

# **Alton Coal Development, LLC.**

## **Summary of PM<sub>10</sub> Data**

**Collected at Coal Hollow Mine, Utah**

**During the Second Quarter, 2017**

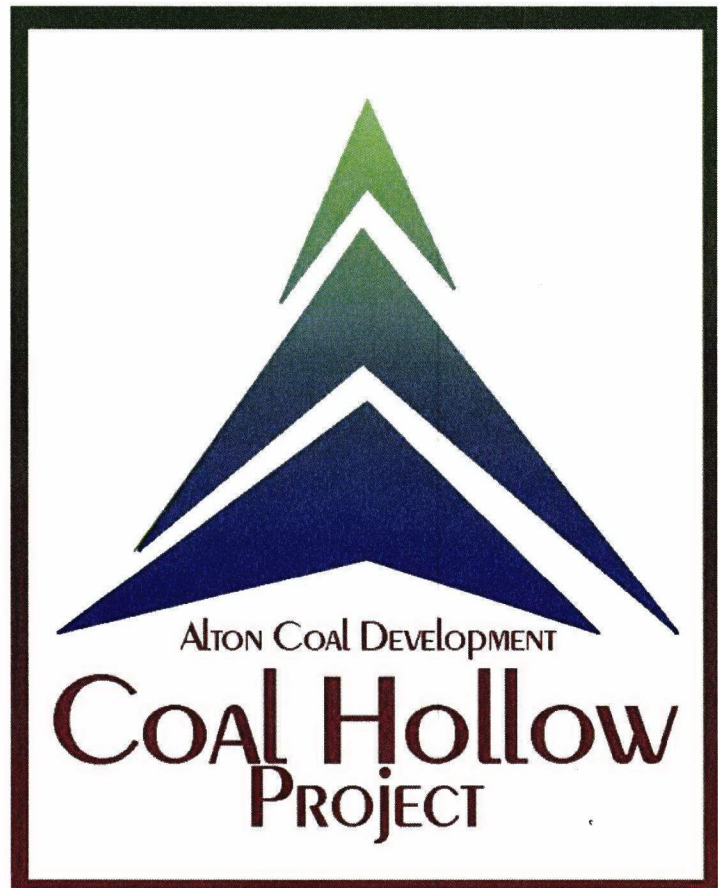
### **Submitted to:**

Utah Division of Environmental Quality  
Division of Air Quality  
195 North 1950 West  
Salt Lake City, Utah  
Contact: Jon Black

**DAQ-2017-019501**

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## 1.0 INTRODUCTION

This report summarizes measurements of Particulate Matter less than 10 microns nominal aerodynamic diameter (PM<sub>10</sub>) collected and processed by Alton Coal Development, LLC, (ACD) from the five monitoring stations located at the Coal Hollow Mine Facility in Alton, Utah. Monitoring for PM<sub>10</sub> is a condition of the mines operating permit.

PM<sub>10</sub> monitoring at the site consists of five BGI PQ200 PM<sub>10</sub> monitors run by solar power. Figure 2 of this report shows the approximate locations of the monitoring locations. The BGI PQ200 monitors are EPA Reference Method monitors and are operated on the National Particulate 1-in-6 Monitoring Schedule. The data summarized herein covers the data collected during the second quarter of 2017.

## 2.0 SITE LOCATION

The Coal Hollow Mine is located in Kane County, Utah, approximately three miles southeast of the town of Alton, Utah. Figure I on the following page gives an overview of the site location. Specifically, the Coal Hollow Mine is located in Sections 19, 20, 29, and 30 of Township 39S, Range 5W; with an approximate facility location of:

