### Quarterly Ambient Air Quality Monitoring Report for the Durham York Energy Centre – October to December 2014

Durham York Energy Centre



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Project No.: 160950528

January 28, 2015

### Sign-off Sheet

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### **Executive Summary**

The Regional Municipalities of Durham and York are constructing the Durham York Energy Centre (DYEC) which is an Energy from Waste (EFW) Facility intended to provide a long-term, sustainable solution to manage municipal solid waste remaining after diversion from the Regions.

The Ambient Air Quality Monitoring Plan - Durham York Residual Waste Study (Stantec, May 8, 2012), was developed based on the Regional Council's mandate to provide ambient air quality monitoring in the area of the DYEC for a three year period. An ambient air quality monitoring and reporting program was also a requirement laid out in the Provincial Minister's Notice of Approval to Proceed with the Undertaking, detailed in Condition 11 of the Notice of Approval (MOECC, 2010). The air monitoring plan was also developed to satisfy the conditions of the Environmental Compliance Approval and the environmental mitigation and commitments set out in the Environmental Assessment (Jacques Whitford, 2009). The predominantly downwind station is located along Rundle Road, south of Baseline Road. The predominantly upwind station is sited at the Courtice Water Pollution Control Plant (WPCP). Since May 2013, the two stations have measured the following air contaminants:

- Sulphur Dioxide (SO<sub>2</sub>);
- Nitrogen Oxides (NOx);
- Particulate Matter smaller than 2.5 microns (PM<sub>2.5</sub>);
- Metals in total suspended particulate matter (TSP);
- Polycyclic Aromatic Hydrocarbons (PAHs); and,
- Dioxins and Furans.

Operation of the non-continuous monitors was temporarily discontinued on June 28, 2014 as per Section 1.2 of the Ambient Monitoring Plan (Stantec, 2012), which calls for collection of continuous parameters only during commissioning of the Facility. When the EFW facility is fully operational, monitoring of non-continuous monitors will resume (as specified in the Ambient Monitoring Plan).

Meteorological data is also measured at the two stations. The predominantly downwind Rundle Road station measures horizontal wind speed, wind direction, atmospheric temperature, relative humidity and rainfall. The predominantly upwind Courtice WPCP Station measures atmospheric temperature, relative humidity, rainfall and barometric pressure. Wind speed and wind direction data at the predominantly upwind location are measured and provided by the Courtice Water Pollution Control Plant.

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This quarterly report provides a summary of the ambient air quality data collected at these two stations for the period October to December 2014 (Calendar Quarter 4). During this quarter, a few instrumentation issues were encountered with above acceptable data recovery rates for all measured air quality parameters. Additional details on instrumentation issues are presented in **Section 3.2** of this report.

The following observations and conclusions were made from a review of the measured ambient air quality monitoring data:

- Measured levels of NO<sub>2</sub>, SO<sub>2</sub> and PM<sub>2.5</sub> were below the applicable O. Reg. 419/05 criteria or human health risk assessment (HHRA) health-based standards presented in **Table 2-2** of this report;
- 2. Since the Canada Wide Standard (CWS) for PM<sub>2.5</sub> is based on a 98th percentile level over 3 years, whereas the PM<sub>2.5</sub> measurement period at both stations for this quarterly report was three months, there is insufficient data collected to determine with any certainty if exceedances of the CWS would occur. Therefore no comparison of the measured PM<sub>2.5</sub> data during this quarter to the CWS was conducted for this report, as it would not be scientifically accurate or representative;
- 3. In summary, all monitored contaminants were below their applicable MOECC criteria for the monitoring data presented in this report. All measured levels of all monitored contaminants were below their applicable HHRA health-based standards.



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### **Abbreviations**

AAQC Ambient Air Quality Criteria

CAC Criteria Air Contaminants

D/Fs Dioxins and Furans

DYEC Durham York Energy Centre

EFW Energy from Waste

MOECC Ontario Ministry of the Environment and Climate Change

SO<sub>2</sub> Sulphur Dioxide
NO<sub>x</sub> Nitrogen Oxides

PAH Polycyclic aromatic hydrocarbons

Particulate A particle of a solid or liquid that is suspended in air.

PCB Polychlorinated biphenyl

PCDD/PCDF Polychlorinated dibenzo-p-dioxins and dibenzofurans

PM Particulate Matter

PM<sub>2.5</sub> Particulate Matter smaller than 2.5 microns

TEQ Toxic equivalent quotient

TEQs Toxic Equivalents

TSP Total Suspended Particulate
WPCP Water Pollution Control Plant

#### **Elements**

Cd Cadmium Hg Mercury Pb Lead Αl Aluminum Arsenic As Ве Beryllium Cr Chromium Cu Copper Mn Manganese

Ni Nickel
Ag Silver
TI Thallium
Sn Tin



V Vanadium

Zn Zinc

#### Miscellaneous

max

°C temperature in degrees Celsius

N/A not available

% percent

ppm part per million
ppb part per billion
ppt part per trillion
min minimum

µg/m³ microgram per cubic metre

maximum



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### 1.0 Introduction

#### 1.1 BACKGROUND AND OBJECTIVES

The Regional Municipalities of Durham and York are constructing the Durham York Energy Centre (DYEC) which is an Energy from Waste (EFW) Facility intended to provide a long-term, sustainable solution to manage municipal solid waste remaining after diversion from the Regions. The site location of the DYEC is shown in **Figure 1-1**.

A monitoring plan, Ambient Air Quality Monitoring Plan - Durham York Residual Waste Study (Stantec, May 8, 2012), was developed based on the Regional Council's mandate to provide ambient air quality monitoring in the area of the DYEC for a three year period.

The purposes of the ambient air quality monitoring program are to:

- Quantify any measureable ground level concentrations resulting from emissions from the DYEC cumulative to local air quality, including validating the predicted concentrations from the dispersion modelling conducted in the Environmental Assessment (Jacques Whitford, 2009);
- 2. Monitor concentration levels of EFW-related air contaminants in nearby residential areas; and.
- 3. Quantify background ambient levels of air contaminants in the area.

Two monitoring stations in the vicinity of the DYEC were set up in April 2013. Since May 2013, the two stations have measured the following air contaminants:

- Sulphur Dioxide (SO<sub>2</sub>);
- Nitrogen Oxides (NO<sub>X</sub>);
- Particulate Matter smaller than 2.5 microns (PM<sub>2.5</sub>);
- Metals in Total Suspended Particulate matter (TSP);
- Polycyclic Aromatic Hydrocarbons (PAHs); and,
- Dioxins and Furans.

This quarterly report provides a summary of the ambient air quality data collected at these two stations for the period October to December 2014.



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Operation of the non-continuous monitors was temporarily discontinued on June 28, 2014 as per Section 1.2 of the Ambient Monitoring Plan (Stantec, 2012), which calls for collection of continuous parameters only during commissioning of the Facility. When the EFW facility is fully operational, monitoring of non-continuous monitors will resume (as specified in the Ambient Monitoring Plan).

#### 1.2 LOCATIONS OF AMBIENT AIR QUALITY MONITORING STATIONS

The selection of sites for the monitoring stations was done in consultation with the Ontario Ministry of Environment and Climate Change (MOECC) and Durham/York representatives based on the results of air quality modelling done in support of the environmental assessment for the project, the locations of nearby sensitive receptors, and general MOECC siting criteria. Two monitoring stations (one predominantly downwind and one predominantly upwind) were chosen for the ambient air quality program. The final locations of the monitoring stations were influenced by the availability of electrical power, accessibility of each location, and security. Details of the siting requirements are detailed in the Monitoring Plan.

The selected downwind location is sited northeast of the DYEC in the vicinity of residential receptors predominantly downwind of the DYEC in this direction, and falls in the area where maximum annual concentrations are predicted to occur. The predominantly downwind Rundle Road Station, is located along Rundle Road, south of Baseline Road. Its location is shown in **Figure 1-2**. The monitoring station measures all the air contaminants listed in **Section 1.1** and meteorological data. This station is referred to as the Rundle Road Station.

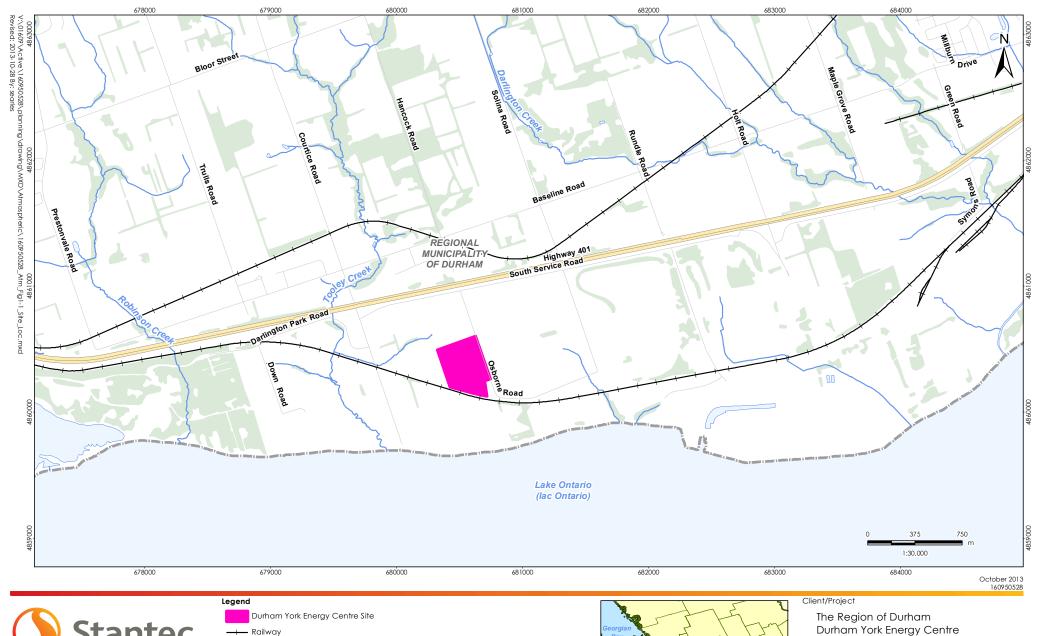
The predominately upwind Courtice WPCP Station, is sited at the Courtice Water Pollution Control Plant (WPCP), located to the southwest of the DYEC in order to measure background air quality in the predominantly upwind direction. The location is presented in **Figure 1-2**. This monitoring station measures the air contaminants presented in **Section 1.1**, as well as meteorological data, with the exception of wind speed and wind direction, which are measured and provided by the Courtice Water Pollution Control Plant.

A third Fence Line Station, which will measure non-continuous parameters (metals and total particulate matter) will be installed prior to full operation of the DYEC. As per Section 1.2 of the Ambient Monitoring Plan (Stantec, 2012), which requires collection of continuous parameters only during commissioning of the Facility, the non-continuous monitoring at the Fence Line Station will begin after the Facility's commissioning period is complete, and will run for a one-year period.

Photographs of the Rundle Road and Courtice WPCP ambient air quality monitoring stations are shown in **Figure 1-3** and **Figure 1-4**, respectively.

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#### Notes 1. Coordinate System: NAD 1983 UTM Zone 17N

2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2013.

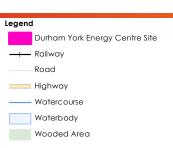




Figure No. 1-1

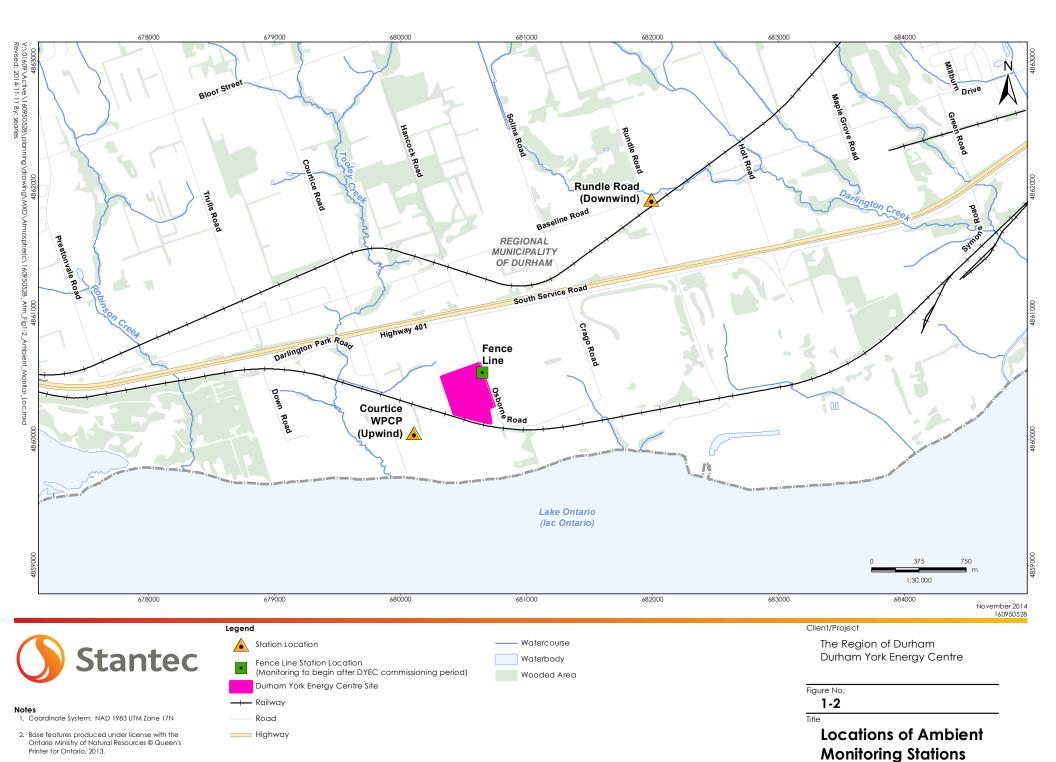
**Site Location Plan** 

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Figure 1-3 View of Rundle Road Ambient Air Quality Monitoring Station



Figure 1-4 View of Courtice WPCP Ambient Air Quality Monitoring Station





Key Components Assessed January 28, 2015

### 2.0 Key Components Assessed

#### 2.1 METEOROLOGY

The following meteorological parameters are measured at the Rundle Road and Courtice WPCP monitoring stations.

Table 2-1 Summary of Meteorological Parameters Measured at Each Station

Courtice WPCP (Predominately Upwind) Ambient Air Quality Monitoring Station	Rundle Road (Predominately Downwind) Ambient Air Quality Monitoring Station
Wind Speed and Direction @ 20-m	Wind Speed and Direction @10-m
Ambient Temperature @ 2-m	Ambient Temperature @ 2-m
Relative Humidity	Relative Humidity
Rainfall	Rainfall
Barometric Pressure	

#### 2.2 AIR QUALITY CONTAMINANTS OF CONCERN

The ambient air quality monitoring program for the DYEC includes the following contaminants specified in the Ambient Air Quality Monitoring Plan:

- Nitrogen Oxides (NO<sub>x</sub>);
- Sulphur Dioxide (SO<sub>2</sub>);
- Particulate Matter smaller than 2.5 microns (PM<sub>2.5</sub>);
- Total Suspended Particulate (TSP) matter and metals;
- Polycyclic Aromatic Hydrocarbons (PAHs); and,
- Dioxins and Furans (D/Fs).

Operation of the non-continuous monitors was temporarily discontinued on June 28, 2014 as per Section 1.2 of the Ambient Monitoring Plan (Stantec, 2012), which calls for collection of continuous parameters only during commissioning of the Facility. When the EFW facility is fully operational, monitoring of non-continuous monitors will resume (as specified in the Ambient Monitoring Plan). Therefore, the following contaminants were not measured this quarter:

- Total Suspended Particulate (TSP) matter and metals,
- Polycyclic Aromatic Hydrocarbons (PAHs), and
- Dioxins and Furans (D/Fs).



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Key Components Assessed January 28, 2015

#### 2.3 AIR QUALITY CRITERIA

Two sets of standards were used for comparison to the air quality data as specified in the Ambient Air Monitoring Plan. The first set of standards is the limits reported in O.Reg.419/05 (Schedules 3 and 6). These are compliance based standards used throughout the province of Ontario. However, not all chemicals have O.Reg.419/05 criteria, or in some instances updated health-based standards were used in the human health risk assessment (HHRA) conducted in support of the Environmental Assessment (July 31, 2009) - December 10, 2009). These health-based values, which were reported in Table 7-2 (Summary of Inhalation TRVs and Inhalation Benchmarks Selected for CACs) and Table 7-3 (Inhalation TRVs and Inhalation Benchmarks for Selected COPCs) of the HHRA (Stantec, 2009) were used as the second set of standards.

The currently applicable Canada-Wide Standard (CWS) for  $PM_{2.5}$  of 30  $\mu g/m^3$  (98th percentile averaged over 3 consecutive years), is noted in **Table 2-2**. New Canadian Ambient Air Quality Standards (CAAQS) are being proposed as objectives to replace the existing CWS. The proposed CAAQS for  $PM_{2.5}$  would be 28  $\mu g/m^3$  by 2015 and 27  $\mu g/m^3$  by 2020.

A summary of the relevant air quality criteria for the contaminants monitored in Q4 2014 is presented in **Table 2-2**.

Table 2-2 Summary of Air Quality Criteria for CACs

		O. Reg 419/	05 – Schedu	ıle 3/AAQC	HHRA He	alth-Based S	tandards
Contaminant	CAS	1-Hour (µg/m³)	24-Hour (µg/m³)	Other time Period (µg/m³)	1-Hour (µg/m³)	24-Hoυr (μg/m³)	Annual (µg/m³)
Sulphur dioxide	7446095	690	275		690	275	29
Nitrogen oxides A	10102-44-0	400	200		400	200	60

		Canada-Wide Standard			HHRA Health-Based Standards		
Contaminant	CAS	1-Hour (µg/m³)	24-Hour (µg/m³)	Other time Period (µg/m³)	1-Hour (µg/m³)	24-Hour (µg/m³)	Other time Period (µg/m³)
PM <sub>2.5</sub>	N/A		30 B			30 C	

#### Notes:

- A. The Schedule 3 standards for NO<sub>x</sub> are based on health effects of NO<sub>2</sub>, as NO<sub>2</sub> has adverse health effects at much lower concentrations than NO. Therefore the standard was compared to NO<sub>2</sub> in this report. However, as per the current April 2012 version of O. Reg. 419 Summary of Standards and Guidelines, the standard was also compared to the monitored NO<sub>x</sub>.
- B. CCME (2000), Canada-Wide Standards for Respirable Particulate Matter and Ozone, effective by 2010. The Respirable Particulate Matter Objective is referenced to the 98th percentile over 3 consecutive years.
- C. HHRA Health-Based Standard for PM2.5 was selected referencing CCME (2006).

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Instrumentation Summary January 28, 2015

### 3.0 Instrumentation Summary

#### 3.1 INSTRUMENTATION

The measurement program at the monitoring sites includes both continuous and non-continuous monitors to sample air contaminant concentrations. The monitors were set up in April 2013, and monitoring started in May 2013.

Monitoring for respirable particulate matter ( $PM_{2.5}$ ), nitrogen oxides ( $NO_X$ ) and sulphur dioxide ( $SO_2$ ) are conducted on a continuous basis. A summary of the continuous monitors and a brief description of their principle of operation are provided in **Table 3-1** below.

Table 3-1 Summary of Continuous Ambient Air Quality Monitors

Contaminant	Monitor	Principle of Operation	Range	Time Interval
PM <sub>2.5</sub>	Thermo Sharp 5030 Synchronized Hybrid Ambient Real-time Particulate Monitor	Light Scattering Photometry / Beta Attenuation - Consists of a carbon 14 source, detector and light scattering Nephelometer in a rack-mountable enclosure. The Thermo Sharp utilizes a continuous (non-step wise) hybrid mass measurement and a combination of beta attenuation and light scattering technology. The unit's filter tape is automatically advanced based upon a user defined frequency or particulate loading.	0-10 mg/m <sup>3</sup>	1 minute
NO, NO2, NOx	API Model 200E Chemiluminescence Analyzer	Chemiluminescence - Uses a chemiluminescence detection principle and microprocessor technology for ambient continuous emissions monitoring (CEM).  Measurements are automatically compensated for temperature and pressure changes.	0 – 1000 ppb	1 second
SO <sub>2</sub>	Teledyne Monitor Labs Sulphur Dioxide Analyzer Model T100	Pulsed Florescence - SO <sub>2</sub> levels are measured based on the principle that SO <sub>2</sub> has a strong ultraviolet (UV) absorption at a wavelength between 200 and 240 nanometres (nm). The absorption of photons at these wavelengths results in the emission of fluorescence photons at a higher wavelength. The amount of fluorescence measured is directly proportional to the concentration of SO <sub>2</sub> .	0 – 1000 ppb	1 second



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Instrumentation Summary January 28, 2015

The predominantly downwind Rundle Road Station measures horizontal wind speed, wind direction, atmospheric temperature, relative humidity and rainfall. The predominantly upwind Courtice WPCP Station measures atmospheric temperature, relative humidity, rainfall and barometric pressure. Wind speed and wind direction data at the predominantly upwind location are measured and provided by the Courtice Water Pollution Control Plant. The meteorological sensors at the Rundle Road Station are mounted on an external 10-m aluminum tower and are logged using a digital data acquisition system (DAS). The meteorological equipment includes the following:

Table 3-2 Summary of Meteorological Equipment

Parameter	Equipment
Wind Speed/Wind Direction	Met One Instruments Inc. Model 034B
Temperature	Campbell Scientific Model HMP60
Relative Humidity	Campbell Scientific Model HMP60
Atmospheric Pressure	Campbell Scientific Model CS106
Rainfall	Texas Electronic TE525M

A Campbell Scientific CRX1000 station data acquisition system is used to collect continuous instrument monitoring data and status codes from the ambient air quality monitors. Continuous station data is maintained in the data loggers, and data is viewed locally using a laptop and the relevant DAS software applications. Remote data transmission is accomplished by the periodic transmission of collected station air quality data via cellular phone.

#### 3.2 INSTRUMENTATION ISSUES

A few minor instrumentation issues were encountered during this quarter. A summary of operational issues for each measurement parameter during the monitoring period is presented in **Table 3-3** and **Table 3-4**.

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Instrumentation Summary January 28, 2015

Table 3-3 Summary of Instrument Issues at Courtice WPCP Station (Predominately Upwind)

Parameter	Issues	Time Frame	Remedial Action
SO <sub>2</sub>	UV Lamp warning message.	November 7- 25, 2014	UV lamp adjusted. No data adjustments required as lamp did not require re-calibration.
	Auto-calibrations were higher than normal	November 3 - 21, 2014	Issue related to UV lamp adjustment noted above.
NOx	RCELL/Sample flow/Ozone flow warning messages	November 7, 2014	Error messages were diagnosed as due to a momentary power outage to unit. All data was intact. Cleared message. No data adjustments required.
	Auto-calibrations were lower than normal	November 15 - 21, 2014	Issue was caused by damage to the pump line causing low flow. The pump line was replaced. No data adjustments required.
PM <sub>2.5</sub>	None		
Data logger	Unable to connect remotely for data download.	November 10 - 12, 2014	Data logger reset.

Table 3-4 Summary of Instrument Issues at Rundle Road Station (Predominately Downwind)

Parameter	Issues	Time Frame	Remedial Action
SO <sub>2</sub>	UV Lamp Warning message.	November 12 - 21, 2014	UV lamp adjusted. No data adjustments required as lamp did not require re-calibration.
	Auto-calibrations were lower than usual	November 6 - 21, 2014	Issue related to UV lamp adjustment noted above.
	UV Lamp Warning message	December 11, 2014	UV lamp adjusted. No data adjustments required as lamp did not require re-calibration.
	System automatically reset due to power loss.	December 23, 2014	No action required.
NOx	System automatically reset due to power loss.	December 23, 2014	No action required.
PM <sub>2.5</sub>	None		
Data Logger	Unable to connect remotely for data download.	November 6, 2014	Data logger reset on the same day.



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Instrumentation Summary January 28, 2015

At the Rundle Road Station, occasional periods of zero SO<sub>2</sub> concentrations occurred during the period from December 3 to December 23 which were due to low ambient concentrations coupled with minor instrument drift. Since the monthly external calibrations on the instruments were well within the acceptable MOECC guidelines for instrumentation drift, and ambient levels were very low during these periods, no drift correction to the measurements was required.

#### 3.3 INSTRUMENTATION RECOVERY RATES

Data recovery rates for each continuous monitor at the two monitoring stations during Quarter 4 (October to December 2014) are presented in **Table 3-5** and **Table 3-6**.

Table 3-5 Summary of Data Recovery Rates for the Courtice WPCP Station (Predominately Upwind) – October to December 2014

Parameter	Valid Measurement Hours	Data Recovery Rate (%)
SO <sub>2</sub>	2195	99.4%
NO <sub>X</sub>	2194	99.4%
PM <sub>2.5</sub>	2195	99.4%
Temperature	2208	100.0%
Rainfall	2208	100.0%
Relative Humidity	2208	100.0%
Pressure	2208	100.0%
Wind Speed/Direction	2208	100.0%
TSP/Metals	N/A <sup>A</sup>	N/A <sup>A</sup>
PAHs	N/A <sup>A</sup>	N/A <sup>A</sup>
Dioxins and Furans	N/A ^	N/A A

#### Note:

Table 3-6 Summary of Data Recovery Rates for the Rundle Road Station (Predominately Downwind) – October to December 2014

Parameter	Valid Measurement Hours	Data Recovery Rate (%)
SO <sub>2</sub>	2196	99.5%
NOx	2197	99.5%
PM <sub>2.5</sub>	2197	99.5%
Temperature	2208	100.0%
Rainfall	2208	100.0%
Relative Humidity	2208	100.0%



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A. Monitoring of these parameters was temporarily discontinued after June 28, 2014. Monitoring will resume when the Facility is fully operational.

Instrumentation Summary January 28, 2015

Table 3-6 Summary of Data Recovery Rates for the Rundle Road Station (Predominately Downwind) – October to December 2014

Parameter	Valid Measurement Hours	Data Recovery Rate (%)
Wind Speed/Direction	2208	100.0%
TSP/Metals	N/A <sup>A</sup>	N/A <sup>A</sup>
PAHs	N/A A	N/A <sup>A</sup>
Dioxins and Furans	N/A <sup>A</sup>	N/A A

#### Note:



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A. Monitoring of these parameters was temporarily discontinued after June 28, 2014. Monitoring will resume when the EFW Facility is fully operational.

Summary of Ambient Measurements January 28, 2015

### 4.0 Summary of Ambient Measurements

The following sections provide summaries of the validated data and the validation done on each parameter.

#### 4.1 METEOROLOGICAL DATA

A summary of the maximum, minimum, arithmetic mean, and standard deviation of the hourly average meteorological parameters measured at the two monitoring stations for the October to December 2014 period are presented in **Table 4-1**.

Table 4-1 Summary of Hourly Meteorological Measurements – October to December 2014

Parameter		Courtice WPCP Station (Predominately Upwind)	Rundle Road Station (Predominately Downwind)	Units
Temperature	Max	22.2	20.7	С
	Min	-9.6	-10.8	С
	Mean (October)	10.5	10.2	С
	Mean (November)	2.4	2.0	С
	Mean (December)	-0.1	-0.5	С
	Mean (Period)	4.3	3.9	С
	Standard Deviation	6.2	6.4	С
Rainfall	Max	5.4	5.7	mm
	Min	0.0	0.0	mm
	Mean (October)	0.10	0.10	mm
	Mean (November)	0.06	0.05	mm
	Mean (December)	0.03	0.03	mm
	Mean (Period)	0.06	0.06	mm
	Standard Deviation	0.32	0.32	mm
Relative Humidity	Max	96.4	100.0	%
	Min	34.3	36.3	%
	Mean (October)	77.5	81.8	%
	Mean (November)	70.7	75.1	%
	Mean (December)	74.4	79.1	%
	Mean (Period)	74.2	78.7	%
	Standard Deviation	13.0	13.9	%



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Summary of Ambient Measurements January 28, 2015

Table 4-1 Summary of Hourly Meteorological Measurements – October to December 2014

Parameter		Courtice WPCP Station (Predominately Upwind)	Rundle Road Station (Predominately Downwind)	Units
Pressure <sup>A</sup>	Max	30.5	-	in Hg
	Min	28.9	-	in Hg
	Mean (October)	29.6	-	in Hg
	Mean (November)	29.7	-	in Hg
	Mean (December)	29.8	-	in Hg
	Mean (Period)	29.7	-	in Hg
	Standard Deviation	0.2	-	in Hg
Wind Speed B	Max	57.3	45.2	km/hr
	Min	0.5	0.0	km/hr
	Mean (October)	11.9	10.4	km/hr
	Mean (November)	14.3	14.7	km/hr
	Mean (December)	13.9	12.1	km/hr
	Mean (Period)	13.4	12.4	km/hr
	Standard Deviation	7.1	7.5	km/hr

#### Notes:

At the Courtice WPCP Station (located near Lake Ontario), wind data were measured and provided by the Courtice Water Pollution Control Plant on a 20-m tower, while at the Rundle Road Station they are measured on a 10-m tower.

Wind roses showing the directionality and speed at each location are presented in **Figure 4-1**. The length of the radial barbs gives the total percent frequency of winds from the indicated direction, while portions of the barbs of different widths indicate the frequency associated with each wind speed category.

Winds over the three-month period at the Courtice WPCP Station occurred predominantly from east-northeast and southwesterly to westerly directions. Wind contribution from the south was low. Higher wind speeds occurred from southwesterly directions, and lower wind speeds from the southwest to northwesterly directions.

At the Rundle Road Station, the wind rose over the three-month period showed predominant winds occurring from west-northwesterly and west-southwesterly directions. Higher wind speeds



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A. Pressure is not measured at the Rundle Road Station.

B. Wind speed at Courtice WPCP Station measured at 20-m and at Rundle Road Station at 10-m.

Summary of Ambient Measurements January 28, 2015

are noted occurring from the west to west-southwesterly directions, with lower wind speeds from northerly to northeasterly directions.

**Rundle Road Station (Predominately Downwind)** Courtice WPCP Station (Predominately Upwind) at 20-m Above Ground at 10-m Above Ground 15% FAST FAST WINDSPEED WIND SPEED (m/s)**≥=** 11.10 8.80 - 11.10 5.70 - 8.80 5.70 - 8.80 **ээл**-SOUTH 3.60 - 5.70 210-360 2.10 - 3.60 0.50 - 2.10 0.50 - 2.10 Calms: 0.59% Calms: 3.17%

Figure 4-1 Wind Roses for October to December 2014

#### 4.2 CAC AMBIENT AIR QUALITY MEASUREMENTS

A summary of the maximum, minimum, arithmetic mean and standard deviation of the CAC pollutant concentrations measured at each station are presented in **Table 4-2**. Also presented in this table are the number of exceedances of the relevant Ontario ambient air quality criteria (AAQC) or health-based standard for each contaminant (if any occurred). All monitored contaminants were below their applicable criteria during the period between October to December, 2014.

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Summary of Ambient Measurements January 28, 2015

Nitric oxide (NO) has no regulatory criteria as discussed in **Section 4.2.2** below. There are both hourly and daily AAQCs as well as Reg. 419 Schedule 3 criteria for NO<sub>X</sub> which are based on health effects of NO<sub>2</sub>. As specified in the MOECC's listing of AAQCs (MOECC, 2012a) the AAQC were compared to measured NO<sub>2</sub> concentrations in this report. However, as per the current April 2012 version of O. Reg. 419 Summary of Standards and Guidelines, the Schedule 3 criterion for NO<sub>X</sub> (MOECC, 2012b) was compared to the monitored NO<sub>X</sub> levels.

A comparison of the maximum measured data to their respective air quality criteria is presented graphically in **Figure 4-2**.

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Summary of Ambient Measurements January 28, 2015

Table 4-2 Summary of Ambient CAC Monitoring Data – October to December 2014

Pollutant	Averaging	AAQC / Schedule 3 / HHRA Health-Based Standards			Courtice WPCP Station (Predominately Upwind)		Rundle Road Station (Predominately Downwind)	
Pollutant	Period	ppb	μg/m³		Concentration (ppbv)	Concentration (µg/m³)	Concentration (ppbv)	Concentration (µg/m³)
				Maximum	16.6	45.2	9.7	26.5
				Minimum	0.0	0.0	0.0	0.0
				Mean (October)	1.1	3.1	1.2	3.2
	1	050	400	Mean (November)	2.9	8.1	0.9	2.5
		250	690	Mean (December)	0.6	1.6	0.3	0.8
				Mean (Period)	1.5	4.2	0.8	2.1
				Standard Deviation	1.9	5.3	0.6	1.5
0.0				# of Exceedances	0	0	0	0
SO <sub>2</sub>			275	Maximum	5.5	15.0	2.1	6.2
				Minimum	0.0	0.0	0.0	0.0
				Mean (October)	1.1	3.1	1.2	3.2
	0.4	100		Mean (November)	2.9	8.2	0.9	2.5
24	24	100		Mean (December)	0.6	1.6	0.3	0.8
				Mean (Period)	1.5	4.3	0.8	2.2
				Standard Deviation	1.4	4.0	0.5	1.3
				# of Exceedances	0	0	0	0



Summary of Ambient Measurements January 28, 2015

Table 4-2 Summary of Ambient CAC Monitoring Data – October to December 2014

Dalladand	Averaging	AAQC / Schedule 3 / HHRA Health-Based Standards			Courtice WPCP Station (Predominately Upwind)		Rundle Road Station (Predominately Downwind)	
Pollutant	Period	ppb	μg/m³		Concentration (ppbv)	Concentration (µg/m³)	Concentration (ppbv)	Concentration (µg/m³)
				Maximum	-	32.2	-	24.5
				Minimum	-	0.2	-	0.2
				Mean (October)	-	7.5	-	7.1
DAA	24	NI/A	30 A	Mean (November)	-	8.0	-	8.9
PM <sub>2.5</sub>	24	N/A	30 ^	Mean (December)	-	7.2	-	7.6
				Mean (Period)	-	7.6	-	7.9
				Standard Deviation	-	5.0	-	4.6
				# of Exceedances	-	N/A	-	N/A
		200 <sup>B</sup>	400 <sup>B</sup>	Maximum	34.4	67.7	49.7	96.7
				Minimum	0.8	1.5	0.0	0.0
				Mean (October)	7.6	15.0	5.2	10.1
	1			Mean (November)	7.6	15.3	8.1	16.4
	I			Mean (December)	8.5	17.5	6.5	13.4
NO				Mean (Period)	7.9	15.9	6.6	13.2
NO <sub>2</sub>				Standard Deviation	5.5	11.1	5.2	10.5
				# of Exceedances	0	0	0	0
				Maximum	17.1	33.5	19.9	38.8
	24	100 B	000 B	Minimum	2.2	4.5	0.0	0.0
	24	100 B	200 B	Mean (October)	7.6	15.0	5.2	10.2
				Mean (November)	7.7	15.5	8.1	16.3

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Summary of Ambient Measurements January 28, 2015

Table 4-2 Summary of Ambient CAC Monitoring Data – October to December 2014

Pollutant	Averaging	AAQC / Schedule 3 / HHRA Health-Based Standards			Courtice WPCP Station (Predominately Upwind)		Rundle Road Station (Predominately Downwind)	
Pollutant	Period	ppb	μg/m³		Concentration (ppbv)	Concentration (µg/m³)	Concentration (ppbv)	Concentration (µg/m³)
				Mean (December)	8.5	17.1	6.5	13.1
				Mean (Period)	7.9	15.9	6.6	13.2
				Standard Deviation	3.3	6.8	3.5	7.1
				# of Exceedances	0	0	0	0
				Maximum	50.1	64.7	35.0	46.2
				Minimum	1.5	2.1	0.0	0.0
		NA	NA	Mean (October)	5.4	7.0	2.6	3.3
	1			Mean (November)	3.5	4.6	2.2	2.9
	'			Mean (December)	3.7	4.9	2.2	2.9
				Mean (Period)	4.2	5.5	2.3	3.1
				Standard Deviation	4.5	5.9	3.0	3.9
NOC				# of Exceedances	N/A	N/A	N/A	N/A
NOs			IA NA	Maximum	14.7	19.2	6.7	9.0
				Minimum	1.8	2.2	0.7	1.0
				Mean (October)	5.4	6.9	2.6	3.3
	24	NIA		Mean (November)	3.5	4.6	2.2	2.9
	24	INA		Mean (December)	3.7	4.9	2.2	2.9
				Mean (Period)	4.2	5.5	2.3	3.1
				Standard Deviation	2.4	3.1	1.2	1.5
				# of Exceedances	N/A	N/A	N/A	N/A



Summary of Ambient Measurements January 28, 2015

Table 4-2 Summary of Ambient CAC Monitoring Data – October to December 2014

Pollutant	Averaging Period	AAQC / Schedule 3 / HHRA Health-Based Standards			Courtice WPCP Station (Predominately Upwind)		Rundle Road Station (Predominately Downwind)	
		ppb	μg/m³		Concentration (ppbv)	Concentration (µg/m³)	Concentration (ppbv)	Concentration (µg/m³)
NOx	1	200 <sup>B</sup>	400 B	Maximum	81.5	161.2	70.0	136.0
				Minimum	1.3	2.5	0.0	0.0
				Mean (October)	11.3	22.4	6.9	13.6
				Mean (November)	9.2	18.7	9.5	19.2
				Mean (December)	10.3	21.0	7.9	16.1
				Mean (Period)	10.3	20.7	8.1	16.3
				Standard Deviation	9.1	18.2	7.1	14.3
				# of Exceedances	0	0	0	0
	24	100 <sup>B</sup>	200 в	Maximum	25.9	51.8	25.4	49.5
				Minimum	3.1	6.3	0.0	0.0
				Mean (October)	11.3	22.3	7.0	13.7
				Mean (November)	9.4	19.0	9.5	19.2
				Mean (December)	10.2	20.6	7.9	15.8
				Mean (Period)	10.3	20.7	8.1	16.2
				Standard Deviation	5.2	10.5	4.3	8.6
				# of Exceedances	0	0	0	0

#### Note:

C. NO has no regulatory criteria.

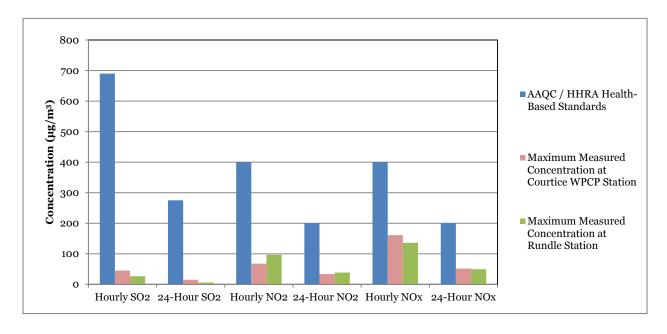
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A. Canada-Wide Standards for Respirable Particulate Matter. The Respirable Particulate Matter Objective is referenced to the 98th percentile over 3 consecutive years.

B. As per current version (April 2012) of Reg 419 Summary of Standards and Guidelines, the air standard for NO<sub>x</sub> is compared to a monitored NO<sub>x</sub> concentration, although the Reg419 Schedule 3 standard for NO<sub>x</sub> is based on health effects of NO<sub>2</sub>.

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Figure 4-2 Comparison of NO<sub>2</sub> / NO<sub>X</sub> and SO<sub>2</sub> Ambient Air Quality Monitoring Data to Applicable Criteria



Detailed discussion for each measured contaminant is presented in the following sections.

#### 4.2.1 Sulphur Dioxide (SO<sub>2</sub>)

Data summaries are presented in **Appendix A** for sulphur dioxide for each station and month as well as time history plots of the hourly and 24-hour average  $SO_2$  concentrations. For the hourly and 24-hour averages, the Ontario AAQCs of 690  $\mu$ g/m³ and 275  $\mu$ g/m³ are shown as blue lines on each plot. As shown in these figures, measured ambient  $SO_2$  concentrations at both stations were well below the criteria.

The maximum hourly and 24-hour average concentrations measured at the Courtice WPCP Station during October to December 2014 were 45.2 and 15 µg/m³ respectively, which are 7% and 5% of the applicable 1-hour and 24-hour ambient air quality criteria.

The maximum hourly and 24-hour average concentrations measured at the Rundle Road Station during this quarter were 26.5 and 6.2  $\mu$ g/m³ respectively, which are 4% and 2% of the applicable 1-hour and 24-hour ambient air quality criteria.

Pollution roses of hourly average  $SO_2$  concentrations measured at the Courtice WPCP Station and Rundle Road Station are presented in **Figure 4-3**. The pollution rose plots present measured hourly average contaminant concentrations versus measured wind direction (over  $10^{\circ}$  wind sectors).

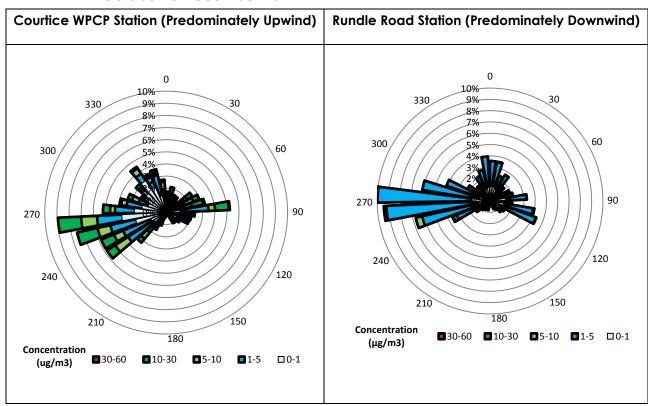
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For the Courtice WPCP Station, higher hourly concentrations were measured when winds were blowing from the east-northeast and north-northwest. For the Rundle Road Station, the maximum measured hourly concentration occurred for westerly to southwesterly winds.

Figure 4-3 Pollution Roses of Measured Hourly Average SO<sub>2</sub> Concentrations – October to December 2014



#### 4.2.2 Nitrogen Dioxide (NO<sub>2</sub>)

Nitrogen oxides (NO<sub>x</sub>) are almost entirely made up of nitric oxide (NO) and nitrogen dioxide (NO<sub>2</sub>). Together, they are often referred to as NO<sub>x</sub>. Most NO<sub>2</sub> in the atmosphere is formed by the oxidation of NO, which is emitted directly by combustion processes, particularly those at high temperature and pressure. Exposure to both NO and NO<sub>2</sub> can result in adverse health effects to an exposed population. NO<sub>2</sub> is the regulated form of NO<sub>x</sub>. Similar to other jurisdictions (e.g., Alberta Environment, World Health Organization), the O. Reg. 419/05 Schedule 3 standards for NO<sub>x</sub> are based on health effects of NO<sub>2</sub>, as health effects are seen at much lower concentrations of NO<sub>2</sub> than NO. In this report, because NO<sub>2</sub> is the regulated form of NO<sub>x</sub>, the AAQC were compared to measured NO<sub>2</sub> concentrations (as per MOECC 2012a). However, as per the current April 2012 version of O. Reg. 419 Summary of Standards and Guidelines, the Schedule 3 NO<sub>x</sub> criteria were also compared to the monitored NO<sub>x</sub> concentrations (see **Section 4.2.3** below).



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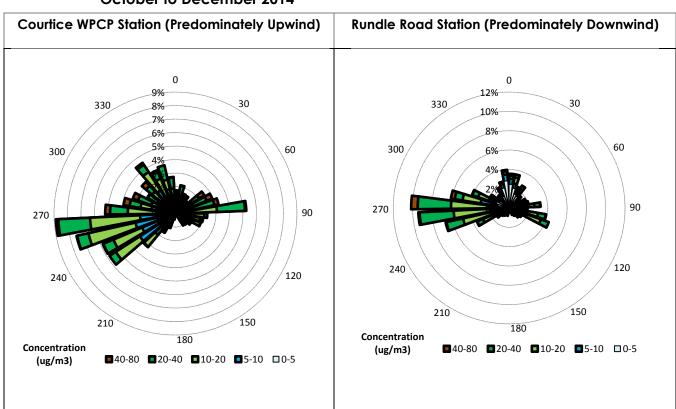
Summary of Ambient Measurements January 28, 2015

Data summaries are presented in **Appendix B** for nitrogen dioxide for each station and month as well as time history plots of the hourly and 24-hour average NO<sub>2</sub> concentrations. For the hourly and 24-hour averages, the Ontario AAQCs of 400  $\mu$ g/m³ and 200  $\mu$ g/m³ are shown as blue lines on each plot. As shown in these figures, measured ambient NO<sub>2</sub> concentrations at both stations were well below the criteria.

The maximum hourly and 24-hour average  $NO_2$  concentrations measured at the Courtice WPCP Station during this quarter were 68 and 34  $\mu$ g/m³ respectively, which are 17% and 17% of the applicable 1-hour and 24-hour ambient air quality criteria. At the Rundle Road Station, the maximum measured hourly and 24-hour average concentrations were 97 and 39  $\mu$ g/m³, which are 24% and 19% of the applicable 1-hour and 24-hour ambient air quality criteria.

Pollution roses of measured hourly average NO<sub>2</sub> concentrations are presented in **Figure 4-4**. The measured hourly average concentrations at the Courtice WPCP Station were higher for winds that occurred for westerly, northwesterly and east-northeasterly directions. For the Rundle Road Station, higher measured hourly average concentrations occurred for winds blowing from the west-northwest and west.

Figure 4-4 Pollution Roses of Measured Hourly Average NO<sub>2</sub> Concentrations – October to December 2014





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Summary of Ambient Measurements January 28, 2015

#### 4.2.3 Nitrogen Oxides (NOx)

Data summaries are presented in **Appendix C** for nitrogen oxides for each station and month as well as time history plots of the hourly and 24-hour average NO $_{\rm X}$  concentrations. For the hourly and 24-hour averages, the Ontario Schedule 3 criteria of 400  $\mu$ g/m³ and 200  $\mu$ g/m³ are shown as blue lines on each plot. As shown in these figures, the maximum measured ambient hourly and 24-hour average NO $_{\rm X}$  concentrations at the Courtice WPCP Station were below the criteria during this quarter. The measured concentrations at the Rundle Road Station were also well below the criteria.

As shown in **Table 4-2**, the maximum hourly NO<sub>x</sub> concentration measured at the Courtice WPCP Station was  $161\mu g/m^3$ , which is 40% of the 1-hour ambient criteria. The 24-hour average NO<sub>x</sub> concentration measured at this station was  $52 \mu g/m^3$ , which is 26% of the applicable 24-hour air quality criteria. At the Rundle Road Station, the maximum hourly and 24-hour average concentrations measured during this quarter were 136 and  $50 \mu g/m^3$ , which are 34% and 25% of the applicable air quality criteria.

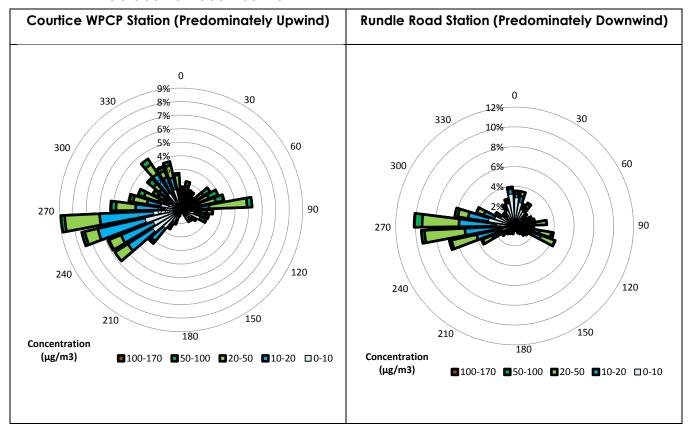
Pollution roses of measured hourly average NO<sub>x</sub> concentrations for the Courtice WPCP Station and the Rundle Road Station are presented in **Figure 4-5**. In Figure 4-5, higher measured hourly average NO<sub>x</sub> concentrations at the Courtice WPCP Station occurred for winds blowing from northwesterly directions. At the Rundle Road Station, higher measured hourly average concentrations occurred for easterly winds.

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Summary of Ambient Measurements January 28, 2015

Figure 4-5 Pollution Roses of Measured Hourly Average NO<sub>X</sub> Concentrations – October to December 2014



#### 4.2.4 Particulate Matter Smaller than 2.5 Microns (PM<sub>2.5</sub>)

Data summaries and time history plots of measured 24-hour average concentrations are presented in **Appendix D** for PM<sub>2.5</sub> for the Courtice WPCP and Rundle Road Stations.

The maximum measured 24-hour average PM<sub>2.5</sub> concentrations at the Courtice WPCP and the Rundle Road Stations were  $32.2 \,\mu\text{g/m}^3$  and  $24.5 \,\mu\text{g/m}^3$  during this quarter. It should be noted that since an exceedance of the CWS for PM<sub>2.5</sub> requires the average of the 98<sup>th</sup> percentile levels in each of three consecutive years to be greater than  $30 \,\mu\text{g/m}^3$ , whereas the PM<sub>2.5</sub> measurement period at both stations in the report was three months, there is insufficient data in a quarter to determine with any certainty if exceedances of the CWS would occur. Discussion of PM<sub>2.5</sub> measurements with respect to the CWS will be provided in the 2014 annual report, at which time sufficient data will have been collected to make preliminary comparisons.

