012
Temperature Standard Used:	Model:	Delta Cal	Serial No:	1103	Calibration Date:	4/9/2012
Barometric Pressure Standard Used:	Model:	Delta Cal	Serial No:	1103	Calibration Date:	4/9/2012

Leak Check Value: as found: 0.4 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:	5.0	5.1	as left:	5.2	5.4	Adjusted	
Barometric Pressure (mmHg):	as found:	685	684.5	as left:	685	684.5	Adjusted	
Flow Rate (15.0 LPM):	as found:	15.0	15.31	as left:	15.0	15.21	Adjusted	X
Flow Rate (18.4 LPM):	as found:	18.4	18.54	as left:	18.4	18.40	Adjusted	X
Flow Rate (16.7 LPM):	as found:	16.7	16.91	as left:	16.7	16.84	Adjusted	X

Audit Notes: **Instrument found in a clean and serviceable condition; Cleaned reference membrane.**

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	X	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		
on	As found	X	As left	X	Inlet tube perpendicular to BAM:	As found	X	As left	x		

Signature: Roy Attridge

Appendix L: CD