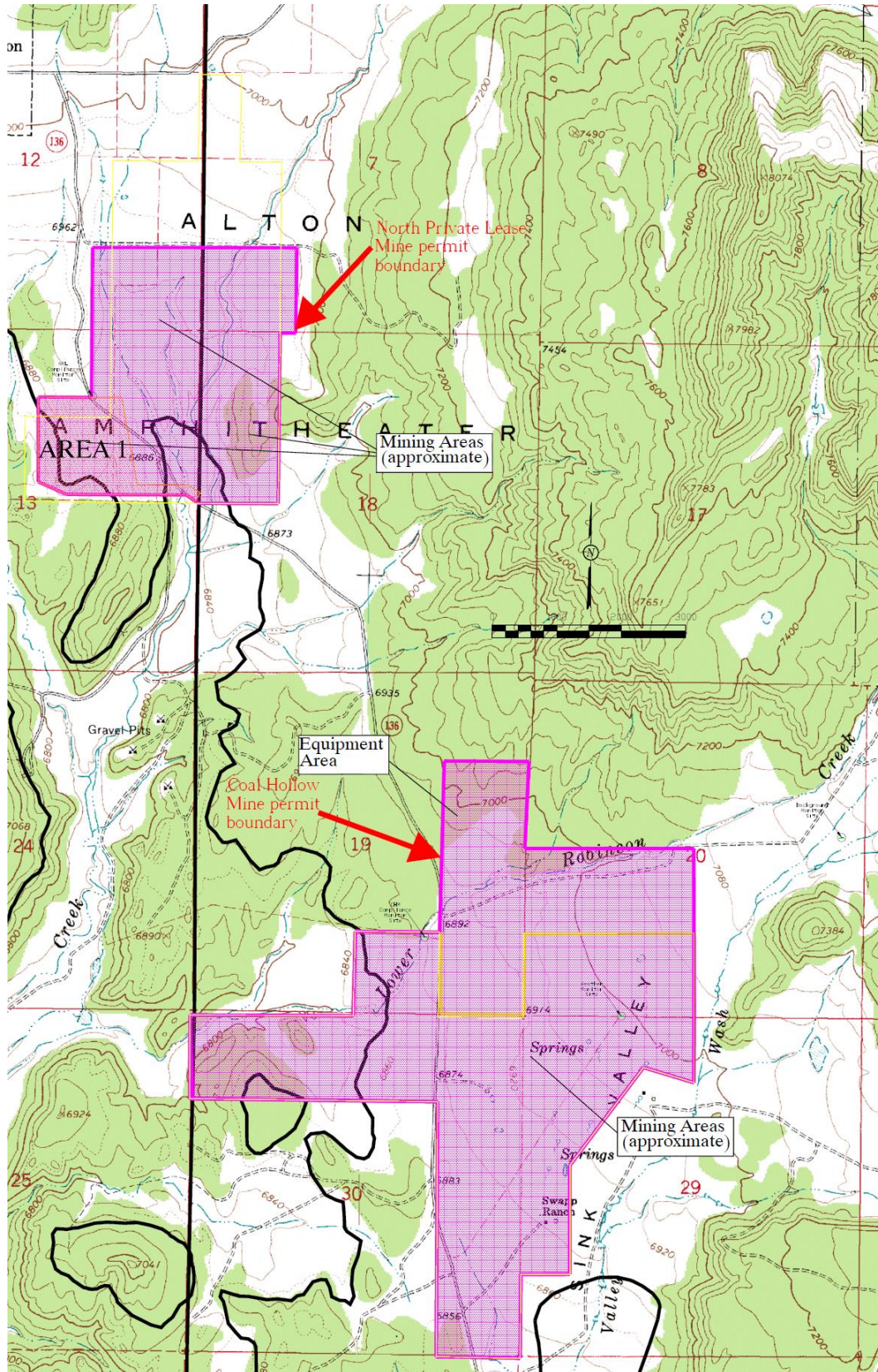
Northing: 41401699 meters

Easting: 371534 meters

Universal Transverse Mercator (UTM) Datum NAD27, Zone 12

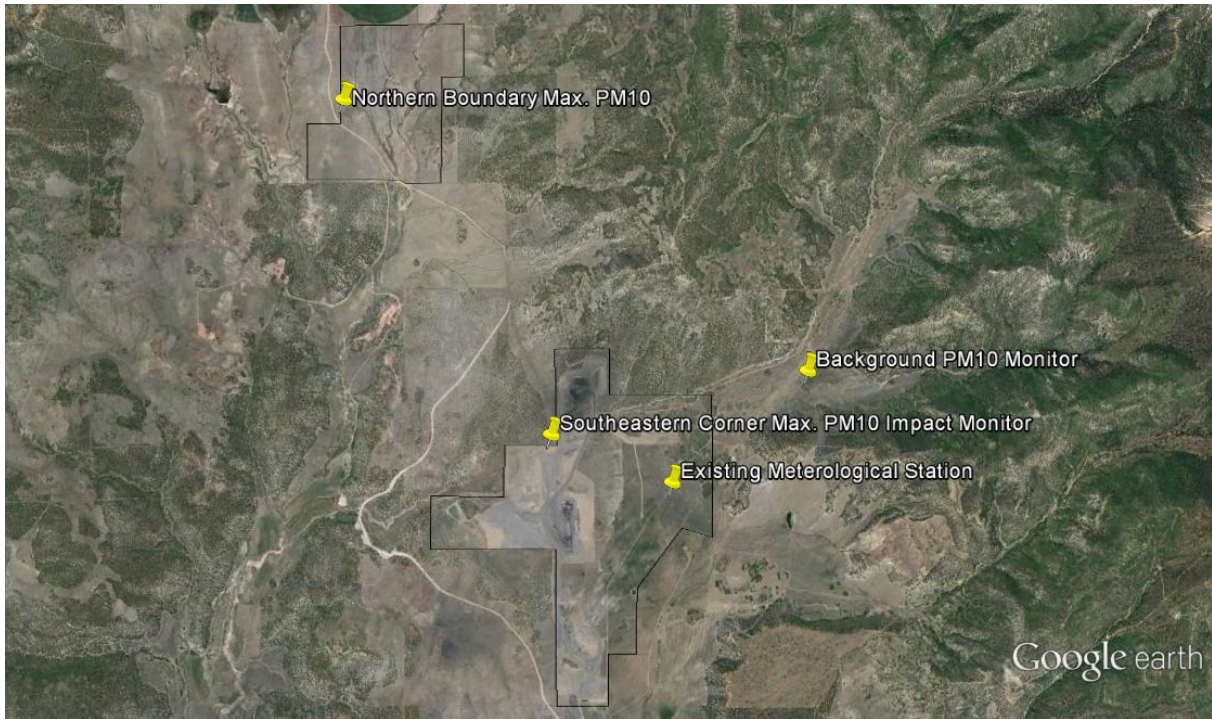
The three monitoring locations as depicted in Figure 2, are located in positions to collect both background and maximum PM<sub>10</sub> concentrations. The background monitor has a manufactures serial #962, therefore this monitor will be referred as monitor 962A. The compliance monitor for the Coal Hollow Mine (CHM) has a manufactures serial #963, therefore this monitor will be referred as monitor 963B. The co-located monitor has a manufactures serial #964, therefore this monitor will be referred as monitor 964C. The background monitor coordinates are Northing: 4140856, Easting 373119, (UTM) Datum NAD27, Zone 12. The CHM compliance monitor and the co-located monitor coordinates are Northing: 4140396, Easting 371147, (UTM) Datum NAD27, Zone 12. The North Private Lease area of the CHM is located in Sections 12, 13 of Township 39S, Range 6W and Sections 7, 18 of Township 39S, Range 5W. The compliance monitor for the North Private Lease has a manufactures serial #2366, therefore this monitor will be referred as monitor 2366D. The co-located monitor has a manufactures serial #2398, therefore this monitor will be referred as monitor 2398E. The NPL compliance monitor and the co-located monitor coordinates are Northing: 4141570, Easting 370928, (UTM) Datum NAD27, Zone 12.

**Figure 1 - Site Location Map**





**Figure 2 - Satellite View of Monitoring Locations**



### **3.0 AIR QUALITY DATA SUMMARIES**

A listing of the measured PM<sub>10</sub> concentrations for the quarter are presented in Appendix B (individual data sheets are provided on the enclosed disk in the PDF version of Appendix B) and Field Data