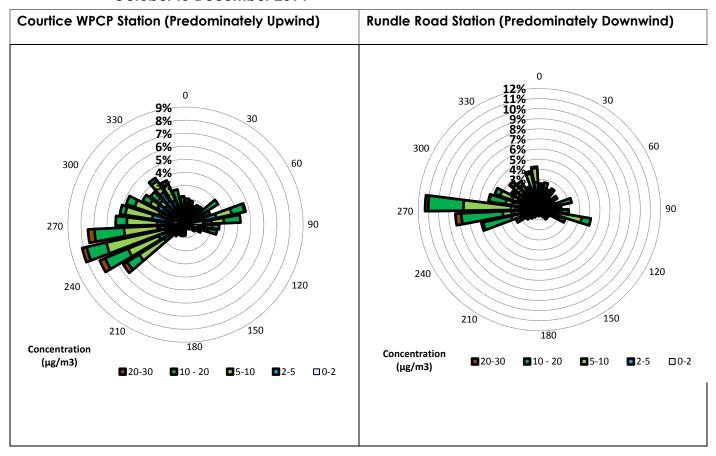
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Summary of Ambient Measurements January 28, 2015

Pollution roses showing the measured 24-hour average ambient PM<sub>2.5</sub> concentrations versus direction are shown in **Figure 4-6** for both monitoring stations. The maximum measured concentrations occurred for westerly and west-southwesterly winds for the Courtice WPCP Station. For the Rundle Road Station, higher measured 24-hour average concentrations occurred for westerly winds.

Figure 4-6 Pollution Roses of Measured 24-Hour Average PM<sub>2.5</sub> Concentrations – October to December 2014



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Conclusions January 28, 2015

#### 5.0 Conclusions

This quarterly report provides a summary of the ambient air quality data collected at the two monitoring stations located predominantly upwind and downwind in the vicinity of the DYEC for the period October to December 2014.

The following observations and conclusions were made from a review of the measured ambient air quality monitoring data:

- 1. Measured levels of NO<sub>2</sub>, SO<sub>2</sub> and PM<sub>2.5</sub> were below the applicable O. Reg. 419/05 criteria or human health risk assessment (HHRA) health-based standards presented in **Table 2-2** of this report;
- 2. Since the Canada Wide Standard (CWS) for PM<sub>2.5</sub> is based on a 98th percentile level over 3 years, whereas the PM<sub>2.5</sub> measurement period at both stations for this quarterly report was three months, there is insufficient data collected to determine with any certainty if exceedances of the CWS would occur. Therefore no comparison of the measured PM<sub>2.5</sub> data during this quarter to the CWS was conducted for this report, as it would not be scientifically accurate or representative;
- 3. In summary, all monitored contaminants were below their applicable MOECC criteria for the monitoring data presented in this report. All measured levels of all monitored contaminants were below their applicable HHRA health-based standards.

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References January 28, 2015

#### 6.0 References

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- Jacques Whitford, (2009). Final Environmental Assessment, December 4, 2009
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  Notice of Approval to Proceed with the Undertaking. Re: The Amended Environmental Assessment for Durham and York Residual Waste Study (EA File No: 04-EA-02-08)
- Ontario Ministry of the Environment (MOECC), (2012a). Standards Development Branch, Ontario's Ambient Air Quality Criteria, April 2012. (PIBs 6570e01)
- Ontario Ministry of the Environment (MOECC), (2012b). Standards Development Branch, Summary of Standards and Guidelines to support Ontario Regulation 419/05 Air Pollution Local Air Quality (including Schedule 6 of O. Reg 419/05 on Upper Risk Thresholds), April 2012 (PIBs 6569e01)
- Stantec Consulting Limited, (2009). Final Environmental Assessment, Appendix C12: Site Specific Human Health and Ecological Risk Assessment Technical Study Report, December 4, 2009.
- Stantec Consulting Limited, (2012). Ambient Air Quality Monitoring Plan Durham York Residual Waste Study, May 8, 2012

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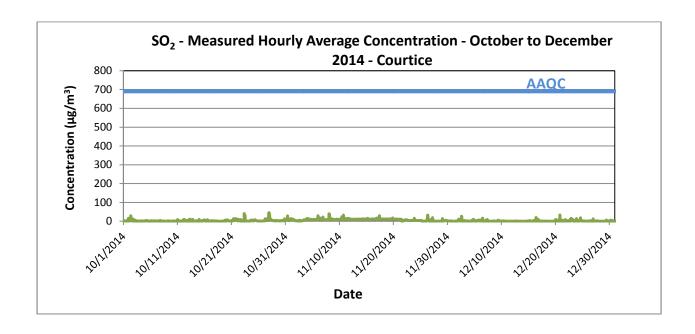
Appendix A SO2 Data Summaries and Time History Plots January 28, 2015

# Appendix A SO<sub>2</sub> Data Summaries and Time History Plots



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Figure A-1 Time History Plots of Measured Hourly Average and 24-Hour Average SO<sub>2</sub> Concentrations—Courtice (WPCP) Station



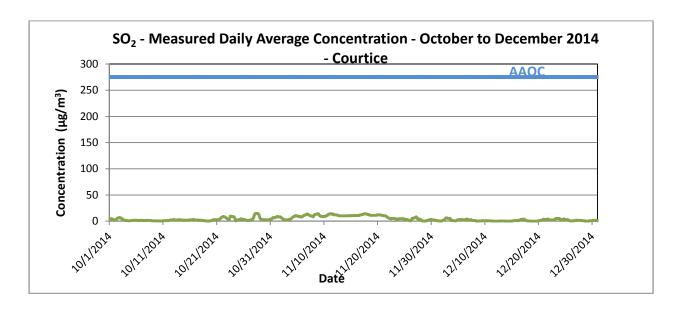
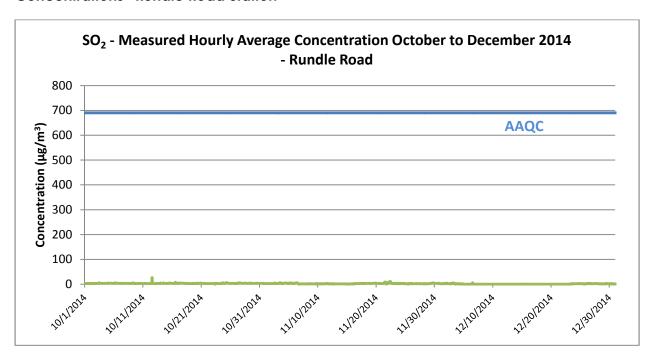
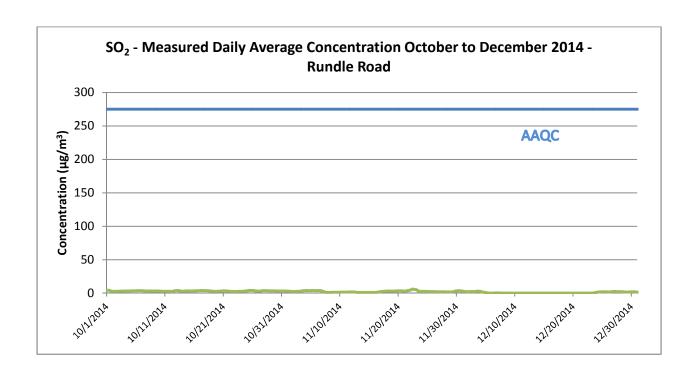


Figure A-2 Time History Plots of Measured Hourly Average and 24-Hour Average SO<sub>2</sub> Concentrations—Rundle Road Station





												DURTICE																	
											tober g/m3)		2014																
H	lour									,																			
Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300					Hrs>690 Days>275
1	4.5 1.6	0.7 3.3	3.8	2.8	2.4	1.2 2.3	1.2	0.7 8.8	0.9	0.9	1.1 13.2	1.2 3.2	0.9	0.8 3.3	0.4	0.0 4.9	0.1	0.2	1.1 12.5	7.0	0.9	2.7 2.1	2.5	16.0 1.0	24	16.0	0.0	2.3 6.3	0 0
2	0.8	3.3 7.8	6.1 2.5	4.0	4.9 1.3	0.7	10.8 0.8	1.3	10.3 1.8	29.4 2.7	1.7	1.6	4.2 2.1	1.4	9.4 1.1	0.8	1.6 0.7	1.0 0.7	0.7	6.1 0.7	6.2 0.8	0.7	1.5 0.7	0.8	24 24	29.4 7.8	1.0 0.7	1.6	0 0
4	0.7	0.7	0.4	1.3	0.8	0.9	1.0	1.7	1.0	0.8	0.7	1.3	0.8	0.5	0.6	0.8	0.8	0.7	0.8	0.3	1.1	1.8	1.0	1.5	24	1.8	0.3	0.9	0 0
5	2.1	2.7	3.2	2.9	2.7	2.4	2.5	2.6	2.3	2.5	2.2	1.5	1.6	1.6	1.3	0.8	1.1	0.8	1.0	0.8	0.8	0.6	0.7	0.7	24	3.2	0.6	1.7	0 0
6	0.9	1.0	2.0	3.0	2.6	2.2	1.1	1.4	1.7	2.0	2.1	1.9	1.7	1.4	1.4	1.5	1.7	1.7	1.6	0.8	0.9	0.6	0.8	0.8	24	3.0	0.6	1.5	0 0
7	0.7	1.0	1.3	0.9	1.2	2.3	0.9	0.9	1.4	1.6	1.5	0.8	0.7	0.7	0.7	0.9	0.7	0.9	3.7	2.8	3.5	3.8	2.2	2.0	24	3.8	0.7	1.5	0 0
8	0.6	0.6	1.3	0.9	1.3	1.2	0.8	0.9	0.8	1.0	0.9	0.8	0.7	0.1	0.3	0.2	0.2	0.6	0.2	0.2	0.4	0.3	0.4	0.1	24	1.3	0.1	0.6	0 0
9	0.7	0.6	0.7	0.1	0.3	0.8	1.4	1.4	1.7	1.2	1.0	1.3	0.3	0.1	0.2	0.1	0.0	0.1	0.2	0.2	0.0	0.1	0.1	0.4	24	1.7	0.0	0.6	0 0
10	0.7	1.0 9.2	1.4 0.6	0.4 2.3	0.4 0.1	0.5 0.7	0.4 4.0	0.4 1.3	0.8	1.0 0.9	1.5 1.0	0.7 0.7	0.3 0.5	0.2 0.5	0.1	0.0	0.0 0.1	0.4 0.1	0.3 0.1	1.9 0.1	0.4 0.1	0.6 0.2	0.9 0.2	0.5	24 24	1.9 9.2	0.0	0.6 1.0	0 0
12	5.7	5.5	4.5	2.2	8.8	3.4	1.5	6.9	9.2	2.1	0.8	0.6	0.3	0.3	0.3	2.5	0.1	0.1	2.3	1.3	2.3	3.8	2.8	4.6	24	9.2	0.1	3.0	0 0
13	7.1	1.2	0.8	0.8	0.6	0.8	0.9	2.0	11.4	3.7	1.7	1.4	1.7	1.5	1.0	0.7	0.8	1.5	1.0	7.1	9.5	1.6	2.3	2.0	24	11.4	0.6	2.6	0 0
14	2.3	2.1	1.5	0.8	0.7	0.6	0.8	0.9	1.4	1.4	1.3	2.2	2.8	1.7	2.2	1.7	1.2	0.7	0.6	0.5	1.3	0.8	3.8	4.3	24	4.3	0.5	1.6	0 0
15	2.0	9.8	1.7	1.0	1.1	1.2	0.5	0.2	0.1	0.6	0.5	0.6	0.7	1.7	2.7	2.0	2.5	1.9	5.0	4.8	4.8	5.4	5.9	3.9	24	9.8	0.1	2.5	0 0
16	2.0	1.1	6.9	3.4	2.0	1.4	1.0	1.2	1.5	1.1	0.9	0.9	1.5	1.6	8.1	7.1	3.3	2.1	1.5	1.2	0.8	0.7	0.8	1.3	24	8.1	0.7	2.2	0 0
17	1.2	0.9	0.8	1.1	1.7	2.3	2.3	2.3	2.7	1.7	1.6	2.0	2.3	2.3	2.0	2.2	1.7	1.6	1.4	1.9	2.1	2.0	2.1	1.6	24	2.7	0.8	1.8	0 0
18	1.2 0.1	0.8	1.0 0.2	0.8	0.0	0.8 0.1	0.8	1.1 0.0	1.0 0.1	0.8	0.7 0.0	0.6 0.4	0.4 1.3	0.2 1.4	0.2	0.1 1.2	0.2 2.0	0.2 1.3	0.2 0.9	0.2 1.7	0.2 6.6	0.4 1.0	0.3 0.9	0.0 1.7	24 24	1.2 6.6	0.0	0.5	0 0
20	0.1	0.4	4.8	6.2	4.3	4.6	6.5	5.5	6.3	3.8	2.2	1.9	1.8	1.4	2.1	1.4	1.4	1.1	1.0	1.6	2.0	1.6	1.9	2.4	24	6.5	0.5	2.8	0 0
21	2.2	2.2	1.0	5.0	3.2	1.3	1.2	8.1	4.8	11.0	14.2	11.2	7.9	3.7	6.3	7.8	7.0	8.7	12.5	14.0	14.3	9.7	10.6	10.1	24	14.3	1.0	7.4	0 0
22	7.6	10.0	8.1	10.6	8.6	1.0	1.1	7.7	10.0	8.2	6.3	4.6	3.9	2.6	1.9	0.9	0.8	0.4	1.3	9.2	6.7	5.1	1.0	0.4	24	10.6	0.4	4.9	0 0
23	0.7	1.4	2.2	1.5	1.5	3.2	0.3	С	С	41.0	34.1	33.1	33.0	29.4	2.1	1.6	1.2	0.8	0.8	0.8	0.8	0.5	0.8	0.4	22	41.0	0.3	8.7	0 0
24	0.4	0.7	0.3	0.3	0.4	0.2	0.4	0.7	1.4	1.7	0.0	0.9	1.0	1.6	1.8	6.0	5.0	5.0	3.0	5.2	5.3	5.1	3.5	3.4	24	6.0	0.0	2.2	0 0
25	1.9	1.4	2.5	2.4	5.8	3.8	3.8	5.2	8.2	7.6	5.7	5.2	4.4	3.5	2.7	2.2	2.2	2.1	2.2	2.1	1.7	1.6	1.6	1.5	24	8.2	1.4	3.4	0 0
26	1.5 1.6	1.5 1.4	1.8 1.5	1.5 1.6	1.5 1.6	1.4 5.3	1.5 13.4	1.2 5.4	1.4 6.8	1.5 5.6	1.5 2.8	1.5 3.3	1.5 4.3	1.5 5.1	1.5 4.7	1.5 4.5	1.5 4.1	1.5 10.8	1.3 16.5	1.4 9.0	1.5 5.5	1.4 17.0	1.5 42.5	1.5 37.3	24 24	1.8 42.5	1.2 1.4	1.5 8.8	0 0
27	45.2	30.4	34.3	20.9	8.8	9.3	10.3	8.3	9.4	7.3	7.4	6.6	4.7	4.3	3.6	4.1	4.1	3.1	2.9	2.7	2.5	2.3	2.2	2.4	24	45.2	2.2	9.9	0 0
29	2.7	2.8	2.8	2.2	2.3	2.4	3.1	2.3	3.5	4.9	3.7	3.7	3.0	2.9	2.9	2.6	2.2	2.1	2.1	2.2	2.5	2.2	2.3	2.1	24	4.9	2.1	2.7	o o
30	2.1	2.0	2.2	2.1	2.8	3.0	3.5	3.3	2.4	2.3	2.5	2.9	3.8	3.2	3.0	2.8	2.4	2.7	2.9	4.6	12.8	4.8	3.3	6.8	24	12.8	2.0	3.5	0 0
31	7.5	6.8	4.4	4.4	3.6	3.6	5.3	6.8	5.7	13.0	28.1	14.1	5.7	5.5	6.7	3.4	3.1	3.6	3.2	3.4	6.0	3.7	7.7	11.9	24	28.1	3.1	7.0	0 0
Count	31	31	31	31	31	31	31	30	30	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	742	31	30	31	
Maximum	45.2	30.4	34.3	20.9	8.8	9.3	13.4	8.8	11.4	41.0	34.1	33.1	33.0	29.4	9.4	7.8	7.0	10.8	16.5	14.0	14.3	17.0	42.5	37.3	24	45.2	7.0	22.1	
Minimum Average	0.1 3.5	0.4 3.6	0.2 3.4	0.1 2.9	0.0 2.5	0.1 2.1	0.0 2.7	0.0 3.0	0.1 3.7	0.0 5.3	0.0 4.6	0.4 3.6	0.1 3.2	0.1 2.8	0.1 2.3	0.0 2.1	0.0 1.7	0.1 1.9	0.1 2.7	0.1 3.1	0.0 3.4	0.1 2.7	0.1 3.5	0.0 4.0	22 24	1.2 11	0.0	0.1 3.1	
#>900	3.5	0.0	3.4	2.9	2.5	2.1	0	0.0	0.7	0.5	4.6	3.0 0	3.2 0	2.8	0	2.1	0	1.9	0	3.1	3.4 0	0	3.5	4.0	24	11	1	3.1	
500	- 0								٥							٦								3	Regs Acc	eptable De	sirable V	iolations/	Maximum
Percentiles		10		20		30		40		50		60		70		80		90		95		99		100	Hour				45.2
																									Day				9.9
Data		0.4		0.7		0.9		1.3		1.6		2.1		2.7		4.1		7.0		10.0		32.0		45.2	Month				3.1
Notes		C - Calibratio	on / Span C	ycle N	NA - No Data	Available	T -	Test	A-	MOE Audit	M	- Equipme	nt Malfunc	tion / Dow	1														

1 116 142 122 113 127 120 97 93 73 73 73 82 102 91 93 62 62 67 54 39 37 18 33 22 93 0 23 24 142 23 77 0 0 1 2 2 2 3 23 23 24 142 23 77 0 0 1 2 2 2 3 23 23 25 13 31 31 30 32 21 23 24 144 98 130 122 132 132 132 132 132 132 132 132 132											:	502 - C	DURTICE																	
No.   Color														2014																
1   16   142   122   113   127   120   97   93   73   73   92   102   91   63   62   67   54   39   37   38   33   29   30   23   24   442   23   77   0   0   2   2   2   2   2   2   2   2	- 1	Hour										5/1113/																		
2 23 23 24 24 21 24 28 25 23 31 30 0 22 21 23 20 20 29 22 57 33 24 23 26 17 21 22 22 48 57 17 22 50 0 4 87 144 87	Day	0	100								900			1200	1300	1400	1500	1600	1700					2200	2300	Count M	aximum N	linimum	Average	Hrs>690 Days>275
2 2 2 3 2 3 2 5 3 1 3 1 15 100 100 103 103 104 105 105 105 105 105 105 105 105 105 105	1																													0 0
*** S.*** 14.4 \$2 \$13.7 \$13.3 \$1.5 \$1.0 \$1.0 \$1.0 \$1.0 \$1.0 \$1.0 \$1.0 \$1.0	2																													0 0
9 80 77 82 78 77 77 97 97 92 99 88 99 94 85 58 78 77 77 77 77 77 77 77 77 77 77 78 77 92 99 88 99 94 85 58 78 78 77 77 77 78 77 78 78 79 79 79 80 92 94 86 82 77 77 77 76 73 79 75 76 78 111 94 14 111 94 14 14 14 14 14 14 14 14 14 14 14 14 14	3																													0 0
199   291   108   156   142   124   108   111   186   181   146   111   101   102   95   93   119   114   131   93   88   119   163   226   24   291   88   139   0   141   112   114   114   114   114   115	- 4																													0 0
Part	6																													0 0
11.2   14.4   39.8   15.3   38.1   25.5   13.0   12.2   11.7   10.8   12.7   11.0   10.6   10.9   11.5   13.3   11.1   12.2   11.2   8.8   8.9   8.3   8.5   8.0   24   39.8   8.0   14.0   0   10.9	7																													0 0
9 79 78 80 0 81 79 87 80 0 81 79 87 83 83 83 82 86 78 87 100 110 100 94 80 89 9103 95 85 93 80 92 24 110 78 88 0 11 1 148 120 107 92 99 104 105 118 108 123 113 114 115 112 110 114 115 115 114 115 115 114 115 115 115	8																													0 0
10 93 90 93 96 91 84 125 124 121 106 143 225 173 104 116 128 228 122 165 122 118 113 24 328 88 136 0 114 134 120 110 99 107 99 99 105 97 99 105 97 99 105 114 107 110 99 107 99 108 108 108 108 111 110 110 110 110 110	9																-												-	0 0
1 11 2 110 9 98 99 100 98 100 99 100 102 103 100 100 100 100 100 100 100 100 97 99 101 98 8 103 100 100 100 100 100 100 100 100 100	10	9.3		9.3			8.4									10.0	13.2	10.4	11.6							24	32.8			0 0
13 109 98 99 91 100 99 103 11.1 11.0 100 103 95 100 99 103 11.1 11.0 100 103 96 102 108 99 102 98 99 105 97 98 98 99 24 11.1 96 10.1 0 10.1 11.1 11.1 11.1 11.1 10.2 10.0 10.5 10.3 11.3 11.3 11.3 11.3 11.3 11.3 11.5 11.5	11	14.8	12.0	10.7	9.2	9.9	10.5	11.8	10.8	12.3	13.6	13.1	12.5	10.8	11.4	14.4	13.6	13.9	12.9	13.5	14.6	13.5	12.4	12.6	11.2	24	14.8	9.2	12.3	0 0
10   10   10   10   10   10   10   10	12	11.2	11.0	9.9	10.4	10.5	10.4	10.2	10.3	10.0	9.8	10.3	10.0	10.0	9.7	9.9	10.5	9.8	9.9	10.4	10.5	10.0	9.9	10.4	9.9	24	11.2	9.7	10.2	0 0
15 11.1 10.2 99 10.8 10.3 11.3 11.2 11.5 11.5 10.5 10.3 10.7 10.0 10.0 98 98 99 99 50 98 10.5 10.0 99 10.2 11.8 24 15.8 95 10.7 0 17.0 17.0 17.0 17.0 17.0 17.0 17	13	10.9	9.8	9.9	10.0	9.9	10.0	9.9	10.3	11.1	11.0	10.0	10.3	9.6	10.2	10.4	9.9	10.2	9.8	9.9	10.5	9.7	9.8	9.8	9.7	24	11.1	9.6	10.1	0 0
15   12.3   11.3   11.4   11.2   11.3   12.5   12.1   11.3   11.9   10.9   10.9   10.9   11.4   12.6   12.2   12.5   12.6   12.8   12.6   12.0   12.7   12.3   12.7   13.1   12.4   24   13.1   10.9   12.0   0.9   13.4   11.9   11.9   11.0   11.6   11.5   11.5   11.6   11.6   11.5	14																													0 0
17 16.5 15.4 13.9 17.0 14.4 11.9 12.2 13.6 11.0 11.0 11.0 11.0 11.0 11.0 11.0 11	15																													0 0
18 10.4 10.7 11.1 11.1 11.5 12.2 11.5 10.9 11.2 11.6 11.8 11.0 11.2 11.1 10.9 11.2 11.0 10.8 11.1 11.3 10.7 10.7 10.4 10.1 10.1 10.1 10.5 10.8 11.3 11.8 11.0 11.1 11.5 12.1 11.5 11.5 11.0 10.6 11.7 11.1 11.4 11.4 11.4 11.3 11.3 10.7 10.7 10.4 10.1 12.7 24 11.7 10.0 11.1 10.0 10.1 11.3 11.8 11.0 10.1 10.5 10.8 10.8 10.8 10.8 10.7 10.8 11.1 11.1 11.3 10.7 10.7 10.8 11.2 12.7 24 11.7 10.0 11.1 10.0 10.1 10.5 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8	16																													0 0
19 10.0 10.3 10.6 13.3 11.8 12.1 11.5 11.5 12.0 11.2 10.9 10.6 11.7 12.4 11.7 11.0 11.4 13.9 15.5 17.0 15.1 13.4 12.7 24 17.0 10.0 12.1 0 1 10.1 10.1 10.5 10.8 10.8 10.6 10.7 10.3 10.7 11.5 11.1 11.4 10.3 10.7 94 9.6 10.3 10.9 10.5 10.2 10.1 10.4 10.6 10.8 24 17.5 9.4 10.6 10.0 12.1 11.5 11.5 12.0 11.5 11.5 12.0 11.5 11.5 12.0 11.5 11.5 12.0 11.5 11.5 12.0 11.5 11.5 12.0 11.5 11.5 12.0 11.5 11.5 12.0 11.5 11.5 12.0 11.5 11.5 12.0 11.5 11.5 12.0 11.5 11.5 12.0 11.5 11.5 12.0 11.5 11.5 12.0 11.5 11.5 12.0 11.5 11.5 12.0 11.5 11.5 12.0 11.5 11.5 12.0 11.5 11.5 12.0 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11	17																													0 0
20 113 110 101 105 108 106 107 103 107 115 111 114 103 107 94 9.6 103 109 105 102 101 104 106 108 24 115 9.4 106 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	18																													0 0
21 100 106 98 99 102 99 97 96 109 100 100 103 106 R 04 02 13 22 17 16 19 31 3.5 33 23 109 0.2 6.6 0 1 22 31 46 6.4 6.4 6.4 6.4 6.4 6.4 6.4 6.4 6.4	19																													0 0
22 3.1 4.6 6.4 6.1 7.6 8.1 7.8 5.9 5.4 6.9 7.6 8.0 7.1 6.4 4.9 4.3 4.8 4.4 3.7 3.4 3.4 3.5 3.5 3.5 3.5 3.5 24 8.1 3.1 5.4 0 0 2 3 3.5 3.5 3.4 3.4 3.4 3.4 3.4 3.4 3.5 4.0 3.6 3.5 3.9 4.1 3.5 3.5 3.5 3.4 4.8 4.8 3.7 3.6 3.4 3.4 3.4 3.4 3.4 3.4 3.4 3.5 5.2 4 8.1 3.1 5.4 0 0 2 4 5.0 3.8 3.4 3.4 3.4 3.4 3.4 3.4 3.4 3.4 3.4 3.4	20																													0 0
23 3.5 3.4 3.5 4.0 3.6 3.5 3.9 4.1 3.5 3.5 4.2 4.5 3.7 3.6 3.4 3.5 3.5 3.4 3.4 3.7 4.5 15.9 13.9 6.5 24 15.9 3.4 4.8 0 2 24 5.0 3.8 3.4 3.4 3.4 3.4 3.4 3.4 3.4 3.4 3.4 3.4	21																													0 0
24 5.0 3.8 3.4 3.4 3.4 3.4 3.4 3.4 3.3 4.1 4.5 3.8 3.9 3.4 3.7 3.8 4.1 4.0 4.1 3.9 3.6 3.4 3.4 3.4 3.4 3.5 24 5.0 3.3 3.7 0 25 3.4 3.4 3.4 3.4 3.4 3.2 3.3 3.3 3.3 C C C C 0.2 0.4 0.2 0.1 0.1 0.1 0.1 0.0 0.3 0.0 0.1 0.0 0.1 0.3 0.3 0.3 21 3.4 0.0 1.2 0 26 0.1 0.0 0.0 4.1 0.7 4.9 3.5 17.5 29.1 32.5 24.7 5.9 3.3 1.2 1.4 1.6 4.2 5.3 4.5 0.9 0.4 1.4 1.4 5.6 24 32.5 0.0 6.4 0.2 0.1 0.1 0.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0																														0 0
25 3.4 3.4 3.4 3.4 3.2 3.3 3.3 3.3 C C C C 0.2 0.4 0.2 0.1 0.1 0.1 0.1 0.1 0.0 0.3 0.0 0.1 0.0 0.1 0.3 0.3 21 3.4 0.0 1.2 0 0 26 0.1 0.0 0.0 4.1 0.7 4.9 3.5 17.5 29.1 32.5 24.7 5.9 3.3 1.2 1.4 1.6 4.2 5.3 4.5 0.9 0.4 1.4 1.4 5.6 24 32.5 0.0 6.4 0 0 27 7.7 6.5 10.4 0.7 5.7 8.0 19.1 7.9 1.5 7.2 3.8 1.2 1.7 1.0 0.9 0.5 0.2 0.1 0.1 0.0 0.0 0.0 0.0 0.0 0.0 24 19.1 0.0 3.5 0 0 28 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	23																												-	0 0
25 0.1 0.0 0.0 4.1 0.7 4.9 3.5 17.5 29.1 32.5 24.7 5.9 3.3 1.2 1.4 1.6 4.2 5.3 4.5 0.9 0.4 1.4 1.4 5.6 24 32.5 0.0 6.4 0 2 27 7.7 6.5 10.4 0.7 5.7 8.0 19.1 7.9 1.5 7.2 3.8 1.2 1.7 1.0 0.9 0.5 0.2 0.1 0.1 0.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0	24								4.1	4.5	3.8																			0 0
27 7.7 6.5 10.4 0.7 5.7 8.0 19.1 7.9 1.5 7.2 3.8 1.2 1.7 1.0 0.9 0.5 0.2 0.1 0.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	25								17 5	20.1	22 5																			0 0
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29 0.0 4.1 13.6 9.7 1.6 1.7 1.8 1.6 1.7 1.9 2.6 3.1 3.3 2.9 2.8 2.5 3.5 5.4 4.7 2.8 2.3 2.1 2.3 3.1 24 13.6 0.0 3.4 0 30 2.7 1.9 2.0 1.9 1.8 1.6 1.4 1.3 1.5 1.4 1.3 1.1 1.5 0.9 1.3 1.3 1.0 1.9 1.9 1.4 0.6 0.2 0.3 0.2 24 2.7 0.2 1.3 0 0 0.0 0.0 0 0 0 0 0 0 0 0 0 0 0 0 0	20																													0 0
27	29																													0 0
Count   30   30   30   30   30   30   30   3	30																													0 0
Count 30 30 30 30 30 30 30 30 30 30 29 29 29 29 30 30 30 30 29 30 30 30 30 30 30 30 30 30 30 30 30 30	31	2.7	1.5	2.0	1.5	1.0	1.0	4.4	1.5	1.5	2	1.5		1.5	0.5	1.5	2.5	2.0	2.5	1.5	2	0.0	0.2	0.5	0.2				1.5	0 0
Maximum 19.9 29.1 39.8 17.0 38.1 25.5 19.1 17.5 29.1 32.5 29.2 23.5 17.3 13.4 14.4 13.6 13.9 12.9 32.8 28.2 17.0 15.9 16.3 22.6 24 39.8 12.9 22.4 Minimum 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Count	30	30	30	30	30	30	30	29	29	29	30	30	30	29	30	30	30	30	30	30	30	30	30	30	716			30	0 0
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Average 8.1 8.7 9.0 8.3 8.8 8.5 8.5 8.8 9.1 9.3 9.4 8.5 8.0 7.4 7.1 7.1 7.3 7.3 8.0 7.7 7.1 7.5 7.7 7.5 23 14 5 8.1 4.900 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0																														
#990 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Average									9.1																23			8.1	
Percentiles 10 20 30 40 50 60 70 80 90 95 99 100 Hour Day  Data 1.3 3.1 4.2 7.8 9.3 10.0 10.7 11.3 12.6 14.4 27.8 39.8 Month	-		0	0			0	0	0	0		0			0		0			0	0	0			0					
Data 1.3 3.1 4.2 7.8 9.3 10.0 10.7 11.3 12.6 14.4 27.8 39.8 Month																										Regs Acc	eptable D	esirable V	/iolations	Maximum
Data 1.3 3.1 4.2 7.8 9.3 10.0 10.7 11.3 12.6 14.4 27.8 39.8 Month	Percentiles		10		20		30		40		50		60		70		80		90		95		99		100	Hour				39.8
																										Day				14.0
Notes C - Calibration / Span Cycle NA - No Data Available T - Test A - MOE Audit M - Equipment Malfunction / Down R - Rate of Change	Data		1.3		3.1		4.2		7.8		9.3		10.0		10.7		11.3		12.6		14.4		27.8		39.8	Month				8.1
Notes C - Calibration / Span Cycle NA - No Data Available T - Test A - MOE Audit M - Equipment Malfunction / Down R - Rate of Change																														
	Notes	С	- Calibratio	n / Span C	ycle N	A - No Data	Available	Т-	Test	A-	MOE Audit	M	- Equipme	nt Malfunc	tion / Dowr	R -	Rate of C	hange												

										S	O2 - C	DURTICE																	
											ember g/m3)		2014																
Н	our									,ωε	5/1113/																		
Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300					Hrs>690 Days>275
1	0.2	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.6	1.4	0.7	0.2	0.2	0.5	1.0	1.4	24	1.4	0.0	0.3	0 0
2	3.4 0.1	4.1 0.3	8.1 2.6	11.6 4.1	7.6 3.5	6.2 2.9	3.2 2.6	1.3 A	1.0	6.5 A	4.3 A	3.3 A	1.2 2.0	4.5 2.2	13.4 1.8	26.4 0.6	24.7 0.5	8.0 0.6	1.5 0.4	2.5 0.3	3.8 0.2	0.5 0.3	0.2 0.8	0.2 1.4	24 19	26.4 4.1	0.2	6.1 1.4	0 0
4	0.1	0.3	0.0	0.0	0.0	0.7	0.6	0.8	0.6	0.2	1.2	0.7	1.2	0.2	2.5	1.6	6.8	6.4	5.2	7.3	10.6	10.0	5.3	1.4	24	10.6	0.0	2.7	0 0
5	2.6	0.7	0.9	0.5	0.5	2.9	2.2	1.6	1.9	2.1	2.7	2.1	2.9	3.3	3.2	2.2	2.1	2.1	4.8	6.3	3.9	2.9	1.6	1.7	24	6.3	0.5	2.4	0 0
6	2.4	1.1	2.0	7.5	1.9	1.8	1.9	2.6	4.6	2.1	2.8	2.3	6.9	16.5	10.0	3.3	0.9	0.2	0.0	0.0	0.0	0.0	0.0	0.0	24	16.5	0.0	2.9	0 0
7	0.0	0.0	0.0	0.0	0.5	7.5	1.0	4.2	2.4	8.1	9.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24	9.2	0.0	1.4	0 0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5	0.3	0.7	1.4	1.9	1.4	1.3	1.1	0.8	0.7	0.2	0.2	0.0	0.0	24	1.9	0.0	0.4	0 0
9	0.0	0.0	0.4	0.7	0.0	0.2	0.2	0.0	4.9	0.4	1.1	0.4	5.5	1.4	0.8	0.3	0.1	0.5	0.6	0.5	0.0	0.0	0.9	0.8	24	5.5	0.0	0.8	0 0
10	0.6 0.0	0.3	0.4	0.2	0.4	1.1 0.2	1.3 0.2	1.3 0.2	1.3 0.1	1.0 0.1	1.0 0.2	1.7 0.1	0.9 0.1	0.7 0.0	1.0 0.1	1.0 0.0	0.5 0.0	0.3	0.2	0.2	0.0	0.1	0.0	0.0	24 24	1.7 0.2	0.0	0.7 0.1	0 0
12	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.2	0.1	0.1	0.5	0.6	1.3	1.0	0.6	1.1	0.5	0.0	0.6	0.0	0.8	24	1.3	0.0	0.1	0 0
13	0.9	0.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24	0.9	0.0	0.1	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	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	1.6	1.1	0.0	24	1.6	0.0	0.1	0 0
15	1.3	2.0	1.8	1.8	1.7	2.7	2.0	1.9	2.9	2.1	1.3	0.9	0.6	0.4	0.5	0.7	0.2	0.2	0.7	0.9	0.6	0.1	0.2	1.9	24	2.9	0.1	1.2	0 0
16	3.4	0.2	0.0	0.1	0.1	0.0	0.0	5.3	2.4	4.4	19.6	7.3	4.4	9.5	1.4	1.9	0.8	4.2	10.6	2.9	10.0	2.9	0.9	0.5	24	19.6	0.0	3.9	0 0
17	0.4	0.2	0.7 0.1	0.8 0.8	0.9 1.0	1.5	1.0 0.0	0.8	0.9	0.7 0.3	0.4	0.9 0.0	1.2 0.1	0.8	0.7 0.1	0.7 0.0	0.1	0.1 0.0	0.0	0.0	0.0	0.0	0.2 0.0	0.1	24 24	1.5 1.0	0.0	0.5 0.1	0 0
19	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.2	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	0.0	24	0.9	0.0	0.0	0 0
20	4.1	6.1	9.4	8.9	0.8	0.5	0.0	0.0	1.2	4.4	1.5	1.9	2.4	1.5	0.4	0.1	0.0	0.0	0.5	0.4	33.3	5.5	2.8	3.4	24	33.3	0.0	3.7	0 0
21	1.2	1.5	5.6	1.7	4.1	6.3	5.8	0.6	0.4	1.9	2.4	2.2	2.2	1.7	1.6	1.7	1.0	1.1	5.0	3.3	8.6	3.3	1.9	3.6	24	8.6	0.4	2.9	0 0
22	2.2	1.2	0.8	1.5	0.9	2.7	2.0	1.0	0.4	1.0	0.6	1.2	1.1	1.4	1.2	5.0	2.3	5.7	1.7	0.7	12.1	5.2	4.8	15.9	24	15.9	0.4	3.0	0 0
23	13.7	4.7	10.7	9.7	7.6	4.2	9.6	1.4	1.4	1.5	1.7	0.9	0.8	0.8	0.6	0.5	0.2	0.6	1.4	5.0	7.1	3.6	13.9	9.0	24	13.9	0.2	4.6	0 0
24	3.1	7.9	1.4	0.8	0.3	0.4	0.7	0.3	1.2	2.2	1.8	1.9	2.2	4.3	4.5	7.2	18.3	4.0	2.1	1.6	1.2	1.1	1.9	2.7	24	18.3	0.3	3.0	0 0
25	1.5 0.0	0.9 0.0	0.8 0.5	1.4 1.5	1.3 1.6	1.7 1.3	1.7 0.6	1.4 1.1	1.3 1.5	1.0 1.9	0.9 2.5	0.7 1.8	0.4 2.8	0.3 1.7	0.1 1.6	0.1 1.5	0.1 0.5	0.0 0.9	0.0 1.3	0.0 1.0	0.0 0.9	0.0	0.0	0.0 1.3	24 24	1.7 2.8	0.0	0.6 1.2	0 0
27	12.8	1.2	0.3	0.3	0.2	1.0	0.9	0.7	1.2	1.4	1.3	1.1	1.6	1.8	1.7	1.9	2.2	1.2	1.4	2.1	1.7	1.1	0.7	0.7	24	12.8	0.0	1.7	0 0
28	0.8	0.4	0.1	0.2	0.1	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	0.0	0.0	0.0	0.0	0.0	24	0.8	0.0	0.1	0 0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.6	0.6	2.0	3.9	5.9	3.3	2.0	2.3	1.6	0.5	0.0	1.3	1.4	0.5	0.2	0.2	0.1	24	5.9	0.0	1.1	0 0
30	0.3	0.1	0.0	0.0	1.2	4.3	6.5	1.6	С	С	С	3.7	1.7	3.8	4.1	1.2	0.5	0.3	0.0	0.0	0.0	0.0	0.2	0.3	21	6.5	0.0	1.4	0 0
31	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.4	0.9	1.9	1.0	1.4	1.2	1.0	0.7	24	1.9	0.0	0.4	0 0
Count	31 13.7	31	31	31	31	31	31	30	29 4.9	29	29	30	31	31	31	31	31	31	31 10.6	31	31	31	31 12.0	31 15.0	736	31	29	31	
Maximum Minimum	0.0	7.9 0.0	10.7 0.0	11.6 0.0	7.6 0.0	7.5 0.0	9.6 0.0	5.3 0.0	0.0	8.1 0.0	19.6 0.0	7.3 0.0	6.9 0.0	16.5 0.0	13.4 0.0	26.4	24.7 0.0	8.0 0.0	10.6 0.0	7.3 0.0	33.3 0.0	10.0 0.0	13.9 0.0	15.9 0.0	24 19	33.3 0.2	4.9 0.0	12.5 0.0	
Average	1.8	1.1	1.5	1.7	1.2	1.6	1.4	1.0	1.1	1.6	2.1	1.4	1.5	2.0	1.8	2.1	2.1	1.3	1.4	1.3	3.1	1.3	1.3	1.6	24	8	0.0	1.6	
#>900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
									•																Regs Acc	eptable De	esirable V	iolations/	Maximum
Percentiles		10		20		30		40		50		60		70		80		90		95		99		100	Hour				33.3
Data		0.0		0.0		0.1		0.2		0.6		1.0		1.4		2.1		4.3		7.2		13.8		33.3	Day Month				6.1 1.6
Data		0.0		0.0		0.1		0.2		0.0		1.0		1.4		2.1		4.3		7.2		13.0		33.3	WOITH				1.0
Notes	С	- Calibratio	n / Span Cy	cle N	A - No Data	Available	T -	Test	A- N	MOE Audit	М	- Equipme	nt Malfunc	tion / Dow	n														

										o	602 - Ri ctober g/m3)	undle Roa	d 2014																
He	our									, u	g/1113)																		
Day	. 0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Count M	aximum Mi	inimum	Average	Hrs>690 Days>27
1	3.0	2.7	2.9	2.9	2.9	2.7	2.5	2.8	2.8	2.6	2.8	3.0	2.5	3.2	3.2	2.6	2.4	2.6	2.6	2.8	2.6	3.0	2.9	2.9	24	3.2	2.4	2.8	0
2	3.0	2.6	2.6	2.6	2.5	2.7	3.1	2.9	2.8	2.8	2.7	3.1	2.0	3.1	3.1	3.1	2.8	2.6	2.6	2.8	2.7	2.6	2.8	3.1	24	3.1	2.0	2.8	0 0
3	3.1	3.1	3.1	3.0	3.0	3.0	3.2	3.1	3.0	3.0	3.1	3.0	5.7	3.8	3.1	3.0	3.0	3.0	3.1	3.0	3.0	3.1	3.0	3.0	24	5.7	3.0	3.2	0 0
4	3.0	3.2	3.1	3.1	3.2	3.2	3.2	3.4	3.3	3.3	3.2	3.3	3.2	3.5	3.2	3.2	3.2	3.1	3.1	3.1	3.2	3.5	3.3	3.2	24	3.5	3.0	3.2	0 0
5	3.4	4.3	3.9	3.7	3.7	3.6	3.7	3.8	3.9	4.0	3.8	3.6	3.6	3.6	3.9	3.2	3.2	3.1	3.3	3.3	3.1	3.1	3.0	3.3	24	4.3	3.0	3.6	0 0
6	3.2	3.7	3.8	4.9	5.0	4.4	3.5	3.4	3.8	4.0	4.3	4.1	4.2	4.0	3.5	3.9	3.6	3.6	3.3	3.1	3.1	3.1	3.2	3.1	24	5.0	3.1	3.7	0 0
7	3.1	3.1	3.3	3.1	3.4	3.8	3.3	3.1	3.2	3.3	3.5	3.3	3.1	3.0	3.1	3.1	3.5	3.2	3.1	2.6	3.0	3.1	3.1	3.0	24	3.8	2.6	3.2	0 0
8	3.1	3.1	3.1	3.2	3.4	3.2	3.2	3.3	3.4	3.2	3.1	3.2	3.1	3.1	3.1	2.9	2.8	3.0	3.1	3.1	3.0	3.0	2.9	2.8	24	3.4	2.8	3.1	0 0
9	2.7	3.0	3.3	3.1	3.1	3.1	3.4	4.3	4.9	3.9	3.5	3.6	3.1	2.8	2.6	2.7	2.8	2.7	2.9	2.5	2.4	2.4	2.5	2.5	24	4.9	2.4	3.1	0 0
10	2.5	2.5	2.7	2.6	2.6	2.7	2.5	2.9	3.1	3.1	2.9	3.2	3.1	3.1	2.9	2.8	2.8	2.5	2.5	2.8	2.6	2.5	2.5	2.8	24	3.2	2.5	2.8	0 0
11	2.6	2.5	2.5	2.5	2.5	2.8	2.8	2.9	2.7	2.8	3.0	3.0	2.8	2.8	2.5	2.4	2.4	2.5	2.4	2.4	2.8	2.6	2.5	2.5	24	3.0	2.4	2.6	0 0
12	2.5 2.6	2.5 2.6	2.5 2.5	2.6 2.5	2.6 2.5	2.6 2.5	2.6 3.1	2.6 2.5	2.6 2.4	3.3 2.4	2.7 2.6	2.4 3.0	2.7 3.0	3.1 3.0	26.5 2.9	4.4 2.5	3.2 2.6	3.1 2.7	2.9 2.9	3.0 2.7	3.0 2.9	2.9 2.8	2.7 3.2	2.5 3.3	24 24	26.5 3.3	2.4	3.8 2.7	0 0
14	4.5	3.4	3.1	3.1	3.1	3.0	3.1	3.1	3.1	3.0	3.1	3.6	5.4	3.7	3.4	3.2	3.4	3.3	3.0	3.3	3.4	3.1	3.0	3.3	24	5.4	3.0	3.4	0 0
15	3.1	3.0	2.9	3.0	3.1	3.1	3.0	3.0	2.9	3.0	3.3	3.5	3.4	4.3	4.8	4.3	3.6	3.6	3.4	3.2	3.4	3.1	3.1	2.9	24	4.8	2.9	3.4	0 0
16	3.1	3.2	3.2	3.1	3.0	3.1	3.0	3.1	3.3	3.6	3.7	3.5	3.6	3.6	7.8	6.4	4.6	3.8	3.5	3.4	3.1	3.2	3.3	3.6	24	7.8	3.0	3.7	0 0
17	3.5	3.8	3.5	3.2	3.6	3.7	4.0	3.7	4.3	3.6	3.7	3.8	4.0	4.2	3.6	3.8	3.8	3.6	3.6	3.8	3.9	3.9	3.8	3.7	24	4.3	3.2	3.7	0 0
18	3.6	3.3	3.6	3.3	3.1	3.2	3.1	3.5	3.3	3.1	3.1	3.1	3.1	3.1	3.1	2.8	2.7	2.5	2.8	2.7	2.8	2.7	2.6	2.5	24	3.6	2.5	3.0	o o
19	2.6	2.6	2.5	2.9	2.6	2.5	2.6	2.6	2.5	2.5	2.6	2.8	3.5	3.4	3.1	3.3	3.7	3.5	2.9	2.6	2.6	2.6	2.7	2.7	24	3.7	2.5	2.8	0 0
20	2.7	2.7	2.8	2.9	2.9	3.2	3.2	3.2	3.6	3.8	3.5	3.1	3.5	3.6	3.6	3.5	3.2	3.2	3.1	3.3	3.4	3.6	3.5	3.7	24	3.8	2.7	3.3	0 0
21	3.6	3.4	3.2	3.1	3.1	3.4	3.1	3.1	3.1	3.1	3.1	3.1	3.0	2.7	2.7	2.5	2.6	2.6	2.5	2.5	2.5	2.5	2.5	2.5	24	3.6	2.5	2.9	0 0
22	2.5	2.6	2.6	2.6	2.5	2.5	2.8	2.5	2.5	2.5	2.5	2.5	2.4	2.4	2.5	2.5	2.4	2.5	2.5	2.5	2.4	2.5	2.5	2.5	24	2.8	2.4	2.5	0 0
23	2.5	2.5	2.6	2.5	2.5	2.5	2.5	2.9	2.6	С	C	3.0	2.8	2.8	2.9	3.0	2.9	2.8	2.7	2.6	2.6	2.5	2.6	2.5	22	3.0	2.5	2.7	0 0
24	2.6	2.6	2.6	2.6	2.6	2.6	2.7	2.9	3.3	1.8	2.9	2.7	3.0	3.1	3.2	5.5	5.7	5.0	3.9	3.6	3.6	3.3	3.8	3.4	24	5.7	1.8	3.3	0 0
25	3.2	3.1	3.2	3.3	4.3	3.9	3.8	4.5	6.1	6.4	5.3	4.8	4.8	4.3	3.6	3.5	3.3	3.5	3.5	3.1	3.1	3.2	3.1	3.1	24	6.4	3.1	3.9	0 0
26	3.1	3.2	3.1	3.1	3.1	3.1	3.1	3.0	3.0	3.1	3.4	3.2	3.1	3.1	3.1	3.1	3.0	3.1	2.8	2.8	2.8	3.0	2.9	2.8	24	3.4	2.8	3.1	0 0
27	2.8	3.1	2.9	2.8	3.0	3.1	3.3	4.3	3.3	3.3	4.3	4.9	4.2	4.8	4.5	6.0	4.2	3.6	3.6	3.9	3.7	3.6	3.6	3.2	24	6.0	2.8	3.8	0 0
28	3.1	3.1	3.2	3.2	3.2	3.2	3.3	3.3	3.4	3.9	4.3	4.4	4.1	3.7	3.6	3.6	3.6	3.3	3.1	3.1	3.0	3.4	3.2	3.1	24	4.4	3.0	3.4	0 0
29	3.1 2.9	3.1 3.1	3.1 3.0	3.2	3.0 2.9	3.2 3.0	3.7 3.2	3.6 3.4	3.9 3.2	4.0 3.0	4.2 3.2	3.7 3.8	3.4 3.8	3.6 3.6	3.2 3.9	3.1	3.2	3.2 3.2	3.1 3.2	3.1 3.0	3.1 3.2	3.2 3.2	3.1 3.2	3.0	24 24	4.2 3.9	3.0 2.9	3.3 3.2	0 0
30	3.1	3.1	3.0	3.0	3.1	3.0	3.2	3.4	3.2	3.0	3.2	3.8	3.8	3.6	3.9	3.3	3.2 2.9	2.9	2.8	2.7	2.7	2.7	2.8	3.2 2.6	24	3.9	2.9	3.2	
Count	3.1	31	3.1	3.2	3.1	3.1	3.2	3.2	31	30	3.1	3.4	3.1	31	31	3.3	31	31	31	31	31	31	31	31	742	3.4	30	3.0	o c
Maximum	4.5	4.3	3.9	4.9	5.0	4.4	4.0	4.5	6.1	6.4	5.3	4.9	5.7	4.8	26.5	6.4	5.7	5.0	3.9	3.9	3.9	3.9	3.8	3.7	24	26.5	3.7	5.6	
Minimum	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.4	1.8	2.5	2.4	2.0	2.4	2.5	2.4	2.4	2.5	2.4	2.4	2.4	2.4	2.5	2.5	22	2.8	1.8	2.4	
Average	3.0	3.0	3.0	3.0	3.1	3.1	3.1	3.2	3.3	3.3	3.4	3.4	3.4	3.4	4.2	3.4	3.2	3.1	3.0	3.0	3.0	3.0	3.0	3.0	24	5	3	3.2	
#>900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
																									Regs Acc	eptable De	esirable V	iolations/	Maximum
Percentiles		10		20		30		40		50		60		70		80		90		95		99		100	Hour				26.5
																									Day				3.9
Data		2.5		2.7		2.9		3.0		3.1		3.1		3.2		3.5		3.8		4.3		5.6		26.5	Month				3.2
Notes	C -	- Calibration	n / Span Cy	cle N	A - No Data	Available	T -	Test	Α-	MOE Audit	M	- Equipme	nt Malfunc	tion / Dow	n R-	Rate of C	hange												