Sheets generated during the collection of each sample are presented in Appendix D. Measurements were collected during a 24-hour periods and represent the average PM<sub>10</sub> concentration during the midnight to midnight data collection cycle. As required by the operating permit for the CHM, duplicate measurements were made with Sampler #963B (designated as a compliance monitor) and Sampler #964C (designated as a co-located sampler) to the extent possible. The quarterly mean PM<sub>10</sub> concentration and the comparison of measured concentrations to standards are based on measurements from the primary Sampler #963B. If a measurement from Sampler #963B was missing or invalid, the measurement from the secondary Sampler #964C would be used. Also, required by the operating permit for the NPL, duplicate measurements were made with Sampler #2366D (designated as a compliance monitor) and Sampler #2398E (designated as a co-located sampler) to the extent possible. The quarterly mean PM<sub>10</sub> concentration and the comparison of measured concentrations to standards are based on measurements from the primary Sampler #2366D. If a measurement from Sampler #2366D was missing or invalid, the measurement from the secondary Sampler #2398E would be used.

The highest 24-hour mean PM<sub>10</sub> concentrations measured during the quarter from the three monitoring locations are summarized in Table I, Table II, Table III, Table IV and Table V. The three highest concentrations, # of valid samples, and the arithmetic mean concentrations from each of the sites are listed. All measured PM<sub>10</sub> concentrations were below the 24-hour National Ambient Air Quality Standard (NAAQS) of 150 µg/m<sup>3</sup> with the exception of the June 6<sup>th</sup> concentrations for the D and E monitors at the CHM.

**Table I - Summary of Measured PM<sub>10</sub> Concentrations (µg/m<sup>3</sup>)**  
**Background Monitor - 962A**

RANK	DATE	PM <sub>10</sub> CONCENTRATION
Highest	5/07/2017	19.5
2 <sup>nd</sup> Highest	2/25/2017	16.6
Monthly Mean	4/1/17-4/30/17	7.0
Monthly Mean	5/1/17-5/31/17	10.8
Monthly Mean	6/1/17-6/30/17	No Valid Samples
Quarterly Mean	4/1/17-6/30/17 (10 valid samples)	8.9

**Table II - Summary of Measured PM<sub>10</sub> Concentrations (µg/m<sup>3</sup>)**  
**Compliance Monitor - 963B**

RANK	DATE	PM <sub>10</sub> CONCENTRATION
Highest	6/06/2017	153.6
2 <sup>nd</sup> Highest	5/31/2017	65.1
Monthly Mean	4/1/17-4/30/17	13.3
Monthly Mean	5/1/17-5/31/17	28.5
Monthly Mean	6/1/17-6/30/17	58.4
Quarterly Mean	4/1/17-6/30/17 (16 valid samples)	33.1

**Table III - Summary of Measured PM<sub>10</sub> Concentrations (µg/m<sup>3</sup>)  
Collocated Monitor – 964C**

RANK	DATE	PM <sub>10</sub> CONCENTRATION
Highest	6/06/2017	222.3
2 <sup>nd</sup> Highest	5/31/2017	90.2
Monthly Mean	4/1/17-4/30/17	24.6
Monthly Mean	5/1/17-5/31/17	42.7
Monthly Mean	6/1/17-6/30/17	76.5
Quarterly Mean	4/1/17-6/30/17 (16 valid samples)	47.6

**Table IV - Summary of Measured PM<sub>10</sub> Concentrations (µg/m<sup>3</sup>)  
Compliance Monitor – 2366D**

RANK	DATE	PM <sub>10</sub> CONCENTRATION
Highest	4/07/2017	136.5
2 <sup>nd</sup> Highest	4/13/2017	105.1
Monthly Mean	4/1/17-4/30/17	60.5
Monthly Mean	5/1/17-5/31/17	24.7
Monthly Mean	6/1/17-6/30/17	27.6
Quarterly Mean	4/1/17-6/30/17 (16 valid samples)	36.8

**Table V - Summary of Measured PM<sub>10</sub> Concentrations (µg/m<sup>3</sup>)  
Collocated Monitor – 2398E**

RANK	DATE	PM <sub>10</sub> CONCENTRATION
Highest	4/07/2017	121.6
2 <sup>nd</sup> Highest	4/13/2017	95.5
Monthly Mean	4/1/17-4/30/17	55.4
Monthly Mean	5/1/17-5/31/17	25.2
Monthly Mean	6/1/17-6/30/17	28.9
Quarterly Mean	4/1/17-6/30/17 (16 valid samples)	35.8

**Table VI – Mean Quarterly and Monthly Wind Speed**

	2 <sup>nd</sup> Quarter 2017	Apr.	May	Jun.
Mean Wind Speed (m/s)	3.47	3.62	3.36	3.44

## **4.0 DATA RECOVERY AND QUALITY ASSURANCE**

### **4.1 Data Recovery**

#### Monitor 962A

Monitor 962A collected 10 of the 16 samples during the quarter. The percent recovery for this quarter is 63%. Monitor 962A began malfunctioning with the May 31<sup>th</sup> run with the ultimate failure on the June 24<sup>th</sup> run. The pump motor seized and the monitor remained inoperable until the manufacture could supply a new motor.

#### Monitor 963B

Monitor 963B collected 16 of the 16 samples during the quarter. The percent recovery for this quarter is 100%.



#### Monitor 964C

Monitor 964C collected 16 of the 16 samples during the quarter. The percent recovery for this quarter is 100%.

#### Monitor 2366D

Monitor 2366D collected 16 of the 16 samples during the quarter. The percent recovery for this quarter is 100%.

#### Monitor 2398E

Monitor 2398E collected 16 of the 16 samples during the quarter. The percent recovery for this quarter is 100%.