											9	602 - Ri	undle Roa	d																
												vember		2014																
	Hour										(uį	g/m3)																		
Day		0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300		aximum M			Hrs>690 Days>275
1	1	2.8	2.8	2.6	2.7	2.6	2.6	2.6	2.6	2.5	2.6	2.5	2.6	2.5	2.5	2.5	2.6	2.7	2.5	2.6	2.5	2.6	2.6	2.6	2.6	24	2.8	2.5	2.6	0 0
2	2	2.6	2.6 2.6	2.6 2.6	2.7 2.7	2.6 2.9	2.6 2.9	2.7 3.0	2.6 3.3	2.5 3.5	2.6 3.7	2.5 4.3	2.5 5.8	2.4 5.8	2.4 4.7	3.5 4.9	2.7 5.3	4.3 3.5	3.3 4.4	2.9 4.1	2.7 3.5	2.6 3.8	2.7 3.1	2.6 2.9	2.7	24 24	4.3 5.8	2.4 2.6	2.7 3.7	0 0
-	4	2.7	2.6	2.0	2.7	2.5	3.2	3.8	4.4	4.4	4.7	4.7	4.5	4.5	4.5	4.6	4.6	3.8	3.5	3.6	3.3	3.4	3.3	3.2	3.6	24	4.7	2.0	3.7	0 0
	5	3.6	3.5	3.6	3.4	3.7	3.5	4.1	4.3	4.9	4.5	4.7	4.4	4.0	3.8	3.8	3.5	3.5	3.7	3.4	3.5	3.2	3.6	3.9	3.5	24	4.9	3.2	3.8	0 0
•	6	3.5	3.4	3.5	3.5	3.5	3.7	4.3	4.5	3.9	5.4	5.8	4.4	4.4	4.1	3.4	2.8	1.5	1.1	0.9	1.1	1.0	0.9	1.1	1.0	24	5.8	0.9	3.0	0 0
3	7	1.0	1.1	1.1	1.2	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.1	1.0	1.0	1.1	1.0	1.1	1.0	1.1	1.1	1.0	1.0	1.1	1.2	24	1.2	1.0	1.1	0 0
8	3	1.1	1.2	1.0 1.1	1.1 1.1	1.0 1.1	1.1 1.0	1.0 1.0	1.3 1.1	1.7 1.1	1.2 1.1	1.4 1.2	1.2	1.3 1.2	1.2 2.0	1.7 1.7	1.8	1.7 1.4	1.7 1.4	1.8 1.7	1.7 1.8	1.6 1.4	1.5 1.7	1.3 1.3	1.1	24 24	1.8 2.0	1.0 1.0	1.4	0 0
10	0	1.7	1.8	1.8	1.6	1.1	1.1	1.0	1.1	1.1	1.7	1.5	1.8	2.0	1.1	1.7	1.1	1.3	1.4	1.9	1.8	1.4	2.0	1.8	1.8	24	2.0	1.0	1.4	0 0
11	1	1.8	1.7	1.3	1.3	1.1	1.1	1.1	1.5	1.9	2.3	2.5	2.6	2.4	2.4	2.4	2.4	2.2	2.3	2.2	1.7	1.8	1.9	1.7	1.7	24	2.6	1.1	1.9	0 0
12	2	1.6	1.6	1.0	1.2	1.0	1.0	1.1	1.0	1.0	1.2	1.1	1.1	1.0	2.5	1.1	1.0	0.9	1.0	1.0	1.0	1.0	1.1	1.1	1.1	24	2.5	0.9	1.2	0 0
13	3	1.2	1.1	1.1	1.2	1.3	1.2	1.1	1.1	1.1	1.1	1.5	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.2	1.1	1.2	1.2	24	1.5	1.1	1.1	0 0
14	•	1.2	1.2 1.0	1.1 1.0	1.2 0.9	1.1 0.9	1.2 0.8	1.2 1.0	1.1	1.1	1.1 1.0	1.1 1.1	1.0 1.0	1.1 1.0	1.1	1.0 1.1	1.1 1.0	1.1 1.5	1.1 1.1	1.1 1.0	1.0 1.0	0.9 0.8	0.6 1.0	0.7 1.1	0.8 1.7	24 24	1.2 1.7	0.6	1.0 1.0	0 0
16	6	1.7	1.0	1.1	1.0	1.2	1.6	1.5	1.4	2.4	1.9	2.0	2.4	2.5	2.6	2.6	2.6	2.7	2.6	2.6	2.6	2.7	2.6	2.6	2.6	24	2.7	1.0	2.1	0 0
17	7	2.5	2.6	2.5	2.5	2.4	2.3	2.6	2.6	2.7	3.2	3.1	3.1	3.2	3.3	3.4	3.4	3.7	3.4	3.2	3.3	3.1	2.8	2.8	2.9	24	3.7	2.3	2.9	0 0
18	3	2.9	2.8	2.8	2.8	2.8	3.4	3.1	3.1	3.3	3.4	3.3	3.3	3.3	3.3	3.2	3.2	3.3	3.2	3.1	3.2	3.0	2.8	2.7	2.7	24	3.4	2.7	3.1	0 0
19	•	2.6	2.6	2.8	2.9	3.3	3.3	3.2	3.4	3.5	3.4	3.3	3.3	3.4	3.4	3.3	3.4	3.4	3.3	4.0	4.4	4.6	4.2	3.7	3.8	24	4.6	2.6	3.4	0 0
20		3.0 2.7	3.1 2.6	3.1 2.7	3.1 2.7	3.3 2.6	3.2 2.7	3.3 2.7	3.3 2.7	3.3 3.2	3.3 3.1	3.3 5.6	3.3 6.8	3.3 8.6	3.2 6.0	2.7 7.6	2.8 7.2	2.7 7.4	2.7 7.5	2.7 M	2.7 0.9	2.7 1.0	2.6 2.2	2.6 3.2	2.6 3.0	24 23	3.3 8.6	2.6 0.9	3.0 4.1	0 0
22	2	2.7	2.7	5.7	6.1	8.0	9.1	9.5	7.2	6.7	8.2	10.2	10.8	7.2	5.2	4.2	3.5	3.4	3.2	3.2	3.0	2.6	2.2	2.5	2.7	24	10.8	2.5	5.4	0 0
23	3	2.7	3.1	2.9	2.8	2.7	2.4	2.1	2.3	2.5	2.5	3.4	3.9	3.0	2.5	2.6	1.9	1.8	1.8	2.2	2.1	2.6	3.0	3.8	3.3	24	3.9	1.8	2.7	0 0
24	1	3.5	2.4	2.2	2.2	2.3	3.1	2.9	2.5	2.6	2.6	2.4	2.8	2.9	2.9	2.4	2.5	3.0	3.0	2.4	1.8	1.8	1.9	2.5	2.6	24	3.5	1.8	2.6	0 0
25	5	2.4	1.9	2.1	1.9	1.8	1.7	1.7	2.0	2.0	2.0	С	C	. c	2.5	2.5	2.5	2.7	1.5	2.4	2.5	2.5	2.5	2.5	2.5	21	2.7	1.5	2.2	0 0
26	7	2.2	1.9 2.0	2.5 1.8	2.2 1.8	2.4 1.9	1.8 1.9	1.9 2.0	2.1 1.8	2.1 1.8	1.8 1.9	1.9 1.7	1.8 1.9	1.7 2.5	2.1 2.4	1.8 2.3	1.7 1.9	1.7 2.0	2.0 1.8	1.8 1.9	1.7 1.9	1.8 1.8	2.0 1.8	2.1 1.8	2.6 1.9	24 24	2.6 2.5	1.7 1.7	2.0	0 0
28	,	1.9	1.9	1.9	1.7	1.3	1.8	1.9	1.1	1.7	1.8	1.7	1.8	1.8	1.8	1.8	1.8	1.6	1.8	1.8	2.0	1.9	1.8	1.9	1.9	24	2.0	1.1	1.8	0 0
29	9	1.9	1.8	1.9	1.8	1.8	2.3	2.5	2.6	2.8	3.1	3.3	3.7	3.9	3.8	3.8	3.6	3.8	5.5	4.5	3.9	3.6	3.6	4.2	3.7	24	5.5	1.8	3.2	0 0
30	D	3.5	3.2	3.3	3.4	3.4	3.3	3.2	3.1	3.2	3.1	3.1	3.2	3.1	3.2	3.1	3.1	3.0	3.4	3.6	3.2	2.4	2.6	2.4	2.3	24	3.6	2.3	3.1	0 0
31	1																									0	0.0	0.0		0 0
Count Maximum		30 3.6	30 3.5	30 5.7	30 6.1	30 8.0	30 9.1	30 9.5	30 7.2	30 6.7	30 8.2	29 10.2	29 10.8	29 8.6	30 6.0	30 7.6	30 7.2	30 7.4	30 7.5	29 4.5	30 4.4	30 4.6	30 4.2	30 4.2	30 3.8	716 24	30 10.8	29 3.5	30 6.6	
Minimum		1.0	1.0	1.0	0.9	0.9	0.8	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.9	1.0	0.9	0.9	0.8	0.6	0.7	0.8	0	0.0	0.6	0.0	
Average		2.3	2.2	2.3	2.2	2.3	2.4	2.5	2.4	2.6	2.7	2.9	3.0	3.0	2.8	2.7	2.6	2.6	2.6	2.4	2.3	2.2	2.2	2.3	2.3	23	3	2	2.5	
#>900		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
																											eptable De	sirable V	iolations	Maximum
Percentile	s		10		20		30		40		50		60		70		80		90		95		99		100	Hour Day				10.8 5.4
Data			1.1		1.2		1.7		1.9		2.5		2.6		2.9		3.3		3.8		4.5		7.6		10.8	Month				2.5
Notes		C - 1	Calibration	/ Span Cy	cle N	A - No Data	Available	Т-	Test	A-	MOE Audit	M	- Equipme	nt Malfunc	tion / Dowr	ı R-	Rate of C	hange												

												undle Roa																	
											ember g/m3)		2014																
н	our									\	,,																		
Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300					Hrs>690 Days>27
1	2.2	1.9	1.9	2.0	1.7	1.8	1.8	1.8	1.9	1.9	1.8	1.8	1.8	1.9	1.9	2.8	2.6	3.2	2.5	2.1	1.9	1.8	2.0	1.8	24	3.2	1.7	2.0	0 0
2	2.6	3.6	4.2	3.6	2.9	2.7	2.1	2.2	1.9	1.9	1.8	2.2	2.1	1.9	2.0	2.1	2.2	2.3	1.9	2.0	2.6	2.0	2.5	2.3	24	4.2	1.8	2.4	0 0
3	2.2 2.1	2.3 1.8	3.0 1.5	5.1 1.2	5.0 1.2	3.5 1.5	3.3 1.8	3.2 1.5	3.2 2.0	3.5 1.7	3.7 0.6	3.6 0.0	A 0.4	0.0	A 1.5	2.0 0.0	2.1 1.5	2.0 0.0	1.6 0.0	1.6 1.8	1.8 0.3	2.0 0.4	1.9 0.0	2.0 0.0	21 24	5.1 2.1	1.6 0.0	2.8 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	0.0	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	
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	5.7	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24	5.7	0.0	0.3	
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	0.0	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	
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	0.0	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	
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	0.0	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
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	0.0	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
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	0.0	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
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	0.0	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	
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	0.0	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	
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	0.0	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
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	0.0	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
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	0.0	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	
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 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24 24	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	0.0	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	
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	0.0	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	
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	0.0	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	
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24	0.1	0.0	0.0	
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	1.5	1.9	1.8	1.8	1.7	1.4	1.3	1.3	1.3	1.7	1.6	1.6	1.7	1.8	24	1.9	0.0	1.0	о с
24	1.8	1.8	1.9	1.8	1.8	1.7	1.9	1.7	2.1	1.9	1.8	1.8	1.8	1.9	1.9	1.8	1.8	2.0	2.2	2.5	2.4	2.5	2.9	2.5	24	2.9	1.7	2.0	0 0
25	2.2	2.1	2.1	2.2	1.9	1.8	1.9	1.8	1.8	1.8	1.7	1.7	1.8	1.8	1.6	1.7	1.5	1.4	1.4	1.2	1.1	1.2	1.6	1.4	24	2.2	1.1	1.7	0 0
26	1.5	1.6	1.8	2.5	2.5	2.5	2.1	2.0	2.1	2.8	3.4	2.8	3.5	3.3	2.9	2.6	2.0	2.1	2.8	2.7	2.6	2.2	2.3	1.9	24	3.5	1.5	2.4	
27	1.9	2.1	1.8	1.9	1.9	1.9	1.9	1.9	1.9	2.3	2.8	2.7	2.6	2.7	2.5	2.6	2.5	2.5	2.9	2.6	1.9	2.3	2.1	1.9	24	2.9	1.8	2.3	0 0
28	2.1	1.8	1.9	1.8	1.9	1.8	1.9	1.8	1.5	1.6	1.3	1.7	1.8	1.8	1.3	1.3	1.5	1.6	1.8	1.6	1.6	1.4	1.3	1.4	24	2.1	1.3	1.7	0 0
29	1.3	1.2	1.3	1.4	1.4	1.2	1.4	1.8	1.6	1.5	2.8	3.2	2.7	2.6	2.7	2.6	2.0	1.8	1.9	1.9	1.9	1.9	1.9	1.8	24	3.2	1.2	1.9	
30	1.5 1.0	1.3 1.0	1.3	1.3	1.4 0.4	2.0	2.4 0.4	2.3 0.3	2.5 0.8	2.4	C	C	C	2.2	2.2 1.1	1.8	1.4 1.2	1.0 1.6	0.8 2.5	0.7	0.6 2.2	0.6 2.2	1.0 2.1	1.0 1.5	21 24	2.5 2.5	0.6	1.5 1.2	
Count 31	31	31	1.0	0.0	31	0.5	31	31	31	1.1	1.1	0.8	1.0	1.0	30	1.1	31	31	31	1.9	31	31	31	31	738	31	29	31	
Count Maximum	2.6	3.6	4.2	5.1	5.0	3.5	3.3	3.2	3.2	3.5	3.7	3.6	3.5	5.7	2.9	2.8	2.6	3.2	2.9	2.7	2.6	2.5	2.9	2.5	24	5.7	2.5	3.4	
Minimum	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	
Average	0.7	0.7	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.9	0.9	0.8	0.8	0.7	0.8	0.8	0.7	0.7	0.8	0.7	24	1	0.0	0.8	
#>900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
									,																Regs Acce	eptable De	sirable V	/iolations	Maximum
Percentiles		10		20		30		40		50		60		70		80		90		95		99		100	Hour				5.7
																									Day				2.8
Data		0.0		0.0		0.0		0.0		0.0		0.0		1.5		1.9		2.2		2.6		3.5		5.7	Month				0.8
Notes	С	- Calibration	n / Span Cy	cle NA	A - No Data	Available	T -	Test	A- I	MOE Audit	М	- Equipme	nt Malfunc	tion / Dowr	n R-	Rate of C	hange												

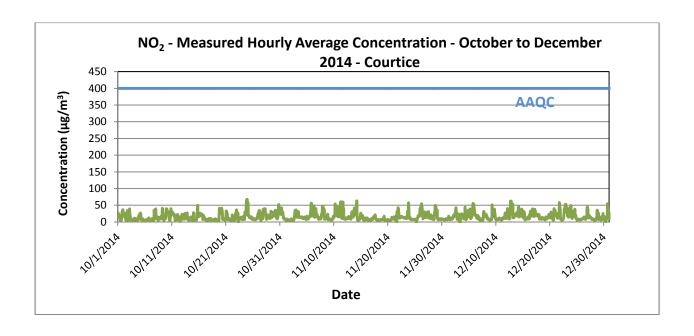
Appendix B NO2 Data Summaries and Time History Plots January 28, 2015

# Appendix B NO<sub>2</sub> Data Summaries and Time History Plots



Project No.: 160950528 B.1

Figure B-1 Time History Plots of Measured Hourly Average and 24-Hour Average NO<sub>2</sub> Concentrations – Courtice (WPCP) Station



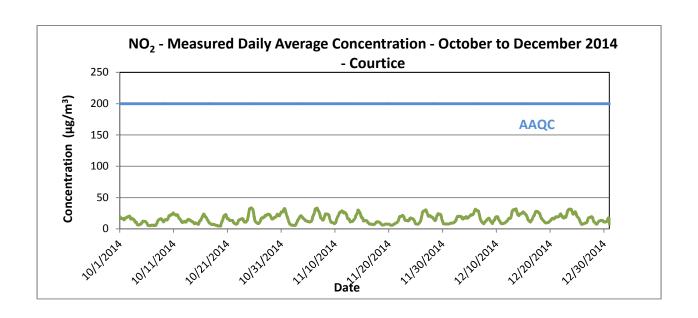
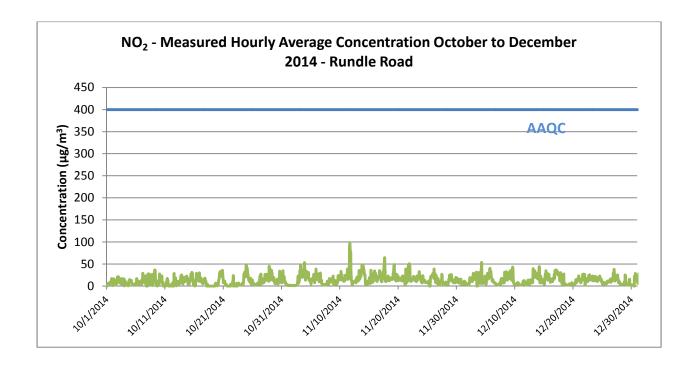
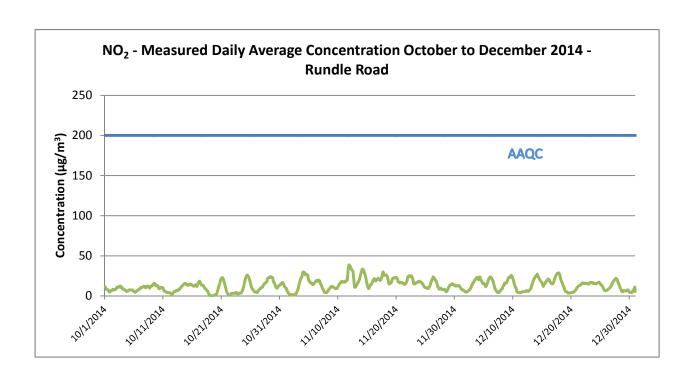


Figure B-2 Time History Plots of Measured Hourly Average and 24-Hour Average NO<sub>2</sub> Concentrations – Rundle Road Station





										o	NO <sub>2</sub> - Co ctober g/m3)		2014																	
	four 0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Count M	aximum M	lin lancons	Augraga	Hrs>400	Daves 200
Day 1	19.0	27.2	17.0	15.8	24.5	16.4	17.6	14.9	13.6	13.7	9.5	8.4	4.5	4.8	4.7	5.0	5.0	7.5	21.9	28.9	28.3	26.5	36.8	35.8	24	36.8	4.5	Average 17.0	0	Days>200
2	30.6	23.7	23.6	16.8	19.4	19.2	24.8	22.4	22.1	26.3	15.6	6.0	6.5	6.0	12.7	7.3	5.4	13.4	29.5	34.5	29.9	12.0	6.1	4.8	24	34.5	4.8	17.4	0	0
3	5.0	9.9	19.2	30.4	39.2	31.8	16.3	18.7	9.4	7.2	9.4	7.7	5.6	3.4	3.3	3.3	3.8	4.4	3.8	4.6	4.6	4.5	8.6	9.9	24	39.2	3.3	11.0	0	0
4	10.9	8.8	7.9	10.7	6.8	5.3	6.5	5.8	9.9	7.4	7.0	5.9	5.3	6.0	5.8	5.0	5.7	3.8	5.9	13.1	15.0	10.5	14.4	21.4	24	21.4	3.8	8.5	0	0
5	9.9	10.7	23.5	19.7	22.7	26.6	25.3	15.7	7.9	5.9	6.8	5.7	5.1	4.1	3.8	9.7	4.9	3.7	3.6	3.3	3.3	4.4	3.5	4.2	24	26.6	3.3	9.8	0	0
6	4.5	4.7	5.3	6.2	6.1	6.3	4.8	6.5	7.2	5.1	7.1	5.1	5.0	4.7	4.4	4.5	6.2	11.9	11.7	4.0	3.9	5.4	6.5	4.0	24	11.9	3.9	5.9	0	0
,	4.7 36.9	6.5 39.3	5.9 20.8	3.9 16.0	4.6 9.3	6.4 12.0	3.9 13.6	3.6 14.1	5.7 13.8	10.2 15.2	9.0 6.3	3.1 5.1	3.1 4.8	3.1 9.7	3.1 8.4	3.4 9.4	3.4 12.1	15.9 13.3	35.1 11.1	23.9 11.8	15.9 13.2	20.6 8.5	16.8 11.1	22.2 10.8	24 24	35.1 39.3	3.1 4.8	9.7 13.6	0	0
٩	16.8	9.3	14.4	13.3	11.7	19.1	41.3	36.2	26.0	20.5	15.4	12.0	6.0	6.5	5.0	6.1	7.5	9.3	15.4	14.5	10.4	19.0	16.1	39.4	24	41.3	5.0	16.3	0	0
10	37.1	37.2	38.8	34.5	32.8	31.8	29.7	28.9	27.5	24.0	29.6	27.1	16.6	6.9	7.8	3.7	3.8	17.6	14.7	21.3	39.5	35.3	33.0	31.9	24	39.5	3.7	25.5	0	- 0
11	29.7	25.8	27.0	23.7	23.3	28.4	26.4	24.3	20.8	18.9	19.2	21.0	22.0	17.6	13.6	3.9	7.9	5.8	7.0	17.1	13.0	12.9	14.4	11.2	24	29.7	3.9	18.1	0	0
12	6.3	14.1	22.3	17.8	18.8	16.1	14.9	13.0	13.6	6.9	2.2	1.8	1.7	1.5	1.6	6.1	3.1	14.3	15.0	16.3	16.7	22.5	23.4	16.3	24	23.4	1.5	11.9	0	0
13	16.8	8.3	10.4	12.0	11.5	8.7	12.4	14.8	23.6	15.6	8.4	12.5	25.6	11.7	16.8	11.4	11.5	16.2	12.1	18.7	27.1	20.2	8.2	7.2	24	27.1	7.2	14.2	0	0
14	8.0	6.4	12.4	6.9	5.5	8.6	8.7	7.6	10.2	7.7	6.4	7.9	10.4	15.1	11.7	9.7	7.0	5.7	3.5	3.8	10.4	5.9	11.6	17.2	24	17.2	3.5	8.7	0	0
15	9.4	27.8	8.9	7.9	2.7	5.1	2.5	3.9	3.9	3.9	3.7	4.0	4.1	6.2	7.0	8.3	26.5	22.0	29.1	49.6	26.4	20.1	20.5	23.3	24	49.6	2.5	13.6	0	0
16	16.3	15.9 12.9	24.3 10.4	23.4 9.8	25.8 8.7	24.8 9.3	26.1 6.0	24.8 5.6	23.1 5.8	21.2 6.5	18.9 6.3	20.8 6.5	20.7 6.1	23.7 7.3	23.9 5.8	19.0 6.5	15.6	14.7 5.8	6.9 5.2	7.7 5.7	12.6 8.5	20.2 10.2	14.0 9.8	14.2 7.8	24 24	26.1 14.7	6.9 5.2	19.1	0	0
17	14.7 9.4	7.2	6.7	7.9	7.8	10.0	10.6	7.8	4.7	4.6	3.2	3.4	3.3	3.7	4.6	3.5	7.4 4.0	5.8	3.3	3.0	7.8	4.9	4.1	3.0	24	10.6	3.0	7.8 5.6	0	0
19	8.4	2.8	6.1	9.0	5.4	4.7	7.7	4.0	4.4	3.3	2.0	4.0	2.2	2.5	3.6	4.9	3.9	3.4	4.1	40.7	41.1	33.2	29.2	27.5	24	41.1	2.0	10.7	0	0
20	27.3	24.2	25.4	26.7	30.5	36.3	41.0	31.2	33.2	26.7	7.3	12.0	11.1	7.9	7.0	7.0	7.0	7.6	7.3	6.1	6.2	5.7	6.2	7.8	24	41.0	5.7	17.0	0	0
21	9.0	22.3	32.8	32.6	29.8	27.4	25.6	21.5	12.6	7.5	6.5	8.0	10.4	11.2	10.7	8.5	7.3	7.5	5.8	5.5	5.5	5.5	4.7	6.0	24	32.8	4.7	13.5	0	0
22	4.7	4.7	4.5	9.1	14.1	20.9	19.6	10.3	9.0	7.3	4.7	4.8	4.0	5.3	4.5	4.2	5.8	6.3	9.1	25.2	9.8	12.7	15.2	31.2	24	31.2	4.0	10.3	0	0
23	36.3	31.9	26.2	24.4	9.5	22.4	26.8	С	С	8.5	7.4	8.3	8.7	7.1	8.1	9.6	12.8	13.6	14.0	13.8	10.7	10.9	8.7	13.1	22	36.3	7.1	15.1	0	0
24	10.9	7.0	7.2	8.4	15.6	12.2	16.3	14.3	10.8	12.5	7.1	8.6	13.0	30.0	18.6	19.6	20.0	25.3	22.7	50.6	65.5	56.6	58.2	67.7	24	67.7	7.0	24.1	0	0
25	54.3	51.5	58.3	57.3	20.9	18.0	20.6	19.4	17.7	14.4	12.1	12.2	13.6	15.9	11.9	12.1	11.9	11.5	15.3	11.4	10.1	7.9	8.1	8.6	24	58.3	7.9	20.6	0	0
26 27	10.2 21.8	9.1 27.2	7.8 19.2	11.2 30.4	7.0 33.9	6.9 32.6	7.7 33.8	7.9 29.2	8.5	8.1	7.1	8.6	7.1 4.2	6.6	8.5 6.5	9.0 9.8	8.7	8.5 22.8	9.2 27.4	10.7 14.8	15.0 9.6	10.5 14.9	19.6 36.5	22.9 34.1	24	22.9 36.5	6.6	9.8	0	0
27	38.4	33.9	34.9	29.4	23.8	24.9	39.6	40.0	22.8 27.5	17.7 23.5	11.6 22.8	5.1 15.0	11.5	6.4 8.3	7.3	8.3	13.6 8.9	10.1	21.5	18.8	19.3	18.5	18.2	14.9	24 24	40.0	4.2 7.3	20.2	0	0
29	18.4	19.8	14.8	12.1	10.1	11.9	17.3	17.2	28.4	32.4	22.9	13.0	12.3	13.1	21.0	19.0	15.5	22.5	18.2	29.2	22.7	22.7	18.0	22.1	24	32.4	10.1	19.0	0	0
30	22.4	18.7	29.4	26.0	34.9	33.4	34.9	32.4	17.2	12.7	11.7	13.0	10.5	9.2	9.7	12.5	18.0	25.8	39.3	52.0	45.7	37.9	36.7	35.2	24	52.0	9.2	25.8	0	0
31	37.1	35.1	29.6	22.7	31.3	31.0	33.9	42.5	36.6	34.5	33.8	26.4	20.9	28.9	26.1	21.2	15.4	11.5	12.8	8.4	9.8	9.7	8.3	8.9	24	42.5	8.3	24.0	0	0
Count	31	31	31	31	31	31	31	30	30	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	742	31	30	31		
Maximum	54.3	51.5	58.3	57.3	39.2	36.3	41.3	42.5	36.6	34.5	33.8	27.1	25.6	30.0	26.1	21.2	26.5	25.8	39.3	52.0	65.5	56.6	58.2	67.7	24	67.7	21.2	42.0		
Minimum	4.5	2.8	4.5	3.9	2.7	4.7	2.5	3.6	3.9	3.3	2.0	1.8	1.7	1.5	1.6	3.3	3.1	3.4	3.3	3.0	3.3	4.4	3.5	3.0	22	10.6	1.5	3.1		
Average	18.9	18.8	19.2	18.6	17.7	18.3	19.9	17.9	15.9	13.9	11.0	9.8	9.2	9.5 0	9.3	8.8	9.3 0	11.9	14.2	18.4	18.0	16.5	17.0	18.9	24	34	5	15.0		
#>900	0	0	0	0	0	0	0	0	U	0	0	0	U	U	0	U	U	0	0	0	0	0	0	U	Pogs No	eptable De	acirable V	/iolations		Maximum
Percentiles		10		20		30		40		50		60		70		80		90		95		99		100	Hour	epianie Di	anianie V	riolations		67.7
. Li contines				20		30				30				,,		55		30		33		33		100	Day					25.8
Data		4.5		6.0		7.4		9.1		11.6		14.7		18.9		23.6		30.5		36.1		51.8		67.7	Month					15.0
Notes	С	- Calibratio	n / Span Cy	cle N	A - No Data	Available	Τ-	Test	Α	<ul> <li>MOE Audit</li> </ul>	. M	- Equipme	nt Malfunct	ion / Dowr	1									·						

										No	NO <sub>2</sub> - Co vember g/m3)		2014																	
Day	our O	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Count M	aximum N	linimum	Average	Hrs>400	Days>200
1	6.5	6.2	5.7	5.6	5.4	6.1	8.2	6.7	7.9	7.1	8.6	5.5	5.1	4.5	5.0	5.1	5.3	5.2	5.2	5.9	5.6	5.5	5.1	5.3	24	8.6	4.5	5.9	0	0
2	4.2	7.6	9.6	4.2	3.9	4.1	6.3	6.6	4.7	5.3	5.3	5.8	5.5	4.9	7.7	6.7	11.4	15.0	20.9	26.5	33.9	24.7	18.5	18.9	24	33.9	3.9	10.9	0	0
3	16.9	36.2	32.6	21.8	13.5	18.5	16.7	16.8	16.5	21.3	26.6	31.1	19.9	16.6	13.3	15.1	14.8	14.8	13.2	13.5	14.4	14.8	14.6	14.1	24	36.2	13.2	18.7	0	0
4	13.0	13.5	13.4	13.9	15.4	12.1	9.8	12.1	11.9	11.8	10.1	10.8	11.3	11.9	13.6	14.6	13.1	10.8	11.5	9.5	7.6	7.9	6.9	10.7	24	15.4	6.9	11.5	0	0
5	17.1	14.0	9.5	13.0	10.0	9.1	9.4	8.9	12.4	12.4	13.3	15.0	15.2	18.3	19.0	21.2	17.1	28.4	35.2	50.0	56.6	49.1	23.7	17.1	24	56.6	8.9	20.6	0	0
6	33.3	42.8	36.0	24.5	39.6	41.8	46.4	46.8	48.4	33.2	17.0	13.5	16.8	15.0	18.2	25.3	40.1	26.1	27.5	16.1	19.8	23.1	22.0	18.6	24	48.4	13.5	28.8	0	0
7	17.3	14.8	14.9	10.4	8.2	8.4	11.4	11.6	10.0	8.2	7.8	11.3	12.7	10.8	8.9	9.0	12.0	22.0	23.8	16.5	21.4	46.3	40.6	41.4	24	46.3	7.8	16.7	0	0
8	46.9	40.2	40.2	35.9	33.0	30.6	36.6	7.5	7.8	8.1	9.5	9.8	9.9	9.4	9.4	9.4	12.6	11.4	12.9	14.5	18.3	23.1	15.5	6.4	24	46.9	6.4	19.1	0	0
10	7.6 13.9	11.8	7.6 15.1	8.2 18.3	7.4 18.5	8.5 23.9	9.2 53.9	8.4 49.8	8.7 38.2	8.3 34.8	5.8 20.9	5.3 31.5	6.2 22.9	7.4 19.4	7.6 17.9	7.1 25.7	5.5 22.4	7.9	8.3 44.4	8.3 38.1	9.0	13.5 15.1	16.4 17.6	15.2 16.0	24	16.4 53.9	5.3 13.9	8.7 26.0	0	- 0
10	29.6	25.4	24.0	22.1	24.9	33.0	51.7	60.6	47.1	15.0	13.3	13.3	11.3	9.7	10.6	12.3	21.6	59.5	23.5	33.9	40.4	14.4	10.0	8.9	24	60.6	8.9	25.7	0	0
12	9.0	11.5	12.1	10.4	7.6	9.1	11.8	11.3	12.2	9.8	10.1	12.5	12.1	9.5	9.1	10.6	11.5	15.5	16.2	11.3	11.8	10.5	15.0	14.8	24	16.2	7.6	11.5	0	0
13	14.3	14.1	13.5	9.5	7.9	8.4	10.7	16.4	29.9	30.5	14.3	14.9	19.8	23.1	20.6	15.3	21.4	30.8	36.9	37.0	41.9	39.3	34.7	24.9	24	41.9	7.9	22.1	0	0
14	33.5	29.9	27.4	20.4	23.9	43.5	63.3	51.5	22.4	10.9	5.7	5.0	5.2	5.4	5.4	6.0	6.8	6.4	10.1	10.4	8.2	9.3	11.3	24.4	24	63.3	5.0	18.6	0	0
15	26.1	24.3	21.4	19.1	11.8	13.3	16.9	18.8	19.4	15.4	10.5	10.4	8.5	5.8	4.5	4.3	5.9	6.2	6.8	8.3	6.6	11.9	12.2	10.9	24	26.1	4.3	12.5	0	0
16	8.6	8.7	8.6	9.3	7.6	11.9	7.8	6.3	6.7	4.7	5.7	5.3	6.1	7.2	7.1	6.5	6.5	5.9	5.7	5.9	5.8	5.4	5.3	7.8	24	11.9	4.7	6.9	0	0
17	9.5	10.7	7.2	7.3	8.2	8.0	8.2	11.8	13.3	13.1	15.4	16.5	15.3	14.7	12.2	15.6	21.5	19.2	11.3	10.2	7.0	6.4	5.9	5.8	24	21.5	5.8	11.4	0	0
18	5.2	5.8	7.3	7.1	5.4	5.5	5.6	6.8	6.6	6.2	5.7	5.9	5.1	5.5	5.9	6.4	7.0	6.7	7.1	6.8	7.1	7.4	6.5	6.5	24	7.4	5.1	6.3	0	0
19	6.5	6.5	6.6	8.3	9.8	9.3	11.3	13.8	17.0	9.2	7.8	5.4	4.7	5.9	5.8	5.2	5.3	5.0	5.5	5.9	6.2	6.3	6.9	7.6	24	17.0	4.7	7.6	0	0
20	7.1	5.5	5.3	5.7	5.9	5.6	5.2	5.0	5.6	6.2	6.1	5.8	5.3	5.3	5.0	5.7	7.3	8.8	13.7	11.4	10.4	11.8	11.0	10.2	24	13.7	5.0	7.3	0	0
21	12.3	11.7	11.3	15.3	8.9	7.7	13.0	14.3	13.9	6.5	6.3	5.4	6.4	10.8	19.2	12.7	M	27.7	32.0	31.7	30.5	34.5	42.3	38.5	23	42.3	5.4	17.9	0	0
22	38.2	27.2	14.6	11.2	11.8	12.5	13.1	11.8	11.8	13.0	14.4	15.8	16.0 12.2	17.0	16.1	16.2	15.8	14.8	14.9	14.1	12.8 22.5	12.9	12.3	12.3	24	38.2	11.2	15.4	0	0
23 24	11.1 15.1	11.3 10.6	11.6 15.4	13.5 9.6	13.3 10.1	11.6 9.1	11.5 7.3	12.3 8.0	11.2 9.3	10.6 8.1	13.8 7.7	14.0 7.3	6.7	11.6 6.8	10.9 7.7	14.6 7.4	31.3 7.8	17.6 7.7	14.0 7.8	22.6 7.4	7.1	57.5 7.2	35.9 8.1	15.9 8.1	24 24	57.5 15.4	10.6 6.7	17.2 8.6	0	0
25	7.2	7.8	7.6	6.5	7.3	7.5	8.4	6.U	5.5 C	0.1 C	9.4	8.5	9.7	11.9	15.4	17.4	19.1	16.5	17.4	17.4	17.6	18.0	17.8	36.7	21	36.7	6.5	13.6	0	0
26	41.0	31.9	43.7	43.0	36.5	49.2	54.4	47.9	43.3	43.6	18.0	17.6	16.6	9.6	13.4	17.1	16.1	24.3	23.2	30.2	30.1	26.7	19.8	12.9	24	54.4	9.6	29.6	0	0
27	13.0	15.1	13.2	25.0	21.3	25.0	28.1	26.0	25.1	16.8	15.8	14.3	30.4	31.0	11.2	18.8	17.7	15.6	18.7	16.0	13.5	11.8	12.7	19.9	24	31.0	11.2	19.0	0	0
28	21.2	8.8	10.0	12.0	18.7	12.8	13.1	14.9	16.5	9.4	7.5	7.1	7.2	7.2	6.9	14.6	27.0	30.7	35.8	49.1	45.5	40.3	44.2	36.2	24	49.1	6.9	20.7	0	0
29	28.8	30.0	33.5	33.8	35.1	10.9	8.8	7.5	6.6	6.2	6.7	7.3	7.4	8.1	9.5	8.9	8.3	9.6	8.2	7.0	6.9	6.5	7.1	10.1	24	35.1	6.2	13.0	0	0
30	10.0	8.9	8.4	8.0	8.7	8.2	8.3	8.2	7.8	6.9	7.4	6.3	5.7	6.1	6.2	7.4	7.4	8.2	9.2	8.5	9.5	9.3	9.2	7.0	24	10.0	5.7	8.0	0	0
31																									0	0.0	0.0		0	0
Count	30	30	30	30	30	30	30	29	29	29	30	30	30	30	30	30	29	30	30	30	30	30	30	30	716	30	29	30		
Maximum	46.9	42.8	43.7	43.0	39.6	49.2	63.3	60.6	48.4	43.6	26.6	31.5	30.4	31.0	20.6	25.7	40.1	59.5	44.4	50.0	56.6	57.5	44.2	41.4	24	63.3	20.6	43.4		
Minimum	4.2	5.5	5.3	4.2	3.9	4.1	5.2	5.0	4.7	4.7	5.3	5.0	4.7	4.5	4.5	4.3	5.3	5.0	5.2	5.9	5.6	5.4	5.1	5.3	0	0.0	3.9			
Average	17.5	16.9	16.2	15.1	14.7	15.5	18.9	18.2	17.0	13.5	10.9	11.3	11.2	11.0	10.8	12.1	14.5	16.7	17.4	18.1	18.5	19.0	17.0	16.1	23	33	7	15.3		
#>900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
Dorcontilos		10		20		30		40		50		60		70		80		90		95		99		100	-0-	eptable D	esirable \	violations		Maximum 63.3
Percentiles		10		20		50		40		50		00		70		80		90		95		99		100	Hour					29.6
Data		5.8		7.1		8.2		9.6		11.8		13.6		16.1		21.4		32.8		40.5		51.6		63.3	Day Month					15.3
Data		3.0		7.1		3.2		5.0		11.0		13.0		10.1		21.4		32.0		40.5		31.0		03.3	WOULT					13.3
Notes	С	- Calibration	n / Span Cy	cle N	A - No Data	Available	т-	Test	A-	MOE Audit	М	- Equipme	nt Malfunct	tion / Dowr	1															

										Dec	O <sub>2</sub> - CC ember /m3)	DURTICE	2014																
	Hour 0	100	200	300	400	500	600	700	800	000	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	C 84	ximum M			U 400 D 200
Day 1	7.8	6.8	6.8	8.4	9.7	8.1	13.6	17.1	13.0	900	9.6	8.0	7.4	6.7	8.0	8.9	11.3	10.2	11.2	11.6	8.2	8.2	8.2	8.3	24	17.1	6.7	Average 9.5	Hrs>400 Days>200
2	8.8	12.5	11.9	14.8	18.0	20.1	15.6	20.8	23.2	21.0	21.6	22.2	18.4	30.0	33.7	42.6	32.3	31.1	25.6	26.3	7.9	7.4	7.4	7.7	24	42.6	7.4	20.0	0 0
3	7.4	9.7	14.5	23.4	18.5	13.2	12.8	Α	Α	Α	Α	Α	22.8	21.6	18.5	16.0	18.9	24.9	23.7	20.5	20.8	20.5	14.7	12.8	19	24.9	7.4	17.6	0 0
4	15.3	10.6	8.7	8.8	17.2	19.2	20.7	27.1	44.0	28.3	8.3	7.4	6.8	7.6	9.1	11.4	22.6	28.6	29.9	29.7	28.5	35.0	29.3	22.6	24	44.0	6.8	19.9	0 0
5	23.0	20.1	15.1	16.3	25.0	29.4	39.0	33.6	33.6	10.2	11.4	11.0	13.8	14.9	17.1	17.6	26.9	20.9	50.2	55.4	54.8	53.7	53.1	48.4	24	55.4	10.2	28.9	0 0
6	38.4	37.0	34.5	25.9	21.8	20.4	21.9	18.8	17.3	17.0	14.7	12.2	12.4	10.9	10.3	14.7	19.3	14.8	9.2	12.4	15.5	14.2	7.9	6.6	24	38.4	6.6	17.8	0 0
7	10.8	7.2	9.9	10.3	5.2	4.7	6.6	8.0	7.9	6.1	4.9	5.2	4.5	4.2	4.1	4.9	9.8	23.7	27.8	31.5	23.4	23.1	19.2	19.0	24	31.5	4.1	11.8	0 0
8	17.6	17.4	17.7	15.6	16.5	23.2	19.3	17.6	19.3	12.9	10.6	8.8	10.9	9.6	10.7	8.2	6.7	7.2	7.5	6.9	6.6	5.6	5.9	5.4	24	23.2	5.4	12.0	0 0
10	6.1 9.9	5.9 7.1	6.8	6.2	6.9 7.0	6.5 7.1	9.8 7.9	14.4 7.5	51.1 7.7	37.4 7.0	28.7 9.4	23.6 6.6	20.6 9.0	18.5	16.3	25.2 8.4	16.4	24.7 11.9	37.9 9.8	23.3 9.5	27.1 8.6	23.7 6.9	12.5 6.7	11.4 6.7	24	51.1 11.9	5.9 6.2	19.3 8.3	0 0
11	9.9	6.2	6.6	6.3	9.1	8.5	8.9	12.5	10.5	9.8	10.8	13.5	9.0	11.2	12.6	12.7	18.8	19.5	26.8	20.2	12.1	10.3	10.0	12.3	24	26.8	6.2	12.0	0 0
12	11.9	18.1	20.1	22.4	39.9	17.2	13.0	18.5	33.7	15.0	10.5	11.6	8.6	9.2	12.7	10.7	26.9	48.1	62.4	52.3	59.0	61.6	44.6	53.5	24	62.4	8.6	28.4	0 0
13	32.1	26.1	22.7	34.7	53.1	20.3	12.5	14.8	20.3	12.7	15.3	23.0	16.6	17.7	18.4	21.7	23.3	23.8	24.9	24.3	24.5	25.8	28.4	22.5	24	53.1	12.5	23.3	0 0
14	18.3	17.3	19.3	22.2	36.9	40.2	45.3	31.2	14.5	16.7	16.3	16.9	23.0	21.2	17.5	19.8	29.5	34.9	35.8	38.1	38.0	37.0	35.0	25.9	24	45.3	14.5	27.1	0 0
15	16.1	13.0	13.0	15.2	14.3	31.4	29.4	18.8	25.8	6.9	6.7	12.7	8.2	7.7	10.2	10.9	9.1	8.6	9.7	10.1	10.4	8.9	13.0	15.0	24	31.4	6.7	13.5	0 0
16	13.5	9.3	9.8	9.4	9.4	11.8	9.3	22.4	16.6	18.9	31.8	20.6	20.0	25.6	17.0	22.0	19.0	31.2	36.5	27.3	39.3	32.8	21.3	23.4	24	39.3	9.3	20.8	0 0
17	19.2	16.3	34.0	37.6	36.3	37.8	36.3	34.3	32.6	26.4	20.7	18.0	20.3	22.7	21.2	21.3	23.2	18.9	20.7	17.9	21.1	21.6	23.0	22.5	24	37.8	16.3	25.2	0 0
18	15.1	20.4	9.3	7.9	13.0	9.0	10.5	11.5	11.3	9.1	9.9	8.0	8.2	8.8	13.3	13.7	11.3	11.5	9.7	8.6	11.4	8.4	8.3	10.2	24	20.4	7.9	10.8	0 0
19	8.9	8.4	6.7	6.1	7.4	8.1	10.7	15.3	10.9	11.0	8.5	8.5	10.5	13.1	14.3	14.0	14.6	15.4	13.1	20.4	20.4	23.0	16.1	13.3	24	23.0	6.1	12.4	0 0
20 21	16.5 34.8	18.1 22.8	14.4 18.6	11.4 19.3	17.8 18.3	26.1 22.9	29.6 26.3	26.6 18.2	19.6 20.2	13.6 16.9	12.0 13.3	13.1 10.6	14.7 14.6	8.5 14.4	6.7 12.7	8.1 12.2	6.3 13.9	5.8 15.9	21.0 21.0	39.5 57.9	29.4 56.3	25.7 45.1	23.8 39.4	27.8 36.5	24 24	39.5 57.9	5.8 10.6	18.2 24.2	0 0
21	11.9	8.4	7.3	7.0	6.3	7.2	6.3	5.9	5.6	6.5	6.9	7.1	8.3	9.9	11.5	23.6	28.9	38.8	34.6	37.5	51.2	38.7	40.5	52.9	24	52.9	5.6	19.3	0 0
23	43.7	29.7	38.8	41.5	40.7	42.8	41.2	18.1	23.6	17.5	18.0	14.7	15.6	14.6	14.7	25.6	18.7	29.7	34.8	44.1	38.8	39.4	49.0	31.5	24	49.0	14.6	30.3	0 0
24	16.9	32.7	14.1	10.8	10.6	16.5	18.6	15.4	16.4	27.0	32.3	29.6	27.9	30.6	19.1	32.4	38.1	19.2	21.2	20.5	18.4	10.7	9.7	8.8	24	38.1	8.8	20.7	0 0
25	8.3	5.8	5.7	6.6	6.5	7.3	7.7	8.5	8.8	8.4	7.7	6.5	6.1	6.2	5.9	5.9	8.1	8.2	7.9	8.2	6.8	8.2	8.5	8.2	24	8.8	5.7	7.3	0 0
26	9.5	9.2	10.0	10.9	11.1	10.0	9.5	10.1	12.3	15.2	14.2	10.4	9.5	8.8	8.5	8.8	7.7	10.8	11.6	12.3	13.4	18.2	39.7	44.9	24	44.9	7.7	13.6	0 0
27	42.0	38.9	34.5	19.5	11.6	13.9	12.8	13.0	19.4	17.6	14.7	13.1	12.3	12.7	14.3	13.2	11.9	12.0	9.4	8.5	7.0	8.7	10.0	7.9	24	42.0	7.0	15.8	0 0
28	8.5	7.3	8.9	7.6	6.8	5.6	6.8	4.8	4.5	7.5	5.1	5.1	6.0	7.0	6.3	9.3	10.9	13.5	18.7	35.3	18.8	12.6	28.2	19.8	24	35.3	4.5	11.0	0 0
29	26.1	23.2	9.7	6.4	7.2	8.6	9.6	12.1	14.1	7.3	6.0	7.9	7.3	6.3	7.1	6.7	10.9	17.6	10.9	11.1	14.1	25.1	14.2	18.2	24	26.1	6.0	12.0	0 0
30	16.4	6.9	7.9	8.4	10.9	12.0	8.5	14.3	С	С	С	6.6	10.6	16.3	16.0	10.8	25.6	54.3	35.3	25.0	22.5	23.7	12.9	11.4	21	54.3	6.6	17.0	0 0
31	12.4	10.9	10.7	9.2	14.6	13.5	21.1	26.5 30	14.3	11.8	15.4	12.4 30	11.0	10.0	11.4	11.3	12.2	14.3	12.1	10.3	10.9	11.4	12.7	12.5	726	26.5	9.2	13.0	0 0
Count Maximum	31 43.7	31 38.9	31 38.8	31	31 53.1	31	31 45.3	34.3	-	29 37.4	29 32.3	29.6	31 27.9	31 30.6	31 33.7	31 42.6	31	31 54.3	31 62.4	31 57.9	31 59.0	31 61.6	31 53.1	31 53.5	736	31	29 27.9	31 44.3	
Minimum	6.1	38.9 5.8	38.8 5.7	41.5 6.1	5.2	42.8 4.7	45.3 6.3	34.3 4.8	51.1 4.5	6.1	4.9	29.6 5.1	4.5	4.2	4.1	42.6	38.1 6.3	54.3	7.5	6.9	6.6	61.6 5.6	53.1	53.5	24 19	62.4 8.8	4.1	5.5	
Average	17.3	15.6	14.7	14.8	17.0	16.9	17.5	17.3	19.0	14.7	13.6	12.5	12.8	13.4	13.2	15.3	17.5	21.0	22.9	24.4	23.4	22.4	21.1	20.3	24	37	8	17.5	
#>900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		***			
										-						- 1	-				-				Regs Acc	eptable D	esirable \	/iolations	Maximum
Percentiles		10		20		30		40		50		60		70		80		90		95		99		100	Hour				62.4
																									Day				30.3
Data		7.0		8.4		9.9		11.6		13.9		17.1		20.4		24.9		34.5		39.6		54.1		62.4	Month				17.5
Notes	С	- Calibratio	n / Span Cy	cle N	A - No Data	Available	Т-	Test	A-	MOE Audit	М	- Equipme	nt Malfunc	tion / Dowr	1														