The PM<sub>10</sub> data recoveries for the five monitoring stations are presented below:

**Table VII - Summary of Data Recovery**

SAMPLER	POSSIBLE SAMPLES	VALID SAMPLES	PERCENT DATA RECOVERY
962A	16	10	63%
963B	16	16	100%
964C	16	16	100%
2366D	16	16	100%
2398E	16	16	100%

## **4.2 Quality Assurance**

Quality assurance procedures utilized to verify the integrity of the measured PM<sub>10</sub> data included the following:

1. Review of PM<sub>10</sub> precision measurements based upon duplicate, collocated measurements.
2. Independent quarterly audits of the PM<sub>10</sub> samplers.
3. Monthly zero and single point flow rate checks of the PM<sub>10</sub> samplers.

#### 4.2.1 Precision of PM<sub>10</sub> Measurements

The precision of the PM<sub>10</sub> measurements was determined from the duplicate samples collected from the collocated BGI PQ200 Monitors 963B and 964C at the Coal Hollow Mine and 2366D and 2398E at the North Private Lease. As recommended in *40 CFR, Part 58, Appendix A, Section 5.3.1*, PM<sub>10</sub> precision checks are reported for instances when the concentrations for duplicate samples both exceed 3 µg/m<sup>3</sup>. Duplicate samples that did not meet this condition were omitted for the purposes of the precision checks. Appendix C, of this report summarizes precision calculations between the compliance monitor and the co-located monitor. Monthly flow rate verification data is also summarized in Appendix C.

Precision calculations at the Coal Hollow Mine were developed based on 16 valid pairs of co-located monitoring data during the quarter. Single point precision based on *40 CFR, Part 58, Appendix A Equation 2* results were -86.7% to 9.2%. The aggregate coefficient of variability (CV) calculated in accordance with *40 CFR, Part 58, Appendix A Equation 11* is 27.6%. This value is not within the 10% goal for aggregate CV.

Precision calculations at the North Private Lease were developed based on 7 valid pairs of co-located monitoring data during the quarter. Single point precision based on *40 CFR, Part 58, Appendix A Equation 2* results were -51.7% to 34.6%. The aggregate coefficient of variability (CV) calculated in accordance with *40 CFR, Part 58, Appendix A Equation 11* is 24.0%. This value is not within the 10% goal for aggregate CV.

#### 4.2.2 Audit Results

The accuracy of the PM<sub>10</sub> sampler flows was verified by a performance audit conducted by Air Resource Specialist on Feb. 27, 2017. A copy of the audit report is presented in Appendix E and is summarized in Table VI. The audit results indicate that the five samplers were operating properly.

**Table VIII- Audit Summary**

SAMPLER	AUDIT % DIFFERENCE	LIMIT*	DESIGN % DIFFERENCE	LIMIT*
962A	-2.3	±4%	2.4	± 5%

963B	-2.3	±4%	2.3	± 5%
964C	-1.4	±4%	1.4	± 5%
2366D	-1.1	±4%	1.1	± 5%
2398E	-1.1	±4%	1.1	± 5%
*Values between ± 7% and ± 10% require recalibration but no data are invalidated.				

#### 4.2.3 Zero and Single Point Flow Rate Checks

Zero and single-point flow rate verifications are performed by a site technician on a monthly basis. The data was then input into a statistical calculator to calculate percent difference and bias between each of the monitors and the monthly single point flow rate measured by a NIST traceable calibration orifice. The calculator used is called the “Data Assessment Statistical Calculator” DASC Tool. DASC was developed for the data user community and can be found in the Precision and Accuracy Reporting System within the Quality Assurance section of EPA’s Ambient Monitoring Technology Information System. This data is presented in Appendix C of this report.

## **APPENDIX A**

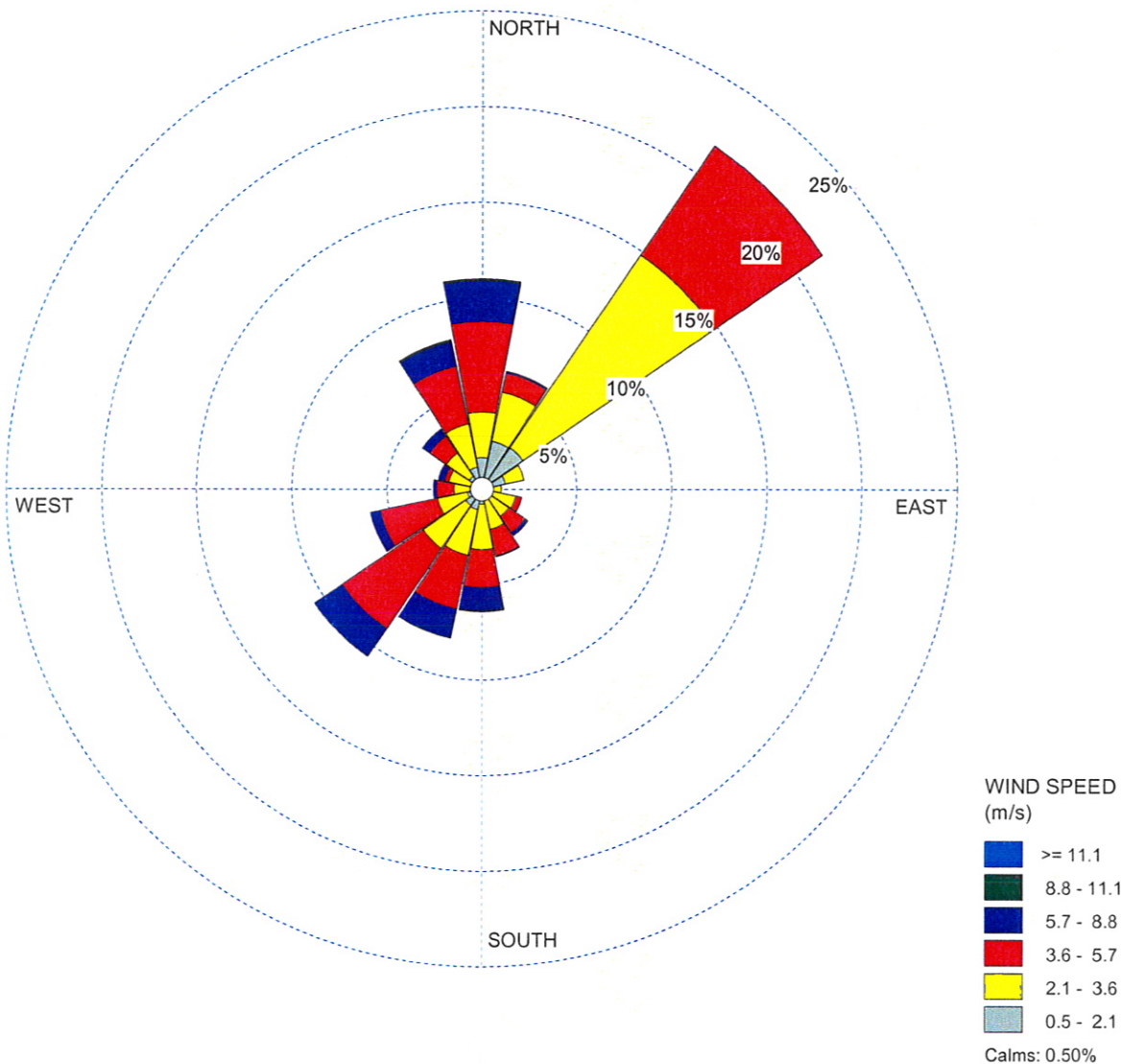
### **Windrose**

WIND ROSE PLOT:

**Alton Coal Development, LLC , Alton, Utah**  
**2017 2nd Quarter**

DISPLAY:

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



COMMENTS:

DATA PERIOD:

**Start Date: 4/1/2017 - 00:00**  
**End Date: 6/30/2017 - 23:00**

COMPANY NAME:

**Alton Coal Development, LLC - Coal Hollow Mine**

MODELER:

**B. Kirk Nicholes**

CALM WINDS:

**0.50%**

TOTAL COUNT:

**2184 hrs.**

AVG. WIND SPEED:

**3.47 m/s**

DATE:

**7/19/2017**

PROJECT NO.:



Station ID: 1  
 Start Date: 4/1/2017 - 00:00  
 End Date: 6/30/2017 - 23:00

Run ID:

Frequency Distribution  
 (Count)

Wind Direction (Blowing From) / Wind Speed (m/s)							
	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
348.75-11.25	36	52	103	47	2	0	240
11.25-33.75	56	57	22	2	0	0	137
33.75-56.25	57	266	150	0	0	0	473
56.25-78.75	28	22	0	0	0	0	50
78.75-101.25	12	11	0	0	0	0	23
101.25-123.75	11	29	7	0	0	0	47
123.75-146.25	10	28	22	4	0	0	64
146.25-168.75	12	35	31	1	0	0	79
168.75-191.25	17	52	43	27	1	0	140
191.25-213.75	24	53	63	34	0	0	174
213.75-236.25	23	59	111	38	0	0	231
236.25-258.75	17	35	67	11	0	0	130
258.75-281.25	14	18	20	4	0	0	56
281.25-303.75	13	26	5	7	0	0	51
303.75-326.25	18	32	23	10	0	0	83
326.25-348.75	26	50	67	29	2	0	174
Total	374	825	734	214	5	0	2184