										o	NO <sub>2</sub> - Ro ctober g/m3)	undle Roa	d 2014																	
Day	lour	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Count M	laximum N	tinimum	Average	Hrs>400	Days>200
1	0.0	0.0	0.3	1.2	4.5	5.8	4.3	4.5	6.0	3.2	4.0	4.5	3.5	8.6	9.0	6.4	6.2	8.1	9.0	7.5	9.0	17.2	12.1	12.2	24	17.2	0.0	6.1	0	0
2	7.9	1.6	1.1	1.7	3.7	6.1	16.6	15.9	11.0	11.1	6.6	4.4	2.7	7.6	2.6	3.3	4.6	5.6	13.9	14.7	12.3	20.5	21.4	17.4	24	21.4	1.1	8.9	0	0
3	11.4	21.2	14.3	8.4	8.9	13.2	17.1	9.4	6.5	8.1	12.0	5.3	14.1	9.4	7.6	7.2	17.2	4.6	8.3	9.1	4.9	4.4	8.1	10.6	24	21.2	4.4	10.0	0	0
4	16.4	7.7	0.4	5.9	12.8	5.9	5.9	4.6	8.2	3.6	3.8	2.6	3.9	2.5	3.5	3.5	3.4	0.7	1.5	6.3	11.2	9.4	14.5	13.6	24	16.4	0.4	6.3	0	0
5	14.4	9.6	10.5	13.0	11.6	11.1	12.7	7.5	4.6	2.4	3.8	2.7	3.3	3.2	1.9	2.0	3.7	4.1	4.8	5.6	3.4	3.4	1.8	3.5	24	14.4	1.8	6.0	0	0
6	2.2	4.4	3.9	4.6	16.9	8.0	11.9	10.9	12.3	10.9	9.8	8.3	8.1	5.0	8.7	5.1	9.7	10.0	9.2	9.9	9.6	10.9	9.9	6.0	24	16.9	2.2	8.6	0	0
7	4.8	14.2	9.9	8.4	14.2	28.9	17.8	14.4	10.5	11.5	9.8	17.0	7.7	7.5	10.0	12.6	13.8	23.3	12.1	3.6	0.1	0.2	0.0	2.1	24	28.9	0.0	10.6	0	0
8	0.0	3.9	26.7	25.7	24.1	19.4	28.1	23.6	17.6	11.8	4.2	4.2	3.9	2.3	5.8	4.6	2.8	7.1	22.4	26.8	10.5	1.3	4.4	4.3	24	28.1	0.0	11.9	0	0
9	12.0	15.6	17.5	26.6	25.3	29.1	36.7	36.6	32.9	19.8	13.8	12.5	4.4	2.3	0.8	0.3	0.4	0.6	0.8	1.2	3.2	1.9	12.0	7.3	24	36.7	0.3	13.1	0	- 0
10	2.0 1.4	12.4 3.0	27.5 0.0	16.1 0.7	16.3 0.0	12.2 5.2	17.0 3.0	20.2 10.0	17.5 8.0	11.9 12.7	11.2 17.5	23.4 14.0	15.0 11.7	7.0 10.4	5.7 1.8	5.6 0.0	9.2 0.0	5.2 0.0	0.0	1.4 0.0	0.7 0.0	0.0	1.2 0.0	1.6 0.0	24 24	27.5 17.5	0.0	10.0 4.1	0	0
12	0.0	3.1	0.0	0.0	1.7	0.0	0.0	0.0	7.7	8.1	4.5	0.0	7.0	0.1	28.6	2.7	2.3	6.6	14.4	12.0	18.4	7.2	1.9	0.6	24	28.6	0.0	5.3	0	0
13	5.3	6.4	4.7	2.2	2.1	3.2	11.2	4.8	4.3	6.1	4.4	10.4	11.0	9.8	8.7	6.6	12.0	19.7	23.4	14.9	11.4	25.4	17.8	15.5	24	25.4	2.1	10.1	0	0
14	15.1	6.1	4.9	7.7	19.3	14.3	19.1	13.1	10.3	9.9	13.9	14.4	17.5	19.8	16.8	16.5	21.8	19.1	22.5	20.3	16.7	10.2	17.3	5.1	24	22.5	4.9	14.6	0	0
15	11.1	6.3	3.4	3.3	7.5	9.0	7.9	16.0	12.2	12.3	15.4	27.3	25.6	13.8	13.6	31.3	20.3	29.7	17.7	17.6	13.6	8.5	3.5	2.1	24	31.3	2.1	13.7	0	0
16	4.3	1.2	2.9	0.2	1.8	0.8	2.6	12.6	12.8	18.3	28.9	27.0	24.2	24.6	24.2	16.5	14.2	15.7	12.9	14.7	10.8	21.8	30.2	23.8	24	30.2	0.2	14.5	0	0
17	17.8	19.5	11.3	12.1	15.6	17.6	14.4	9.0	8.5	7.9	8.2	7.8	5.4	9.7	6.7	6.4	15.0	10.7	11.0	16.5	17.3	18.2	14.8	9.6	24	19.5	5.4	12.1	0	0
18	12.0	9.3	5.8	4.4	0.5	4.5	0.6	4.5	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	0.0	0.0	0.0	24	12.0	0.0	1.7	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	0.0	0.0	2.9	5.3	7.0	6.5	1.5	4.6	1.9	2.3	1.2	24	7.0	0.0	1.4	0	0
20	0.7	4.3	3.0	3.0	5.4	12.2	14.1	16.3	19.3	29.0	29.3	24.9	33.1	26.4	29.9	31.6	22.6	29.7	30.7	27.4	34.9	35.9	25.6	20.3	24	35.9	0.7	21.2	0	0
21	12.7	7.8	11.3	11.7	11.8	10.8	11.4	10.4	5.9	2.5	1.7	2.6	4.5	3.5	2.6	1.9	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24	12.7	0.0	4.7	0	0
22 23	0.0	0.0	0.0 1.9	0.0	0.0	0.6	4.1 1.6	2.2 6.4	1.1 2.6	1.9 C	1.7 C	0.9 5.8	1.3 5.2	0.8 5.5	1.5 4.4	9.7 5.2	6.8 7.0	15.7 5.4	23.9 3.8	5.0 2.9	0.0 2.5	0.0 2.4	0.0 2.3	0.0 2.3	24 22	23.9 7.0	0.0	3.2 3.1	0	0
23	0.0 2.1	2.2	1.9	1.8	0.0 2.2	0.0 2.2	4.9	7.1	5.2	3.5	4.5	5.8 5.9	10.7	28.0	19.8	19.2	22.8	32.2	31.0	31.8	2.5	21.5	33.4	47.2	24	47.2	1.8	15.2	0	0
25	29.7	29.5	41.9	40.6	31.3	23.7	26.7	20.4	17.4	13.2	12.6	11.5	15.4	14.2	8.8	12.5	13.6	17.6	9.5	5.6	4.9	4.3	3.9	47.2	24	41.9	3.9	17.2	0	0
26	10.5	13.6	8.3	8.1	3.3	3.3	3.4	4.9	3.1	3.6	3.4	3.4	3.0	3.0	3.3	3.4	3.8	3.5	3.3	3.6	4.1	6.3	5.9	7.5	24	13.6	3.0	5.0	0	0
27	6.6	6.0	7.0	5.6	3.6	4.0	13.4	22.6	13.2	8.9	16.4	27.0	5.0	11.2	7.9	11.1	9.0	11.3	16.1	11.5	6.8	7.1	7.5	11.8	24	27.0	3.6	10.4	0	0
28	14.6	10.4	9.7	14.6	26.3	23.5	25.6	26.6	20.7	24.4	24.1	26.9	20.6	13.5	15.0	17.1	14.3	17.2	25.8	19.2	11.0	44.8	44.4	27.7	24	44.8	9.7	21.6	0	0
29	25.2	20.1	13.8	22.9	20.5	21.0	36.5	32.8	30.4	30.0	23.7	13.7	15.9	16.3	17.0	16.6	11.8	18.7	12.3	14.3	6.0	7.1	7.3	6.3	24	36.5	6.0	18.3	0	0
30	5.3	5.7	5.8	5.8	5.9	9.8	12.9	15.7	12.2	8.0	5.1	6.1	11.8	11.9	8.8	15.9	24.5	34.0	27.7	20.5	24.7	16.1	12.4	9.6	24	34.0	5.1	13.2	0	0
31	7.2	9.2	10.1	12.1	8.7	17.9	34.6	20.6	10.2	14.3	12.5	21.5	14.3	11.9	12.2	8.8	6.3	5.3	6.8	3.3	3.6	4.3	3.9	3.5	24	34.6	3.3	11.0	0	0
Count	31	31	31	31	31	31	31	31	31	30	30	31	31	31	31	31	31	31	31	31	31	31	31	31	742	31	30	31		
Maximum	29.7	29.5	41.9	40.6	31.3	29.1	36.7	36.6	32.9	30.0	29.3	27.3	33.1	28.0	29.9	31.6	24.5	34.0	31.0	31.8	34.9	44.8	44.4	47.2	24	47.2	24.5	33.8		
Minimum	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	7.0	0.0	0.0		
Average #>000	8.2 0	8.2 0	8.4	8.7 0	9.9 0	10.4 0	13.4 0	13.0	10.7	10.3 0	10.2	10.8 0	10.0	9.3 0	9.3	9.2	9.8 0	11.9 0	12.3	10.6 0	9.0 0	10.1 0	10.3 0	8.9	24	25	2	10.1		
#>900	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	Rogs \cc	eptable D	ocirablo \	/iolations		Maximum
Percentiles		10		20		30		40		50		60		70		80		90		95		99		100	Hour	eptable D	can able 1	riolations		47.2
																									Day					21.6
Data		0.0		2.3		3.9		5.7		8.0		10.7		12.9		16.8		23.6		28.1		36.3		47.2	Month					10.1
Notes	C	- Calibratio	n / Span Cy	rcle N	A - No Data	Available	Τ-	Test	Α	- MOE Audit	М	- Equipme	nt Malfunct	tion / Dowr	n R-	Rate of C	hange													

										No	NO <sub>2</sub> - Ru vember g/m3)		d 2014																	
Day Ho	our O	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Count M	aximum N	Ainimum	Average	Hrs>400 Da	avs>200
1	2.2	1.6	1.7	1.5	1.8	1.7	1.7	1.6	1.9	1.9	1.6	1.6	1.7	1.6	1.8	1.5	1.9	1.7	1.6	1.3	1.2	1.4	1.3	1.3	24	2.2	1.2	1.6	0	0
2	1.1	1.1	1.2	1.2	1.3	1.2	1.4	1.3	1.3	1.3	1.3	1.4	1.6	1.7	2.4	2.4	2.9	4.1	6.7	12.5	22.0	17.8	12.6	6.9	24	22.0	1.1	4.5	0	0
3	10.4	24.6	12.7	17.8	35.0	22.7	25.3	48.1	31.0	28.4	32.4	35.5	24.0	24.1	19.5	20.3	24.2	22.9	22.4	22.1	25.5	41.5	48.8	53.4	24	53.4	10.4	28.0	0	0
4	37.0	28.1	28.0	13.5	19.3	21.1	34.0	25.6	20.2	19.3	20.4	19.4	25.6	24.8	25.0	30.8	19.0	13.3	15.5	13.7	13.9	13.8	10.5	12.0	24	37.0	10.5	21.0	0	0
5	15.1	12.8	4.5	11.7	15.0	16.5	13.6	14.3	17.9	14.4	14.5	16.4	18.9	26.8	20.5	11.1	7.5	12.7	15.0	15.9	13.9	19.1	38.7	23.2	24	38.7	4.5	16.3	0	0
6	22.6 4.4	20.8 3.7	18.4 3.4	16.3 3.1	15.2 2.8	20.3 2.9	22.2 2.8	28.0 3.1	24.9 3.6	21.5 3.0	14.9 3.2	9.7 3.6	10.1 2.7	15.1 2.5	20.2 2.5	24.7 3.0	29.7 3.4	13.1 3.6	10.9 5.2	7.8 6.8	12.0 5.6	13.2 11.3	4.9 10.8	4.5 6.5	24 24	29.7 11.3	4.5 2.5	16.7 4.3	0	0
,	5.5	3.6	4.1	6.1	6.8	17.0	16.6	14.0	13.0	16.6	14.1	12.7	11.2	9.5	9.5	11.4	14.0	11.4	13.1	16.3	19.6	22.7	7.3	2.9	24	22.7	2.9	11.6	0	0
9	2.8	2.8	3.8	7.6	4.7	10.2	12.8	10.4	10.5	7.2	5.9	3.9	4.8	8.2	7.5	8.8	11.1	23.7	13.1	14.3	15.8	24.1	22.3	15.6	24	24.1	2.8	10.5	0	0
10	15.3	17.1	16.8	18.9	20.0	33.5	18.9	13.8	16.4	25.7	16.4	16.7	17.4	14.7	17.4	12.5	15.9	11.0	17.6	12.7	12.1	17.6	16.5	24.8	24	33.5	11.0	17.5	0	0
11	22.3	19.7	15.8	18.7	17.8	16.6	18.0	32.1	39.0	30.1	15.4	16.2	15.8	17.6	25.6	42.0	86.0	96.7	91.1	81.0	74.8	77.1	36.0	22.9	24	96.7	15.4	38.7	0	0
12	14.1	10.0	7.0	4.7	3.6	6.1	8.0	9.8	10.1	9.4	9.3	8.8	8.8	9.2	10.1	12.3	12.3	12.2	11.3	7.7	15.6	16.7	17.5	20.5	24	20.5	3.6	10.6	0	0
13	20.0	18.4	17.6	13.2	11.6	18.3	20.5	26.1	35.4	26.5	15.5	18.9	25.7	28.0	26.3	21.6	29.4	30.9	37.8	46.8	45.2	47.1	48.5	38.1	24	48.5	11.6	27.8	0	0
14	46.3	42.2	40.1	38.2	35.1	26.3	26.0	26.3	24.8	11.2	4.4	4.2	5.4	3.7	3.3	5.3	6.3	6.8	9.0	11.8	9.4	5.7	5.6	7.3	24	46.3	3.3	16.9	0	0
15	12.2	8.8	19.0	15.5	9.7	9.1	6.2	15.3	35.8	31.9	28.5	22.3	18.7	12.2	9.7	8.3	21.2	14.3	10.8	18.4	21.9	20.5	30.8	34.5	24	35.8	6.2	18.1	0	0
16	28.0	22.5 18.4	19.3 11.3	29.1 13.7	19.4 15.1	24.3	22.9	12.1 26.3	13.7 15.8	10.4	14.9	13.6	15.2 29.6	19.3 35.2	18.7	20.3 49.5	18.9	18.7	23.2 39.3	27.0 32.1	35.1 10.7	33.2 12.1	33.6 10.5	28.4	24 24	35.1	10.4	21.7	0	0
17	25.5 11.2	13.7	16.5	17.8	12.7	10.0 12.7	12.0 14.9	20.3	17.4	23.1 15.0	27.8 14.3	31.1 14.4	12.1	13.3	46.4 14.3	17.0	61.7 18.5	64.4 17.7	18.2	15.9	17.1	19.0	16.2	13.5 15.0	24	64.4 22.9	10.0 11.2	26.5 15.7	0	0
19	15.6	16.6	17.5	20.5	28.8	28.1	42.0	42.6	49.1	33.6	23.5	16.0	13.8	20.2	21.2	17.8	12.7	11.3	26.8	16.0	15.8	19.0	21.6	23.2	24	49.1	11.3	23.1	0	0
20	21.0	12.2	13.2	13.4	17.9	16.9	14.1	15.0	17.7	17.6	16.8	16.3	14.3	14.3	12.5	11.7	17.2	22.6	19.2	23.3	19.7	17.8	14.7	12.3	24	23.3	11.7	16.3	0	0
21	14.2	21.7	15.6	12.3	6.0	3.3	3.8	11.6	38.7	10.8	6.8	8.3	10.3	21.3	24.5	10.7	21.5	35.0	47.2	30.3	36.7	38.2	50.7	49.8	24	50.7	3.3	22.1	0	0
22	46.5	36.3	15.4	14.0	10.7	12.3	16.0	11.9	13.3	12.5	16.1	15.9	15.8	16.7	18.0	17.5	22.0	16.2	15.5	15.6	15.0	14.2	12.3	15.1	24	46.5	10.7	17.3	0	0
23	12.0	15.7	10.6	12.9	20.9	10.8	22.0	23.3	18.7	14.9	19.7	18.1	15.5	17.2	18.4	33.1	27.9	20.2	19.1	16.5	23.3	20.2	15.0	10.0	24	33.1	10.0	18.1	0	0
24	12.0	8.5	7.7	7.2	8.7	20.0	23.5	10.9	9.7	10.1	12.3	12.0	11.4	13.7	9.6	9.6	10.3	8.1	8.2	9.0	9.1	8.2	9.2	8.5	24	23.5	7.2	10.7	0	0
25	7.7	7.9	6.8	6.6	7.5	7.9	10.5	11.7	11.1	12.4	С	С	С	15.2	19.0	21.4	22.4	21.9	22.8	22.9	22.3	24.1	25.7	28.8	21	28.8	6.6	16.0	0	0
26 27	27.3	24.2 2.8	23.8	17.9	38.7	22.6	15.5	27.7	27.1	27.4	8.3	8.5	9.1	24.0 25.1	8.3	7.9	6.3	10.2	14.4 5.0	11.4	11.5 3.0	16.9	7.4	3.9	24 24	38.7	3.9	16.7	0	0
27	2.9 5.6	3.3	3.2 3.7	2.9 4.5	3.1 9.6	3.4 7.3	6.4 6.3	9.6 8.2	9.4 7.3	12.6 4.7	8.6 4.1	9.2 4.3	26.8 3.8	4.9	10.2 4.6	10.1 7.7	8.6 12.7	6.0 15.2	16.6	3.7 15.8	24.8	2.7 20.8	2.9 23.1	3.7 21.5	24	26.8 24.8	2.7 3.3	7.6 10.0	0	0
29	16.4	13.2	12.5	26.1	23.7	16.9	11.4	11.2	10.2	10.7	9.6	9.1	7.7	9.6	11.5	14.6	11.2	12.9	9.2	7.8	11.3	14.9	19.7	14.6	24	26.1	7.7	13.2	0	0
30	18.9	18.7	11.0	14.5	15.8	8.3	12.3	13.9	16.2	9.9	10.2	14.5	6.9	8.5	8.3	10.1	11.8	14.3	16.0	12.9	4.9	4.3	4.5	4.4	24	18.9	4.3	11.3	0	0
31																									0	0.0	0.0		0	0
Count	30	30	30	30	30	30	30	30	30	30	29	29	29	30	30	30	30	30	30	30	30	30	30	30	717	30	29	30		
Maximum	46.5	42.2	40.1	38.2	38.7	33.5	42.0	48.1	49.1	33.6	32.4	35.5	29.6	35.2	46.4	49.5	86.0	96.7	91.1	81.0	74.8	77.1	50.7	53.4	24	96.7	29.6	52.1		
Minimum	1.1	1.1	1.2	1.2	1.3	1.2	1.4	1.3	1.3	1.3	1.3	1.4	1.6	1.6	1.8	1.5	1.9	1.7	1.6	1.3	1.2	1.4	1.3	1.3	0	0.0	1.1			
Average	16.5	15.0	12.7	13.4	14.6	14.3	15.4	17.6	18.7	15.8	13.5	13.2	13.3	15.3	14.9	15.8	19.0	19.1	19.4	18.3	19.0	20.5	19.3	17.6	23	33	7	16.3		
#>900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Dees* · ·		anionbla 1	Calatian I		laudanus.
Percentiles		10		20		30		40		50		60		70		80		90		95		99		100	Regs Acc Hour	eptable L	esirable V	riolations	Ma	laximum 96.7
reiteilules		10		20		30		40		30		00		70		80		50		93		99		100	Day					38.7
Data		3.6		7.5		10.1		12.3		14.4		16.4		19.0		22.9		28.9		38.1		60.4		96.7	Month					16.3
Notes	С-	Calibration	n / Span Cy	cle N	A - No Data	Available	Т-	Test	A	- MOE Audit	t M	- Equipme	nt Malfunc	tion / Dowr	n R-	Rate of C	hange													

										De	NO <sub>2</sub> - Ri cember g/m3)	undle Roa	d 2014																
Day I	four 0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Count M	aximum M	linimum	Average	Hrs>400 Days>200
1	3.8	3.5	3.9	3.4	3.5	4.0	4.6	8.7	11.3	5.4	5.1	6.0	9.6	9.4	6.4	5.3	5.7	4.6	4.1	3.4	2.4	2.3	2.1	2.0	24	11.3	2.0	5.0	0 0
2	2.3	2.4	3.5	3.8	5.7	9.9	6.4	19.3	14.4	15.9	12.3	14.2	11.6	10.8	11.3	15.0	17.6	18.8	10.5	11.7	22.0	17.5	28.9	17.7	24	28.9	2.3	12.6	0 0
3	22.7	15.6	15.4	23.9	22.4	17.7	16.6	23.0	27.2	27.3	31.6	28.1	Α	Α	Α	17.5	27.0	18.7	24.9	27.0	30.6	24.8	15.9	15.9	21	31.6	15.4	22.6	0 0
4	10.7	6.2	5.7	7.4	15.7	31.1	37.7	42.9	53.5	22.5	6.2	6.9	5.7	6.9	6.8	7.4	14.8	10.7	10.5	10.3	8.9	10.1	22.8	12.9	24	53.5	5.7	15.6	0 0
5	9.2	4.5	4.9	5.1	10.7	12.5	17.7	19.3	29.1	22.2	23.5	22.2	16.8	18.8	22.0	26.8	26.2	38.8	40.3	31.4	31.5	34.0	32.8	26.5	24	40.3	4.5	22.0	0 0
6	20.0	17.0	15.1	13.9	10.8	11.5	14.8	11.9 2.7	11.7	9.8	8.6	7.6	7.7	7.4	6.7	7.4 5.3	6.6	5.8	5.1 17.5	4.8	5.0	4.2	4.0	3.7 10.8	24	20.0	3.7 2.6	9.2	0 0
,	3.6 15.9	3.6 7.8	3.3 10.4	3.0 7.1	2.7 9.7	3.6 7.5	3.2 17.7	31.6	2.8 27.2	2.6 14.2	2.9 17.2	3.5 14.6	8.6 15.7	5.7 17.7	4.4 32.7	22.2	15.8 15.8	12.9 13.3	15.9	17.5 15.1	7.7 19.5	16.9 23.1	12.1 17.0	16.4	24 24	17.5 32.7	7.1	7.2 16.9	0 0
٥	28.2	29.7	24.0	25.2	33.0	32.0	30.4	35.1	34.9	29.6	24.3	18.2	12.9	20.2	14.8	37.2	43.2	36.2	21.5	8.3	6.6	4.9	4.7	4.0	24	43.2	4.0	23.3	0 0
10	4.0	3.5	3.4	3.5	3.5	3.8	3.7	5.4	4.8	4.3	5.7	5.2	7.1	8.3	5.8	4.9	6.3	4.4	4.0	3.9	3.1	2.8	2.5	2.5	24	8.3	2.5	4.4	0 0
11	2.6	2.4	2.4	2.7	2.6	2.7	2.6	3.2	3.5	6.4	9.9	10.1	11.6	9.8	11.9	9.1	12.2	4.5	4.0	3.6	3.1	3.0	2.7	2.9	24	12.2	2.4	5.4	0 0
12	2.7	2.5	2.5	4.0	10.3	4.0	3.1	13.8	12.4	6.3	10.9	9.6	4.5	3.3	4.1	4.8	9.9	14.4	11.9	12.9	8.3	8.4	13.5	12.0	24	14.4	2.5	7.9	0 0
13	11.9	9.7	7.7	14.2	39.4	38.0	20.8	34.9	34.5	28.5	33.7	34.5	26.7	19.8	21.1	23.6	28.8	29.0	27.6	18.7	25.0	20.8	20.7	16.0	24	39.4	7.7	24.4	0 0
14	16.8	19.9	26.5	23.0	34.9	44.4	42.2	11.1	7.5	7.6	7.3	22.5	18.7	9.9	8.0	11.4	11.2	12.8	14.2	14.3	12.3	14.9	10.5	7.5	24	44.4	7.3	17.0	0 0
15	5.3	4.7	4.6	6.6	14.7	18.8	27.5	24.8	27.8	34.7	22.5	22.4	24.9	24.8	18.9	28.3	13.8	20.4	24.3	27.2	22.4	25.8	17.3	17.1	24	34.7	4.6	20.0	0 0
16	17.3	11.4	13.2	8.6	8.6	9.8	14.9	16.1	12.6	12.6	10.6	12.6	10.2	17.5	15.7	14.8	15.0	15.4	21.2	26.9	17.7	22.6	35.2	31.3	24	35.2	8.6	16.3	0 0
17	29.1	28.9	36.6	33.8	32.3	35.7	34.1	31.8	31.0	32.2	26.6	25.1	25.1	24.8	29.4	28.8	26.7	14.0	11.8	27.7	28.7	30.5	25.3	14.7	24	36.6	11.8	27.7	0 0
18	26.1	17.3	6.8	6.8 2.2	4.2	3.4 2.2	3.4 2.7	4.3	4.7 4.5	15.3 4.9	27.4	4.0	7.2	5.4	6.6 5.0	5.7	4.9	3.7 4.7	3.7 4.9	2.7 5.0	2.6 7.9	2.7	2.6	2.7 3.6	24 24	27.4 7.9	2.6	7.3 4.0	0 0
20	2.2 3.6	2.2 3.5	2.3 3.7	3.8	2.3 3.4	3.6	4.0	3.9 4.8	6.7	5.0	3.3 8.0	3.4 13.1	5.5 14.5	4.5 10.2	7.4	5.1 9.0	5.2 11.1	16.1	12.2	14.6	13.6	4.5 15.4	4.8 14.0	18.3	24	18.3	2.2 3.4	9.2	0 0
20	23.2	13.2	12.2	11.5	12.9	14.2	11.9	9.2	7.4	8.9	15.7	15.0	15.5	15.8	13.8	13.6	27.0	19.2	18.0	20.2	27.3	21.7	18.9	19.2	24	27.3	7.4	16.1	0 0
22	26.4	14.4	2.3	5.4	10.0	11.1	13.3	11.4	10.5	13.0	16.3	17.9	16.6	10.4	11.4	13.8	17.4	24.6	21.3	15.7	18.3	25.3	16.7	19.1	24	26.4	2.3	15.1	0 0
23	15.4	13.9	18.0	15.1	13.7	18.0	18.6	16.6	14.0	12.8	22.9	12.2	13.9	12.0	12.7	14.5	13.7	15.6	12.2	12.1	22.3	19.7	20.1	16.8	24	22.9	12.0	15.7	0 0
24	16.9	17.2	16.6	11.6	11.6	10.5	16.5	14.5	18.9	19.8	17.8	15.8	20.0	22.2	22.9	13.7	19.4	18.0	16.0	16.4	11.4	10.9	13.4	8.4	24	22.9	8.4	15.8	0 0
25	7.7	4.7	4.9	5.4	5.3	6.1	6.3	7.8	8.0	8.1	7.9	5.4	4.4	4.0	4.3	3.7	5.5	5.1	6.7	9.0	7.1	8.1	11.6	8.9	24	11.6	3.7	6.5	0 0
26	9.0	9.2	10.7	9.0	10.2	10.6	11.5	10.1	11.9	14.7	16.4	10.4	10.3	8.6	11.3	11.0	13.9	13.4	17.4	17.6	17.0	16.8	29.9	21.2	24	29.9	8.6	13.4	0 0
27	25.2	37.9	33.0	21.3	11.4	23.4	25.9	23.8	24.2	24.4	22.1	16.2	14.1	18.5	21.2	22.3	25.5	17.8	14.0	13.3	7.6	12.0	10.2	8.1	24	37.9	7.6	19.7	0 0
28	8.7	5.5	5.5	5.9	4.4	3.2	3.0	2.9	3.0	3.1	2.9	2.7	2.9	2.9	3.7	4.2	4.4	5.8	6.9	9.4	8.0	7.5	11.9	25.3	24	25.3	2.7	6.0	0 0
29	22.3	11.6	3.4	3.0	2.4	2.4	2.8	2.7	2.4	2.7	2.6	2.4	2.1	2.6	7.3	10.7	15.2	15.7	4.5	3.0	3.5	3.0	3.2	3.0	24	22.3	2.1	5.6	0 0
30	2.4	2.3	2.3	2.2	2.0	1.9	2.0	2.2	2.7	2.6	15.0	12.0	C	22.3	19.7	13.4	16.9	28.5	23.7	17.2	17.8	21.9	15.6	13.5	21	28.5	1.9	11.1	0 0
Count	16.8 31	10.5 31	9.6	6.2	6.4	7.9 31	11.1 31	28.2	20.8	13.2 31	15.6 30	13.9 30	11.5 29	10.7 30	11.2 30	10.9 31	11.5 31	14.6 31	12.4 31	11.6 31	10.0	10.0	12.1 31	12.6 31	24 738	28.2	6.2	12.5 31	U U
Maximum	29.1	37.9	36.6	33.8	39.4	44.4	42.2	42.9	53.5	34.7	33.7	34.5	26.7	24.8	32.7	37.2	43.2	38.8	40.3	31.4	31.5	34.0	35.2	31.3	24	53.5	24.8	36.2	
Minimum	2.2	2.2	2.3	2.2	2.0	1.9	2.0	2.2	2.4	2.6	2.6	2.4	2.1	2.6	3.7	3.7	4.4	3.7	3.7	2.7	2.4	2.3	2.1	2.0	21	7.9	1.9	2.6	
Average	13.3	10.9	10.1	9.6	11.6	13.1	13.9	15.4	15.7	13.9	14.6	13.2	12.3	12.2	12.6	13.6	15.7	15.4	14.3	14.0	13.8	14.4	14.6	12.7	24	27	5	13.4	
#>900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
																									Regs Acc	eptable D	esirable \	/iolations	Maximum
Percentiles		10		20		30		40		50		60		70		80		90		95		99		100	Hour				53.5
																									Day				27.7
Data		3.1		4.5		6.6		9.6		11.6		14.2		16.9		21.2		27.0		31.5		38.5		53.5	Month				13.4
Notes	C-	- Calibration	n / Span Cy	cle N	A - No Data	Available	Т-	Test	A-	MOE Audit	M	- Equipme	nt Malfunc	tion / Dowr	n R	Rate of C	hange												

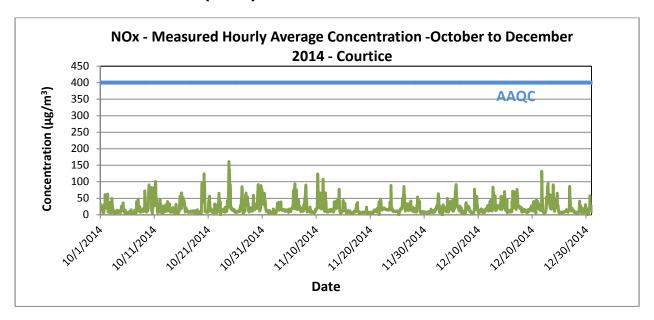
Appendix C NOX Data Summaries and Time History Plots January 28, 2015

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Project No.: 160950528 C.1

Figure C-1 Time History Plots of Measured Hourly Average and 24-Hour Average NO<sub>X</sub> Concentrations – Courtice (WPCP) Station



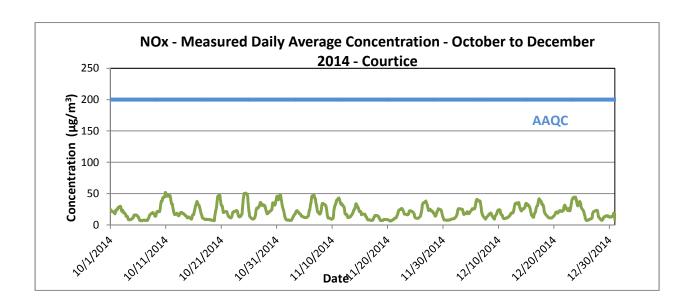
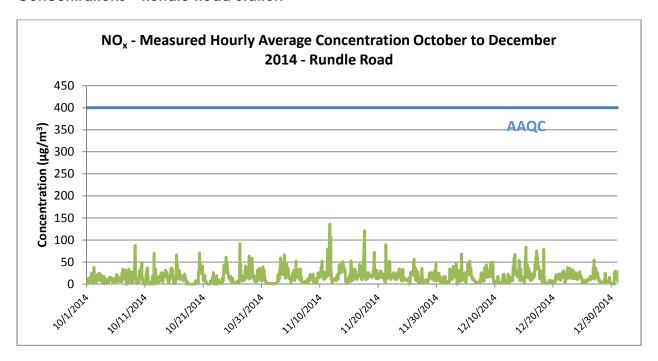
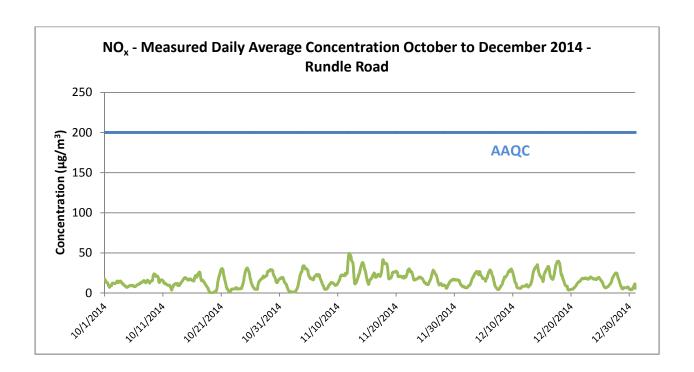


Figure C-2 Time History Plots of Measured Hourly Average and 24-Hour Average NO<sub>X</sub> Concentrations – Rundle Road Station





											NOx C	OURTICE																		
											ctober g/m3)		2014																	
H	our																													
Day		100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Count N	laximum N	linimum	Average	Hrs>400	Days>200
1	21.0	32.5	19.2	19.8	31.6	18.8	26.0	18.7	18.1	19.4	13.0	11.9	6.6	6.4	5.8	6.6	6.1	9.2	26.1	32.0	30.6	29.2	61.4	50.4	24	61.4	5.8	21.7	0	0
2	52.9	40.0	38.7	20.4	24.0	25.3	32.5	30.6	37.7	63.0	27.1	8.2	8.6	8.6	21.0	9.9	7.1	16.2	34.2	37.4	34.6	13.6	7.6	6.2	24	63.0	6.2	25.2	0	0
3	6.3	11.2	22.7	37.5	49.4	38.4	19.6	25.0	12.3	10.4	14.3	10.7	7.3	4.9	4.8	4.6	5.2	5.8	5.1	5.9	5.7	5.3	9.8	11.4	24	49.4	4.6	13.9	0	0
4	12.3	10.3	9.4	12.4	8.1	6.1	7.7	7.2	13.3	11.7	11.3	9.0	8.1	8.6	7.8	7.6	7.7	5.3	7.1	14.6	16.5	12.0	16.4	25.8	24	25.8	5.3	10.7	0	0
5	11.6	12.3	26.6	22.1	26.6	34.6	36.0	25.3	14.5	10.1	10.7	10.0	7.7	6.0	5.3	14.5	7.2	5.2	4.8	4.6	4.8	6.1	4.7	5.3	24	36.0	4.6	13.2	0	0
5	5.9	6.5 7.8	6.8 7.1	7.6 4.9	7.3	7.8	6.2 5.1	7.8 4.8	8.8 7.7	6.9	9.7	7.0	7.6 4.8	6.8	6.1	6.4 5.1	7.9	15.5 18.6	13.9 39.7	5.5 30.2	5.1 18.1	6.6 23.0	7.6 18.6	5.6	24	15.5 39.7	5.1	7.6	0	0
,	5.8	7.8 46.5		4.9 17.6	5.8 10.5	6.9	15.5	4.8 17.8		13.3 24.0	13.0 9.4	4.8	4.8 7.2	4.4	4.4 11.7	12.4	5.0	14.9	12.8	13.9	15.2		12.6	24.0 12.7	24 24	39.7 46.5	4.4	11.8	0	0
9	41.8 18.7	10.7	22.5 16.3	15.0	13.2	13.3 21.2	72.4	60.1	19.3 52.1	39.5	28.0	8.1 19.2	8.9	12.2 10.0	8.0	9.0	15.0 10.2	11.7	17.8	16.5	12.8	10.1 21.7	18.1	66.9	24	72.4	7.2 8.0	16.5 24.1	0	0
10	77.3	90.3	83.2	58.0	58.7	70.2	56.8	58.5	68.6	60.8	82.9	58.9	29.5	11.8	12.8	5.9	5.4	20.5	19.4	23.8	66.5	72.3	83.4	66.1	24	90.3	5.4	51.7	0	- 0
11	60.9	49.3	57.4	29.8	27.9	65.7	101.2	90.4	58.1	45.7	46.2	45.7	37.8	29.2	22.1	7.0	13.5	7.3	8.6	21.6	14.8	17.6	18.6	18.9	24	101.2	7.0	37.3	0	0
12	8.1	17.4	47.0	32.5	33.9	28.1	24.6	24.9	27.8	12.5	4.0	3.1	3.1	3.0	2.5	10.8	5.0	19.6	20.9	19.9	18.4	26.0	27.7	21.0	24	47.0	2.5	18.4	0	0
13	18.6	10.7	12.2	19.0	13.9	10.0	19.3	18.9	33.9	21.3	11.6	17.6	40.1	16.1	25.0	15.5	16.4	20.7	14.6	21.7	32.7	24.9	9.6	9.2	24	40.1	9.2	18.9	0	0
14	9.8	7.7	19.5	9.4	7.7	13.0	11.7	10.3	16.9	12.8	9.5	12.2	13.9	21.5	14.9	11.8	8.3	7.0	4.5	5.0	14.4	7.4	13.1	20.8	24	21.5	4.5	11.8	0	0
15	10.9	32.0	13.4	11.1	3.8	6.7	3.3	4.9	5.2	5.4	5.0	5.4	5.7	9.0	8.9	10.0	30.2	24.6	47.2	56.2	29.8	24.4	24.4	27.4	24	56.2	3.3	16.9	0	0
16	18.1	21.5	66.2	48.5	40.7	43.0	43.3	53.3	52.3	38.7	30.3	32.9	36.1	43.3	39.5	26.8	18.4	16.4	8.0	9.1	13.9	21.8	15.5	15.7	24	66.2	8.0	31.4	0	0
17	16.2	14.3	11.6	11.9	10.2	10.7	7.4	7.0	8.0	8.7	8.2	9.5	8.9	8.8	7.4	7.9	9.1	7.1	6.5	6.9	9.8	11.4	11.1	9.6	24	16.2	6.5	9.5	0	0
18	11.0	8.3	7.8	9.7	10.0	11.8	12.6	9.7	7.2	8.4	5.7	6.2	6.1	6.0	12.7	5.5	6.3	9.7	5.8	4.8	12.0	9.5	5.9	4.1	24	12.7	4.1	8.2	0	0
20	15.2 53.5	3.8	7.3 53.1	10.9 49.1	7.2 50.5	6.6 84.4	9.4	5.7 65.3	6.5 97.7	5.1 63.6	3.9 9.7	8.0 14.6	3.9 13.3	4.1 9.7	5.8 8.7	7.4 8.7	6.0 8.5	4.9 9.1	5.7 8.8	74.0 7.6	95.5 7.5	68.6 7.3	61.0 7.6	69.8 9.1	24	95.5 124.2	7.3	20.7 33.7	0	- 0
21	10.1	24.9	38.0	46.0	45.6	55.6	56.5	38.2	22.3	12.9	11.1	14.4	15.9	18.4	14.7	11.9	11.1	14.3	8.9	7.9	9.5	8.2	6.6	10.5	24	56.5	6.6	21.4	0	0
22	6.3	6.6	6.3	14.3	20.7	33.0	29.1	13.8	13.5	12.6	8.0	7.9	6.4	8.4	7.1	6.3	7.9	8.0	11.0	33.2	11.7	14.8	20.4	40.3	24	40.3	6.3	14.5	0	0
23	65.1	54.7	33.0	32.9	12.6	29.6	39.7	С	С	12.4	9.8	11.4	11.7	10.2	9.8	11.8	15.1	14.0	15.0	16.9	11.6	13.2	9.3	15.1	22	65.1	9.3	20.7	0	0
24	11.5	8.1	7.7	10.2	23.1	13.5	19.5	17.4	14.1	20.0	9.8	12.5	17.7	42.7	24.2	24.1	22.5	26.0	23.2	95.2	161.2	118.2	96.3	136.0	24	161.2	7.7	39.8	0	0
25	67.7	54.5	91.8	67.2	21.7	18.3	21.6	21.4	21.8	17.9	14.2	13.4	15.4	17.2	14.2	13.9	12.6	11.8	16.3	11.8	11.0	8.3	8.1	8.7	24	91.8	8.1	24.2	0	0
26	10.7	9.3	7.9	11.5	6.9	7.0	7.9	8.2	9.0	9.0	8.3	10.8	8.6	8.0	10.8	10.5	9.9	9.0	9.6	11.1	15.6	10.9	20.3	23.8	24	23.8	6.9	10.6	0	0
27	23.0	28.8	20.3	42.3	47.7	54.5	85.1	79.9	51.9	38.2	21.4	6.0	4.9	8.5	7.6	12.0	19.7	28.9	37.9	18.7	10.6	21.5	59.9	47.9	24	85.1	4.9	32.4	0	0
28	66.0	46.0	49.4	42.0	30.7	29.0	52.3	54.1	37.2	35.3	33.1	18.4	12.7	8.9	8.2	8.5	9.0	10.1	21.9	18.7	20.0	18.7	18.6	15.1	24	66.0	8.2	27.7	0	0
29	19.0	20.4	15.3	12.3	10.5	12.3	18.0	18.2	43.2	58.9	39.6	19.9	14.8	14.4	23.5	21.9	16.7	24.2	19.1	32.8	26.5	26.1	19.8	24.8	24	58.9	10.5	23.0	0	0
30 31	24.3 70.3	19.9 48.6	33.2 39.6	32.0 31.6	68.5 36.7	71.3 34.1	91.6 45.4	85.5 57.9	32.2 44.9	18.8 51.1	18.9 65.2	20.1 42.2	14.9 26.6	11.6 44.4	11.9 38.1	15.2 26.4	19.8 17.9	26.5 13.6	54.5 15.2	88.7 9.4	74.1 11.7	57.2 10.8	55.8 9.0	76.1 11.1	24 24	91.6 70.3	11.6 9.0	42.6 33.4	0	0
Count	31	48.0	39.0	31.0	30.7	34.1	31	30	30	31	31	31	31	31	30.1	31	31	31	31	31	31	31	31	31	742	31	30	33.4	U	
Maximum	77.3	90.3	91.8	67.2	68.5	84.4	124.2	90.4	97.7	63.6	82.9	58.9	40.1	44.4	39.5	26.8	30.2	28.9	54.5	95.2	161.2	118.2	96.3	136.0	24	161.2	26.8	77.9		
Minimum	5.8	3.8	6.3	4.9	3.8	6.1	3.3	4.8	5.2	5.1	3.9	3.1	3.1	3.0	2.5	4.6	5.0	4.9	4.5	4.6	4.8	5.3	4.7	4.1	22	12.7	2.5	4.5		
Average	27.4	25.6	28.7	25.5	24.7	28.4	35.5	31.4	28.5	24.8	19.1	15.5	13.4	13.7	13.1	11.5	11.6	14.0	17.5	24.4	26.5	23.4	24.5	28.7	24	61	7	22.4		
#>900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				,		
	-	·		-				-							-			-	·			·	-		Regs Acc	eptable D	esirable \	/iolations	1	Maximum
Percentiles		10		20		30		40		50		60		70		80		90		95		99		100	Hour					161.2
																									Day					51.7
Data		6.1		7.9		9.5		11.7		14.3		18.6		23.1		33.1		53.1		66.5		95.4		161.2	Month					22.4
Notes	C.	- Calibratio	n / Span Cy	cle N	A - No Data	Available	Т-	Test	A-	- MOE Audit	M	- Equipme	nt Malfunc	tion / Dowr	1															