Frequency of Calm Winds: 32  
 Average Wind Speed: 3.47 m/s



Station ID: 1  
 Start Date: 4/1/2017 - 00:00  
 End Date: 6/30/2017 - 23:00

Run ID:

Frequency Distribution  
 (Normalized)

	Wind Direction (Blowing From) / Wind Speed (m/s)						
	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
348.75-11.25	0.016484	0.023810	0.047161	0.021520	0.000916	0.000000	0.109890
11.25-33.75	0.025641	0.026099	0.010073	0.000916	0.000000	0.000000	0.062729
33.75-56.25	0.026099	0.121795	0.068681	0.000000	0.000000	0.000000	0.216575
56.25-78.75	0.012821	0.010073	0.000000	0.000000	0.000000	0.000000	0.022894
78.75-101.25	0.005495	0.005037	0.000000	0.000000	0.000000	0.000000	0.010531
101.25-123.75	0.005037	0.013278	0.003205	0.000000	0.000000	0.000000	0.021520
123.75-146.25	0.004579	0.012821	0.010073	0.001832	0.000000	0.000000	0.029304
146.25-168.75	0.005495	0.016026	0.014194	0.000458	0.000000	0.000000	0.036172
168.75-191.25	0.007784	0.023810	0.019689	0.012363	0.000458	0.000000	0.064103
191.25-213.75	0.010989	0.024267	0.028846	0.015568	0.000000	0.000000	0.079670
213.75-236.25	0.010531	0.027015	0.050824	0.017399	0.000000	0.000000	0.105769
236.25-258.75	0.007784	0.016026	0.030678	0.005037	0.000000	0.000000	0.059524
258.75-281.25	0.006410	0.008242	0.009158	0.001832	0.000000	0.000000	0.025641
281.25-303.75	0.005952	0.011905	0.002289	0.003205	0.000000	0.000000	0.023352
303.75-326.25	0.008242	0.014652	0.010531	0.004579	0.000000	0.000000	0.038004
326.25-348.75	0.011905	0.022894	0.030678	0.013278	0.000916	0.000000	0.079670
Total	0.171245	0.377747	0.336081	0.097985	0.002289	0.000000	0.985348

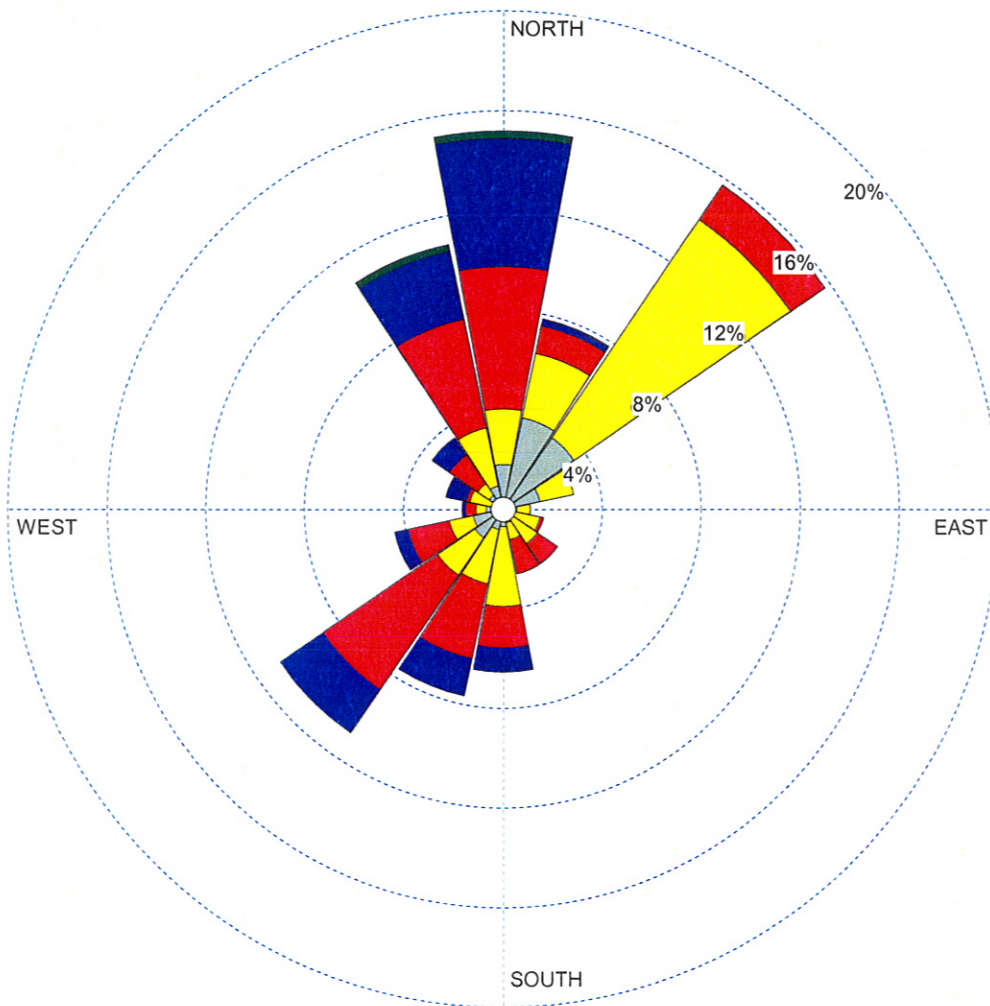
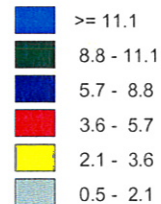
Frequency of Calm Winds: 1.47%  
 Average Wind Speed: 3.47 m/s