											No	NOx CO		2014																
	Hour										(u	g/m3)																		
Day		0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Count N	laximum M	linimum	Average	Hrs>400 Days>200
1	8	.2	8.1	7.5	6.8	5.9	8.3	13.0	7.5	11.2	9.3	12.5	7.4	6.4	5.4	6.7	6.9	5.7	6.2	6.5	7.2	7.0	7.3	7.0	6.4	24	13.0	5.4	7.7	0 0
2	4.	.5	12.3	17.8	5.1	4.0	4.0	9.8	8.7	5.2	6.9	6.3	7.8	7.1	5.9	10.7	7.4	12.3	15.4	21.6	27.5	35.2	25.4	19.3	19.4	24	35.2	4.0	12.5	0 0
3	17.		37.4	34.1	22.6	13.6	19.2	17.1	17.6	18.1	22.9	30.5	39.3	26.9	19.0	15.0	16.4	15.5	14.8	13.2	14.0	15.5	15.6	15.3	14.1	24	39.3	13.2	20.2	0 0
4	13.		13.6	13.7	13.8	15.6	12.6	10.2	12.4	12.6	12.8	11.1	11.0	12.3	12.4	14.1	15.3	13.3	10.9	11.6	9.6	7.5	8.3	7.7	11.0	24	15.6	7.5	11.9	0 0
5	17.5 55.1		14.3 93.7	9.6 84.8	13.5 34.6	10.3 62.6	9.9 66.1	10.2 69.2	9.4 72.9	14.0 75.7	16.0 46.8	18.1 20.5	19.5 15.9	18.4 22.6	20.3 17.5	20.6 20.4	23.7 29.6	18.9 46.9	29.8 30.8	37.6 41.7	68.2 17.5	75.4 20.8	53.9 24.4	24.4 26.5	18.0 22.7	24 24	75.4 93.7	9.4 15.9	23.8 42.5	0 0
7	23.		15.9	15.8	11.3	9.9	10.9	15.8	15.8	12.9	11.0	10.8	18.9	20.5	17.5	11.8	10.6	14.8	30.7	25.4	17.1	22.4	49.4	43.0	46.6	24	49.4	9.9	20.1	0 0
8	67.		78.8	90.1	77.1	52.1	36.9	48.9	8.1	8.6	8.8	10.4	10.7	11.4	10.4	10.3	9.9	12.8	11.9	13.3	15.0	18.6	23.8	16.6	7.3	24	90.1	7.3	27.5	0 0
9	8.9	.9	13.2	8.2	8.5	7.8	9.0	9.5	8.8	9.4	8.9	6.6	6.0	7.0	8.6	8.6	7.7	5.6	8.3	8.6	8.4	9.1	13.9	17.1	16.2	24	17.1	5.6	9.3	0 0
10	14.	.7	15.9	15.7	19.3	19.4	25.7	96.7	123.7	89.0	69.9	32.4	58.4	40.9	29.8	21.9	31.4	28.3	24.6	66.1	53.5	33.4	17.9	20.4	18.5	24	123.7	14.7	40.3	0 0
11	31.		28.7	24.5	23.2	29.6	40.9	68.4	108.1	74.6	18.5	16.1	16.4	13.6	10.6	11.5	13.0	23.6	66.8	24.7	35.0	41.6	14.7	10.5	8.8	24	108.1	8.8	31.5	0 0
12	9.0		11.5	12.6	10.3	7.9 8.0	9.5	12.4	11.7	13.0	10.9	12.1	15.3	13.7	10.7	9.9	11.5 17.7	12.0	15.8	16.7	11.6	11.9	10.8	15.5	15.4	24	16.7	7.9	12.2	0 0
13	14.: 34.:		14.6 31.0	13.9 28.1	9.7 20.4	25.0	9.1 46.5	11.2 77.5	17.6 70.6	34.6 35.1	39.4 14.5	17.6 7.4	18.9 5.9	24.5 6.2	28.3 7.1	24.1 5.9	7.0	22.2 7.6	31.9 7.2	38.2 10.5	38.4 10.7	43.5 8.6	40.6 9.9	35.7 11.4	25.4 27.2	24 24	43.5 77.5	8.0 5.9	24.1 21.5	0 0
15	43.0		30.5	24.0	22.1	12.7	17.8	29.1	29.0	35.3	24.7	14.5	13.9	11.2	7.0	4.8	4.5	6.3	6.6	7.1	8.7	6.8	12.6	12.9	11.4	24	43.6	4.5	16.5	0 0
16	9.		9.3	8.7	10.0	8.3	12.5	7.8	6.6	7.1	5.6	6.4	5.3	6.7	7.7	7.8	6.9	6.9	6.1	5.7	6.0	6.1	5.6	5.5	8.2	24	12.5	5.3	7.3	0 0
17	10.	.3	11.6	7.3	8.9	8.5	8.6	8.6	13.7	16.4	17.1	24.2	28.0	31.7	26.6	17.5	22.4	37.2	20.8	12.1	10.5	7.4	6.6	6.2	6.2	24	37.2	6.2	15.3	0 0
18	5.4		5.8	7.9	7.4	5.8	5.7	6.0	7.2	7.5	7.4	7.7	8.2	6.8	7.5	7.2	7.7	7.4	7.2	7.4	7.4	7.1	7.6	6.6	6.8	24	8.2	5.4	7.0	0 0
19	7.0		6.8	7.0	9.0	10.2	9.7	12.0	15.5	23.0	11.8	9.1	5.8	5.9	6.8	6.5	5.3	5.3	5.4	6.0	6.1	6.5	6.7	7.7	7.9	24	23.0	5.3	8.5	0 0
20 21	7.		5.5	5.8	6.2	6.2	5.9	5.3	5.9	6.7	8.0	8.4	8.3	6.9	7.3	5.6	6.9	7.7	9.3	14.7	12.6	11.0	12.4	11.6	10.8	24	14.7	5.3	8.2	0 0
21	13. 42.		12.4 31.2	11.9 18.2	16.1 14.9	10.3 15.2	8.6 15.6	14.5 16.5	15.9 15.0	19.9 15.1	8.6 16.5	9.3 18.5	7.4 20.3	8.9 20.0	13.7 21.0	24.4 19.9	39.0 20.4	M 19.5	31.8 18.0	35.7 18.3	35.2 17.5	34.1 15.7	38.7 16.1	46.9 15.6	43.3 15.7	23 24	46.9 42.5	7.4 14.9	21.7 19.0	0 0
23	14.		14.7	14.9	16.5	16.4	14.7	14.7	15.5	14.6	14.0	17.9	17.9	15.2	14.9	14.4	18.4	38.2	21.1	17.3	29.6	27.4	89.1	43.4	20.0	24	89.1	14.0	22.3	0 0
24	19.		13.7	20.6	12.7	14.2	12.3	10.2	11.2	12.5	11.1	10.7	10.5	10.3	9.9	10.6	10.7	10.8	11.3	10.9	10.4	10.1	10.2	11.4	10.9	24	20.6	9.9	12.0	0 0
25	10.	1	11.0	11.0	9.6	10.6	10.8	11.5	С	С	С	9.5	8.9	10.7	13.2	16.4	18.8	19.3	16.3	18.1	17.3	17.5	17.8	18.0	40.5	21	40.5	8.9	15.1	0 0
26	49.		32.2	45.5	48.8	58.6	64.9	85.4	74.6	59.7	59.3	23.0	20.6	19.9	10.8	14.9	19.9	19.8	26.3	24.3	33.7	31.0	28.4	26.0	14.3	24	85.4	10.8	37.1	0 0
27	15.		20.5	12.9	25.5	24.1	32.6	33.3	29.1	28.0	21.1	20.6	17.7	38.5	41.6	13.3	22.2	19.4	16.4	22.5	20.9	15.0	12.2	12.6	20.4	24	41.6	12.2	22.3	0 0
28	21.		8.7	10.1 34.3	12.0 34.9	18.5 40.4	12.7	13.3	15.0	18.7 6.4	11.6	8.9 6.7	8.1 7.8	8.1	8.0 8.6	7.8 9.7	15.8 9.3	27.7	31.3	37.0	54.0	46.8	42.2	46.5 7.6	38.0	24 24	54.0 40.4	7.8 6.0	21.8	0 0
29 30	29.		31.8 8.5	8.0	7.7	8.3	11.0 7.7	8.5 7.9	7.3 7.4	7.4	6.0 6.5	7.5	6.1	8.1 5.6	5.9	5.8	7.4	7.6 7.1	9.3 8.3	8.3 8.9	6.6 8.2	6.6 10.1	6.4 9.6	9.6	10.2 7.8	24	10.1	5.6	13.5 7.8	0 0
31	3.		0.5	0.0		0.5		7.5		7	0.5	7.5	0.1	5.0	3.3	3.0	7		0.5	0.5	0.2	10.1	3.0	5.0	7.0	0	0.0	0.0	7.0	0 0
Count	3	0	30	30	30	30	30	30	29	29	29	30	30	30	30	30	30	29	30	30	30	30	30	30	30	716	30	29	30	1
Maximum	67.	.3	93.7	90.1	77.1	62.6	66.1	96.7	123.7	89.0	69.9	32.4	58.4	40.9	41.6	24.4	39.0	46.9	66.8	66.1	68.2	75.4	89.1	46.9	46.6	24	123.7	24.4	65.8	
Minimum	4.		5.5	5.8	5.1	4.0	4.0	5.3	5.9	5.2	5.6	6.3	5.3	5.6	5.4	4.8	4.5	5.3	5.4	5.7	6.0	6.1	5.6	5.5	6.2	0	0.0	4.0		
Average	21.		21.4	20.8	17.9	18.0	18.7	25.2	26.3	23.9	18.1	13.8	14.9	14.9	13.8	12.6	14.8	16.5	18.4	19.7	20.6	20.3	21.3	18.6	17.6	23	45	8	18.7	
#>900		0	0	0	0	0	0	U	0	U	0	0	0	0	U	0	U	0	0	0	0	0	0	0	0	Pogs \c	eptable De	asirahla V	iolations	Maximum
Percentiles			10		20		30		40		50		60		70		80		90		95		99		100	Hour	eptable Di	con able V	ioiations	123.7
			-																							Day				42.5
Data			6.7		7.8		9.3		11.0		13.2		15.7		18.9		24.7		38.1		52.4		85.3		123.7	Month				18.7
Notes		C - C	Calibration	/ Span Cy	cle N	A - No Data	Available	T	- Test	A-	<ul> <li>MOE Audit</li> </ul>	: M	<ul> <li>Equipme</li> </ul>	nt Malfunct	ion / Down	1														

											De	NOx Co cember g/m3)	OURTICE	2014																	
	Hour										, (u	g/III3)																			
Day	(	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Count M	aximum N	linimum	Average	Hrs>400 D	Days>200
1	9.7		6.5	6.7	8.6	9.2	7.8	13.6	17.1	13.4	10.7	10.6	9.0	8.2	6.8	8.9	9.5	11.8	10.4	12.0	13.2	8.6	8.2	8.5	7.8	24	17.1	6.5	9.9	0	0
2	9.5	5	15.1	16.4	15.8	19.8	21.7	16.1	24.9	27.0	25.9	28.1	29.6	25.8	45.8	50.8	64.0	45.8	51.3	27.2	30.4	8.1	6.7	7.0	7.3	24	64.0	6.7	25.8	0	0
3	7.1	1	10.4	14.2	23.6	18.5	13.2	12.7	Α	Α	Α	Α	Α	30.2	29.1	21.8	16.4	19.2	24.9	23.7	20.6	21.0	20.6	14.4	12.6	19	30.2	7.1	18.6	0	0
4	14.4	4	10.5	9.2	8.8	17.1	19.4	20.8	27.5	49.7	34.0	9.9	8.3	7.9	8.5	11.4	12.4	24.6	33.3	33.3	32.0	33.4	41.0	31.0	23.3	24	49.7	7.9	21.7	0	0
5	25.6		20.8	15.5	21.7	29.4	32.0	43.3	42.2	46.2	10.8	12.3	12.0	15.1	17.9	19.6	18.0	28.5	21.4	64.6	70.1	70.9	81.7	91.6	87.0	24	91.6	10.8	37.4	0	0
6	51.4		44.1	45.1	28.0	28.0	25.9	25.9	22.6	19.7	21.0	19.6	13.6	14.8	12.1	10.8	18.0	26.1	18.1	8.8	12.8	16.6	21.0	7.8	5.9	24	51.4	5.9	21.6	0	0
7	13.1		7.4	13.1	11.9	4.7	5.3	8.3	10.3	11.6	6.5	5.5	5.9	4.5	3.7	3.8	4.7	10.2	32.7	29.2	36.6	24.5	26.5	19.3	20.7	24	36.6	3.7	13.3	0	0
8	20.0		17.3 5.7	20.1 5.9	15.6 7.9	16.5 6.8	26.1 6.4	20.5 9.9	20.6 16.5	22.9 77.2	14.6 54.2	13.3 36.0	9.6 28.8	13.0 25.3	10.2 22.1	11.6 17.8	8.8 28.6	6.2 16.4	7.4 27.8	7.3 56.0	7.0 26.4	6.2 30.5	5.6 28.8	5.4 13.1	4.9 17.0	24 24	26.1 77.2	4.9 5.5	12.9 23.8	0	0
10	12.7		7.6	6.2	6.1	8.3	8.0	8.2	8.9	10.0	8.3	14.5	8.3	11.6	13.0	17.7	9.9	12.6	16.3	11.6	11.0	9.2	7.2	7.0	6.8	24	17.7	6.1	10.0	0	- 0
10	14.1		6.5	6.6	6.2	12.6	8.4	9.6	15.8	13.1	13.4	13.6	19.3	12.4	13.3	15.6	15.0	20.6	21.4	27.9	24.2	14.6	11.6	11.0	12.4	24	27.9	6.2	14.1	0	0
12	11.8		21.9	24.2	23.2	40.3	17.8	13.2	19.9	43.9	18.2	14.8	16.5	12.0	11.6	17.7	11.9	27.9	52.1	83.6	61.6	67.4	67.5	45.7	55.2	24	83.6	11.6	32.5	0	0
13	34.4	4	31.8	22.4	35.6	56.7	20.5	12.5	14.4	21.3	13.7	17.4	28.9	20.3	21.5	22.4	24.8	23.6	23.9	25.0	24.5	25.0	26.0	28.5	22.5	24	56.7	12.5	24.9	0	0
14	18.3	3	17.2	19.1	22.4	37.5	41.0	56.6	36.2	15.4	18.1	18.5	20.3	31.3	28.2	21.3	22.7	35.8	42.2	42.1	56.2	54.8	59.0	70.4	35.8	24	70.4	15.4	34.2	0	0
15	24.5	5	13.8	13.8	15.7	14.3	41.9	34.2	19.7	45.8	6.7	6.6	14.9	9.0	8.7	11.6	11.7	9.1	8.4	9.4	9.7	9.9	9.0	13.1	14.8	24	45.8	6.6	15.7	0	0
16	13.0		9.0	10.5	9.0	10.9	14.4	9.3	41.2	24.1	31.7	71.7	34.2	27.5	42.1	22.0	31.4	20.8	48.7	61.4	32.5	68.6	40.0	22.1	24.1	24	71.7	9.0	30.0	0	0
17	18.9		16.1	43.8	49.6	51.2	76.7	69.3	50.8	47.1	32.8	23.4	22.5	26.7	27.4	24.1	23.8	24.2	21.9	22.1	18.1	21.2	21.9	23.4	22.6	24	76.7	16.1	32.5	0	0
18	14.9		20.5	8.9	7.7	13.2	9.7	12.0	13.1	12.2	10.6	17.0	10.5	11.3	10.2	17.0	16.0	13.2	13.6	10.2	9.1	13.1	8.2	8.5	13.3	24	20.5	7.7	12.2	0	0
19 20	10.2		10.1 24.9	6.4 19.0	5.7 11.5	7.9	8.9 32.2	11.6 38.0	16.5 40.8	11.0 25.7	13.2 16.9	10.5 16.3	10.1	12.0 20.9	16.2	17.0 7.5	15.2 8.4	15.8 6.1	20.7 5.4	13.4 21.8	22.6 44.9	21.0 31.4	26.7	16.8 27.4	13.8 29.1	24 24	26.7 44.9	5.7 5.4	13.9 21.8	0	- 0
20	39.9		26.1	19.0	20.5	18.5	26.3	33.2	18.9	23.2	22.7	17.6	14.1	20.9	19.1	15.5	13.2	14.0	15.7	24.6	132.2	86.7	55.9	42.3	42.8	24	132.2	13.2	31.7	0	0
22	12.0		8.2	7.2	7.2	6.1	7.0	5.9	4.8	5.0	6.3	6.7	7.2	9.0	10.9	13.1	30.0	37.1	53.3	40.5	41.0	86.6	49.8	54.2	96.0	24	96.0	4.8	25.2	0	0
23	65.1		34.6	51.9	61.6	62.2	60.6	60.4	23.9	32.5	21.2	23.8	17.7	20.0	17.9	17.2	36.0	21.5	36.9	45.5	62.5	52.7	50.8	91.1	35.6	24	91.1	17.2	41.8	0	0
24	18.5	5 .	40.0	15.9	10.8	10.5	20.1	23.5	19.5	19.8	33.2	48.8	38.0	41.3	45.3	26.3	49.6	65.4	22.7	29.3	28.3	25.2	10.7	10.3	8.6	24	65.4	8.6	27.6	0	0
25	8.1	1	5.2	5.3	6.0	6.0	6.9	7.3	8.4	8.7	8.8	8.1	7.0	6.1	5.8	5.9	5.5	8.0	7.8	7.2	8.0	6.6	7.7	8.1	8.5	24	8.8	5.2	7.1	0	0
26	9.5	5	8.6	9.6	10.4	11.1	10.0	9.3	9.9	12.3	16.1	15.1	11.3	10.4	9.7	8.8	9.2	7.2	10.3	11.3	11.7	13.2	18.3	54.5	86.2	24	86.2	7.2	16.0	0	0
27	60.8		44.2	39.7	20.1	11.5	13.8	12.6	12.8	20.6	20.3	16.3	14.5	13.8	13.6	14.9	13.3	11.7	11.8	9.1	8.1	6.8	8.5	9.5	7.5	24	60.8	6.8	17.3	0	0
28	8.3		7.2	8.7	7.2	6.4	5.5	6.6	4.7	4.2	7.8	5.2	5.1	5.8	8.0	6.3	9.4	11.0	13.8	21.2	41.6	19.0	12.3	28.6	19.6	24	41.6	4.2	11.4	0	0
29	26.4		23.6	10.8	6.3	7.4	8.5	9.9	15.3	19.4	8.1	7.3	12.2	9.6	7.3	8.2	6.4	11.1	17.4	11.1	11.4	17.2	30.8	14.6	18.3	24	30.8	6.3	13.3	0	0
30 31	22.9 12.1		6.7 10.4	9.6 10.4	11.9 8.8	12.9 15.3	16.4 13.5	8.5 21.0	15.8 26.9	14.4	C 13.0	C 18.4	7.4 13.5	12.4 12.2	19.3 10.6	17.3 12.5	11.0 11.8	26.4 12.1	57.5 14.2	35.6 11.9	25.0 9.8	22.4 10.4	24.0 11.4	12.6 12.6	11.1 12.4	21 24	57.5 26.9	6.7 8.8	18.4 13.3	0	0
Count	31		31	31	31	31	31	31	30	29	29	29	30	31	31	31	31	31	31	31	31	31	31	31	31	736	31	29	31		- 0
Maximum	65.1		44.2	51.9	61.6	62.2	76.7	69.3	50.8	77.2	54.2	71.7	38.0	41.3	45.8	50.8	64.0	65.4	57.5	83.6	132.2	86.7	81.7	91.6	96.0	24	132.2	38.0	67.5		
Minimum	5.5		5.2	5.3	5.7	4.7	5.3	5.9	4.7	4.2	6.3	5.2	5.1	4.5	3.7	3.8	4.7	6.1	5.4	7.2	7.0	6.2	5.6	5.4	4.9	19	8.8	3.7	5.3		
Average	20.4	4	17.2	16.6	16.3	19.1	20.2	20.8	20.7	24.1	17.9	18.2	15.6	16.1	17.0	16.0	18.3	20.1	24.6	27.0	30.4	29.1	26.6	26.1	25.3	24	54	8	21.0		
#>900	(	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
																									I	Regs Acc	eptable D	esirable V	iolations/	M	1aximum
Percentiles			10		20		30		40		50		60		70		80		90		95		99		100	Hour					132.2
L.							40.0		42.0		45.0		40.5		22.0		20.5		42.5		50.0		05.0		422.5	Day					41.8
Data			7.2		8.9		10.8		13.0		15.6		19.3		22.8		28.6		43.5		56.0		85.3		132.2	Month					21.0
Notes		C - Ca	libration /	/ Span Cyc	le N	A - No Data	Available	T.	Test	A-	MOE Audit	. M	- Equipme	ent Malfunc	tion / Dowr	1															

Hour  1 2 3 4 5	0.0 11.1 11.4 17.5	100 0.3 1.9	200	300	400						ctober		2014																
Hour 1 2 3 4	0.0 11.1 11.4 17.5	0.3 1.9			400					1																			
Hour 1 2 3 4	0.0 11.1 11.4 17.5	0.3 1.9			400					, u	g/m3)																		
1 2 3 4 5	0.0 11.1 11.4 17.5	0.3 1.9				500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Count M:	aximum Mi	nimum	Average	Hrs>400 Davs>
2 3 4 5	11.4 17.5			1.7	4.9	7.5	6.2	7.0	12.7	5.4	5.4	7.0	5.5	15.3	12.5	7.7	7.0	11.1	9.3	8.9	15.0	25.0	15.4	15.3	24	25.0	0.0	8.6	0
3 4 5	17.5	22.5	3.1	1.9	4.3	7.2	38.0	35.4	16.3	17.6	9.1	5.5	4.0	14.0	3.4	4.3	5.4	7.3	14.2	18.9	15.6	21.2	21.9	19.9	24	38.0	1.9	12.6	0
5		23.5	20.6	8.6	9.4	13.7	24.7	13.6	8.3	13.6	16.8	9.6	20.3	12.9	8.6	7.8	18.5	5.3	12.1	9.9	5.2	8.0	8.7	11.2	24	24.7	5.2	12.6	0
5		7.7	0.3	6.0	13.1	6.4	6.6	5.2	11.3	6.5	8.2	5.4	10.5	4.5	5.3	5.3	4.4	1.3	1.9	6.6	11.8	9.7	15.3	13.9	24	17.5	0.3	7.7	0
	15.7	10.1	10.8	13.6	12.1	11.3	14.3	13.1	11.0	6.0	7.6	6.4	7.8	6.0	2.5	3.7	5.1	4.8	8.2	13.3	7.0	4.1	2.3	13.4	24	15.7	2.3	8.8	0
6	2.6	14.1	4.4	5.5	21.8	9.7	14.1	12.9	18.8	15.6	14.2	13.3	15.5	7.7	10.7	6.2	10.9	10.6	9.8	10.5	10.6	11.4	12.1	10.5	24	21.8	2.6	11.4	0
7	5.3 0.0	24.2 3.8	10.3	8.7	14.8	34.3	22.6	16.2	13.3	15.5 20.0	14.9	28.3	12.5	11.6	12.9	14.5	15.3	32.4	13.6	4.2	0.2	0.2	0.1	3.7	24 24	34.3 34.1	0.1	13.7	0
8	12.5	16.3	28.0 17.6	26.3 29.2	24.8 28.1	20.9 33.0	34.1 54.3	32.6 85.9	29.0 87.6	42.2	7.2 29.0	7.7 21.4	6.5 7.1	4.6 4.5	8.8 2.8	6.7 1.7	3.7 2.0	7.8 1.6	23.9 1.4	28.0 1.8	10.9 3.5	1.9 2.5	5.0 13.7	4.6 8.8	24	87.6	0.0 1.4	14.4 21.2	0
10	2.1	13.2	30.4	16.8	18.2	16.3	20.3	30.2	37.0	28.0	25.6	49.5	26.2	12.3	9.4	9.9	11.4	6.1	0.7	2.1	1.2	0.0	3.0	5.8	24	49.5	0.0	15.7	0
11	3.3	4.0	0.0	1.9	0.0	21.4	9.3	30.2	18.2	30.1	37.1	32.0	19.2	17.9	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24	37.1	0.0	9.5	0
12	0.0	5.1	0.0	4.6	5.6	0.0	0.3	0.9	18.9	16.3	11.6	0.0	20.1	1.7	70.1	5.6	3.4	11.3	15.9	17.9	33.6	7.6	2.5	0.9	24	70.1	0.0	10.6	0
13	6.9	8.9	5.7	2.7	2.0	3.7	17.0	5.3	5.2	7.9	5.5	12.6	12.9	15.5	10.3	7.7	12.8	22.3	23.9	15.4	12.0	26.6	18.2	19.6	24	26.6	2.0	11.7	0
14	18.4	6.7	5.1	8.1	23.9	15.4	25.4	16.8	16.0	15.7	20.0	20.6	23.9	31.7	20.5	18.5	23.7	19.8	23.3	27.2	19.7	10.2	18.4	5.5	24	31.7	5.1	18.1	0
15	16.8	9.8	3.5	3.6	8.6	10.0	8.5	20.0	15.7	14.3	17.5	36.0	33.1	16.9	16.4	36.1	21.8	32.4	17.7	19.1	13.8	8.9	3.8	2.2	24	36.1	2.2	16.1	0
16	8.6	5.7	9.7	1.1	2.6	2.4	4.1	16.5	20.7	47.1	66.3	52.0	48.4	46.1	37.7	20.7	15.6	15.8	13.0	15.5	10.9	26.5	31.2	28.6	24	66.3	1.1	22.8	0
17	17.8	20.0	12.1	12.6	18.6	19.7	17.0	11.2	10.8	11.2	16.6	11.5	9.3	11.5	7.9	7.4	15.8	11.1	11.9	22.8	23.1	18.7	15.6	9.9	24	23.1	7.4	14.3	0
18	12.2	10.6	6.4	5.0	0.6	4.9	1.2	5.7	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	0.0	0.0	24	12.2	0.0	2.0	0
19	1.3	7.3	0.0 3.4	3.0	0.0 5.1	0.0 29.0	0.0 25.3	0.0 25.8	0.0 46.2	71.0	0.0 52.2	0.0 31.6	0.0 49.9	0.0 32.1	0.0 36.4	5.5 36.3	6.8 24.0	7.9 32.6	7.5 33.6	2.5	7.0 38.0	3.0 41.4	4.9 26.3	1.3 20.9	24	7.9 71.0	1.3	1.9 29.2	0
20	12.9	7.3 7.9	11.3	12.0	12.2	11.5	16.3	19.4	10.3	3.9	3.6	4.3	6.6	5.3	4.1	2.9	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24	19.4	0.0	6.1	0
22	0.0	0.0	0.0	0.0	0.0	1.9	7.7	3.8	3.2	5.4	5.4	3.0	5.1	3.1	3.7	16.5	8.4	16.8	26.6	5.1	0.2	0.0	0.0	0.0	24	26.6	0.0	4.8	0
23	0.0	1.0	5.4	0.0	0.0	0.8	5.8	19.7	6.7	C	C	9.6	9.1	9.2	7.3	8.3	10.3	7.3	3.8	2.8	2.3	2.2	2.2	1.7	22	19.7	0.0	5.3	o
24	1.8	2.1	1.8	1.4	1.7	2.6	7.4	14.1	8.6	6.0	6.6	10.1	17.7	43.2	28.1	25.0	25.8	32.5	31.4	32.7	38.6	29.6	61.0	54.6	24	61.0	1.4	20.2	0
25	29.9	29.9	44.1	46.6	33.2	23.5	28.6	23.8	22.2	17.3	16.9	13.0	17.0	15.1	10.3	15.3	14.3	17.3	9.5	5.7	4.9	4.4	3.3	4.0	24	46.6	3.3	18.8	0
26	10.3	13.6	8.0	7.8	3.1	3.0	3.4	5.1	3.2	3.8	3.5	4.1	3.4	3.4	3.1	3.7	4.4	3.6	3.3	3.4	4.1	6.6	5.7	7.3	24	13.6	3.0	5.0	0
27	6.4	5.7	6.8	5.3	4.0	4.9	33.1	91.9	28.1	18.4	35.1	44.3	6.8	17.9	9.7	14.0	9.6	10.9	18.4	11.6	14.1	6.8	9.2	11.7	24	91.9	4.0	17.7	0
28	16.6	11.6	9.5	18.1	30.2	25.3	41.4	37.1	34.1	38.0	36.5	37.5	22.8	14.2	15.4	18.1	14.1	17.0	26.3	19.2	11.5	63.4	48.1	31.8	24	63.4	9.5	26.6	0
29	25.3	19.6	13.6	22.8	21.0	22.7	41.2	40.7	50.5	58.6	45.1	24.1	21.9	19.2	19.7	19.4	12.5	19.3	12.3	14.6	6.2	7.3	7.3	6.9	24	58.6	6.2	23.0	0
30	5.1 7.3	5.4	5.7	5.7 12.6	6.3 8.7	17.2	21.6 39.6	31.8	24.5	12.7 17.1	7.9	10.9	18.0 16.0	17.0	11.6	20.1 10.0	28.2	36.4 5.4	30.0 7.1	23.1	27.0 3.3	17.4	14.9	18.3 3.4	24 24	36.4 39.6	5.1	17.4	0
31	31	9.3	10.2 31	31	31	19.3	39.6	25.3 31	11.4 31	30	16.1 30	31.4	31	13.1	14.5 31	31	6.7	31	31	3.3	3.3	3.7	3.6	3.4	742	39.0	3.3	12.4 31	U
t mum	29.9	29.9	44.1	46.6	33.2	34.3	54.3	91.9	87.6	71.0	66.3	52.0	49.9	46.1	70.1	36.3	28.2	36.4	33.6	32.7	38.6	63.4	61.0	54.6	24	91.9	28.2	49.7	
num	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	7.9	0.0	0.0	
age	9.0	9.6	9.3	9.5	10.9	12.9	19.0	22.5	19.4	18.8	18.0	17.5	15.4	13.8	13.1	11.6	11.1	13.2	13.2	12.1	11.3	11.9	12.1	10.8	24	39	2	13.6	
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					
																									Regs Acce	eptable De	sirable V	iolations	Maxin
entiles		10		20		30		40		50		60		70		80		90		95		99		100	Hour			T	!
																									Day				
		0.6		3.4		5.4		7.5		10.3		13.2		16.8		21.0		30.2		37.4		60.0		91.9	Month				1
s	C-	- Calibration	/ Snan O	cle N	A - No Data	Δvailahle	т.	- Test	۸.	MOE Audit	- NA	- Equipme	nt Malfund	tion / Down	) D.	Rate of C	hange												

										No	NOx Ri ovember ig/m3)		d 2014																	
н	our																													
Day	0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300		aximum Mir			Hrs>400	Days>200
1	2.1	1.5	1.3	1.3	1.5	1.4	1.0	1.9	1.8	2.0	1.6	1.7	1.8	1.4	1.5	1.4	1.4	1.7	1.8	1.5	1.0	1.2	1.4	1.1	24	2.1	1.0	1.5	0	0
2	0.8	1.0	0.8	1.0	0.8	1.0	1.2	1.0	1.2	1.2	1.4	1.5	1.8	1.8	2.7	2.6	3.1	4.0	7.0	13.9	22.0	18.7	13.0	6.8	24	22.0	0.8	4.6	0	0
3	10.6 38.0	25.5 29.6	12.7 33.8	18.0 13.4	36.0 21.2	23.9 21.6	31.7 47.3	59.5 29.5	37.2 22.6	31.2 21.9	39.0 25.1	47.4 21.3	36.7 37.6	29.0 26.0	21.9 26.0	22.1 32.6	26.1 18.9	23.2 13.0	22.1 15.5	21.9 13.4	25.6 13.5	41.9 16.3	66.8 10.5	55.0 11.8	24 24	66.8 47.3	10.6 10.5	31.9 23.4	0	0
5	14.9	13.2	4.4	11.5	14.9	17.0	14.6	16.2	25.1	21.8	23.6	26.0	24.1	31.4	22.9	11.7	7.8	12.9	15.9	18.9	13.9	33.8	52.5	26.4	24	52.5	4.4	19.8	0	0
6	25.9	22.5	19.1	16.2	15.9	21.0	22.8	32.9	31.4	25.9	17.1	11.0	11.7	17.4	24.0	27.1	35.1	13.8	11.3	7.5	17.1	13.4	4.9	4.3	24	35.1	4.3	18.7	0	0
7	4.2	3.4	3.1	3.0	2.7	2.6	2.8	4.3	5.3	4.4	5.2	5.9	3.0	3.2	2.6	3.7	3.8	3.6	5.5	6.7	6.1	11.3	10.6	6.7	24	11.3	2.6	4.7	0	0
8	6.6	3.7	5.5	7.0	6.9	17.3	16.6	14.6	14.0	22.6	21.8	20.0	13.0	10.5	10.0	12.2	14.5	11.4	13.5	16.3	19.8	23.3	7.3	2.8	24	23.3	2.8	13.0	0	0
9	2.4	2.7	3.8	7.6	4.6	9.9	12.8	10.5	11.2	7.7	6.4	4.3	5.1	14.0	11.4	9.5	11.4	25.6	16.8	18.2	15.9	25.5	22.5	15.3	24	25.6	2.4	11.5	0	0
10	15.1	17.0	17.0	19.1	20.2	37.6	20.1	26.0	28.4	52.6	25.3	24.6	27.9	18.8	23.6	13.1	17.1	10.8	27.4	12.4	11.9	22.3	16.6	25.6	24	52.6	10.8	22.1	0	0
11	23.9	19.5	15.4	22.5	17.9	17.4	19.1	51.3	79.5	46.8	19.7	20.8	19.7	22.2	30.0	46.4	113.6	136.0	118.9	88.4	88.5	106.7	37.7	26.0	24	136.0	15.4	49.5	0	0
12	14.2 20.0	9.9 18.5	6.7 18.1	4.5 13.2	3.6 11.6	6.1 20.0	8.0 21.6	10.2 29.7	11.4 44.1	11.0 36.2	11.2 25.4	10.3 31.6	9.9 43.8	11.1 43.5	11.9 32.9	13.9 25.5	13.4 32.0	12.8 31.6	11.6 38.3	8.2 48.3	16.0 48.0	16.7 48.4	18.1 51.2	20.6 38.9	24 24	20.6 51.2	3.6 11.6	11.3 32.2	0	0
14	48.5	42.6	40.9	38.5	35.3	29.0	27.2	28.7	33.5	16.1	7.1	6.7	7.6	4.7	3.5	6.8	7.8	7.4	9.3	12.5	9.7	5.6	5.4	7.6	24	48.5	3.5	18.4	0	0
15	15.6	8.9	20.4	15.2	9.3	8.9	6.0	18.6	52.5	50.4	41.8	30.4	25.9	15.4	11.1	8.5	24.4	14.9	10.6	18.2	21.8	20.3	33.0	34.7	24	52.5	6.0	21.5	0	0
16	28.6	22.7	19.3	29.3	19.3	24.1	23.1	11.7	18.4	10.9	15.8	14.7	16.4	21.5	20.0	21.4	19.1	19.2	23.4	27.3	44.5	34.2	40.3	28.4	24	44.5	10.9	23.1	0	0
17	25.3	18.4	12.7	15.0	14.7	10.0	12.0	41.0	16.4	29.5	38.7	51.4	50.4	63.6	89.9	88.7	120.9	80.6	39.8	32.6	10.4	12.1	10.2	13.4	24	120.9	10.0	37.4	0	0
18	11.4	13.8	16.4	17.4	12.8	13.2	15.9	26.4	22.7	21.7	23.4	23.8	18.9	19.3	20.6	21.0	20.6	18.5	18.6	16.1	17.5	19.2	16.4	15.1	24	26.4	11.4	18.4	0	0
19	15.8	16.4	17.9	20.5	29.0	28.3	43.0	50.3	72.0	49.3	31.2	27.5	17.1	24.4	25.1	20.6	14.4	12.4	31.7	17.2	16.9	21.8	22.3	23.5	24	72.0	12.4	27.0	0	0
20	21.6	12.0	13.0	13.7	18.0	17.0	14.5	19.1	27.6	28.8	28.3	29.6	25.6	25.9	19.7	14.7	18.5	24.2	19.1	23.7	19.7	18.1	14.6	12.0	24	29.6	12.0	20.0	0	0
21 22	14.7 46.8	21.9 36.6	15.8 15.7	11.9 20.0	6.0 10.9	3.3 12.5	3.9 18.9	16.4 12.3	89.4 18.8	17.5 13.3	11.0 20.9	16.7 17.4	17.5 16.8	32.2 17.6	33.8 18.8	13.5 17.6	23.5 25.9	35.5 16.0	48.6 15.6	30.7 15.6	37.0 15.2	38.6 13.9	51.7 12.0	50.3 17.5	24 24	89.4 46.8	3.3 10.9	26.7 18.6	0	0
23	11.7	22.0	10.4	12.6	20.9	10.4	26.0	23.1	18.8	15.3	21.7	19.5	15.7	18.2	18.7	34.9	28.7	19.7	20.9	16.4	32.6	20.0	21.3	9.8	24	34.9	9.8	19.6	0	0
24	23.4	8.3	8.6	6.9	8.4	23.7	33.8	11.7	10.3	11.1	14.1	14.6	14.2	15.3	10.2	9.9	11.2	8.8	9.8	11.3	11.3	9.3	10.2	9.1	24	33.8	6.9	12.7	0	0
25	8.4	8.7	7.1	8.4	8.1	8.7	12.1	14.5	13.2	16.0	С	С	С	20.3	25.9	27.2	25.8	23.5	24.8	24.8	22.8	25.4	25.9	28.6	21	28.6	7.1	18.1	0	0
26	27.4	24.1	50.7	19.2	56.7	24.3	18.3	34.5	38.3	33.7	9.4	10.1	9.1	33.8	8.8	8.9	7.6	12.6	14.6	11.8	11.4	27.5	7.9	3.8	24	56.7	3.8	21.0	0	0
27	2.7	2.2	2.8	2.8	3.3	3.4	7.1	11.1	12.0	16.4	11.5	11.5	35.8	33.4	15.3	13.2	12.5	6.8	4.8	4.1	2.9	2.6	2.6	3.8	24	35.8	2.2	9.4	0	0
28	5.2	2.7	3.4	4.3	9.5	7.3	6.6	8.9	8.4	5.9	5.6	7.3	5.0	6.3	5.6	8.9	13.7	15.9	17.2	16.0	25.5	20.9	24.1	21.5	24	25.5	2.7	10.7	0	0
29 30	16.0 19.1	13.2 19.3	12.2 10.9	26.0 17.2	24.0 15.7	16.8 8.3	11.9 14.3	11.5 14.9	23.5 22.8	17.2 9.8	11.2 14.5	10.9 24.8	9.4 7.3	10.8 9.0	12.8 8.0	16.1 10.1	11.6	30.4 14.3	9.6 16.0	7.8 12.7	16.5 4.4	24.4 4.0	45.2 4.6	14.5 4.1	24 24	45.2 24.8	7.8 4.0	16.8 12.4	0	0
31	19.1	19.5	10.9	17.2	15.7	8.3	14.5	14.9	22.8	9.8	14.5	24.8	7.3	9.0	8.0	10.1	11.9	14.5	16.0	12.7	4.4	4.0	4.0	4.1	24 0	0.0	0.0	12.4	0	0
Count	30	30	30	30	30	30	30	30	30	30	29	29	29	30	30	30	30	30	30	30	30	30	30	30	717	30	29	30		
Maximum	48.5	42.6	50.7	38.5	56.7	37.6	47.3	59.5	89.4	52.6	41.8	51.4	50.4	63.6	89.9	88.7	120.9	136.0	118.9	88.4	88.5	106.7	66.8	55.0	24	136.0	37.6	70.4		
Minimum	0.8	1.0	0.8	1.0	0.8	1.0	1.0	1.0	1.2	1.2	1.4	1.5	1.8	1.4	1.5	1.4	1.4	1.7	1.8	1.5	1.0	1.2	1.4	1.1	0	0.0	0.8			
Average	17.4	15.4	14.0	13.9	15.3	14.9	17.1	21.4	27.1	21.6	18.2	18.7	18.2	20.1	19.0	18.8	23.2	22.0	21.3	19.1	20.6	23.2	22.0	18.0	23	44	7	19.2		
#>900	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		20		20		40				60		70		00		00		0.5		00		100		eptable Des	sirable V	iolations		Maximum
Percentiles		10		20		30		40		50		60		70		80		90		95		99		100	Hour Day					136.0 49.5
Data		3.8		8.0		11.2		13.4		16.0		18.9		22.1		26.0		35.6		47.5		88.7		136.0	Month					19.2
Notes	С	- Calibratio	n / Span Cy	/cle N	A - No Data	Available	T ·	- Test	A	- MOE Audi	t M	- Equipme	nt Malfunct	tion / Down	n R-	Rate of C	hange													

										De	NOx R	undle Roa	nd 2014																	
											g/m3)																			
H	lour																													
Day	0	100	200	300	400	500	600	700 12.0	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300		aximum N		Average	Hrs>400	Days>200
1	3.6 2.0	3.3 2.1	3.8 3.4	3.3 3.4	3.3 5.4	3.9 9.9	4.2 7.0	12.0 34.8	17.7 18.5	6.9 18.5	6.8 14.7	9.3 25.0	16.4 14.7	16.8 12.5	10.4 12.1	7.5 17.2	6.9 18.9	5.4 26.3	4.0 10.8	3.3 11.8	2.4 30.9	2.3	2.0 40.6	2.0 19.2	24 24	17.7 40.6	2.0 2.0	6.6 15.8	0	0
3	25.0	16.8	16.3	26.5	24.8	19.4	18.8	27.7	32.2	35.8	47.1	41.0	14.7 A	12.5 A	12.1 A	19.5	28.4	19.4	24.8	27.0	30.9	25.0	16.1	15.8	24	47.1	15.8	25.6	0	0
4	10.6	6.2	5.5	7.4	16.0	31.7	38.6	47.5	68.5	27.3	8.9	10.9	9.2	12.1	10.7	10.7	21.2	11.2	11.1	10.5	9.2	9.9	26.1	13.2	24	68.5	5.5	18.1	0	0
5	8.7	4.2	4.8	4.9	21.9	20.1	26.8	21.1	37.2	46.1	32.1	32.3	21.1	25.2	27.1	30.0	26.8	52.1	42.4	31.7	32.3	34.0	36.4	29.3	24	52.1	4.2	27.0	0	0
6	20.1	16.7	14.8	14.4	10.5	11.6	14.8	12.4	12.3	10.5	9.2	7.9	8.0	8.1	7.0	7.4	7.0	5.8	4.7	4.8	5.0	4.2	3.8	3.6	24	20.1	3.6	9.4	0	0
7	3.3	3.3	3.2	2.9	2.5	3.5	2.8	2.8	2.9	2.4	3.1	3.7	11.0	7.0	5.2	5.5	24.0	12.7	17.6	26.2	7.6	22.9	11.8	10.7	24	26.2	2.4	8.3	0	0
8	21.7	7.7	17.5	6.6	19.6	7.8	27.3	38.8	31.3	16.8	24.4	19.6	20.7	23.4	43.8	26.8	17.4	15.1	20.1	16.7	27.7	28.5	21.6	16.7	24	43.8	6.6	21.6	0	0
9	30.2	30.2	28.8	26.2	33.7	34.0	36.9	39.9	48.6	35.1	30.7	23.1	16.6	24.5	15.7	44.6	50.2	39.5	22.1	8.5	7.4	4.8	4.9	3.7	24	50.2	3.7	26.7	0	0
10	3.5	3.3	3.1	3.1	3.2	3.7	3.6	8.1	7.0	6.8	9.2	10.7	14.8	17.6	11.5	6.8	10.3	4.8	4.0	3.8	3.9	2.2	2.4	2.4	24	17.6	2.2	6.2	0	0
11	2.5	2.0 2.3	1.9 2.3	2.4 3.6	2.3	2.3	2.4 2.8	4.1 22.4	3.7	11.7	20.3	21.7	22.0 7.5	22.4	21.3 5.2	17.7 5.3	20.0	5.2 15.3	4.3 12.9	3.9	2.7	3.0	2.7 13.5	2.8	24	22.4	1.9	8.6	0	0
12	2.3	2.3 9.9	2.3 7.5	13.9	10.2 40.1	4.0	2.8	60.3	18.6 57.0	11.0 52.4	20.0	19.5 67.2	7.5 52.4	4.3 28.4	28.5	29.2	10.2	29.3	27.8	13.0	8.4	8.1		11.8 16.0	24 24	22.4 67.2	2.3 7.5	9.8	0	0
14	11.7 16.6	19.7	27.1	22.7	35.5	40.3 54.0	46.9	11.0	8.0	8.2	61.7 7.3	34.8	25.9	11.4	28.5 8.9	13.2	30.5 11.7	14.7	15.7	18.9 14.9	25.7 12.3	20.9 15.5	21.7 11.0	6.9	24	54.0	6.9	32.2 18.9	0	0
15	5.1	4.3	4.5	6.6	15.3	29.9	61.2	53.5	77.3	83.8	34.4	32.7	39.3	39.9	23.5	43.6	14.1	23.6	29.2	35.7	25.8	35.0	17.8	17.8	24	83.8	4.3	31.4	0	0
16	18.0	11.2	26.9	8.4	8.8	9.6	20.3	21.7	13.9	14.3	11.5	13.8	10.7	22.9	16.7	15.4	15.1	15.0	21.3	28.0	18.3	26.5	45.1	35.4	24	45.1	8.4	18.7	0	0
17	32.3	37.4	63.2	37.5	38.4	75.4	65.6	46.3	51.1	57.3	41.8	38.2	35.0	34.0	38.3	34.5	29.6	15.1	12.1	29.0	30.0	30.8	25.6	14.7	24	75.4	12.1	38.0	0	0
18	26.5	17.2	6.6	6.5	3.9	3.3	3.3	4.5	5.7	31.7	78.6	7.5	15.1	10.2	8.9	6.7	5.5	4.0	3.6	2.8	2.3	2.5	2.4	2.2	24	78.6	2.2	10.9	0	0
19	1.7	2.0	1.9	2.0	2.1	2.1	2.8	3.8	5.8	8.7	3.7	3.9	8.3	4.9	5.7	5.6	6.3	5.7	5.1	4.9	7.9	4.1	4.7	3.3	24	8.7	1.7	4.5	0	0
20	3.6	3.3	3.5	3.6	3.2	3.4	3.6	5.4	7.3	6.2	12.5	19.0	21.3	13.9	9.0	9.9	11.4	16.5	13.3	14.4	14.1	15.6	13.6	18.8	24	21.3	3.2	10.3	0	0
21	23.2	12.9	13.1	11.5	13.4	13.9	11.7	9.0	9.0	11.0	23.1	22.5	23.1	24.3	17.6	15.4	28.0	19.8	20.3	22.7	30.5	22.4	19.2	19.6	24	30.5	9.0	18.2	0	0
22	26.4	15.2	3.2	6.2	10.3	11.4	18.4	12.4	11.6	15.7	21.4	26.0	37.2	12.6	12.8	15.0	18.0	25.0	21.6	16.0	18.8	36.0	16.8	19.2	24	37.2	3.2	17.8	0	0
23 24	15.5	14.1 17.0	18.6	15.1	13.6	28.8	20.9	21.0	14.3	13.2	32.7	13.5 17.8	16.1	13.3	14.0	15.0	13.6	15.3	12.1	11.8	26.0	26.3	19.8	16.4	24	32.7 27.8	11.8	17.5	0	0
24	17.4 7.3	4.3	22.7 4.8	11.5 4.9	12.0 5.1	10.4 6.0	22.7 6.2	15.1 7.8	22.9 8.6	24.5 8.8	20.4 8.6	5.9	25.3 4.4	27.1 3.8	27.8 4.2	13.9 3.5	19.5 5.1	20.9 5.0	16.1 6.3	16.5 8.6	11.7 6.6	11.6 8.3	15.7 11.6	8.2 8.9	24 24	11.6	8.2 3.5	17.9 6.4	0	0
26	8.8	8.8	10.7	8.6	10.1	10.3	11.2	10.2	12.4	15.8	18.1	11.9	12.5	10.5	16.3	12.5	14.8	13.5	17.6	17.8	16.3	16.7	38.8	22.5	24	38.8	8.6	14.4	0	0
27	28.4	54.3	37.0	21.7	11.5	25.1	28.6	24.4	31.7	36.0	27.5	18.7	16.1	20.9	23.6	24.3	26.0	17.4	16.6	15.1	7.9	12.2	9.9	7.8	24	54.3	7.8	22.6	0	0
28	8.7	5.4	5.5	5.9	4.3	2.9	2.7	2.6	2.7	3.3	3.3	2.4	2.9	2.7	4.3	4.7	4.8	5.5	7.0	9.7	8.0	7.1	11.5	25.0	24	25.0	2.4	6.0	0	0
29	22.0	11.9	3.2	2.9	2.1	2.0	2.7	3.1	2.6	2.8	2.8	3.1	2.1	2.6	8.6	11.6	15.2	15.6	4.3	2.7	3.4	2.7	3.0	2.7	24	22.0	2.0	5.6	0	0
30	2.1	1.8	1.8	1.9	1.5	1.8	1.9	1.7	2.8	2.6	С	С	С	27.0	22.8	14.8	17.8	29.8	24.1	17.4	17.8	21.7	15.4	13.6	21	29.8	1.5	11.5	0	0
31	17.1	10.6	9.5	6.5	6.6	8.4	10.9	29.1	22.6	16.2	20.2	16.9	13.9	12.9	13.7	12.1	11.8	14.8	12.6	12.8	10.2	10.0	12.4	12.5	24	29.1	6.5	13.5	0	0
Count	31	31	31	31	31	31	31	31	31	31	30	30	29	30	30	31	31	31	31	31	31	31	31	31	738	31	29	31		
Maximum	32.3	54.3	63.2	37.5	40.1	75.4	65.6	60.3	77.3	83.8	78.6	67.2	52.4	39.9	43.8	44.6	50.2	52.1	42.4	35.7	32.3	36.0	45.1	35.4	24	83.8	32.3	51.9		
Minimum	1.7	1.8	1.8	1.9	1.5	1.8	1.9	1.7	2.6	2.4	2.8	2.4	2.1	2.6	4.2	3.5	4.8	4.0	3.6	2.7	2.3	2.2	2.0	2.0	21	8.7	1.5	2.5		
Average	13.7	11.6 0	12.2 0	9.8 0	12.6 0	15.8 0	17.7 0	19.8 0	21.5	20.7	21.9 0	19.3 0	18.1 0	16.6 0	15.8 0	16.1	17.4 0	16.8 0	15.0	14.9 0	14.9 0	15.8 0	16.1 0	13.0	24	39	5	16.1		
#>900	U	0	0	0	U	U	0	0	U	U	U	U	U	U	U	U	U	U	0	U	U	U	U	U	Regs Acc	eptable D	esirahle \	Violations		Maximum
Percentiles		10		20		30		40		50		60		70		80		90		95		99		100	Hour	cptable D	con able 1	- CARCIOIS		83.8
																									Day					38.0
Data		3.1		4.7		7.5		10.5		13.0		16.1		19.8		25.0		32.3		39.9		62.7		83.8	Month					16.1
Notes	_	- Calibratio	n / Snan O	rcle N	A - No Data	Available	т	Test	Α.	- MOE Audi		- Fauinma	ent Malfunc	tion / Down	, D	Rate of C	hange													
INOTES		- Campi atio	11 / Spall Cy	CIC IV	A - INO Data	Available	1.	1636	А	IVIOL Addi	L IVI	- Equipine	TIC IVIGITUIT	cion / Dowi	, n.	nate of C	nange													

# QUARTERLY AMBIENT AIR QUALITY MONITORING REPORT FOR THE DURHAM YORK ENERGY CENTRE – OCTOBER TO DECEMBER 2014

Appendix D PM2.5 Data Summaries and Time History Plots January 28, 2015

# Appendix D PM<sub>2.5</sub> Data Summaries and Time History Plots



Project No.: 160950528

Figure D-1 Time History Plot of Measured 24-Hour Average PM<sub>2.5</sub> Concentrations – Courtice (WPCP) Station

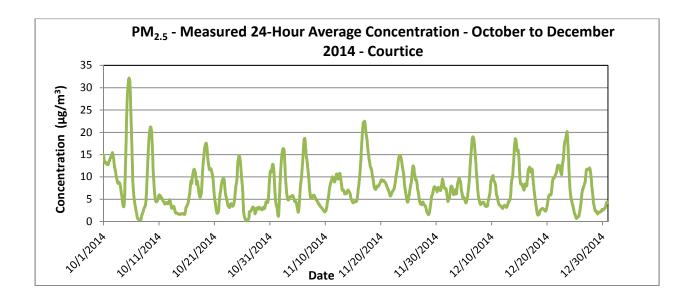
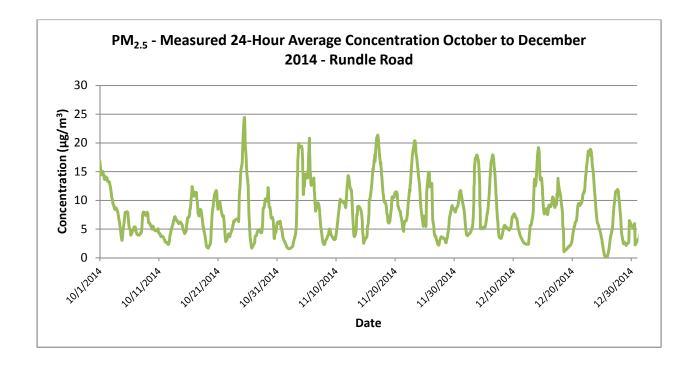


Figure D-2 Time History Plot of Measured 24-Hour Average PM<sub>2.5</sub> Concentrations – Rundle Road Station



										Oc	M <sub>2.5</sub> - CC tober g/m3)		2014																
L	our O	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Count M	aximum N	tinimum.	Augraga	
Day 1	11.9	10.4	11.0	11.6	12.3	13.5	16.2	16.7	14.8	12.6	13.0	14.9	13.2	11.4	7.7	8.1	11.5	14.2	15.6	15.9	15.4	14.6	16.8	15.9	24	16.8	7.7	Average 13.3	
2	15.5	13.7	12.9	13.7	16.9	19.5	18.4	17.2	16.8	18.3	16.3	16.4	17.3	14.3	14.4	9.4	7.2	7.6	7.7	8.1	6.9	5.5	4.9	4.9	24	19.5	4.9	12.7	
3	5.4	6.9	8.2	8.8	10.1	10.3	9.9	11.7	10.5	9.8	10.0	11.3	11.2	8.9	9.8	10.7	11.2	8.8	8.6	7.5	6.1	3.3	2.9	0.8	24	11.7	0.8	8.4	
4	0.5	0.4	0.2	0.3	0.3	0.7	1.9	3.0	2.5	0.3	0.5	1.3	1.9	2.9	5.0	8.0	11.7	12.6	19.0	31.2	40.9	50.0	51.3	50.0	24	51.3	0.2	12.4	
5	45.8	45.8	51.2	50.3	53.6	51.1	43.4	37.0	30.1	17.0	16.8	18.0	14.2	11.4	10.5	9.7	7.9	7.6	7.2	7.6	8.6	8.1	6.6	6.8	24	53.6	6.6	23.6	
6	7.2	6.6	6.4	5.3	3.9	2.7	1.2	0.9	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	1.0	0.8	1.0	0.7	0.4	0.3	0.3	0.3	24	7.2	0.3	1.9	
7	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	1.5	4.6	5.3	5.3	5.7	6.4	4.8	24	6.4	0.2	1.6	
8	4.1	2.8 29.0	2.5	3.1 30.1	4.1 27.0	6.8	6.3	4.4 18.8	3.1	2.3 10.5	1.0	2.1	3.3 4.6	4.7	7.8	9.5	11.8	19.6 1.4	24.9	31.0 1.7	35.2	33.2	35.8	35.4	24 24	35.8 35.3	1.0	12.3	
10	35.3 5.9	9.5	28.9 9.5	7.6	7.3	7.2	7.3	6.8	15.1 6.0	3.7	8.4 3.9	7.7 4.2	3.6	3.2	3.2	2.6 3.1	2.3 4.0	5.6	1.2 3.2	4.2	1.8 5.6	1.9 6.2	2.2 8.2	2.9 9.6	24	9.6	1.2 3.1	11.8 5.8	
11	10.1	9.8	9.0	6.9	6.2	6.7	6.6	4.6	2.2	1.4	1.7	2.2	2.0	1.9	1.7	0.2	0.3	0.9	1.8	3.2	4.5	4.7	5.9	6.0	24	10.1	0.2	4.2	
12	7.0	7.1	7.9	8.0	8.1	8.2	7.9	5.7	3.9	1.4	0.6	0.3	0.3	0.4	0.7	0.6	1.1	2.7	5.5	7.8	8.5	8.4	8.3	7.5	24	8.5	0.3	4.9	
13	4.7	1.3	1.3	1.2	1.2	1.2	1.5	1.8	2.5	2.3	1.9	2.1	2.2	2.0	1.9	2.0	2.1	2.0	1.9	1.9	1.9	1.8	2.0	2.4	24	4.7	1.2	2.0	
14	3.0	2.4	1.8	1.3	0.9	0.8	0.8	0.9	0.9	1.1	1.4	1.6	1.6	1.3	1.7	2.0	2.1	1.9	1.2	1.4	2.2	2.3	3.3	2.6	24	3.3	0.8	1.7	
15	2.8	2.4	1.9	1.8	2.3	1.6	1.1	0.9	0.7	0.3	0.3	0.5	0.4	1.3	0.8	2.1	5.0	5.3	7.0	9.5	10.9	9.5	5.8	4.8	24	10.9	0.3	3.3	
16	4.6	3.4	6.7	5.8	4.7	3.9	4.3	4.8	8.5	8.9	9.0	9.4	7.1	6.2	12.7	15.0	19.8	19.7	17.6	16.8	2.8	3.2	5.0	12.0	24	19.8	2.8	8.8	
17	19.5	18.5	14.0	10.6	11.7	13.2	9.3	9.2	10.0	9.5	6.8	2.7	3.3	5.1	5.0	6.1	5.9	4.7	5.2	6.7	8.6	10.1	10.4	8.3	24	19.5	2.7	8.9	
18	9.2	7.3	7.3	4.0	1.6	1.6	1.9	2.5	4.1	3.9	3.9	4.7	5.8	7.8	10.0	12.7	17.7	23.3	28.3	31.6	31.2	30.6	28.2	25.5	24	31.6	1.6	12.7	
19	24.3	21.5	19.5	18.5	14.7	12.4	11.1	9.6	9.8	10.1	9.1	8.2	6.5	5.9	4.7	6.4	8.2	9.4	9.2	11.6	18.8	19.8	19.1	17.1	24	24.3	4.7	12.7	
20 21	16.1 2.3	15.4 3.7	13.7 5.7	12.9 5.4	12.8 4.7	12.6 4.0	12.4 2.2	11.6 3.4	13.1 2.9	9.0 0.2	4.4 0.2	4.0 0.2	1.8 0.2	0.8 0.6	0.9 1.3	0.8 2.1	0.9 3.1	0.7 4.3	0.9 6.8	0.9 11.9	0.9 18.4	0.8 16.7	0.6 14.7	1.5 14.8	24 24	16.1 18.4	0.6	6.2 5.4	
22	14.4	12.9	12.6	13.8	13.6	13.4	12.7	11.2	9.5	7.2	6.1	3.5	2.1	1.9	2.0	2.6	3.4	4.1	4.2	2.5	0.7	0.7	1.2	2.7	24	14.4	0.7	6.6	
23	5.0	6.4	7.4	8.3	7.5	7.1	8.2	С.	C	0.6	0.3	0.2	0.2	0.2	0.4	0.9	0.9	2.9	4.7	5.5	5.4	5.3	5.0	5.4	22	8.3	0.2	4.0	
24	6.2	5.4	4.5	3.6	5.4	5.6	6.6	7.5	3.9	0.9	0.6	0.8	2.6	10.4	7.5	9.0	11.1	17.1	16.2	16.3	19.2	16.5	13.3	12.9	24	19.2	0.6	8.5	
25	14.0	15.4	14.8	23.7	37.4	29.8	23.0	16.1	10.4	8.2	5.9	4.1	2.7	2.7	2.2	2.8	4.3	3.0	0.5	0.3	0.2	0.2	0.2	0.2	24	37.4	0.2	9.2	
26	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.9	24	0.9	0.2	0.2	
27	1.4	1.8	2.1	2.5	2.6	3.3	4.4	25.1	6.4	0.8	0.2	0.2	0.2	0.8	2.2	2.6	2.2	2.3	3.0	2.9	3.3	3.5	2.5	1.3	24	25.1	0.2	3.2	
28	0.8	0.5	1.0	1.2	1.0	1.6	2.4	2.1	3.0	2.6	3.0	4.3	5.8	6.9	7.0	6.7	4.7	1.7	0.7	1.2	1.7	3.0	3.8	5.7	24	7.0	0.5	3.0	
29	5.3	1.2	0.3	0.2	0.2	0.2	0.2	0.2	1.1	2.7	3.1	3.3	3.4	5.2	7.5	8.6	4.4	4.9	3.5	6.4	3.5	1.8	1.8	2.6	24	8.6	0.2	3.0	
30 31	2.5	2.1	2.8	3.7	5.2	6.6	10.0	8.4	3.1	2.1	2.9	4.0	3.2	4.5	5.4	7.5	10.5	13.5	14.9	21.9	24.6	28.4	21.4	21.2	24	28.4	2.1	9.6	
Count	18.5 31	15.5 31	10.4 31	7.2	7.8	6.2	6.0	5.4 30	5.7	13.6 31	17.2 31	13.9 31	5.2 31	6.0	4.4 31	0.8	0.2 31	0.2 31	0.2	0.2 31	0.2 31	0.2	1.7 31	0.2	742	18.5 31	0.2	6.1 31	
Maximum	45.8	45.8	51.2	50.3	53.6	51.1	43.4	37.0	30.1	18.3	17.2	18.0	17.3	14.3	14.4	15.0	19.8	23.3	28.3	31.6	40.9	50.0	51.3	50.0	24	53.6	14.3	34.1	
Minimum	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	22	0.9	0.2	0.2	
Average	9.8	9.0	8.9	8.8	9.2	8.8	8.4	8.3	6.7	5.2	4.8	4.7	4.1	4.3	4.6	5.0	5.7	6.6	7.3	8.8	9.5	9.6	9.4	9.3	24	19	1	7.4	
#>900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
																									Regs Acc	eptable D	esirable V	/iolations	Maximum
Percentiles		10		20		30		40		50		60		70		80		90		95		99		100	Hour			T	53.6
Data		0.3		1.1		2.1		3.1		4.7		6.5		8.4		11.7		16.8		23.6		45.8		53.6	Day Month				23.6 7.4
Notes	C-	Calibration	n / Span Cv	cle NA	A - No Data	Available	Т-	Test	A-	MOE Audit	М	- Equipme	nt Malfunct	tion / Dowr	1														

										Nov	M <sub>2.5</sub> - CC rember t/m3)		2014																
Day	Hour 0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Count M	aximum N	linimum	Average	
1	0.2	0.2	0.2	0.4	0.6	0.9	1.6	1.8	1.9	1.9	1.9	2.0	2.0	3.6	9.4	17.0	24.0	30.2	32.8	32.8	31.2	27.8	24.2	22.1	24	32.8	0.2	11.3	
2	20.8	19.0	17.4	16.1	14.0	12.3	10.5	8.4	6.5	5.5	3.3	1.5	1.2	1.2	1.2	1.5	1.8	3.0	4.7	5.9	6.6	6.7	6.4	6.0	24	20.8	1.2	7.6	
3	6.4	7.0	7.3	6.7	6.1	6.4	6.7	7.2	5.9	5.9	5.8	6.2	4.5	2.5	2.1	3.1	3.6	5.0	5.4	6.0	5.9	6.1	6.4	7.3	24	7.3	2.1	5.6	
4	8.7	9.1	7.9	6.9	5.3	3.4	2.4	2.2	2.1	2.0	1.1	1.0	1.5	2.6	3.5	4.2	3.4	1.7	1.5	1.3	0.8	0.4	0.3	0.5	24	9.1	0.3	3.1	
5	1.6	1.6	1.2	4.1	7.4	11.1	14.3	16.1	18.5	21.8	21.0	20.9	19.8	18.4	17.1	12.3	11.1	13.7	16.6	17.4	18.0	16.9	17.5	19.8	24	21.8	1.2	14.1	
6	23.2	23.7	21.2	25.4	20.5	18.2	17.4	17.4	13.9	9.1	6.1	5.1	3.7	2.5	2.2	2.7	4.3	5.4	5.2	4.9	5.1	5.6	6.5	6.9	24	25.4	2.2	10.7	
7	7.3	7.0	8.4	6.7	5.5	5.4	5.3	5.2	5.1	5.5	4.5	4.0	5.0	5.1	4.0	5.1	6.5	7.6	6.2	5.2	6.6	7.9	6.1	6.5	24	8.4	4.0	5.9	
8	6.2	4.0 3.2	3.6	3.6	4.1	3.9	3.9 2.0	2.5	2.1	3.0	3.2	3.0	2.8	2.7	3.1	3.0	2.7	2.6	3.5	5.3 2.9	6.8	5.9	4.0 6.0	2.5 4.6	24	6.8	2.1 0.9	3.7	
10	2.7 3.4	3.3	3.0	2.7 5.4	6.5	7.4	8.1	2.1 9.6	1.3	9.9	1.2 8.6	0.9 6.7	1.1 6.6	6.7	1.2 8.1	1.2	1.2	1.5	3.1 12.5	10.8	2.5 9.8	4.1 9.5	9.8	9.8	24	6.0 13.1	3.3	2.3 8.5	
11	9.0	7.8	8.1	8.6	9.9	11.5	13.2	14.3	12.8	7.4	4.9	3.2	2.8	3.2	4.6	6.8	9.4	15.1	14.2	16.1	16.5	14.0	13.6	13.6	24	16.5	2.8	10.0	
12	18.8	13.2	7.2	5.2	4.7	6.5	8.0	9.0	9.7	10.7	10.1	10.6	10.3	8.3	7.0	6.6	6.8	7.6	7.1	6.2	6.7	5.5	4.0	3.5	24	18.8	3.5	8.1	
13	3.9	4.8	5.1	5.7	7.1	7.4	7.1	6.9	8.1	7.3	5.6	4.7	5.7	7.4	8.9	6.8	6.6	7.5	7.0	7.0	7.4	7.9	7.5	6.8	24	8.9	3.9	6.7	
14	8.1	8.3	6.7	6.0	5.4	4.6	5.0	6.0	6.6	4.5	2.8	1.3	0.8	0.9	1.2	1.9	2.5	3.1	4.2	5.6	4.4	3.8	3.6	4.9	24	8.3	0.8	4.3	
15	7.1	8.6	7.4	6.6	6.5	5.9	6.0	5.5	6.1	5.6	3.2	2.2	1.2	1.1	0.9	2.2	5.2	8.5	10.9	13.4	14.1	15.2	15.9	17.3	24	17.3	0.9	7.4	
16	16.7	16.9	17.3	18.9	17.9	20.8	21.2	23.4	25.1	21.2	23.2	24.2	23.1	24.0	23.7	25.9	28.2	26.6	28.1	27.0	26.0	21.2	16.1	16.8	24	28.2	16.1	22.2	
17	15.8	21.0	20.4	13.1	12.3	10.9	9.6	10.2	10.1	11.6	17.9	13.5	16.8	14.0	11.7	10.7	12.0	13.6	20.2	19.1	12.9	11.0	10.5	9.3	24	21.0	9.3	13.7	
18	9.9	10.6	9.2	9.0	8.1	7.7	7.7	7.1	6.8	6.4	7.2	6.7	6.0	5.6	5.7	5.6	6.4	7.4	7.5	7.2	7.0	7.8	7.6	8.2	24	10.6	5.6	7.4	
19	7.8	7.8	8.2	10.1	10.6	10.8	11.7	11.6	10.3	6.6	5.4	5.4	5.8	6.5	6.9	7.3	8.4	10.4	10.4	9.4	9.1	9.5	11.8	11.6	24	11.8	5.4	8.9	
20 21	11.5 8.2	9.9 8.3	11.9 7.4	11.8 7.6	10.9 7.5	10.7 6.9	9.3 6.5	8.6 6.9	8.3 6.6	7.9 4.6	7.2 3.3	6.2 2.6	5.9 2.1	6.4 1.6	6.1 2.4	5.4 2.1	5.9 2.3	7.3 3.5	8.4 6.3	9.0 9.7	8.5 10.4	8.2 11.5	7.9 11.8	7.0 12.0	24 24	11.9 12.0	5.4 1.6	8.3 6.3	
22	11.1	10.3	10.1	9.7	9.1	9.9	9.6	8.4	7.1	6.7	6.6	7.5	8.0	9.0	10.8	10.6	13.7	13.6	14.0	16.7	17.5	18.0	18.1	18.6	24	18.6	6.6	11.4	
23	19.2	19.4	19.2	20.6	21.3	19.4	16.7	14.4	11.2	9.1	8.3	7.6	8.2	8.5	7.3	7.1	7.6	6.8	7.4	8.1	9.4	9.8	10.0	10.7	24	21.3	6.8	12.0	
24	11.0	12.6	12.9	10.1	8.5	4.8	2.0	0.8	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4	2.7	5.3	9.9	14.6	16.7	24	16.7	0.2	4.8	
25	18.1	20.7	19.6	15.0	14.5	14.7	14.3	С	С	С	4.3	4.1	5.7	7.4	10.9	16.3	14.8	10.5	9.1	10.5	10.5	10.4	10.1	12.4	21	20.7	4.1	12.1	
26	13.1	9.1	9.6	11.3	8.4	5.5	5.0	7.1	13.6	7.7	1.4	0.4	0.2	0.2	0.2	0.3	4.1	9.7	1.7	2.2	3.4	2.9	2.2	2.7	24	13.6	0.2	5.1	
27	3.1	3.9	4.3	5.9	7.7	8.8	8.4	7.1	5.9	3.9	2.6	1.4	3.2	5.9	1.9	1.8	1.1	0.6	1.5	1.2	1.4	1.7	1.7	2.5	24	8.8	0.6	3.7	
28	1.7	1.2	1.7	2.0	2.7	2.5	2.5	2.7	2.2	1.1	0.8	0.7	0.5	0.4	0.5	1.2	2.2	4.1	5.5	6.7	8.0	9.0	11.5	12.6	24	12.6	0.4	3.5	
29	9.1	9.9	10.6	14.0	16.0	5.6	6.2	5.8	4.8	4.9	7.0	8.1	6.1	5.6	5.9	5.8	4.4	4.8	4.7	5.1	6.2	6.9	7.5	7.4	24	16.0	4.4	7.2	
30	9.0	10.1	9.3	8.8	9.3	10.2	12.0	12.9	9.6	7.2	6.8	5.6	3.8	2.7	3.1	3.1	2.8	3.0	3.9	6.0	10.2	11.5	14.5	15.5	24	15.5	2.7	8.0	
Gount 31	30	30	30	30	30	30	30	29	29	29	30	30	30	30	30	30	30	30	30	30	30	30	30	30	717	0.0	0.0	30	
Count Maximum	23.2	23.7	21.2	25.4	21.3	20.8	21.2	23.4	25.1	29	23.2	24.2	23.1	24.0	23.7	25.9	28.2	30.2	32.8	32.8	31.2	27.8	24.2	22.1	24	32.8	20.8	25.0	
Minimum	0.2	0.2	0.2	0.4	0.6	0.9	1.6	0.8	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	1.2	0.8	0.4	0.3	0.5	0	0.0	0.2	23.0	
Average	9.7	9.8	9.3	9.3	9.0	8.5	8.5	8.3	8.1	6.9	6.2	5.6	5.5	5.5	5.7	6.3	7.2	8.3	8.8	9.4	9.6	9.6	9.6	9.9	23	15	3	8.1	
#>900	0	0	0	0	0	0.5	0.5	0.5	0	0.5	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0					
																									Regs Acc	eptable D	esirable V	/iolations	Maximum
Percentiles		10		20		30		40		50		60		70		80		90		95		99		100	Hour				32.8
																									Day				22.2
Data		1.6		3.0		4.7		5.9		6.9		7.9		9.7		11.7		16.9		20.7		27.0		32.8	Month				8.1
Notes		C - Calibratio	n / Span Cy	rcie N	A - No Data	Available	T -	Test	A-	- MOE Audit	M	<ul> <li>Equipme</li> </ul>	nt Malfunc	tion / Dowi	1														

										Dec	M <sub>2.5</sub> - C0 ember :/m3)		2014																
Ho ay	our O	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Count M	aximum M	inimum	Average	
1	14.3	19.9	23.1	16.6	9.0	4.4	3.9	4.2	3.0	2.0	1.8	0.8	0.7	0.9	1.4	2.4	3.5	3.5	4.2	4.2	4.0	4.6	4.7	5.4	24	23.1	0.7	5.9	
2	7.4	10.2	10.9	11.0	10.0	8.0	6.9	7.1	6.3	7.9	8.6	8.0	4.1	10.2	13.2	19.5	9.5	4.1	3.3	5.4	2.0	1.3	1.3	1.3	24	19.5	1.3	7.4	
3	1.4	1.9	1.8	4.5	7.4	11.5	13.0	Α	Α	Α	Α	Α	20.6	14.7	7.3	5.5	9.9	13.2	14.4	13.2	12.0	9.2	3.9	4.1	19	20.6	1.4	8.9	
4	4.7	5.9	6.4	7.0	7.9	8.8	7.9	7.4	8.2	5.5	1.9	1.4	1.1	1.1	1.7	2.3	5.8	4.3	5.3	7.2	7.4	7.6	8.0	5.9	24	8.8	1.1	5.5	
5	4.3	3.3	2.8	2.8	3.2	4.3	4.4	5.0	4.8	4.1	3.2	4.1	6.0	8.0	8.8	9.2	10.8	12.7	18.3	17.4	18.0	19.5	20.6	22.6	24	22.6	2.8	9.1	
6	23.4	22.6	23.6	20.4	20.9	21.5	24.5	20.7	19.1	20.7	18.5	19.9	18.5	17.5	11.9	11.5	10.8	10.7	11.0	10.5	12.0	11.8	8.1	6.4	24	24.5	6.4	16.5	
7	6.6	6.1 5.0	5.0 5.9	4.1 5.5	3.6	3.8 5.0	3.9 5.2	4.0 5.4	3.5 5.5	3.0 5.2	2.5	1.5 1.4	1.0 1.3	1.2	2.0 0.7	2.9 0.3	3.5 0.3	3.8 0.8	5.5 1.7	6.5 2.5	5.1 3.3	5.0 3.5	5.0 3.9	4.8 4.2	24 24	6.6 5.9	1.0 0.3	3.9	
٥	5.1 5.0	5.9	5.4	5.4	5.6 5.8	6.4	6.7	7.2	24.2	9.3	3.0 7.4	6.2	7.1	0.9 6.5	6.3	7.6	7.2	8.9	15.9	22.0	16.0	13.7	10.7	6.0	24	24.2	5.0	3.4 9.3	
10	6.5	9.9	11.7	11.4	9.2	8.3	7.9	6.5	5.7	5.0	4.7	4.3	4.0	4.0	3.6	3.4	3.5	3.9	4.9	4.2	3.8	3.7	4.0	4.6	24	11.7	3.4	5.8	
11	4.5	4.2	3.9	3.6	3.2	3.1	2.5	2.5	2.5	3.4	3.2	3.3	3.2	3.2	2.5	2.5	2.9	2.3	2.7	2.6	1.9	2.3	2.0	2.6	24	4.5	1.9	2.9	
12	3.8	7.2	7.1	6.7	7.0	3.9	3.3	4.2	4.2	3.3	1.4	1.0	1.4	1.3	1.4	1.1	1.4	3.1	4.7	4.5	4.8	6.2	7.8	9.5	24	9.5	1.0	4.2	
13	7.6	6.1	6.3	10.4	12.4	5.9	4.4	5.6	8.4	10.4	12.7	14.7	17.8	22.1	21.9	12.9	6.5	7.5	8.8	13.9	23.6	24.2	22.5	23.9	24	24.2	4.4	12.9	
14	28.2	33.4	33.0	30.7	24.6	18.6	15.3	10.6	5.0	6.1	6.0	6.7	7.2	6.8	7.6	8.1	8.6	10.1	10.7	12.7	12.5	10.9	8.6	6.5	24	33.4	5.0	13.7	
15	3.3	6.5	9.0	9.3	9.2	10.4	9.9	8.9	8.3	6.2	5.5	6.4	3.1	1.8	2.8	3.8	5.2	6.7	9.2	8.8	8.5	13.2	16.9	18.9	24	18.9	1.8	8.0	
16	13.6	7.4	8.8	7.1	6.0	6.5	5.6	10.7	9.5	14.8	26.2	12.5	15.1	18.1	12.5	13.6	10.8	10.1	13.0	9.5	12.8	7.9	10.2	13.9	24	26.2	5.6	11.5	
17	8.2	2.7	10.8	12.2	9.6	10.5	8.3	8.3	7.6	3.9	0.4	1.2	2.1	2.2	1.4	1.1	0.3	0.2	0.2	0.2	0.8	1.1	0.8	0.4	24	12.2	0.2	3.9	
18	0.8	0.9	0.3	0.8	1.5	1.8	3.5	4.2	4.5	4.1	2.8	2.2	1.4	2.4	4.9	5.9	4.9	4.0	3.4	3.1	3.1	2.3	1.8	1.8	24	5.9	0.3	2.8	
19	1.4	1.4	1.6	1.7	2.3	2.2	2.5	3.0	2.9	2.9	2.0	1.2	1.6	1.9	1.9	2.1	3.2	4.2	4.5	4.8	5.9	6.5	6.9	6.0	24	6.9	1.2	3.1	
20	7.0	10.0	10.4	9.9	9.8	9.6	9.2	8.4	7.6	6.4	4.3	2.6	2.1	1.0	0.7	1.8 5.5	2.7	5.7	8.1	15.4	17.7	20.6	16.7	17.9	24	20.6	0.7 3.9	8.6	
21	19.9 13.9	16.5 12.3	16.4 10.4	11.8 12.3	9.8 12.6	9.2 13.2	9.2 12.3	9.2 12.4	12.4 1.5	10.3 0.2	6.3 0.2	5.1 0.2	4.4 0.2	3.9 0.2	4.5 0.2	0.2	6.5 18.0	10.4 27.2	13.8 31.5	23.6 32.3	28.2 35.8	24.5 31.9	23.2 31.4	18.9 34.4	24 24	28.2 35.8	0.2	12.7 14.4	
22	33.8	27.5	32.0	27.4	19.7	18.9	17.1	9.3	9.9	8.1	7.1	7.4	7.0	6.5	5.8	3.8	3.8	5.6	5.1	6.7	7.2	6.7	7.3	3.1	24	33.8	3.1	11.9	
24	2.5	4.0	3.3	5.1	5.6	4.6	4.0	2.5	2.9	2.8	2.4	1.6	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	24	5.6	0.2	1.8	
25	0.3	0.2	0.2	0.3	0.4	1.2	0.9	0.6	2.7	5.5	3.4	2.7	1.8	1.5	0.8	0.7	1.8	2.2	2.7	4.8	6.9	7.3	7.5	9.6	24	9.6	0.2	2.7	
26	10.0	8.3	7.9	10.2	11.8	14.0	13.0	13.5	12.3	10.4	9.5	7.5	4.5	4.8	4.8	4.3	5.4	6.1	7.1	8.1	10.9	13.6	18.1	20.0	24	20.0	4.3	9.8	
27	22.3	22.6	19.5	15.9	13.0	12.5	13.2	12.9	13.1	11.5	8.1	7.4	6.7	6.6	7.0	6.3	5.9	4.3	2.7	2.1	1.6	4.1	6.3	8.3	24	22.6	1.6	9.7	
28	8.1	4.4	7.1	6.2	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	1.2	2.2	5.0	3.0	2.7	3.3	4.1	24	8.1	0.2	2.1	
29	5.5	5.4	2.9	2.5	2.1	1.8	2.1	2.0	1.9	1.1	0.8	0.4	0.2	0.2	0.4	0.4	1.7	2.9	3.6	4.2	4.8	6.1	7.5	4.9	24	7.5	0.2	2.7	
30	3.8	3.2	3.6	3.0	2.6	2.7	3.0	3.8	С	С	С	0.9	2.0	3.8	4.8	2.9	6.8	9.7	5.8	5.0	4.6	7.9	5.2	3.0	21	9.7	0.9	4.2	
31	3.6	4.6	2.7	1.4	1.6	1.6	1.9	2.8	3.0	3.6	3.9	3.6	4.2	4.3	4.8	4.9	5.5	6.4	7.2	6.1	6.6	6.3	5.0	3.9	24	7.2	1.4	4.2	
unt	31	31	31	31	31	31	31	30	29	29	29	30	31	31	31	31	31	31	31	31	31	31	31	31	736	31	29	31	
aximum	33.8	33.4	33.0	30.7	24.6	21.5	24.5	20.7	24.2	20.7	26.2	19.9	20.6	22.1	21.9	19.5	18.0	27.2	31.5	32.3	35.8	31.9	31.4	34.4	24	35.8	18.0	26.7	
inimum	0.3	0.2	0.2	0.3	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2 4.7	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	19	4.5 17	0.2	0.2	
erage 900	9.1	9.0 0	9.5 0	8.9 0	8.0 0	7.6 0	7.3 0	6.8 0	6.9	6.1	5.4 0	4.6 0	4.9 0	5.1	4.8 0	4.7	5.4 0	6.3 0	7.5 0	8.6 0	9.2 0	9.2 0	9.0 0	8.9	24	1/		7.2	
300	- 0			- 0			- 0	- 0	· ·	- 0	- 0	- 0				U		- 0	- 0	- 0	- 0	- 0	-	Ü	Regs Acc	eptable De	esirable v	iolations	Maxir
rcentiles		10		20		30		40		50		60		70		80		90		95		99		100	Hour	-,			Muxii
																									Day				
ita		1.1		2.2		3.3		4.2		5.4		6.6		8.2		10.7		16.5		21.6		31.7		35.8	Month				
es	C -	- Calibration	n / Span Cy	cle	NA - No Data	a Available	Τ-	Test	A-	MOE Audit	M	- Equipme	nt Malfunct	tion / Dow	1														

										0	M <sub>2.5</sub> - Ri ctober g/m3)	undle Roa	d 2014																
H Day	our O	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Count M	laximum N	dinimum	Average	
1	14.4	12.1	14.0	13.8	13.8	15.5	18.4	18.2	15.0	13.6	14.1	14.8	14.3	12.5	8.3	9.8	12.8	14.7	14.7	15.4	15.7	13.6	12.3	15.0	24	18.4	8.3	14.0	
2	16.4	11.6	11.1	11.5	15.0	15.4	13.4	11.5	12.1	13.1	14.5	15.2	12.9	10.6	10.4	7.4	7.4	9.0	10.3	10.4	8.9	6.9	5.9	6.1	24	16.4	5.9	11.1	
3	5.6	5.4	6.7	7.5	8.3	8.6	9.7	10.3	9.6	9.1	9.5	10.5	10.7	8.5	9.1	10.4	12.0	9.8	9.5	8.4	7.5	4.0	3.9	1.7	24	12.0	1.7	8.2	
4	4.3	1.7	0.8	1.0	1.4	1.4	3.2	5.0	5.1	1.3	1.3	1.7	1.6	1.0	1.2	2.1	3.6	3.3	6.3	15.6	14.4	16.5	15.9	11.3	24	16.5	0.8	5.0	
5	10.6	8.8	8.6	9.1	9.4	11.0	23.5	6.2	4.8	1.7	1.9	2.4	2.0	1.9	2.1	2.3	2.2	2.7	2.4	2.4	3.0	3.6	2.8	3.6	24	23.5	1.7	5.4	
6	5.2 5.9	7.4 1.5	7.1 1.4	6.7 1.8	6.6 2.5	6.9 4.2	7.0 3.5	6.4 3.7	5.3 3.6	5.2 3.8	5.0 4.5	5.1 5.2	4.7 4.2	4.2 4.1	4.8 4.6	4.9 4.9	5.4 5.1	5.5 7.3	6.0 8.1	5.6 6.6	4.4 4.7	2.9 4.7	2.7 6.4	2.8 4.3	24 24	7.4 8.1	2.7 1.4	5.3 4.4	
,	3.6	5.0	9.2	16.0	19.1	20.7	19.1	10.7	7.4	5.9	2.9	3.7	4.1	5.3	4.9	3.3	2.6	3.3	4.0	5.3	6.0	5.6	7.0	7.9	24	20.7	2.6	7.6	
9	7.8	8.4	7.7	8.7	8.3	7.9	9.2	9.3	7.8	3.8	3.3	3.6	2.3	1.3	1.1	1.5	2.3	1.5	1.0	1.0	1.1	7.8	14.1	7.3	24	14.1	1.0	5.3	
10	12.7	7.0	5.1	4.1	4.3	4.8	9.9	5.8	8.5	2.4	2.1	3.7	2.5	1.6	1.3	1.5	2.2	2.1	1.5	3.3	5.3	5.3	5.0	5.4	24	12.7	1.3	4.5	
11	7.2	6.7	5.0	4.4	4.0	4.8	4.3	4.2	3.2	2.2	2.3	3.2	3.3	3.1	1.2	0.7	0.6	0.8	1.2	2.0	2.5	3.0	2.9	3.0	24	7.2	0.6	3.2	
12	3.2	3.3	3.7	3.4	3.9	3.9	3.7	3.3	3.0	3.2	1.0	0.6	0.8	1.0	1.6	0.9	1.4	4.4	6.8	8.9	12.6	9.8	7.5	7.6	24	12.6	0.6	4.2	
13	8.0	8.7	9.0	8.5	7.7	7.0	6.1	6.4	6.8	7.6	4.8	5.1	5.4	5.1	5.3	5.8	6.0	6.0	6.0	5.8	5.9	6.1	6.3	7.9	24	9.0	4.8	6.6	
14	9.8	7.7	7.3	5.9	4.9	5.0	5.4	5.2	4.8	5.5	6.1	5.8	6.2	6.5	6.3	6.8	6.2	5.0	3.4	3.9	4.3	4.2	5.4	5.1	24	9.8	3.4	5.7	
15	4.5	3.0	2.1	1.9	2.5	1.8	1.7	2.3	2.2	3.7	8.1	10.4	5.7	11.4	5.5	7.2	13.1	25.6	10.0	10.6	14.1	10.1	6.0	4.7	24	25.6	1.7	7.0	
16	4.0	3.4 8.7	4.9 7.7	4.5 5.9	4.5 6.6	8.8 8.5	18.4 7.5	6.5 14.4	5.9 9.3	10.2 8.2	28.9 9.5	25.5 13.6	8.8 6.2	18.6 5.6	21.5 6.1	29.3 10.2	11.5	10.9 6.1	9.8 6.7	10.1 7.7	2.4 9.4	1.7 10.5	3.0 10.3	4.7 8.2	24 24	29.3 14.4	1.7 5.6	10.7 8.4	
17	8.1 9.3	8.0	7.7	4.3	1.3	1.3	3.4	2.5	2.4	1.3	1.1	1.0	1.1	1.3	1.6	1.5	6.3 1.3	1.4	2.2	2.7	3.6	2.5	2.4	2.1	24	9.3	1.0	2.8	
19	1.9	1.5	1.7	1.4	1.3	1.2	1.4	1.3	1.5	1.6	3.5	2.2	2.9	4.9	3.6	3.4	3.6	5.1	6.6	10.4	27.5	30.4	12.5	19.7	24	30.4	1.2	6.3	
20	27.6	11.0	10.1	9.4	8.9	8.6	16.6	8.7	9.8	11.9	6.9	6.1	6.2	6.0	7.8	5.9	6.2	6.4	6.7	7.3	7.2	5.1	6.0	8.9	24	27.6	5.1	9.0	
21	15.5	12.2	18.7	12.3	16.6	17.9	14.4	12.7	9.7	1.0	0.8	0.6	0.6	1.0	1.0	0.9	1.2	1.7	2.7	4.8	8.0	7.1	6.1	4.9	24	18.7	0.6	7.2	
22	3.8	2.8	2.5	2.6	2.4	2.5	2.9	2.8	2.6	2.7	2.5	2.7	3.2	4.4	4.4	3.7	5.1	5.4	9.4	5.4	3.5	2.9	3.5	4.2	24	9.4	2.4	3.7	
23	4.7	5.4	7.2	6.2	5.4	5.1	5.2	6.3	4.7	С	C	9.2	9.2	8.7	7.8	10.1	10.1	8.6	5.9	5.2	5.3	5.1	4.7	5.2	22	10.1	4.7	6.6	
24	5.6	6.9	6.5	5.5	5.8	5.9	6.2	7.2	4.5	4.3	5.1	5.1	6.6	17.8	59.8	52.5	33.1	17.6	19.3	26.8	26.2	19.9	16.1	12.0	24	59.8	4.3	15.7	
25	10.3	10.8	12.4	15.3	38.5	38.2	36.0	30.7	25.3	22.9	19.3	15.8	10.4	9.3	7.8	8.1	9.9	7.4	2.9	2.2	2.0	1.6	1.3	1.6	24	38.5	1.3	14.2	
26 27	2.6 4.5	2.4 4.2	2.1 4.2	2.1 3.7	1.8 3.6	1.4 4.1	2.4 8.0	1.7 18.9	1.3 5.7	2.1 3.3	1.1 2.1	1.5 1.7	1.1	1.0 3.7	1.0 5.2	1.1 6.5	1.4 4.1	2.3 4.7	1.9 4.3	4.5 3.9	3.7 3.7	2.7 3.9	3.7 3.5	3.8	24 24	4.5 18.9	1.0 1.7	2.1 4.7	
28	3.0	4.3	5.0	5.6	6.7	6.6	6.2	5.8	5.3	3.9	4.1	5.1	10.9	18.4	27.3	40.1	21.9	5.7	3.8	4.5	7.0	7.3	10.6	14.9	24	40.1	3.0	9.8	
29	12.7	7.0	4.0	3.5	3.4	3.5	5.4	8.5	7.8	8.1	19.5	18.2	30.2	14.0	4.7	4.8	2.9	5.3	4.0	4.8	2.6	2.4	2.3	2.1	24	30.2	2.1	7.6	
30	2.3	2.7	2.3	2.7	2.6	9.8	3.4	4.7	2.6	1.6	1.2	1.3	3.8	3.3	9.5	12.9	13.0	5.2	5.1	7.0	8.8	8.0	11.4	11.2	24	13.0	1.2	5.7	
31	7.5	6.2	5.1	3.8	4.0	3.8	3.7	3.7	3.4	5.0	3.2	3.3	4.0	4.4	5.1	4.1	3.8	3.5	2.7	2.3	2.2	2.4	2.5	2.4	24	7.5	2.2	3.8	
Count	31	31	31	31	31	31	31	31	31	30	30	31	31	31	31	31	31	31	31	31	31	31	31	31	742	31	30	31	-
Maximum	27.6	12.2	18.7	16.0	38.5	38.2	36.0	30.7	25.3	22.9	28.9	25.5	30.2	18.6	59.8	52.5	33.1	25.6	19.3	26.8	27.5	30.4	16.1	19.7	24	59.8	12.2	28.3	
Minimum	1.9	1.5	0.8	1.0	1.3	1.2	1.4	1.3	1.3	1.0	0.8	0.6	0.6	1.0	1.0	0.7	0.6	0.8	1.0	1.0	1.1	1.6	1.3	1.6	22	4.5	0.6	1.1	
Average	7.8 0	6.3 0	6.5 0	6.2 0	7.3 0	7.9 0	9.0	7.9 0	6.5	5.7 0	6.3 0	6.6 0	6.1	6.5 0	7.8 0	8.5	7.0 0	6.4 0	6.0 0	6.9 0	7.5 0	7.0 0	6.6 0	6.5	24	19	3	7.0	
#>900	U	U	0	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	Rogs \cc	eptable D	osirahlo V	Violations	Maximum
Percentiles		10		20		30		40		50		60		70		80		90		95		99		100	Hour	ертале в	canable	FIGIALIONS	59.8
																									Day				15.7
Data		1.6		2.5		3.6		4.4		5.2		6.2		7.8		9.8		14.1		18.3		30.6		59.8	Month				7.0
Notes	C -	- Calibration	/ Span Cyc	ile NA	- No Data	Available	T -	Test	A-	MOE Audit	М	- Equipme	nt Malfunc	tion / Dowr	n R-	Rate of C	hange												

					_	_				No	M <sub>2.5</sub> - Ru vember g/m3)	undle Roa	d 2014				_		_				_						
	lour																												
Day	2.2	100 2.1	2.0	2.0	400 1.8	500 1.5	1.6	700 1.4	1.3	900 1.5	1000	1100	1200	1300	1400	1500 1.4	1600	1700 1.6	1800	1900 1.6	2000 1.5	2100 1.5	2200 1.5	2300 1.7	Count M	aximum N 2.2	1.3	Average 1.6	
2	1.7	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.3	2.5	2.8	4.0	3.7	11.5	5.5	5.3	5.1	5.4	4.9	24	11.5	1.7	3.3	
3	5.4	6.8	6.4	6.9	8.2	12.1	13.1	14.3	45.4	51.2	21.7	88.0	7.6	69.9	18.1	35.1	26.4	4.0	2.7	3.3	3.2	3.9	4.2	4.7	24	88.0	2.7	19.3	
4	6.1	6.7	7.2	7.7	10.0	6.8	4.9	7.2	9.1	5.6	4.9	6.3	7.0	86.7	41.4	43.9	12.4	17.8	35.8	5.1	4.5	2.0	1.3	2.3	24	86.7	1.3	14.3	
5	5.9	6.0	3.8	5.8	6.8	7.5	8.5	38.0	49.6	28.2	33.9	30.5	21.6	24.2	6.5	4.5	2.1	5.5	3.1	2.5	2.7	5.4	4.4	4.5	24	49.6	2.1	13.0	
6	7.6	9.0	7.6	8.0	9.0	11.0	14.1	15.5	16.8	15.5	11.0	9.9	10.1	8.8	8.9	8.5	9.3	9.4	7.9	7.4	8.0	6.7	5.2	4.3	24	16.8	4.3	9.6	
7	5.3	6.0	5.6	2.7	1.1	1.1	1.1	1.3	1.4	1.3	1.3	1.5	1.1	1.1	1.0	1.2	1.1	1.4	5.8	1.6	1.5	6.3	2.2	2.1	24	6.3	1.0	2.3	
8	4.9	6.6	6.9	8.0	5.0	4.1	3.7	3.4	2.4	3.1	3.1	4.1	4.1	3.7	4.1	3.6	4.1	4.6	6.4	8.9	10.5	9.5	4.0	1.5	24	10.5	1.5	5.0	
9	1.3	1.3	1.3	1.3	1.5	1.9	1.7	1.9	1.8	1.4	1.4	1.6	2.1	2.7	2.5	2.5	2.9	3.9	8.6	9.3	8.8	9.8	10.5	7.6	24	10.5	1.3	3.7	
10	7.1	7.6	7.9	8.4	9.7	10.5	14.8	10.7	11.4	12.3	9.9	9.4	10.0	10.3	12.9	14.1	13.0	9.9	8.3	7.7	7.0	7.7	8.0	8.0	24	14.8	7.0	9.9	
11	7.2	7.5	7.9	8.5	8.9	9.3	10.4	13.5	14.8	8.2	6.4	7.3	6.8	6.6	7.5	9.8	17.5	22.8	22.3	27.6	23.9	22.9	17.7	17.7	24	27.6	6.4	13.0	
12	26.2	18.2	8.5	5.3	2.5	3.1	3.3	4.9	3.7	3.9	3.7	2.8	3.0	2.6	10.4	2.7	2.3	2.1	2.2	2.3	4.3	2.9	2.9	2.9	24	26.2	2.1	5.3	
13	3.9	5.5	5.7	4.8	4.7	5.3	5.7	7.8	11.8	6.2	19.7	7.1	45.6	11.5	9.6	10.6	28.5	2.7	2.7	3.2	3.0	3.1	2.5	2.1	24	45.6	2.1	8.9	
14	2.5	2.9	2.5	2.6	2.2	2.5	3.0	2.2	2.9	2.3	1.9	2.3	2.3	2.4	2.0	2.4	2.9	2.9	9.9	4.9	3.4	9.2	2.2	5.3	24	9.9	1.9	3.3	
15	3.3	4.0	4.1	3.4	3.8	4.0	7.6	20.4	24.6	3.2	8.2	4.7	23.0	9.6	18.7	53.7	8.6	5.4	9.1	12.2	10.2	17.1	12.3	13.7	24	53.7	3.2	11.9	
16	13.1	13.8	15.2	17.4	16.4	20.2	20.9	21.4	22.4	16.1	19.8	19.6	18.9	22.1	32.2	24.7	28.0	25.7	25.3	26.7	27.2	22.2	19.4	18.1	24	32.2	13.1	21.1	
1/	16.3	15.3	16.0	9.7	8.7	6.1	6.3	6.9 7.3	8.0	9.5	7.3	8.3	10.3	13.3	37.4	10.9	10.2	10.3	17.7	17.4	9.2	7.3	6.9	6.2	24	37.4	6.1	11.5	
18	6.7 8.1	5.9 7.0	4.7 8.3	4.6 9.7	3.8 11.5	3.7 12.4	4.8 14.1	17.6	8.6 13.6	5.7 9.5	5.2 22.1	6.1 34.6	5.2 11.8	5.7 7.4	13.2 7.6	7.6 8.2	8.7 7.8	6.5 6.8	5.3 6.4	5.1 6.6	5.0 6.4	5.3 7.2	5.1 11.9	5.4 12.0	24 24	13.2 34.6	3.7 6.4	6.0 11.2	
20	10.0	8.8	10.1	11.3	10.6	9.2	9.9	24.4	9.4	5.8	5.1	8.5	3.9	6.9	4.2	3.8	3.5	4.0	4.3	4.8	5.1	6.6	4.6	4.3	24	24.4	3.5	7.5	
21	4.5	5.4	4.7	4.8	4.3	3.5	3.9	5.9	5.4	4.0	3.9	4.4	30.5	6.9	16.5	4.9	5.1	4.2	4.1	6.7	5.8	5.9	7.5	7.1	24	30.5	3.5	6.7	
22	9.9	13.5	14.6	16.2	16.7	16.4	14.8	13.1	20.8	9.4	18.8	17.0	20.7	32.6	24.0	13.4	18.6	21.1	19.9	21.4	20.6	20.0	20.0	19.4	24	32.6	9.4	18.0	
23	19.3	19.9	19.2	20.6	23.6	22.4	23.2	22.0	17.8	14.0	12.4	8.8	9.3	11.0	10.6	11.3	11.7	11.5	10.3	10.2	10.8	10.4	9.3	8.9	24	23.6	8.8	14.5	
24	8.4	10.6	11.6	10.4	10.8	7.0	2.7	1.3	1.1	1.1	1.4	1.4	1.7	2.3	3.7	2.9	2.7	2.4	3.3	5.1	26.2	38.2	4.8	4.0	24	38.2	1.1	6.9	
25	4.5	4.0	4.3	3.7	4.0	3.8	10.4	57.6	59.0	30.0	С	С	С	3.5	15.5	16.3	9.2	5.3	4.4	4.7	5.3	5.5	5.8	6.6	21	59.0	3.5	12.5	
26	7.1	4.7	5.4	5.3	6.3	4.6	8.8	5.4	4.9	3.9	1.0	0.7	0.7	0.5	0.5	1.0	0.9	1.6	1.5	1.7	2.5	9.3	1.8	1.4	24	9.3	0.5	3.4	
27	1.5	1.6	1.9	2.6	2.9	3.5	3.8	3.5	3.6	3.0	2.2	3.6	7.4	9.0	3.1	3.1	3.7	3.3	5.1	3.6	3.5	3.3	3.2	2.9	24	9.0	1.5	3.5	
28	2.3	1.2	1.6	1.5	2.0	1.6	3.1	3.9	2.0	2.6	1.3	3.0	1.6	2.0	1.8	4.1	3.3	15.0	6.3	9.4	4.6	5.1	11.6	11.5	24	15.0	1.2	4.3	
29	7.6	9.6	11.8	14.7	16.4	12.7	8.8	9.1	7.1	6.7	6.7	7.1	7.1	7.5	8.0	7.8	6.2	5.8	5.6	5.7	6.3	7.0	7.7	7.9	24	16.4	5.6	8.4	
30	9.3	11.2	10.1	10.1	10.4	11.5	12.8	12.1	11.0	9.8	9.7	9.9	8.8	8.7	9.2	9.7	10.3	11.5	12.1	13.6	17.7	16.7	15.7	14.0	24	17.7	8.7	11.5	
31																									0	0.0	0.0		
Count	30	30	30	30	30	30	30	30	30	30	29	29	29	30	30	30	30	30	30	30	30	30	30	30	717	30	29	30	
Maximum	26.2	19.9	19.2	20.6	23.6	22.4	23.2	57.6	59.0	51.2	33.9	88.0	45.6	86.7	41.4	53.7	28.5	25.7	35.8	27.6	27.2	38.2	20.0	19.4	24	88.0	19.2	37.3	
Minimum	1.3	1.2	1.3	1.3	1.1	1.1	1.1	1.3	1.1	1.1	1.0	0.7	0.7	0.5	0.5	1.0	0.9	1.4	1.5	1.6	1.5	1.5	1.3	1.4	0	0.0	0.5		
Average	7.3	7.5	7.3	7.3	7.5	7.4	8.1	11.9	13.1	9.2	8.5	10.8	9.9	12.8	11.2	10.9	8.9	7.8	9.0	8.2	8.5	9.4	7.3	7.1	23	28	4	9.0	
#>900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				e-t-e	
D		10		20		20		40						70		00		00		0.5		00		100		eptable D	esirable V	ioiations	Maximu
Percentiles		10		20		30		40		50		60		70		80		90		95		99		100	Hour				81
Data		1.7		2.7		3.9		5.1		6.5		8.0		9.7		12.4		19.5		24.6		48.9		88.0	Day				2:
Data		1.7		2.7		5.9		5.1		0.5		8.0		9.7		12.4		19.5		24.0		46.9		00.0	Month				
Notes	С	- Calibration	n / Span Cy	cle N	A - No Data	Available	т-	Test	A-	MOE Audit	М	- Equipme	nt Malfunc	tion / Dow	n R	- Rate of C	hange												

										De	cember	undle Roa	d 2014																
	lour									(u	g/m3)																		
Day	10ur 0	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	Count M	laximum M	linimum	Average	
1	10.3	12.7	12.6	9.1	5.7	4.2	6.6	6.2	3.3	2.5	2.5	5.2	3.4	4.3	5.6	3.6	3.8	5.3	4.4	3.6	2.3	2.6	2.7	3.2	24	12.7	2.3	5.2	
2	3.4	3.9	4.4	4.4	4.6	4.4	4.3	4.7	5.5	4.8	4.1	5.4	3.8	4.6	5.6	5.8	6.4	6.3	5.6	5.0	4.3	5.1	5.7	6.2	24	6.4	3.4	4.9	
3	6.4	7.8	6.1	10.1	14.0	19.1	20.3	30.4	35.6	72.8	15.4	74.8	Α	Α	Α	4.8	9.1	8.7	8.1	7.7	7.2	5.5	2.5	2.4	21	74.8	2.4	17.6	
4	2.7	3.3	3.6	3.8	4.1	5.3	5.3	5.8	6.8	6.2	2.5	2.7	3.6	4.2	4.4	7.1	13.1	7.9	6.8	6.5	5.1	5.3	6.6	4.6	24	13.1	2.5	5.3	
5	3.6	3.8	3.8	4.0	4.7	4.8	5.3	7.8	13.5	11.7	9.2	9.6	10.8	12.2	12.4	13.9	14.4	15.3	17.2	19.8	18.2	17.5	18.0	21.2	24	21.2	3.6	11.4	
6	22.3	22.5	23.9	19.4	19.3	19.5	22.3	19.3	16.7	15.4	15.5	16.0	15.8	14.7	10.7	9.6	5.9	7.0	6.7	6.5	7.1	7.3	5.0	3.9	24	23.9	3.9	13.8	
7	3.8	3.3	2.6	2.5	2.2	2.3	2.2	2.4	2.7	2.0	1.8	1.3	2.0	2.1	2.3	3.0	4.4	5.8	7.3	6.8	4.7	4.7	4.6	4.6	24	7.3	1.3	3.4	
8	5.0	6.2	6.9	6.4	6.5	6.1	7.0	8.4	10.6	5.7	5.3	4.5	4.8	3.6	3.1	2.7	2.3	2.5	3.0	3.9	5.3	5.3	5.6	5.5	24	10.6	2.3	5.3	
9	4.8	4.3	4.7	4.3	4.8	5.9	6.4	7.4	9.5	8.1	6.3	5.3	4.9	6.2	5.7	7.4	7.8	9.8	14.2	13.9	10.0	9.4	6.4	4.4	24	14.2	4.3	7.2	
10	5.0	8.1	8.4	7.3	6.3	5.5	4.8	5.3	4.8	4.0	4.3	4.4	4.7	4.6	4.7	3.6	4.5	4.4	3.9	3.8	3.5	2.9	2.8	3.1	24	8.4	2.8	4.8	
- 11	3.3	3.3	3.3	3.2	2.7	2.4	2.5	2.3	2.1	2.7	2.4	2.5	2.3	2.2	2.3	2.1 3.3	3.6	1.8	2.0	1.9	2.2	2.2	2.4	3.1 2.7	24	3.6	1.8	2.5	
12	2.4 3.0	2.8 3.7	2.8 4.4	2.1 8.4	2.5 11.6	1.8 7.4	2.0 6.4	2.5 7.5	2.7 9.5	3.1 12.1	1.9 13.8	2.3 42.6	2.5 31.7	2.1 33.5	2.2 23.0	13.2	17.8 7.1	10.4 6.4	18.3 7.7	13.5 11.3	7.2 20.7	23.2 21.3	3.7 20.7	20.9	24 24	23.2 42.6	1.8 3.0	5.7 14.5	
14	22.9	24.7	26.7	25.5	21.4	16.7	13.3	13.4	5.3	5.7	4.5	5.0	5.1	4.5	5.3	9.4	8.5	8.8	9.1	14.6	16.4	7.4	10.0	4.1	24	26.7	4.1	12.0	
15	2.9	4.7	7.4	8.5	8.6	8.9	9.4	9.0	9.5	9.7	6.7	8.1	8.0	8.6	6.3	5.9	2.2	6.6	10.2	9.3	8.0	12.9	15.2	16.0	24	16.0	2.2	8.5	
16	14.1	8.3	10.1	7.8	7.0	7.4	6.8	8.8	8.9	11.3	12.0	10.2	11.7	12.0	13.0	12.9	11.2	9.5	8.1	7.5	5.4	5.8	6.5	7.0	24	14.1	5.4	9.3	
17	6.2	3.6	11.8	11.8	8.9	9.3	8.2	7.6	11.9	17.4	49.8	4.8	3.9	37.2	66.3	4.5	1.1	0.3	0.7	0.5	0.6	0.9	0.6	0.2	24	66.3	0.2	11.2	
18	1.1	0.5	0.2	0.3	0.5	0.5	1.4	1.6	1.4	1.3	1.1	1.6	1.5	2.3	2.6	2.6	2.8	2.2	1.6	2.5	1.6	1.2	1.2	1.1	24	2.8	0.2	1.5	
19	1.0	1.0	1.4	1.8	2.1	2.0	2.2	2.8	2.8	3.0	2.5	2.1	3.0	2.4	2.6	2.9	4.0	3.6	4.3	3.5	4.0	4.2	4.7	4.8	24	4.8	1.0	2.9	
20	7.1	8.9	10.4	9.4	9.3	8.3	8.2	8.8	7.0	3.6	7.1	5.5	12.0	4.8	3.7	4.5	4.3	5.9	10.9	12.8	15.0	16.6	18.8	13.2	24	18.8	3.6	9.0	
21	12.3	13.7	10.9	8.0	6.5	6.7	6.8	7.8	12.3	8.8	6.6	6.5	7.4	6.8	7.1	6.4	7.7	10.4	14.4	28.9	21.7	19.1	18.2	16.4	24	28.9	6.4	11.3	
22	19.1	14.8	8.2	18.7	20.3	21.0	20.5	20.7	19.9	22.8	22.0	14.3	14.7	15.3	16.2	17.8	17.6	20.0	17.9	16.9	17.5	18.0	18.5	19.7	24	22.8	8.2	18.0	
23	20.5	22.0	21.0	18.1	17.3	17.0	13.3	9.3	9.3	7.4	6.5	7.3	7.3	6.0	5.3	3.8	3.4	4.3	3.5	3.7	5.5	6.5	6.0	6.0	24	22.0	3.4	9.6	
24	3.8	5.8	6.3	8.9	8.6	7.0	7.4	6.6	5.0	5.0	6.0	4.2	2.9	1.4	0.7	0.5	0.6	0.3	0.2	0.2	0.6	0.7	1.0	0.6	24	8.9	0.2	3.5	
25	0.6	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	24	0.6	0.2	0.2	
26	4.6	4.5	4.1	5.4	5.6	6.4	7.5	8.4	9.1	8.7	7.9	7.0	4.8	5.3	5.0	4.8	5.4	5.0	4.8	5.7	7.5	16.4	18.0	18.3	24	18.3	4.1	7.5	
27	15.8	16.7 4.0	16.2 6.1	15.1 5.3	12.3	13.2 0.2	17.1 0.5	20.1 0.6	19.4	15.0 2.9	7.7	6.8	6.6 0.7	6.7 0.5	7.1 0.5	6.6 1.1	7.1	5.5	3.0 2.5	2.3 4.3	1.8 7.6	3.7 1.9	4.6 2.6	5.9 2.6	24 24	20.1 7.6	1.8 0.2	9.8 2.5	
28	6.0 4.6	5.4	2.3	2.1	0.9 2.0	2.0	2.2	2.4	1.1 2.3	2.9	0.6 1.7	0.4 1.5	1.3	1.3	3.7	31.6	1.6 60.7	4.6 3.4	0.9	0.9	1.1	1.7	2.5	1.5	24	60.7	0.2	5.9	
30	0.8	0.8	1.0	0.8	0.8	0.8	0.8	0.9	1.0	0.8	1.7 C	1.5 C	1.5 C	7.0	5.3	11.5	2.8	4.1	3.8	2.5	3.0	4.9	3.4	2.2	24	11.5	0.9	2.8	
31	2.7	3.5	2.3	1.8	1.7	1.9	2.1	2.7	2.9	6.1	10.2	13.2	44.8	1.9	5.8	4.0	3.5	3.2	3.7	4.6	6.5	5.5	3.6	3.4	24	44.8	1.7	5.9	
Count	31	31	31	31	31	31	31	31	31	31	30	30	29	30	30	31	31	31	31	31	31	31	31	31	738	31	29	31	
Maximum	22.9	24.7	26.7	25.5	21.4	21.0	22.3	30.4	35.6	72.8	49.8	74.8	44.8	37.2	66.3	31.6	60.7	20.0	18.3	28.9	21.7	23.2	20.7	21.2	24	74.8	18.3	34.3	
Minimum	0.6	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	21	0.6	0.2	0.2	
Average	7.2	7.4	7.6	7.6	7.2	7.0	7.2	7.8	8.1	9.1	7.9	9.2	7.8	7.3	8.0	6.8	7.9	6.1	6.6	7.3	7.2	7.7	7.2	6.7	24	21	3	7.5	
#>900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
									-															I	Regs Acc	eptable De	esirable \	iolations/	Maximum
Percentiles		10		20		30		40		50		60		70		80		90		95		99		100	Hour				74.8
1																									Day				18.0
Data		1.1		2.4		3.3		4.3		5.3		6.5		7.9		11.1		17.2		20.5		36.6		74.8	Month				7.5
Notes	С	- Calibration	n / Span Cy	cle N	A - No Data	Available	Τ-	Test	A	- MOE Audit	M	- Equipme	nt Malfunct	ion / Dowr	R-	Rate of C	hange												

# QUARTERLY AMBIENT AIR QUALITY MONITORING REPORT FOR THE DURHAM YORK ENERGY CENTRE – OCTOBER TO DECEMBER 2014

Appendix E Continuous Parameter Edit Logs January 28, 2015

# Appendix E Continuous Parameter Edit Logs



Project No.: 160950528 E.1

Project Name	<b>Durham York Ener</b>	gy Centre Ambient	Air Monitoring Program									
Contact	Greg Crooks / Con	nie Lim / Tim Hung	Phone:	905-944-7777	E-mail:		greg.crooks@sta	antec.com, connie.lim@stantec.com, tim.hung@stantec.com				
Station number:	1	N/A	Station Name:	Courtice WPCP Station (	Courtice WPCP Station (Upwind)							
Station address:	Courtice Water Pollution Control Plant Emitter Address:			The Region of Durham, 605 Rossland Rd, Whitby, ON								
Pollutant or parameter:	SO2	Instrument make	& model:	Teledyne Monitor Labs Sulphur Dioxide Analyzer Model T100			Serial Number:	565				
Data edit period	Start date:	1-Jan-14	End date:	30-Sep-14				Time Zone : EST				
Edit#	Edit date	Editor's Name	Edit Action	Starting		Endir	ng .	Reason				
				Date (dd/mm/yyyy)	Hour (xx:xx)	Date (dd/mm/yyyy)	Hour (xx:xx)					
1	2-Apr-14	CL	Invalidate data	10-Jan-14	09:00	10-Jan-14	10:00	MOE audit and calibration				
2	2-Apr-14	CL	Invalidate data	21-Jan-14	10:00	21-Jan-14	11:00	Monthly calibration				
3	2-Apr-14	CL	Invalidate data	25-Feb-14	08:00	25-Feb-14	09:00	Monthly calibration				
4	8-Apr-14	CL	Invalidate data	26-Mar-14	07:00	26-Mar-14	09:00	MOE audit and calibration				
5	30-Apr-14	CL	Invalidate data	25-Feb-14	10:00	25-Feb-14	11:00	Datalogger program updated.				
6	16-May-14	CL	Invalidate data	23-Apr-14	10:00	23-Apr-14	11:00	Monthly calibration				
7	27-Jun-14	TH	Invalidate data	9-Jun-14	06:00	9-Jun-14	10:00	MOE audit and calibration				
8	11-Jul-14	TH	Invalidate data	3-Jul-14	08:00	3-Jul-14	09:00	Monthly calibration				
9	1-Aug-14	TH/CL	Invalidate data	30-Jul-14	10:00	30-Jul-14	14:00	Remove unit for annual maintenance. Spare unit installed. Calibration on spare				
								unit.				
10	5-Oct-14	CL	Invalidate data	15-Aug-14	07:00	15-Aug-14	12:00	Original unit re-installed and calibrated.				
11	6-Oct-14	CL	Invalidate data	21-Aug-14	09:00	21-Aug-14	10:00	MOE audit and calibration				
12	6-Oct-14	CL	Invalidate data	23-Sep-14	12:00	23-Sep-14	14:00	Monthly calibration				
13	6-Oct-14	CL	Apply offset to data	15-Aug-14	12:00	23-Sep-14	12:00	SO2 drifting negative				
14	24-Nov-14	CL	Invalidate data	23-Oct-14	07:00	23-Oct-14	08:00	Monthly calibration				
15	7-Jan-15	TH	Invalidate data	25-Nov-14	07:00	25-Nov-14	09:00	Monthly calibration				
16	7-Jan-15	TH	Invalidate data	3-Dec-14	07:00	3-Dec-14	11:00	MOE audit and calibration				
17	7-Jan-15	TH	Invalidate data	30-Dec-14	08:00	30-Dec-14	10:00	Monthly calibration				
18	19-Jan-15	TH	Invalidate data	21-Nov-14	13:00	21-Nov-14	13:00	Rate of change in minute data identified.				
							-					
			1									

Examples of Acceptable Edit Actions:
Add offset of
Delete hours
Zero Correction
Slope Correction
Manual data entry for missing, but collected data
Invalidating span & zero check data
Invalidating data due to equipment malfunctions and power failures.
Invalidating data when instrumentation off-line
Marking data as out-of-range

Project Name			ir Monitoring Program	*** *** ****				
Contact		nie Lim / Tim Hung N/A	Phone: Station Name:	905-944-7777 Courtice WPCP Station	E-mail:		greg.crooks@st	antec.com, connie.lim@stantec.com, tim.hung@stantec.com
tation number: tation address:		N/A Illution Control Plant		The Region of Durham,	605 Rossland Rd	. Whitby. ON		
				,				
ollutant or parameter:	NOx	Instrument make &	k model:	API Model 200E Chemili	uminescence Ana	alyzer	Serial Number:	675
Pata edit period	Start date:	1-Jan-14	End date:	30-Sep-14	ı			Time Zone : EST
Edit#	Edit date	Editor's Name	Edit Action	Starting		Endin		Reason
				Date (dd/mm/yyyy)	Hour (xx:xx)	Date (dd/mm/yyyy)	Hour (xx:xx)	
<u> </u>		•			00.00	10.1	10.00	and the state of t
1	2-Apr-14	CL	Invalidate data	10-Jan-14	09:00	10-Jan-14	10:00	MOE audit and calibration
2	2-Apr-14	CL	Invalidate data	21-Jan-14	10:00	21-Jan-14	11:00 09:00	Monthly calibration
3	2-Apr-14 8-Apr-14	CL	Invalidate data	25-Feb-14 26-Mar-14	08:00	25-Feb-14 26-Mar-14	09:00	Monthly calibration  MOE audit and calibration
5	30-Apr-14	CL	Invalidate data	25-Feb-14	10:00	25-Feb-14	11:00	Datalogger program updated.
6	16-May-14	CL	Invalidate data	23-Apr-14	10:00	23-Apr-14	11:00	Monthly calibration
7	27-Jun-14	TH	Invalidate data	9-Jun-14	09:00	9-Jun-14	10:00	MOE audit and calibration
8	11-Jul-14	TH	Invalidate data	3-Jul-14	08:00	3-Jul-14	09:00	Monthly calibration
9	1-Aug-14	TH	Invalidate data	30-Jul-14	10:00	30-Jul-14	14:00	Remove unit for annual maintenance. Spare unit installed. Calibration on spare
-		***		******		*****		unit.
10	5-Oct-14	CL	Invalidate data	15-Aug-14	07:00	15-Aug-14	11:00	Original unit re-installed and calibrated.
11	6-Oct-14	CL	Invalidate data	21-Aug-14	09:00	21-Aug-14	09:00	MOE audit and calibration
12	6-Oct-14	CL	Invalidate data	23-Sep-14	12:00	23-Sep-14	14:00	Monthly calibration
13	11-Nov-14	CL	No action taken	14-Jul-14	22:00	14-Jul-14	22:00	Elevated NO2 measurement noted. Log book and download log reviewed. Hourly
								data reviewed. No equipment issues identified for this period. No rate of change
								issues identified. Data deemed valid.
14	11-Nov-14	CL	No action taken	18-Jul-14	21:00	18-Jul-14	21:00	Elevated NO2 measurement noted. Log book and download log reviewed. Hourly
								data reviewed. No equipment issues identified for this period. No rate of change
								issues identified. Data deemed valid.
15	11-Nov-14	CL	No action taken	21-Jul-14	21:00	21-Jul-14	21:00	Elevated NO2 measurement noted. Log book and download log reviewed. Hourly
								data reviewed. No equipment issues identified for this period. No rate of change
								issues identified. Data deemed valid.
16	11-Nov-14	CL	Apply offset to NOx	30-Jul-14	15:00	15-Aug-14	06:00	NO measurements noted to be slightly higher than NOx. All channels were within
								ppb span during calibration. A 2.5 ppb offset was applied to NOx to balance the
								NOx/NO/NO2 readings.
17	11-Nov-14	CL	No action taken	8-Aug-14	20:00	8-Aug-14	20:00	Elevated NO2 measurement noted. Log book and download log reviewed. Hourly
								and minute data reviewed. No equipment issues identified for this period. No rat
								of change issues identified. Data deemed valid.
18	11-Nov-14	CL	No action taken	21-Aug-14	21:00	21-Aug-14	21:00	Elevated NO2 measurement noted. Log book and download log reviewed. Hourly
								data reviewed. No equipment issues identified for this period. No rate of change
		-						issues identified. Data deemed valid.
19	11-Nov-14	CL	No action taken	27-Aug-14	22:00	27-Aug-14	23:00	Elevated NO2 measurement noted. Log book and download log reviewed. Hourly
								data reviewed. No equipment issues identified for this period. No rate of change issues identified. Data deemed valid.
20	11-Nov-14	CL	No action taken	8-Sep-14	18:00	8-Sep-14	18:00	Elevated NO2 measurement noted. Log book and download log reviewed. Hourly
20	11-NOV-14	CL	No action taken	8-Sep-14	18:00	8-Sep-14	18:00	and minute data reviewed. No equipment issues identified for this period. No rat
								of change issues identified. Data deemed valid.
21	11-Nov-14	CL	No action taken	25-Sep-14	19:00	25-Sep-14	19:00	Elevated NO2 measurement noted. Log book and download log reviewed. Hourly
21	11-1404-14	CL	INO action taken	23-3ep-14	15.00	23-3ep-14	15.00	data reviewed. Rundle Road station and Oshawa AQI monitoring station
								measurements reviewed. Oshawa station measured relatively high NO2 during thi
								period. No equipment issues identified for this period. No rate of change issues
								identified. Data deemed valid.
22	11-Nov-14	CL	No action taken	26-Sep-14	19:00	26-Sep-14	19:00	Elevated NO2 measurement noted. Log book and download log reviewed. Hourly
								data reviewed. Rundle Road station and Oshawa AQI monitoring station
								measurements reviewed. Oshawa station measured relatively high NO2 during thi
								period. No equipment issues identified for this period. No rate of change issues
								identified. Data deemed valid.
23	24-Nov-14	CL	Invalidate data	23-Oct-14	07:00	23-Oct-14	08:00	Monthly calibration
24	25-Nov-14	CL	No action taken	24-Oct-15	20:00	24-Oct-15	20:00	Elevated NOx measurement noted. Log book and download log reviewed. Hourly
								data reviewed. Rundle Road station and Oshawa AQI monitoring station
								measurements reviewed. Oshawa station measured relatively high NO2 during thi
								period. No equipment issues identified for this period. No rate of change issues
								identified. Data deemed valid.
25	25-Nov-14	CL	No action taken	20-Oct-14	06:00	20-Oct-14	06:00	Elevated NOx measurement noted. Log book and download log reviewed. Hourly
								data reviewed. Rundle Road station and Oshawa AQI monitoring station
							1	measurements reviewed. Oshawa station measured relatively high NO2 during thi
							1	period. No equipment issues identified for this period. No rate of change issues
								identified. Data deemed valid.
26	7-Jan-15	TH	Invalidate data	21-Nov-14	16:00	21-Nov-14	16:00	Valley was onsite repairing a broken pump tube line
27	7-Jan-15	TH	Invalidate data	25-Nov-14	07:00	25-Nov-14	09:00	Monthly calibration
28	7-Jan-15	TH	Invalidate data	3-Dec-14	07:00	3-Dec-14	11:00	MOE audit and calibration
29	7-Jan-15	TH	Invalidate data	30-Dec-14	08:00	30-Dec-14	10:00	Monthly calibration
30	8-Jan-15	TH	No action taken	2-Nov-14	16:00	3-Nov-14	03:00	Elevated measurement noted compared to Oshawa AQI monitoring station. Log
							1	book and download log reviewed. Minute data reviewed. No equipment issues
								identified for this period. No rate of change issues identified. Data deemed valid.

Project Name	Durham York Ener	rgy Centre Amhient A	ir Monitoring Program										
Contact				905-944-7777	E-mail:		greg.crooks@sta	antec.com, connie.lim@stantec.com, tim.hung@stantec.com					
Charles and have		N/A	Station Name:	Courtice WPCP Station									
Station number:		N/A	Station Name:	Courtice WPCP Station									
Station address:	Courtice Water Pollution Control Plant Emitter Address:			The Region of Durham,									
Pollutant or parameter:			API Model 200E Chemi		alyzer	Serial Number:	675						
Data edit period Edit #	Start date: Edit date	1-Jan-14 Editor's Name	End date: Edit Action	30-Sep-1 Startin		Endi	ng	Time Zone : EST Reason					
				Date (dd/mm/yyyy)	Hour (xx:xx)	Date (dd/mm/yyyy)	Hour (xx:xx)						
31	9-Jan-15	TH	No action taken	3-Nov-14	18:00	4-Nov-14	04:00	Relatively consistent low measurements noted. Log book and download log reviewed - no issues identified. Hourly and minute data reviewed. Oshawa AQI					
								station measurements reviewed. Data deemed valid as measurements were not					
								repeating exactly.					
32	9-Jan-15	ТН	No action taken	10-Nov-14	17:00	10-Nov-14	20:00	Elevated measurement noted compared to Oshawa AQI monitoring station. Log book and download log reviewed. Minute data reviewed. No equipment issues					
								identified for this period. No rate of change issues identified. Data deemed valid.					
33	9-Jan-15	TH	No action taken	13-Nov-14	17:00	14-Nov-14	07:00	Elevated measurement noted compared to Oshawa AQI monitoring station. Log book and download log reviewed. Minute data reviewed. No equipment issues					
								identified for this period. No rate of change issues identified. Data deemed valid.					
34	9-Jan-15	TH	No action taken	15-Nov-14	21:00	17-Nov-14	01:00	Relatively consistent low measurements noted. Log book and download log reviewed - no issues identified. Hourly and minute data reviewed. Oshawa AQI					
								station measurements reviewed. Data deemed valid as measurements were not					
								repeating exactly.					
35	9-Jan-15	TH	No action taken	17-Nov-14	10:00	17-Nov-14	18:00	Relatively consistent low measurements noted. Log book and download log reviewed - no issues identified. Hourly and minute data reviewed.Oshawa AQI					
								station measurements reviewed. Data deemed valid as measurements were not					
								repeating exactly.					
36	9-Jan-15	TH	No action taken	18-Nov-14	02:00	18-Nov-14	19:00	Relatively consistent low measurements noted. Log book and download log reviewed - no issues identified. Hourly and minute data reviewed. Oshawa AQI					
								station measurements reviewed. Data deemed valid as measurements were not					
								repeating exactly.					
37	9-Jan-15	TH	No action taken	19-Nov-14	08:00	20-Nov-14	09:00	Relatively consistent low measurements noted. Log book and download log reviewed - no issues identified. Hourly and minute data reviewed. Oshawa AQI					
								station measurements reviewed. Data deemed valid as measurements were not					
38	9-Jan-15	TH	No action taken	21-Nov-14	01:00	21-Nov-14	12:00	repeating exactly.					
38	9-Jan-15	IH	No action taken	21-NOV-14	01:00	21-NOV-14	12:00	Relatively consistent low measurements noted. Log book and download log reviewed - no issues identified. Hourly and minute data reviewed. Oshawa AQI					
								station measurements reviewed. Data deemed valid as measurements were not					
39	9-Jan-15	TH	No action taken	22-Nov-14	16:00	23-Nov-14	10:00	repeating exactly.  Relatively consistent low measurements noted. Log book and download log					
35	3-Jan-13		No action taken	22-1100-14	10.00	23-1101-14	10.00	reviewed - no issues identified. Hourly and minute data reviewed.Oshawa AQI					
								station measurements reviewed. Data deemed valid as measurements were not					
40	9-Jan-15	TH	No action taken	23-Nov-14	21:00	23-Nov-14	22:00	repeating exactly.  Elevated measurement noted compared to Oshawa AQI monitoring station. Log					
40	3-Jan-13		No action taken	25-1101-14	21.00	23-1101-14	22.00	book and download log reviewed. Minute data reviewed. No equipment issues					
								identified for this period. No rate of change issues identified. Data deemed valid.					
41	9-Jan-15	TH	No action taken	25-Nov-14	23:00	26-Nov-14	07:00	Elevated measurement noted compared to Oshawa AQI monitoring station. Log					
	3 3411 13		110 detion taken	25 1107 14	25.00	20 1101 24	07.00	book and download log reviewed. Minute data reviewed. No equipment issues					
								identified for this period. No rate of change issues identified. Data deemed valid.					
42	9-Jan-15	TH	No action taken	28-Nov-14	17:00	29-Nov-14	02:00	Elevated measurement noted compared to Oshawa AQI monitoring station. Log					
· <del>-</del>								book and download log reviewed. Minute data reviewed. No equipment issues					
								identified for this period. No rate of change issues identified. Data deemed valid.					
43	9-Jan-15	TH	No action taken	2-Dec-14	13:00	2-Dec-14	18:00	Elevated measurement noted compared to Oshawa AQI monitoring station. Log					
			1					book and download log reviewed. Minute data reviewed. No equipment issues					
								identified for this period. No rate of change issues identified. Data deemed valid.					
44	9-Jan-15	TH	No action taken	2-Dec-14	20:00	3-Dec-14	01:00	Relatively consistent low measurements noted. Log book and download log					
								reviewed - no issues identified. Hourly and minute data reviewed. Oshawa AQI					
								station measurements reviewed. Data deemed valid as measurements were not repeating exactly.					
45	9-Jan-15	TH	No action taken	11-Dec-14	16:00	11-Dec-14	19:00	Elevated measurement noted compared to Oshawa AQI monitoring station. Log					
								book and download log reviewed. Minute data reviewed. No equipment issues					
								identified for this period. No rate of change issues identified. Data deemed valid.					
46	9-Jan-15	TH	No action taken	12-Dec-14	17:00	12-Dec-14	23:00	Elevated measurement noted compared to Oshawa AQI monitoring station. Log					
								book and download log reviewed. Minute data reviewed. No equipment issues					
								identified for this period. No rate of change issues identified. Data deemed valid.					
	+	-1	+				+	4					

Project Name	Durham York Ene	ergy Centre Ambient A	ir Monitoring Program							
Contact	Greg Crooks / Co	nnie Lim / Tim Hung	Phone:	905-944-7777	E-mail:		greg.crooks@st	antec.com, connie.lim@stantec.com, tim.hung@stantec.com		
tation number:		N/A	Station Name:	Courtice WPCP Station						
Station address:	Courtice Water P	ollution Control Plant	Emitter Address:	The Region of Durham, 605 Rossland Rd, Whitby, ON						
ollutant or parameter:	NOx	Instrument make	& model:	API Model 200E Chemile	uminescence Ana	alyzer	Serial Number:	675		
Data edit period	Start date:	1-Jan-14	End date:	30-Sep-14	ı			Time Zone : EST		
Edit#	Edit date	Editor's Name	Edit Action	Starting	Starting Ending		ng	Reason		
				Date (dd/mm/yyyy)	Hour (xx:xx)	Date (dd/mm/yyyy)	Hour (xx:xx)			
47	9-Jan-15	ТН	No action taken	13-Dec-14	03:00	13-Dec-14	04:00	Elevated measurement noted compared to Oshawa AQI monitoring station. Log book and download log reviewed. Minute data reviewed. No equipment issues identified for this period. No rate of change issues identified. Data deemed valid		
48	9-Jan-15	TH	No action taken	13-Dec-14	17:00	13-Dec-14	23:00	Elevated measurement noted compared to Oshawa AQI monitoring station. Log book and download log reviewed. Minute data reviewed. No equipment issues identified for this period. No rate of change issues identified. Data deemed valid		
49	9-Jan-15	TH	No action taken	14-Dec-14	10:00	14-Dec-14	23:00	Elevated measurement noted compared to Oshawa AQI monitoring station. Log book and download log reviewed. Minute data reviewed. No equipment issues identified for this period. No rate of change issues identified. Data deemed valid		
50	9-Jan-15	TH	No action taken	15-Dec-14	11:00	15-Dec-14	21:00	Relatively consistent low measurements noted. Log book and download log reviewed - no issues identified. Hourly and minute data reviewed.Oshawa AQI station measurements reviewed. Data deemed valid as measurements were not repeating exactly.		
51	9-Jan-15	TH	No action taken	22-Dec-14	16:00	23-Dec-14	06:00	Elevated measurement noted compared to Oshawa AQI monitoring station. Log book and download log reviewed. Minute data reviewed. No equipment issues identified for this period. No rate of change issues identified. Data deemed value		
52	9-Jan-15	TH	No action taken	23-Dec-14	18:00	24-Dec-14	01:00	Elevated measurement noted compared to Oshawa AQI monitoring station. Log book and download log reviewed. Minute data reviewed. No equipment issues identified for this period. No rate of change issues identified. Data de		
53	9-Jan-15	ТН	No action taken	28-Dec-14	17:00	29-Dec-14	01:00	Elevated measurement noted compared to Oshawa AQI monitoring station. Log book and download log reviewed. Minute data reviewed. No equipment issues identified for this period. No rate of change issues identified. Data deemed valid		

Examples of Acceptable Edit Actions:

Add offset of Delete hours Zero Correction Slope Correction Slope Correction Manual data entry for missing, but collected data Invalidating span & zero check data Invalidating data due to equipment malfunctions and power failures. Invalidating data when instrumentation off-line Marking data as out-of-range

Project Name Contact	Durham York Energ							
		gy Centre Ambient A	ir Monitoring Program					
Contact	Greg Crooks /		Phone:	905-944-7777	E-mail:		greg.crooks@sta	intec.com, connie.lim@stantec.com, tim.hung@stantec.com
	Connie Lim / Tim							
	Hung							
Station number:		I/A	Station Name:	Courtice WPCP Station				
Station address:		llution Control Plant	Emitter Address:	The Region of Durham, 6			1	
Pollutant or parameter:	PM2.5	Instrument make		Thermo Sharp 5030 Syno	hronized Hybric	l Ambient Real-time	Serial Number:	E-1569
		& model:		Particulate Monitor				
Data edit period	Start date:	1-Jan-14	End date:	30-Sep-14				Time Zone : EST
Edit#	Edit date	Editor's Name	Edit Action	Starting		Endi		Reason
				Date (dd/mm/yyyy)	Hour (xx:xx)	Date (dd/mm/yyyy)		
1	2-Apr-14	CL	Invalidate data	10-Jan-14	10:00	10-Jan-14	10:00	MOE audit and calibration
2	8-Apr-14	CL	Invalidate data	25-Feb-14	09:00	25-Feb-14	09:00	Monthly calibration
3	8-Apr-14	CL	Invalidate data	26-Mar-14	08:00	26-Mar-14	08:00	MOE audit and calibration
4	11-Apr-14	CL	Replace missing data	11-Jan-14	10:00	12-Jan-14	18:00	Cable from PM2.5 monitor to datalogger was loose. Missing data was replaced
								with hourly data downloaded from PM monitor.
5	11-Apr-14	CL	Replace missing data	12-Jan-14	19:00	17-Jan-14	12:00	Monitor set at incorrect zero offset. Data replaced with data downloaded from the
								PM monitor.
6	14-Apr-14	CL	Invalidate data	20-Mar-14	06:00	24-Mar-14	06:00	Snow/ice melted causing water build-up in the unit.
7	30-Apr-14	CL	Invalidate data	25-Feb-14	10:00	25-Feb-14	11:00	Datalogger program updated.
8	16-May-14	CL	Invalidate data	23-Apr-14	11:00	23-Apr-14	11:00	Monthly calibration
9	27-Jun-14	TH	Invalidate data	9-Jun-14	09:00	9-Jun-14	10:00	MOE audit and calibration
10	11-Jul-14	TH	Invalidate data	3-Jul-14	08:00	3-Jul-14	09:00	Monthly calibration
11	1-Aug-14	TH	Invalidate data	30-Jul-14	11:00	30-Jul-14	12:00	Monthly calibration
12	6-Oct-14	CL	Invalidate data	23-Sep-14	12:00	23-Sep-14	13:00	Monthly calibration
13	10-Nov-14	CL	No action taken	2-Jul-14	00:00	2-Jul-14	01:00	Unusual rate of change in hourly data noted. Log book and download log reviewed.
								Hourly and minute data reviewed. No equipment issues identified for this period.
								No rate of change issues identified in minute data. Data deemed valid.
14	10-Nov-14	CL	No action taken	13-Jul-14	06:00	13-Jul-14	06:00	Elevated measurement noted. Log book and download log reviewed. Hourly data
								reviewed. No equipment issues identified for this period. No rate of change issues
								identified. Data deemed valid.
15	10-Nov-14	CL	No action taken	4-Aug-14	15:00	4-Aug-14	15:00	Elevated measurement noted. Log book and download log reviewed. Hourly data
						_		reviewed. Rundle Road station and Oshawa AQI station measurements reviewed.
								Rundle Road and Oshawa AQI stations had relatively high measurements during
								this period. No equipment issues identified for this period. No rate of change
								issues identified. Data deemed valid.
16	10-Nov-14	CL	No action taken	15-Aug-14	23:00	15-Aug-14	23:00	Elevated measurement noted. Log book and download log reviewed. Hourly data
								reviewed. No equipment issues identified for this period. No rate of change issues
								identified. Data deemed valid.
17	10-Nov-14	CL	No action taken	27-Aug-14	05:00	27-Aug-14	21:00	Relatively consistent low measurements noted. Log book and download log
=-								reviewed. Hourly and minute data reviewed. Rundle Road station and Oshawa AQI
								station measurements reviewed. Oshawa station recorded relatively low
								measurements during this period. Data deemed valid as measurements were not
								repeating exactly.
18	10-Nov-14	CL	No action taken	29-Aug-14	09:00	Aug 30,1 4	10:00	Relatively consistent low measurements noted. Log book and download log
10	10 1101 14	C.	110 decion taken	25 7105 24	03.00	7106 30,1 4	10.00	reviewed. Hourly and minute data reviewed. Rundle Road station and Oshawa AQI
								station measurements reviewed. Rundle Road and Oshawa stations recorded
								relatively low measurements during portions of this period. Data deemed valid as
19	24-Nov-14	CL	Invalidate data	23-Oct-14	07:00	23-Oct-14	08:00	measurements were not repeating exactly.  Monthly calibration
20						25-Nov-14		
	7-Jan-15	TH	Invalidate data	25-Nov-14	07:00		09:00	Monthly calibration
21	7-Jan-15	TH	Invalidate data	3-Dec-14	07:00	3-Dec-14	11:00	MOE audit and calibration
22	7-Jan-15	TH	Invalidate data	30-Dec-14	08:00	30-Dec-14	10:00	Monthly calibration
23	9-Jan-14	TH	No action taken	1-Nov-14	14:00	2-Nov-14	08:00	Elevated measurement noted. Log book and download log reviewed. Hourly data
								reviewed. No equipment issues identified for this period. No rate of change issues
	1			1			1	identified. Data deemed valid.
24	9-Jan-14	TH	No action taken	3-Nov-14	07:00	3-Nov-14	17:00	Relatively consistent low measurements noted. Log book and download log
								reviewed. Hourly and minute data reviewed. Oshawa AQI station measurements
								reviewed. Data deemed valid as measurements were not repeating exactly.
25	9-Jan-14	TH	No action taken	4-Nov-14	00:00	4-Nov-14	00:00	Relatively consistent low measurements noted. Log book and download log
								reviewed. Hourly and minute data reviewed. Oshawa AQI station measurements
								reviewed. Data deemed valid as measurements were not repeating exactly.
	<u> </u>						1	
26	9-Jan-14	TH	No action taken	11-Nov-14	01:00	11-Nov-14	02:00	Relatively consistent low measurements noted. Log book and download log
						1		reviewed. Hourly and minute data reviewed. Oshawa AQI station measurements
								reviewed. Data deemed valid as measurements were not repeating exactly.
27	9-Jan-14	TH	No action taken	24-Nov-14	22:00	25-Nov-14	05:00	Elevated measurement noted. Log book and download log reviewed. Hourly data
						1		reviewed. No equipment issues identified for this period. No rate of change issues
								identified. Data deemed valid.
28	9-Jan-14	TH	No action taken	2-Dec-14	13:00	2-Dec-14	16:00	Elevated measurement noted. Log book and download log reviewed. Hourly data
	1	1				1		reviewed. No equipment issues identified for this period. No rate of change issues

Contact	Greg Crooks / Connie Lim / Tim Hung		Phone:	905-944-7777	E-mail:		greg.crooks@sta	antec.com, connie.lim@stantec.com, tim.hung@stantec.com		
Station number:		I/A	Station Name:	Courtice WPCP Station						
Station address:	Courtice Water Po	Ilution Control Plant	Emitter Address:	The Region of Durham,	605 Rossland Rd.	Whitby, ON				
Pollutant or parameter:	PM2.5	Instrument make & model:		Thermo Sharp 5030 Syn Particulate Monitor	chronized Hybrid	Ambient Real-time	Serial Number:	E-1569		
Data edit period	Start date:	1-Jan-14	End date:	30-Sep-14	3			Time Zone : EST		
Edit#	Edit date	Editor's Name	Edit Action	Starting	3	Endir	ng	Reason		
				Date (dd/mm/yyyy)	Hour (xx:xx)	Date (dd/mm/yyyy)	Hour (xx:xx)			
29	9-Jan-14	ТН	No action taken	2-Dec-14	20:00	3-Dec-14	01:00	Relatively consistent low measurements noted. Log book and download log reviewed. Hourly and minute data reviewed. Oshawa AQI station measurements reviewed. Data deemed valid as measurements were not repeating exactly.		
30	9-Jan-14	тн	No action taken	9-Dec-14	08:00	9-Dec-14	09:00	Elevated measurement noted. Log book and download log reviewed. Hourly data reviewed. No equipment issues identified for this period. No rate of change issue identified. Data deemed valid.		
31	9-Jan-14	ТН	No action taken	9-Dec-14	18:00	9-Dec-14	21:00	Elevated measurement noted. Log book and download log reviewed. Hourly data reviewed. No equipment issues identified for this period. No rate of change issue identified. Data deemed valid.		
32	9-Jan-14	TH	No action taken	10-Dec-14	01:00	10-Dec-14	07:00	Elevated measurement noted. Log book and download log reviewed. Hourly data reviewed. No equipment issues identified for this period. No rate of change issue identified. Data deemed valid.		
33	9-Jan-14	TH	No action taken	21-Dec-14	03:00	21-Dec-14	03:00	Relatively consistent low measurements noted. Log book and download log reviewed. Hourly and minute data reviewed. Oshawa AQI station measurements reviewed. Data deemed valid as measurements were not repeating exactly.		
34	9-Jan-14	ТН	No action taken	22-Dec-14	16:00	23-Dec-14	03:00	Elevated measurement noted. Log book and download log reviewed. Hourly data reviewed. No equipment issues identified for this period. No rate of change issue identified. Data deemed valid.		
35	9-Jan-14	тн	No action taken	24-Dec-14	12:00	25-Dec-14	01:00	Relatively consistent low measurements noted. Log book and download log reviewed. Hourly and minute data reviewed. Oshawa AQI station measurements reviewed. Data deemed valid as measurements were not repeating exactly.		

Examples of Acceptable Edit Actions: Add offset of

Delete hours

Zero Correction Slope Correction

Manual data entry for missing, but collected data

Invalidating span & zero check data

Invalidating data due to equipment malfunctions and power failures.

Invalidating data when instrumentation off-line

Marking data as out-of-range

EDIT LOG TABLE											
Project Name	Durham York Energ	gy Centre Ambient A	Air Monitoring Program								
Contact	Greg Crooks /		Phone:	905-944-7777	905-944-7777 E-mail:			ntec.com, connie.lim@stantec.com, tim.hung@stantec.com			
	Connie Lim / Tim										
	Hung										
Station number:	N/A Station Name:			Courtice WPCP Station							
Station address:	Courtice Water Pollution Control Plant Emitter Address:		The Region of Durham,	The Region of Durham, 605 Rossland Rd, Whitby, ON							
Pollutant or parameter:	Temperature	Instrument make	& model:	Campbell Scientific Model HMP60			Serial Number:				
Data edit period	Start date:	1-Jan-14	End date:	30-Sep-14	3			Time Zone : EST			
Edit#	Edit date	Editor's Name	Edit Action	Starting	3	Ending		Reason			
				Date (dd/mm/yyyy)	Hour (xx:xx)	Date (dd/mm/yyyy)	Hour (xx:xx)				
1	30-Apr-14	CL	Invalidate data	25-Feb-14	16:00	25-Feb-14	17:00	Datalogger program updated.			

#### EDIT LOG TABLE

EDIT LOG TABLE											
Project Name	Durham York Energ	gy Centre Ambient A	ir Monitoring Program								
Contact	Greg Crooks / Connie Lim / Tim		Phone:	905-944-7777	E-mail:		greg.crooks@sta	intec.com, connie.lim@stantec.com, tim.hung@stantec.com			
	Hung										
Station number:	N	/A	Station Name:	Courtice WPCP Station							
Station address:	Courtice Water Pol	Courtice Water Pollution Control Plant Emitter Address:		The Region of Durham,	he Region of Durham, 605 Rossland Rd, Whitby, ON						
Pollutant or parameter:	Rainfall	Instrument make	& model:	Texas Electronic TE525N	Λ		Serial Number:				
Data edit period	Start date:	1-Jan-14	End date:	30-Sep-14				Time Zone : EST			
Edit #	Edit date	Editor's Name	Edit Action	Starting	3	Ending	3	Reason			
				Date (dd/mm/yyyy)	Hour (xx:xx)	Date (dd/mm/yyyy)	Hour (xx:xx)				
1	30-Apr-14	CL	Invalidate data	25-Feb-14	16:00	25-Feb-14	17:00	Datalogger program updated.			
2	15-May-14	TH	Invalidate data	10-Jan-14	00:00	Febuary 3, 2014	23:00	Top of rain guage blown off			

Examples of Acceptable Edit Actions: Add offset of Delete hours Zero Correction Slope Correction

Manual data entry for missing, but collected data Invalidating span & zero check data Invalidating data due to equipment malfunctions and power failures.

Invalidating data when instrumentation off-line Marking data as out-of-range

EDIT LOG TABLE												
Project Name	Durham York Energ	y Centre Ambient A	ir Monitoring Program									
Contact	Greg Crooks /		Phone:	905-944-7777	E-mail:		greg.crooks@stantec.com, connie.lim@stantec.com, tim.hung@stantec.com					
	Connie Lim / Tim											
	Hung											
Station number:	N	N/A Station Name:			Courtice WPCP Station							
Station address:	Courtice Water Pollution Control Plant Emitter Address:		The Region of Durham, 605 Rossland Rd, Whitby, ON									
Pollutant or parameter:	Relative Humidity	Instrument make	& model:	Campbell Scientific Model HMP60			Serial Number:					
Data edit period	Start date:	1-Jan-14	End date:	30-Sep-14			Time Zone : EST					
Edit #	Edit date	Editor's Name	Edit Action	Starting		Ending		Reason				
				Date (dd/mm/yyyy)	Hour (xx:xx)	Date (dd/mm/yyyy)	Hour (xx:xx)					
1	30-Apr-14	CL	Invalidate data	25-Feb-14	16:00	25-Feb-14	17:00	Datalogger program updated.				

# EDIT LOG TABLE

EDIT LOG TABLE											
Project Name	Durham York Energ	gy Centre Ambient A	Air Monitoring Program								
Contact	Greg Crooks /		Phone:	905-944-7777	E-mail:	greg.crooks@stantec.com, connie.lim@stantec.com, tim.hung@stantec.com					
	Connie Lim / Tim										
	Hung										
Station number:	N/A Station Name:		Courtice WPCP Station	Courtice WPCP Station							
Station address:				The Region of Durham, 6	he Region of Durham, 605 Rossland Rd, Whitby, ON						
Pollutant or parameter:	Atmospheric	Instrument make	& model:	Campbell Scientific Mod	el CS106						
	Pressure										
Data edit period	Start date:	1-Jan-14	End date:	30-Sep-14				Time Zone : EST			
Edit#	Edit date	Editor's Name	Edit Action	Starting		Endin	g	Reason			
				Date (dd/mm/yyyy)	Hour (xx:xx)	Date (dd/mm/yyyy)	Hour (xx:xx)				
1	30-Apr-14	CL	Invalidate data	25-Feb-14	16:00	25-Feb-14	17:00	Datalogger program updated.			

Examples of Acceptable Edit Actions:
Add offset of
Delete hours
Zero Correction
Slope Correction
Manual data entry for missing, but collected data
Invalidating span & zero check data
Invalidating data due to equipment malfunctions and power failures.
Invalidating data when instrumentation off-line
Marking data as out-of-range

Project Name	<b>Durham York Energ</b>	y Centre Ambient A	Air Monitoring Program							
Contact	Lisa Heatherington		Phone:	N/A	E-mail:	Lisa.Hetherington@Du	isa.Hetherington@Durham.ca			
Station number:	N,	/A	Station Name:	Courtice WPCP Station						
Station address:	Courtice Water Pollution Control Plant Emitter Address:		The Region of Durham,	The Region of Durham, 605 Rossland Rd, Whitby, ON						
Pollutant or parameter:	Wind Speed/Wind direction	Instrument make a	& model:	N/A	N/A					
Data edit period	Start date:	1-Jan-14	End date:	30-Sep-14				Time Zone : EST		
Edit#	Edit date	Editor's Name	Edit Action	Starting	3	Ending		Reason		
				Date (dd/mm/yyyy)	Hour (xx:xx)	Date (dd/mm/yyyy)	Hour (xx:xx)			
1	6-Oct-14	CL	Invalidate data	21-Aug-14	14:00	22-Aug-14	09:00	No wind data recorded		
2	6-Oct-14	CL	Invalidate data	23-Sep-14	14:00	24-Sep-14	12:00	No wind speed data recorded.		

Examples of Acceptable Edit Actions:
Add offset of
Delete hours
Zero Correction
Slope Correction
Manual data entry for missing, but collected data
Invalidating span & zero check data
Invalidating data due to equipment malfunctions and power failures.
Invalidating data as out-of-range

Project Name	<b>Durham York Ene</b>	rgy Centre Ambient	: Air Monitoring Program										
Contact	Greg Crooks / Co	nnie Lim / Tim Hung	Phone:	905-944-7777	E-mail:			greg.crooks@stantec.com, connie.lim@stantec.com, tim.hung@stantec.com					
Station number:	١	I/A	Station Name:	Rundle Road Sta	tion								
Station address:	Rundle Road / Ba	seline Road	Emitter Address:	The Region of D	The Region of Durham, 605 Rossland Rd, Whitby, ON								
Pollutant or parameter:	SO2	Instrument make	& model:	Teledyne Monitor Labs Sulphur Dioxide Se Analyzer Model T100			Serial Numb	565					
Data edit period	Start date: 1-Jan-14 End date:			30-Sep-14				Time Zone : EST					
Edit #	Edit date	Editor's Name Edit Action		Start	ng	Endi	ng	Reason					
				Date (dd/mm/yyyy)	Hour (xx:xx)	Date (dd/mm/yyyy)	Hour (xx:xx)						
1	21-Apr-14	CL	Invalidate data	10-Jan-14	11:00	10-Jan-14	12:00	MOE audit					
2	15-Apr-14	TZ	Invalidate data	21-Jan-14	08:00	21-Jan-14	09:00	Monthly calibration					
3	21-Apr-14	CL	Invalidate data	25-Feb-14	15:00	25-Feb-14	16:00	Monthly calibration					
4	21-Apr-14	CL	Invalidate data	26-Mar-14	09:00	26-Mar-14	10:00	Monthly calibration					
5	14-Apr-14	CL	Invalidate data	17-Jan-14	04:00	17-Jan-14	10:00	Modem connection off-line.					
6	30-Apr-14	CL	Invalidate data	25-Feb-14	16:00	25-Feb-14	17:00	Datalogger program updated.					
7	30-Jun-14	TH	Invalidate data	23-Apr-14	12:00	23-Apr-14	13:00	Monthly calibration					
8	30-Jun-14	TH	Invalidate data	9-Jun-14	11:00	9-Jun-14	11:00	Monthly calibration and MOE audit					
9	11-Jul-14	TH	Invalidate data	3-Jul-14	11:00	3-Jul-14	14:00	Monthly calibration					
10	1-Aug-14	TH	Invalidate data	30-Jul-14	06:00	30-Jul-14	09:00	Monthly calibration					
11	6-Oct-14	CL	Invalidate data	15-Aug-14	12:00	15-Aug-14	13:00	Monthly calibration					
12	6-Oct-14	CL	Invalidate data	21-Aug-14	10:00	21-Aug-14		MOE audit					
13	6-Oct-14	CL	Invalidate data	30-Aug-14	22:00	3-Sep-14	10:00	SO2 pump failed and removed. Replaced by spare SO2 pump on Sept 3.					
14	6-Oct-14	CL	Invalidate data	23-Sep-14	06:00	23-Sep-14	11:00	New SO2 pump installed. Monthly calibration.					
15	6-Oct-14	CL	Apply negative offset	3-Jul-14	15:00	12-Jul-14		Permeation tube oven evacuation orifice plugged and charcoal filters contaminated with SO2. Therefore the monitor was reading a slight negative. Orifice and charcoal filters were replaced.					
16	7-Jan-15	TH	Invalidate data	23-Oct-14	09:00	23-Oct-14	10:00	Monthly calibration					
17	7-Jan-15	TH	Invalidate data	21-Nov-14	18:00	21-Nov-14	18:00	Valley was checking and adjusting UV lamp					
18	7-Jan-15	TH	Invalidate data	25-Nov-14	10:00	25-Nov-14	12:00	Monthly calibration					
19	7-Jan-15	TH	Invalidate data	3-Dec-14	12:00	3-Dec-14	14:00	MOE audit					
19	7-Jan-15	TH	Invalidate data	30-Dec-14	11:00	30-Dec-14	12:00	Monthly calibration					

Examples of Acceptable Edit Actions:

Add offset of

Delete hours

Zero Correction

Slope Correction

Manual data entry for missing, but collected data

Invalidating span & zero check data

Invalidating data due to equipment malfunctions and power failures.

Invalidating data when instrumentation off-line

Marking data as out-of-range

EDIT LOG TABLE												
Project Name	<b>Durham York Ene</b>	rgy Centre Ambien	t Air Monitoring Program									
Contact	Greg Crooks / Cor	nnie Lim / Tim Hung	Phone:	905-944-7777	E-mail:			greg.crooks@stantec.com, connie.lim@stantec.com, tim.hung@stantec.com				
Station number:	N	I/A	Station Name:	<b>Rundle Road Sta</b>	ition							
Station address:	Rundle Road / Ba	seline Road	Emitter Address:	The Region of D	urham, 605 Ro	ssland Rd, Whit	by, ON					
Pollutant or para		Instrument make					ence Analyzer Serial Numbi 675					
Data edit period		1-Jan-14	End date:	30-Sep-14			Time Zone : EST					
Edit#	Edit date	Editor's Name	Edit Action	Start		Endi	inσ	Reason				
Luit #	Luit dutc	Luitor 3 Hume	Luit Action	Date	Hour (xx:xx)		Hour (xx:xx)					
				(dd/mm/yyyy)	Hour (xx.xx)	(dd/mm/yyyy)	riour (xx.xx)					
1	21-Apr-14	CL	Invalidate data	10-Jan-14	11:00	10-Jan-14	12:00	MOE audit				
1					08:00							
2	15-Apr-14	TZ	Invalidate data	21-Jan-14		21-Jan-14	09:00	Monthly calibration				
3	21-Apr-14	CL	Invalidate data	25-Feb-14	15:00	25-Feb-14	16:00	Monthly calibration				
4	21-Apr-14	CL	Invalidate data	26-Mar-14	09:00	26-Mar-14	10:00	Monthly calibration				
5	14-Apr-14	CL	Invalidate data	17-Jan-14	04:00	17-Jan-14	10:00	Modem connection off-line.				
6	30-Apr-14	CL	Invalidate data	25-Feb-14	16:00	25-Feb-14	17:00	Datalogger program updated.				
7	30-Jun-14	TH	Invalidate data	23-Apr-14	12:00	23-Apr-14	13:00	Monthly calibration				
8	30-Jun-14	TH	Invalidate data	9-Jun-14	11:00	9-Jun-14	11:00	Monthly calibration and MOE audit				
9	11-Jul-14	TH	Invalidate data	3-Jul-14	11:00	3-Jul-14	13:00	Monthly calibration				
10	1-Aug-14	TH	Invalidate data	30-Jul-14	06:00	30-Jul-14	09:00	Monthly calibration				
11	5-Aug-14	TH	Apply offset	3-Jul-14	14:00	30-Jul-14	05:00	Logger was reading data 7 ppb higher than the analyzer.				
12	6-Oct-14	CL	Invalidate data	15-Aug-14	12:00	15-Aug-14	13:00	Monthly calibration				
13	6-Oct-14	CL	Invalidate data	21-Aug-14	10:00	21-Aug-14	11:00	MOE audit				
14	6-Oct-14	CL	Invalidate data	23-Sep-14	06:00	23-Sep-14	11:00	Monthly calibration				
15	7-Oct-14	CL	Apply offset to NO and NO	5-Jul-14	02:00	30-Jul-14	05:00	Analyzer zero drift				
16	11-Nov-14	TH	Data Check	3-Jul-14	00:00	3-Jul-14	03:00	Continuous 0 readings for NO2 observed. Station log book reviewed. No equipment issues identified for that period. Hourly and				
10	11-1101-14	""	Data Check	3-301-14	00.00	3-Jul-14	03.00	minute data reviewed. Courtice and MOECC Oshawa measurements reviewed. Data deemed valid				
17	44 Nov. 44	TH	Data Check	3-Jul-14	18:00	5-Jul-14	09:00	Relatively constant low measurements noted. Station log book reviewed. No equipment issues identified for that period. Hourly				
17	11-Nov-14	IH	Data Check	3-Jul-14	18:00	5-Jul-14	09:00	, , , , , , , , , , , , , , , , , , , ,				
								and minute data reviewed. Courtice and Oshawa measurements reviewed. No rate of change identified. Data deemed valid.				
18	11-Nov-14	TH	Data Check	8-Jul-14	22:00	9-Jul-14	06:00	Volatile readings for NO2 observed. Station log book reviewed. No equipment issues identified for that period. Hourly and minute				
								data reviewed. Courtice and MOECC Oshawa measurements reviewed. Data deemed valid				
19	11-Nov-14	TH	Data Check	15-Jul-14	19:00	16-Jul-14	05:00	Investigated a period of time where readings at Rundle are significantly higher than at Courtice and the MOECC's Oshawa				
								station. Station log book reviewed. No equipment issues identified for that period. No rate of change identified. Data deemed valid.				
20	11-Nov-14	TH	Data Check	6-Aug-14	23:00	7-Aug-14	05:00	Relatively constant low measurements noted. Station log book reviewed. No equipment issues identified for that period. Hourly				
								and minute data reviewed. Courtice and Oshawa measurements reviewed. No rate of change identified. Data deemed valid.				
21	11-Nov-14	TH	Data Check	7-Aug-14	21:00	8-Aug-14	02:00	Relatively constant low measurements noted. Station log book reviewed. No equipment issues identified for that period. Hourly				
	11 1100 14		Data Cricck	7 Aug 14	21.00	0 Aug 14	02.00	and minute data reviewed. Courtice and Oshawa measurements reviewed. No rate of change identified. Data deemed valid.				
								· · · · · · · · · · · · · · · · · · ·				
22	11-Nov-14	TH	Data Check	9-Aug-14	01:00	9-Aug-14	04:00	Relatively constant low measurements noted. Station log book reviewed. No equipment issues identified for that period. Hourly				
								and minute data reviewed. Courtice and Oshawa measurements reviewed. No rate of change identified. Data deemed valid.				
23	11-Nov-14	TH	Data Check	13-Aug-14	16:00	14-Aug-14	11:00	Relatively constant low measurements noted. Station log book reviewed. No equipment issues identified for that period. Hourly				
								and minute data reviewed. Courtice and Oshawa measurements reviewed. No rate of change identified. Data deemed valid.				
								_				
24	11-Nov-14	TH	Data Check	25-Aug-14	14:00	25-Aug-14	22:00	Investigated a period of time where readings at Rundle are significantly higher than at Courtice and the MOECC's Oshawa station.				
	11110111	***	Data cricci	257.08 11	11.00	25 / 105 1 1	22.00	Station log book reviewed. No equipment issues identified for that period. Data deemed valid.				
25	11-Nov-14	TH	Data Check	1-Sep-14	14:00	2-Sep-14	06:00	Investigated a period of time where readings at Rundle are significantly higher than at Courtice and the MOECC's Oshawa station.				
23	11 1100 14		Data Cricck	1 3cp 14	14.00	2 3cp 14	00.00	Station log book reviewed. No equipment issues identified for that period. No rate of change identified. Data deemed valid.				
26	11-Nov-14	TH	Data Check	7-Sep-14	21:00	8-Sep-14	05:00	Investigated a period of time where readings at Rundle are significantly lower than at Courtice and the MOECC's Oshawa station.				
		<u> </u>	<u> </u>		<u> </u>			Station log book reviewed. No equipment issues identified for that period. No rate of change identifed. Data deemed valid.				
27	11-Nov-14	TH	Data Check	16-Sep-14	21:00	17-Sep-14	04:00	Investigated a period of time where readings at Rundle are significantly lower than at Courtice and the MOECC's Oshawa station.				
						]		Station log book reviewed. No equipment issues identified for that period. No rate of change identified. Data deemed valid.				
28	11-Nov-14	TH	Data Check	17-Sep-14	20:00	18-Sep-14	09:00	Investigated a period of time where readings at Rundle are significantly lower than at Courtice and the MOECC's Oshawa station.				
40	11-INOA-14	"	Data CHECK	17-3ep=14	20.00	10-3ep-14	03.00					
		<u> </u>	<u> </u>					Station log book reviewed. No equipment issues identified for that period. No rate of change identified. Data deemed valid.				
29	11-Nov-14	TH	Data Check	20-Sep-14	19:00	20-Sep-14	20:00	Elevated readings in concentration for 2 hours where readings are signficantly higher than Courtice and the MOECC Oshawa				
						1		station readings. Station log book reviewed. No equipment issues identified for that period. No rate of change identified. Data				
						]		deemed valid				
30	11-Nov-14	TH	Data Check	25-Sep-14	21:00	26-Sep-14	05:00	Investigated a period of time where readings at Rundle are significantly lower than at Courtice and the MOECC's Oshawa station.				
								Station log book reviewed. No equipment issues identified for that period. No rate of change identified. Data deemed valid.				
	L	<u> </u>	I	L	1	1	1	I				

Project Name	Durham York Ene	rgy Centre Ambient	: Air Monitoring Program					
		nie Lim / Tim Hung		905-944-7777	F-mail:			greg.crooks@stantec.com, connie.lim@stantec.com, tim.hung@stantec.com
Station number:		I/A	Station Name:	Rundle Road Sta				Breathoning statistication, conficulting statistication, tilling grantection
	Rundle Road / Bas		Emitter Address:			ssland Rd, Whitl	hy ON	
Pollutant or para		Instrument make				scence Analyzer		675
Data edit period		1-Jan-14	End date:	30-Sep-14		scence Analyzer	Jenai Numb	Time Zone : EST
Edit #	Edit date	Editor's Name	Edit Action	Start		Endi	na	Reason
Luit #	Luit date	Luitor 3 Name	Luit Action	Date	Hour (xx:xx)		Hour (xx:xx)	2011
				(dd/mm/yyyy)	Houi (xx.xx)	(dd/mm/yyyy)	Hour (xx.xx)	
31	11-Nov-14	TH	Data Check	27-Sep-14	22:00	28-Sep-14	07:00	Investigated a period of time where readings at Rundle are significantly lower than at Courtice and the MOECC's Oshawa station. Station log book reviewed. No equipment issues identified for that period. No rate of change identified. Data deemed valid.
32	12-Nov-14	TH	Applied updated offset	3-Jul-14	15:00	30-Jul-14	05:00	Offset for NO2 adjusted to value of 5ppb
33	26-Nov-14	TH	Data Check	1-Oct-14	00:00	1-Oct-14	03:00	Relatively constant low measurements noted. Station log book reviewed. No equipment issues identified for that period. Hourly and minute data reviewed. No rate of change identified. Data deemed valid.
34	26-Nov-14	TH	Data Check	7-Oct-14	20:00	8-Oct-14	02:00	Relatively constant low measurements noted. Station log book reviewed. No equipment issues identified for that period. Hourly and minute data reviewed. No rate of change identified. Data deemed valid.
35	26-Nov-14	TH	Data Check	8-Oct-14	18:00	8-Oct-14	19:00	Elevated readings in concentrations where readings are signficantly higher thanthe MOECC Oshawa station readings. Station log book reviewed. No equipment issues identified for that period. No rate of change identified. Data deemed valid
36	26-Nov-14	TH	Data Check	9-Oct-14	13:00	9-Oct-14	18:00	Relatively constant low measurements noted. Station log book reviewed. No equipment issues identified for that period. Hourly and minute data reviewed. No rate of change identified. Data deemed valid.
37	26-Nov-14	TH	Data Check	10-Oct-14	18:00	11-Oct-14	06:00	Relatively constant low measurements noted. Station log book reviewed. No equipment issues identified for that period. Hourly and minute data reviewed. No rate of change identified. Data deemed valid.
38	26-Nov-14	TH	Data Check	11-Oct-14	15:00	12-Oct-14	07:00	Relatively constant low measurements noted. Station log book reviewed. No equipment issues identified for that period. Hourly and minute data reviewed. No rate of change identified. Data deemed valid.
39	26-Nov-14	TH	Data Check	12-Oct-14	14:00	12-Oct-14	15:00	Elevated readings in concentrations where readings are signficantly higher thanthe MOECC Oshawa station readings. Station log book reviewed. No equipment issues identified for that period. No rate of change identified. Data deemed valid
40	26-Nov-14	TH	Data Check	18-Oct-14	04:00	20-Oct-14	04:00	Relatively constant low measurements noted. Station log book reviewed. No equipment issues identified for that period. Hourly and minute data reviewed. No rate of change identified. Data deemed valid.
41	26-Nov-14	TH	Data Check	21-Oct-14	17:00	22-Oct-14	04:00	Relatively constant low measurements noted. Station log book reviewed. No equipment issues identified for that period. Hourly and minute data reviewed. No rate of change identified. Data deemed valid.
42	26-Nov-14	TH	Data Check	22-Oct-14	20:00	23-Oct-14	05:00	Relatively constant low measurements noted. Station log book reviewed. No equipment issues identified for that period. Hourly and minute data reviewed. No rate of change identified. Data deemed valid.
43	5-Dec-14	TH	Data Check	6-Nov-14	11:00	6-Nov-14	13:00	Elevated readings in concentrations where readings are signficantly higher thanthe MOECC Oshawa station readings. Station log book reviewed. No equipment issues identified for that period. No rate of change identified. Data deemed valid
44	5-Dec-14	TH	Data Check	8-Nov-14	01:00	8-Nov-14	08:00	Relatively constant low measurements noted. Station log book reviewed. No equipment issues identified for that period. Hourly and minute data reviewed. No rate of change identified. Data deemed valid.
45	5-Dec-14	TH	Data Check	13-Nov-14	16:00	14-Nov-14	03:00	Elevated readings in concentrations where readings are signficantly higher thanthe MOECC Oshawa station readings. Station log book reviewed. No equipment issues identified for that period. No rate of change identified. Data deemed valid
46	5-Dec-14	TH	Data Check	17-Nov-14	11:00	17-Nov-14	17:00	Elevated readings in concentrations where readings are signficantly higher thanthe MOECC Oshawa station readings. Station log book reviewed. No equipment issues identified for that period. No rate of change identified. Data deemed valid
47	5-Dec-14	TH	Data Check	22-Nov-14	17:00	23-Nov-14	10:00	Relatively constant low measurements noted. Station log book reviewed. No equipment issues identified for that period. Hourly and minute data reviewed. No rate of change identified. Data deemed valid.
48	7-Jan-15	TH	Invalidate data	23-Oct-14	09:00	23-Oct-14	10:00	Monthly calibration
49	7-Jan-15	TH	Invalidate data	25-Nov-14	10:00	25-Nov-14	12:00	Monthly calibration
50	7-Jan-15	TH	Invalidate data	3-Dec-14	12:00	3-Dec-14	14:00	MOE audit
51	7-Jan-15	TH	Invalidate data	30-Dec-14	10:00	30-Dec-14	12:00	Monthly calibration
52	7-Jan-15	TH	Data Check	12-Dec-14	17:00	13-Dec-14	03:00	Relatively constant low measurements noted. Station log book reviewed. No equipment issues identified for that period. Hourly and minute data reviewed. No rate of change identified. Data deemed valid.
53	7-Jan-15	TH	Data Check	13-Dec-14	04:00	13-Dec-14	18:00	Elevated readings in concentrations where readings are signficantly higher thanthe MOECC Oshawa station readings. Station log book reviewed. No equipment issues identified for that period. No rate of change identified. Data deemed valid
54	7-Jan-15	TH	Data Check	16-Dec-14	22:00	17-Dec-14	16:00	Elevated readings in concentrations where readings are signficantly higher thanthe MOECC Oshawa station readings. Station log book reviewed. No equipment issues identified for that period. No rate of change identified. Data deemed valid
55	7-Jan-15	TH	Data Check	18-Dec-14	10:00	18-Dec-14	10:00	Elevated readings in concentrations where readings are signficantly higher thanthe MOECC Oshawa station readings. Station log book reviewed. No equipment issues identified for that period. No rate of change identified. Data deemed valid
56	7-Jan-15	TH	Data Check	27-Dec-14	04:00	27-Dec-14	07:00	Relatively constant low measurements noted. Station log book reviewed. No equipment issues identified for that period. Hourly and minute data reviewed. No rate of change identified. Data deemed valid.
57	7-Jan-15	TH	Data Check	28-Dec-14	23:00	28-Dec-14	23:00	Elevated readings in concentrations where readings are signficantly higher thanthe MOECC Oshawa station readings. Station log book reviewed. No equipment issues identified for that period. No rate of change identified. Data deemed valid

Examples of Acceptable Edit Actions:

Add offset of Delete hours Zero Correction Slope Correction Invalidating span & zero check data
Invalidating data due to equipment malfunctions and power failures.
Invalidating data when instrumentation off-line
Marking data as out-of-range

Manual data entry for missing, but collected data

EDIT LOG TABLE															
		rgy Centre Ambien	t Air Monitoring Program												
Contact	Greg Crooks /		Phone:	905-944-7777	E-mail:			greg.crooks@stantec.com, connie.lim@stantec.com, tim.hung@stantec.com							
	Connie Lim / Tim														
Station number:	Hung	/A	Station Name:	Rundle Road Sta	ation										
Station number.		/A	Station Name.	Rullule Road 31											
Station address:	Rundle Road / Bas	seline Road	Emitter Address:	The Region of D	urham, 605 Ro	ossland Rd, Whit	by, ON								
Pollutant or parameter:	PM2.5	Instrument make	& model:	Thermo Sharp 5 Ambient Real-ti		ized Hybrid	Serial Number:	E-1569							
Data edit period	Start date:	1-Jan-14	End date:	30-Sep-14				Time Zone : EST							
Edit #	Edit date	Editor's Name	Edit Action	Start	ing	Endi	ing	Reason							
				Date	Hour (xx:xx)		Hour (xx:xx)	****							
				(dd/mm/yyyy)		(dd/mm/yyyy)									
1	21-Apr-14	CL	Invalidate data	10-Jan-14	11:00	10-Jan-14	12:00	MOE audit							
2	21-Apr-14	CL	Invalidate data	21-Jan-14	09:00	21-Jan-14	09:00	Monthly calibration							
3	21-Apr-14	CL	Invalidate data	25-Feb-14	15:00	25-Feb-14	15:00	Monthly calibration							
4	21-Apr-14	CL	Invalidate data	26-Mar-14	10:00	26-Mar-14	10:00	Monthly calibration							
5	14-Apr-14	CL	Invalidate data	17-Jan-14	04:00	17-Jan-14	10:00	Modem connection off-line.							
6	30-Apr-14	CL	Invalidate data	25-Feb-14	16:00	25-Feb-14	17:00	Datalogger program updated.							
7 8	30-Jun-14 30-Jun-14	TH TH	Invalidate data Invalidate data	23-Apr-14 9-Jun-14	12:00 11:00	23-Apr-14 9-Jun-14	13:00 11:00	Monthly calibration  Monthly calibration and MOE audit							
9	11-Jul-14	TH	Invalidate data	3-Jul-14	11:00	3-Jul-14	13:00	Monthly calibration							
10	1-Jul-14 1-Aug-14	TH	Invalidate data	30-Jul-14	06:00	30-Jul-14	09:00	Monthly calibration							
11	6-Oct-14	CL	Invalidate data	15-Aug-14	12:00	15-Aug-14	12:00	Monthly calibration							
12	6-Oct-14	CL	Invalidate data	21-Aug-14	10:00	21-Aug-14	11:00	MOE audit							
13	6-Oct-14	CL	Invalidate data	23-Sep-14	06:00	23-Sep-14	07:00	Monthly calibration							
14	10-Nov-14	TH	Data check	4-Jul-14	00:00	4-Jul-14	23:00	Relatively constant low measurements noted. Station log book reviewed. No equipment issues identified for that period. Hourly							
								and minute data reviewed. Courtice and MOECC Oshawa measurements reviewed. Oshawa recorded relatively low							
								measurements during this period. Minute data after last low reading elevates but trends downwards slowly afterwards. Data							
								deemed valid.							
15	10-Nov-14	TH	Data check	9-Jul-14	03:00	10-Jul-14	09:00	Investigated a period of time where readings at Rundle are significantly higher than at Courtice and the MOECC's Oshawa station.							
								Station log book reviewed. No equipment issues identified for that period. Minute data has a low rate of change indicating valid							
								measurements. Data deemed valid.							
16	10-Nov-14	TH	Data check	14-Jul-14	05:00	15-Jul-14	05:00	Investigated a period of time where readings at Rundle are significantly higher than at Courtice and the MOECC's Oshawa station.							
								Station log book reviewed. No equipment issues identified for that period. Minute data has a low rate of change indicating valid							
	40.11		8	45 1 144	22.00	46 1 1 4 4	44.00	measurements. Data deemed valid.							
17	10-Nov-14	TH	Data check	15-Jul-14	22:00	16-Jul-14	11:00	Investigated a period of time where readings at Rundle are significantly higher than at Courtice and the MOECC's Oshawa station.							
								Station log book reviewed. No equipment issues identified for that period. Minute data has a low rate of change indicating valid measurements. Data deemed valid.							
18	10-Nov-14	TH	Data check	17-Jul-14	02:00	17-Jul-14	08:00	Investigated a period of time where readings at Rundle are significantly higher than at Courtice and the MOECC's Oshawa station.							
10	10-1404-14	"	Data Clieck	17-Jul-14	02.00	17-Jul-14	00.00	Station log book reviewed. No equipment issues identified for that period. Minute data has a low rate of change indicating valid							
								measurements. Data deemed valid.							
19	10-Nov-14	TH	Data check	18-Jul-14	04:00	18-Jul-14	06:00	Investigated a period of time where readings at Rundle are significantly higher than at Courtice and the MOECC's Oshawa station.							
-								Station log book reviewed. No equipment issues identified for that period. Minute data has a low rate of change indicating valid							
1								measurements. Data deemed valid.							
20	10-Nov-14	TH	Data check	24-Jul-14	00:00	25-Jul-14	02:00	investigated a period of time where readings at Rundle are significantly higher than at Courtice and the MOECC's Oshawa station.							
								Station log book reviewed. No equipment issues identified for that period. Minute data has a low rate of change indicating valid							
								measurements. Data deemed valid.							
21	10-Nov-14	TH	Data check	28-Jul-14	19:00	29-Jul-14	09:00	Investigated a period of time where readings at Rundle are significantly higher than at Courtice and the MOECC's Oshawa station.							
								Station log book reviewed. No equipment issues identified for that period. Minute data has a low rate of change with 1 elevated							
								reading. Since minute readings after the elevated reading trends downwards slowly afterwards, indicating valid measurements.							
22	10 Nov 14	TU	Data shook	C Aug 14	12,00	0 100 11	01.00	Data deemed valid.							
22	10-Nov-14	TH	Data check	6-Aug-14	12:00	8-Aug-14	01:00	Investigated a period of time where readings at Rundle are significantly higher than at Courtice and the MOECC's Oshawa station.							
								Station log book reviewed. No equipment issues identified for that period. Minute data has a low rate of change with 2 elevated readings which trends downwards slowly, indicating valid measurements. Data deemed valid.							
23	10-Nov-14	TH	Data check	9-Aug-14	00:00	9-Aug-14	05:00	Investigated a period of time where readings at Rundle are significantly higher than at Courtice and the MOECC's Oshawa station.							
23	10-1404-14	'''	Data crieck	3-Aug-14	00.00	3-Aug-14	05.00	Station log book reviewed. No equipment issues identified for that period. Minute data has a low rate of change with 1 elevated							
ĺ								reading which trends downwards slowly indicating valid measurements. Data deemed valid.							
	1	1	1	1	1	1	1	r ====-g = === dominardo sioni, maiodanig rand mediarcinicii. Data decined rand.							

Project Name	Durham York Ene	rgv Centre Ambien	t Air Monitoring Program											
Contact	Greg Crooks / Connie Lim / Tim Hung		Phone:	905-944-7777	E-mail:			greg.crooks@stantec.com, connie.lim@stantec.com, tim.hung@stantec.com						
Station number:		/A	Station Name:	Rundle Road Sta	ation									
Station address:	Rundle Road / Bas	seline Road	Emitter Address:	The Region of D	The Region of Durham, 605 Rossland Rd, Whitby, ON									
parameter:	PM2.5 Instrument make & model:			Thermo Sharp 5030 Synchronized Hybrid Ambient Real-time			Serial Number:	E-1569						
Data edit period	Start date:	1-Jan-14	End date:	30-Sep-14	1			Time Zone : EST						
Edit#	Edit date	Editor's Name	Edit Action	Start Date		End		Reason						
				(dd/mm/yyyy)	Hour (xx:xx)	Date (dd/mm/yyyy)	Hour (xx:xx)							
24	10-Nov-14	TH	Data check	9-Aug-14	22:00	10-Aug-14	08:00	Investigated a period of time where readings at Rundle are significantly higher than at Courtice and the MOECC's Oshawa station. Station log book reviewed. No equipment issues identified for that period. Minute data has a low rate of change with 2 elevated readings which trends downwards slowly indicating valid measurements. Data deemed valid.						
25	10-Nov-14	TH	Data check	10-Aug-14	20:00	11-Aug-14	01:00	Investigated a period of time where readings at Rundle are significantly higher than at Courtice and the MOECC's Oshawa station. Station log book reviewed. No equipment issues identified for that period. Minute data has a low rate of change with 1 elevated reading which trends downwards slowly indicating valid measurements. Data deemed valid.						
26	10-Nov-14	TH	Data check	15-Aug-14	19:00	16-Aug-14	03:00	Investigated a period of time where readings at Rundle are significantly higher than at the MOECC's Oshawa station. Station log book reviewed. No equipment issues identified for that period. Minute data has a low rate of change with 1 elevated reading which trends downwards slowly indicating valid measurements. Data deemed valid.						
27	10-Nov-14	TH	Data check	18-Aug-14	03:00	19-Aug-14	01:00	Investigated a period of time where readings at Rundle are significantly higher than at Courtice and the MOECC's Oshawa station. Station log book reviewed. No equipment issues identified for that period. Minute data has a low rate of change with 1 elevated reading which trends downwards slowly indicating valid measurements. Data deemed valid.						
28	10-Nov-14	TH	Data check	27-Aug-14	10:00	28-Aug-14	16:00	Investigated a period of time where readings at Rundle are significantly higher than at Courtice and the MOECC's Oshawa station. Station log book reviewed. No equipment issues identified for that period. Minute data has a low rate of change with 1 elevated reading which trends downwards slowly indicating valid measurements. Data deemed valid.						
29	10-Nov-14	TH	Data check	16-Sep-14	19:00	17-Sep-14	01:00	Investigated a period of time where readings at Rundle are significantly higher than at the MOECC's Oshawa station. Station log book reviewed. No equipment issues identified for that period. Minute data has a low rate of change with 1 elevated reading which trends downwards slowly indicating valid measurements. Courtice measurements are higher than Rundle's. Data deemed valid.						
30	10-Nov-14	TH	Data check	18-Sep-14	20:00	19-Sep-14	03:00	Investigated a period of time where readings at Rundle are significantly higher than at the MOECC's Oshawa station. Station log book reviewed. No equipment issues identified for that period. Minute data has a low rate of change indicating valid measurements. Courtice measurements are higher than Rundle's. Data deemed valid.						
31	10-Nov-14	TH	Data check	22-Sep-14	00:00	22-Sep-14	14:00	Investigated a period of time where readings at Rundle are significantly higher than at the MOECC's Oshawa station. Station log book reviewed. No equipment issues identified for that period. Minute data has a low rate of change with 1 elevated reading which trends downwards slowly indicating valid measurements. Courtice measurements are higher than Rundle's. Data deemed valid.						
32	11-Nov-14	CL	Invalidate data	17-Jan-14	13:00	17-Jan-14	13:00	Invalidate data due to rate of change						
33 34	11-Nov-14 27-Nov-14	CL TH	Invalidate data  Data check	26-Jan-14 4-Oct-14	09:00 18:00	26-Jan-14 5-Oct-14	09:00 06:00	Invalidate data due to rate of change Elevated readings in concentrations where readings are signficantly higher than the MOECC Oshawa station readings. Station log						
								book reviewed. No equipment issues identified for that period. No rate of change identified. Data deemed valid						
35	5-Dec-14	TH	Data check	15-Oct-14	10:00	15-Oct-14	17:00	Elevated readings in concentrations where readings are signficantly higher than the MOECC Oshawa station readings. Station log book reviewed. No equipment issues identified for that period. No rate of change identified. Data deemed valid						
36	5-Dec-14	TH	Data check	16-Oct-14	06:00	16-Oct-14	15:00	Elevated readings in concentrations where readings are signficantly higher than the MOECC Oshawa station readings. Station log book reviewed. No equipment issues identified for that period. No rate of change identified. Data deemed valid						
37	5-Dec-14	TH	Data check	19-Oct-14	19:00	20-Oct-14	00:00	Elevated readings in concentrations where readings are signficantly higher than the MOECC Oshawa station readings. Station log book reviewed. No equipment issues identified for that period. No rate of change identified. Data deemed valid						
38	5-Dec-14	TH	Data check	23-Oct-14	11:00	23-Oct-14	18:00	Elevated readings in concentrations where readings are significantly higher than the MOECC Oshawa station readings. Station log book reviewed. No equipment issues identified for that period. No rate of change identified. Data deemed valid						
39	5-Dec-14	TH	Data check	24-Oct-14	13:00	24-Oct-14	16:00	Elevated readings in concentrations where readings are significantly higher than the MOECC Oshawa station readings. Station log book reviewed. No equipment issues identified for that period. No rate of change identified. Data deemed valid						
40	5-Dec-14	TH	Data check	28-Oct-14	12:00	28-Oct-14	16:00	Elevated readings in concentrations where readings are significantly higher than the MOECC Oshawa station readings. Station log book reviewed. No equipment issues identified for that period. No rate of change identified. Data deemed valid						
41	5-Dec-14	TH	Data check	29-Oct-14	10:00	29-Oct-14	13:00	Elevated readings in concentrations where readings are significantly higher than the MOECC Oshawa station readings. Station log book reviewed. No equipment issues identified for that period. No rate of change identified. Data deemed valid						
42	5-Dec-14	TH	Data check	30-Oct-14	14:00	30-Oct-14	17:00	Elevated readings in concentrations where readings are significantly higher than the MOECC Oshawa station readings. Station log book reviewed. No equipment issues identified for that period. No rate of change identified. Data deemed valid						
43	8-Dec-14	TH	Data check	3-Nov-14	08:00	3-Nov-14	16:00	Elevated readings in concentrations where readings are signficantly higher than the MOECC Oshawa station readings. Station log book reviewed. No equipment issues identified for that period. No rate of change identified. Data deemed valid						

Project Name		rgy Centre Ambien	t Air Monitoring Program								
Contact	Greg Crooks / Connie Lim / Tim Hung		Phone:	905-944-7777	E-mail:			greg.crooks@stantec.com, connie.lim@stantec.com, tim.hung@stantec.com			
Station number:		I/A	Station Name:	Rundle Road St	ation						
Station address:	Rundle Road / Ba	seline Road	Emitter Address:	The Region of D	urham, 605 Ro	ossland Rd, Whit	by, ON				
Pollutant or	PM2.5 Instrument make & model:		& model:	Thermo Sharp 5	030 Synchroni	ized Hybrid	Serial	rial E-1569			
parameter:				Ambient Real-ti			Number:				
Data edit period	Start date:	1-Jan-14	End date:	30-Sep-1	4			Time Zone : EST			
Edit#	Edit date	Editor's Name	Edit Action	Start	ting	End	ing	Reason			
				Date	Hour (xx:xx)		Hour (xx:xx)				
44	8-Dec-14	TH	Data check	(dd/mm/yyyy) 3-Nov-14	18:00	(dd/mm/yyyy) 4-Nov-14	01:00	Relatively constant low measurements noted. Station log book reviewed. No equipment issues identified for that period. Hourly			
44	8-Det-14	l In	Data Clieck	3-NOV-14	16.00	4-NOV-14	01.00	and minute data reviewed. MOECC Oshawa measurements reviewed. No rate of change identified. Data deemed valid.			
45	8-Dec-14	TH	Data check	4-Nov-14	12:00	4-Nov-14	18:00	Elevated readings in concentrations where readings are signficantly higher than the MOECC Oshawa station readings. Station log			
								book reviewed. No equipment issues identified for that period. No rate of change identified. Data deemed valid			
46	8-Dec-14	TH	Data check	5-Nov-14	07:00	5-Nov-14	13:00	Elevated readings in concentrations where readings are signficantly higher than the MOECC Oshawa station readings. Station log			
47	0 D 14	T11	Data abaali	C Nov. 44	12:00	C Nov. 4.4	14.00	book reviewed. No equipment issues identified for that period. No rate of change identified. Data deemed valid			
47	8-Dec-14	TH	Data check	6-Nov-14	12:00	6-Nov-14	14:00	Elevated readings in concentrations where readings are signficantly higher than the MOECC Oshawa station readings. Station log book reviewed. No equipment issues identified for that period. No rate of change identified. Data deemed valid			
48	8-Dec-14	TH	Data check	11-Nov-14	00:00	11-Nov-14	03:00	Relatively constant low measurements noted. Station log book reviewed. No equipment issues identified for that period. Hourly			
.0	0 500 1.		Data circox	11 1101 11	00.00	11110111	05.00	and minute data reviewed. MOECC Oshawa measurements reviewed. No rate of change identified. Data deemed valid.			
49	8-Dec-14	TH	Data check	11-Nov-14	16:00	11-Nov-14	21:00	Elevated readings in concentrations where readings are signficantly higher than the MOECC Oshawa station readings. Station log			
								book reviewed. No equipment issues identified for that period. No rate of change identified. Data deemed valid			
50	8-Dec-14	TH	Data check	13-Nov-14	11:00	13-Nov-14	16:00	Elevated readings in concentrations where readings are signficantly higher than the MOECC Oshawa station readings. Station log			
51	8-Dec-14	TH	Data check	15-Nov-14	06:00	15-Nov-14	16:00	book reviewed. No equipment issues identified for that period. No rate of change identified. Data deemed valid Elevated readings in concentrations where readings are signficantly higher than the MOECC Oshawa station readings. Station log			
21	8-Dec-14	in in	Data Check	15-NOV-14	06.00	15-NOV-14	16.00	book reviewed. No equipment issues identified for that period. No rate of change identified. Data deemed valid			
52	8-Dec-14	TH	Data check	17-Nov-14	13:00	17-Nov-14	15:00	Elevated readings in concentrations where readings are significantly higher than the MOECC Oshawa station readings. Station log			
								book reviewed. No equipment issues identified for that period. No rate of change identified. Data deemed valid			
53	8-Dec-14	TH	Data check	19-Nov-14	10:00	19-Nov-14	12:00	Elevated readings in concentrations where readings are signficantly higher than the MOECC Oshawa station readings. Station log			
54	0.5.44		B	20.11 44	06:00	20.11	08:00	book reviewed. No equipment issues identified for that period. No rate of change identified. Data deemed valid			
54	8-Dec-14	TH	Data check	20-Nov-14	06:00	20-Nov-14	08:00	Elevated readings in concentrations where readings are signficantly higher than the MOECC Oshawa station readings. Station log book reviewed. No equipment issues identified for that period. No rate of change identified. Data deemed valid			
55	8-Dec-14	TH	Data check	21-Nov-14	11:00	21-Nov-14	14:00	Elevated readings in concentrations where readings are significantly higher than the MOECC Oshawa station readings. Station log			
								book reviewed. No equipment issues identified for that period. No rate of change identified. Data deemed valid			
56	8-Dec-14	TH	Data check	22-Nov-14	10:00	22-Nov-14	14:00	Elevated readings in concentrations where readings are signficantly higher than the MOECC Oshawa station readings. Station log			
	0.5.44		B	22.11	47.00	22.11	22.00	book reviewed. No equipment issues identified for that period. No rate of change identified. Data deemed valid			
57	8-Dec-14	TH	Data check	22-Nov-14	17:00	22-Nov-14	23:00	Relatively constant low measurements noted. Station log book reviewed. No equipment issues identified for that period. Hourly and minute data reviewed. MOECC Oshawa measurements reviewed. No rate of change identified. Data deemed valid.			
58	8-Dec-14	TH	Data check	24-Nov-14	19:00	24-Nov-14	22:00	Elevated readings in concentrations where readings are signficantly higher than the MOECC Oshawa station readings. Station log			
30	0 500 1.		Bata circox	211101 21	15.00	21110121	22.00	book reviewed. No equipment issues identified for that period. No rate of change identified. Data deemed valid			
59	8-Dec-14	TH	Data check	25-Nov-14	06:00	25-Nov-14	13:00	Elevated readings and relatively low in concentrations where readings are signficantly different than the MOECC Oshawa station			
				1				readings. Station log book reviewed. No equipment issues identified for that period. No rate of change identified. Data deemed			
	0.0 11	<b>-</b>	Det 1	26.11	24.00	26.11	22.00	valid			
60	8-Dec-14	TH	Data check	26-Nov-14	21:00	26-Nov-14	22:00	Elevated readings in concentrations where readings are signficantly higher than the MOECC Oshawa station readings. Station log book reviewed. No equipment issues identified for that period. No rate of change identified. Data deemed valid			
61	8-Dec-14	TH	Data check	28-Nov-14	16:00	28-Nov-14	22:00	Elevated readings in concentrations where readings are significantly higher than the MOECC Oshawa station readings. Station log			
- <del>-</del>				1				book reviewed. No equipment issues identified for that period. No rate of change identified. Data deemed valid			
62	7-Jan-15	TH	Invalidate data	23-Oct-14	09:00	23-Oct-14	10:00	Monthly calibration			
63	7-Jan-15	TH	Invalidate data	25-Nov-14	10:00	25-Nov-14	12:00	Monthly calibration			
64 65	7-Jan-15 7-Jan-15	TH	Invalidate data Invalidate data	3-Dec-14 30-Dec-14	12:00 11:00	3-Dec-14 30-Dec-14	14:00 12:00	MOE audit Monthly calibration			
66	7-Jan-15 7-Jan-15	TH TH	Data Check	30-Dec-14 3-Dec-14	07:00	30-Dec-14 3-Dec-14	12:00	Elevated readings in concentrations where readings are signficantly higher thanthe MOECC Oshawa station readings. Station log			
00	, 3411 13		Data Cricck	3 500 14	07.00	3 500 14	12.00	book reviewed. No equipment issues identified for that period. No rate of change identified. Data deemed valid			
67	7-Jan-15	TH	Data Check	12-Dec-14	16:00	12-Dec-14	22:00	Elevated readings in concentrations where readings are significantly higher thanthe MOECC Oshawa station readings. Station log			
								book reviewed. No equipment issues identified for that period. No rate of change identified. Data deemed valid			
68	7-Jan-15	TH	Data Check	13-Dec-14	11:00	13-Dec-14	14:00	Elevated readings in concentrations where readings are signficantly higher thanthe MOECC Oshawa station readings. Station log			
69	7 lon 15	TH	Data Chast:	14 Dec 14	17:00	14-Dec-14	22:00	book reviewed. No equipment issues identified for that period. No rate of change identified. Data deemed valid			
69	7-Jan-15	l IH	Data Check	14-Dec-14	17:00	14-Dec-14	22:00	Elevated readings in concentrations where readings are signficantly higher thanthe MOECC Oshawa station readings. Station log book reviewed. No equipment issues identified for that period. No rate of change identified. Data deemed valid			
	1	1				l		pook reviewed. No equipment issues identified for that period. No rate of change identified. Data deemed valid			

		ergy Centre Ambien	t Air Monitoring Progra											
Contact	Greg Crooks / Connie Lim / Tim Hung	1	Phone:	905-944-7777	E-mail:	greg.crooks@stantec.com, connie.lim@stantec.com, tim.hung@stantec.com								
Station number:	١	N/A	Station Name:	Rundle Road Station										
Station address:	Rundle Road / Baseline Road Emitter Address:			The Region of D	The Region of Durham, 605 Rossland Rd, Whitby, ON									
Pollutant or parameter:	PM2.5 Instrument make & model:		Thermo Sharp 5 Ambient Real-ti		zed Hybrid	Serial Number:	E-1569							
Data edit period	Start date:	1-Jan-14	End date:	30-Sep-14				Time Zone : EST						
Edit#	Edit date	Editor's Name	Edit Action	Start	ing	Endi	ng	Reason						
				Date (dd/mm/yyyy)	Hour (xx:xx)	Date (dd/mm/yyyy)	Hour (xx:xx)							
70	7-Jan-15	TH	Data Check	17-Dec-14	08:00	17-Dec-14	15:00	Elevated readings in concentrations where readings are signficantly higher thanthe MOECC Oshawa station readings. Station log book reviewed. No equipment issues identified for that period. No rate of change identified. Data deemed valid						
71	7-Jan-15	TH	Data Check	20-Dec-14	18:00	20-Dec-14	23:00	Elevated readings in concentrations where readings are signficantly higher thanthe MOECC Oshawa station readings. Station log book reviewed. No equipment issues identified for that period. No rate of change identified. Data deemed valid						
72	7-Jan-15	TH	Data Check	21-Dec-14	18:00	21-Dec-14	22:00	Elevated readings in concentrations where readings are signficantly higher thanthe MOECC Oshawa station readings. Station log book reviewed. No equipment issues identified for that period. No rate of change identified. Data deemed valid						
73	7-Jan-15	TH	Data Check	22-Dec-14	03:00	22-Dec-14	17:00	Elevated readings in concentrations where readings are signficantly higher thanthe MOECC Oshawa station readings. Station log book reviewed. No equipment issues identified for that period. No rate of change identified. Data deemed valid						
74	7-Jan-15	TH	Data Check	29-Dec-14	15:00	29-Dec-14	17:00	Elevated readings in concentrations where readings are signficantly higher thanthe MOECC Oshawa station readings. Station log book reviewed. No equipment issues identified for that period. No rate of change identified. Data deemed valid						
75	7-Jan-15	TH	Data Check	31-Dec-14	09:00	31-Dec-14	13:00	Elevated readings in concentrations where readings are signficantly higher thanthe MOECC Oshawa station readings. Station log book reviewed. No equipment issues identified for that period. No rate of change identified. Data deemed valid						
				-										

Examples of Acceptable Edit Actions:

Add offset of Delete hours

Zero Correction Slope Correction

Manual data entry for missing, but collected data

Invalidating span & zero check data

Invalidating data due to equipment malfunctions and power failures.

Invalidating data when instrumentation off-line

Marking data as out-of-range

EDIT LOG TABLE												
Project Name	<b>Durham York Ene</b>	rgy Centre Ambien	t Air Monitoring Program									
	Greg Crooks / Connie Lim / Tim Hung		Phone:	905-944-7777	E-mail:	greg.crooks@stantec.com, connie.lim@stantec.com, tim.hung@stantec.com						
Station number:	N	/A	Station Name:	Rundle Road Station								
Station address:	Rundle Road / Bas	seline Road	Emitter Address:	The Region of Durham, 605 Rossland Rd, Whitby, ON								
Pollutant or parameter:	Temperature	Instrument make	& model:	Campbell Scient	ific Model HM	P60	Serial Number:					
Data edit period	Start date:	1-Jan-14	End date:	30-Sep-14				Time Zone : EST				
Edit#	Edit date	Editor's Name	Edit Action	Starti	ing	Endi	ng	Reason				
				Date (dd/mm/yyyy)	Hour (xx:xx)	Date (dd/mm/yyyy)	Hour (xx:xx)					
1	21-Apr-14	CL	Invalidate data	17-Jan-14	04:00	17-Jan-14	10:00	Modem connection off-line.				
2	30-Apr-14	CL	Invalidate data	25-Feb-14	16:00	25-Feb-14	17:00	Datalogger program updated.				

# EDIT LOG TABLE

EDIT EOG TABLE													
<b>Project Name</b>	<b>Durham York Ene</b>	rgy Centre Ambien	t Air Monitoring Program										
Contact	Greg Crooks / Connie Lim / Tim Hung		Phone:	905-944-7777	E-mail:	greg.crooks@stantec.com, connie.lim@stantec.com, tim.hung@stantec.com							
Station number:		I/A	Station Name:	Rundle Road Station									
Station address:	Rundle Road / Bas	seline Road	Emitter Address:	The Region of Durham, 605 Rossland Rd, Whitby, ON									
Pollutant or parameter:	Rainfall	Instrument make	& model:	Texas Electronic TE525M			Serial Number:						
Data edit period	Start date:	1-Jan-14	End date:	30-Sep-14				Time Zone : EST					
Edit#	Edit date	Editor's Name	Edit Action	Starti	ng	Endi	ing	Reason					
				Date (dd/mm/yyyy)	Hour (xx:xx)	Date (dd/mm/yyyy)	Hour (xx:xx)						
1	21-Apr-14	CL	Invalidate data	17-Jan-14	04:00	17-Jan-14	10:00	Modem connection off-line.					
2	30-Apr-14	CL	Invalidate data	25-Feb-14	16:00	25-Feb-14	17:00	Datalogger program updated.					

Examples of Acceptable Edit Actions:

Add offset of

Delete hours

Zero Correction Slope Correction

Manual data entry for missing, but collected data

Invalidating span & zero check data

Invalidating data due to equipment malfunctions and power failures.

Invalidating data when instrumentation off-line

Marking data as out-of-range

<b>Project Name</b>	<b>Durham York Ener</b>	gy Centre Ambien	t Air Monitoring Program									
Contact	Greg Crooks /		Phone:	905-944-7777	905-944-7777 E-mail: greg.crooks@stantec.com, connie.lim@stantec.com, tim.hung@stantec.com							
	Connie Lim / Tim											
	Hung											
Station number:	N,	/A	Station Name:	Rundle Road Station								
Station address:	Rundle Road / Bas	eline Road	Emitter Address:	The Region of Durham, 605 Rossland Rd, Whitby, ON								
Pollutant or	Relative Humidity	Instrument make	& model:	Campbell Scient	ific Model HM	P60	Serial					
parameter:							Number:					
Data edit period	Start date:	1-Jan-14	End date:	30-Sep-14				Time Zone : EST				
Edit #	Edit date	Editor's Name	Edit Action	Starti	ing	Endi	ng	Reason				
				Date	Hour (xx:xx)	Date	Hour (xx:xx)					
				(dd/mm/yyyy)		(dd/mm/yyyy)						
1	21-Apr-14	CL	Invalidate data	17-Jan-14	04:00	17-Jan-14	10:00	Modem connection off-line.				
2	30-Apr-14	CL	Invalidate data	25-Feb-14	16:00	25-Feb-14	17:00	Datalogger program updated.				

# EDIT LOG TABLE

Project Name	<b>Durham York Ener</b>	rgy Centre Ambient	Air Monitoring Program										
Contact	Greg Crooks /		Phone:	905-944-7777	E-mail:			greg.crooks@stantec.com, connie.lim@stantec.com, tim.hung@stantec.com					
	Connie Lim / Tim												
	Hung												
Station number:	N	I/A	Station Name:	Rundle Road Station									
Station address:	s: Rundle Road / Baseline Road Emitter Address:			The Region of Durham, 605 Rossland Rd, Whitby, ON									
Pollutant or	Wind	Instrument make	& model:	Met One Instrun	nents Inc. Mod	del 034B	Serial						
parameter:	Speed/Wind Direction						Number:						
Data edit period	Start date:	1-Jan-14	End date:	30-Sep-14				Time Zone : EST					
Edit#	Edit date	Editor's Name	Edit Action	Starti	ing	Endi	ng	Reason					
				Date (dd/mm/yyyy)	Hour (xx:xx)	Date (dd/mm/yyyy)	Hour (xx:xx)						
1	21-Apr-14	CL	Invalidate data	17-Jan-14	04:00	17-Jan-14	10:00	Modem connection off-line.					
2	30-Apr-14	CL	Invalidate data	25-Feb-14	16:00	25-Feb-14	17:00	Datalogger program updated.					
								1					

Examples of Acceptable Edit Actions:
Add offset of
Delete hours
Zero Correction
Slope Correction
Manual data entry for missing, but collected data
Invalidating span & zero check data
Invalidating data due to equipment malfunctions and power failures.
Invalidating data when instrumentation off-line
Marking data as out-of-range