WIND ROSE PLOT:

Alton Coal Development, LLC , Alton, Utah  
2017 April

DISPLAY:

Wind Speed  
Direction (blowing from)

WIND SPEED  
(m/s)

Calms: 0.38%

COMMENTS:

DATA PERIOD:

Start Date: 4/1/2017 - 00:00  
End Date: 4/30/2017 - 23:00

COMPANY NAME:

Alton Coal Development, LLC - Coal Hollow Mine

MODELER:

B. Kirk Nicholes

CALM WINDS:

0.38%

TOTAL COUNT:

720 hrs.

AVG. WIND SPEED:

3.62 m/s

DATE:

7/19/2017

PROJECT NO.:



Station ID: 1  
 Start Date: 4/1/2017 - 00:00  
 End Date: 4/30/2017 - 23:00

Run ID:

### Frequency Distribution (Count)

Wind Direction (Blowing From) / Wind Speed (m/s)							
	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
348.75-11.25	13	16	41	37	2	0	109
11.25-33.75	27	19	8	2	0	0	56
33.75-56.25	25	76	12	0	0	0	113
56.25-78.75	11	10	0	0	0	0	21
78.75-101.25	4	4	0	0	0	0	8
101.25-123.75	2	9	1	0	0	0	12
123.75-146.25	2	10	7	0	0	0	19
146.25-168.75	4	5	10	0	0	0	19
168.75-191.25	5	23	12	7	0	0	47
191.25-213.75	6	16	22	11	0	0	55
213.75-236.25	10	13	40	15	0	0	78
236.25-258.75	9	7	12	4	0	0	32
258.75-281.25	5	3	3	1	0	0	12
281.25-303.75	3	7	1	6	0	0	17
303.75-326.25	5	4	10	6	0	0	25
326.25-348.75	7	17	32	20	2	0	78
Total	138	239	211	109	4	0	720

Frequency of Calm Winds: 19  
 Average Wind Speed: 3.62 m/s

Station ID: 1  
 Start Date: 4/1/2017 - 00:00  
 End Date: 4/30/2017 - 23:00

Run ID:

Frequency Distribution  
 (Normalized)

Wind Direction (Blowing From) / Wind Speed (m/s)							
	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
348.75-11.25	0.018056	0.022222	0.056944	0.051389	0.002778	0.000000	0.151389
11.25-33.75	0.037500	0.026389	0.011111	0.002778	0.000000	0.000000	0.077778
33.75-56.25	0.034722	0.105556	0.016667	0.000000	0.000000	0.000000	0.156944
56.25-78.75	0.015278	0.013889	0.000000	0.000000	0.000000	0.000000	0.029167
78.75-101.25	0.005556	0.005556	0.000000	0.000000	0.000000	0.000000	0.011111
101.25-123.75	0.002778	0.012500	0.001389	0.000000	0.000000	0.000000	0.016667
123.75-146.25	0.002778	0.013889	0.009722	0.000000	0.000000	0.000000	0.026389
146.25-168.75	0.005556	0.006944	0.013889	0.000000	0.000000	0.000000	0.026389
168.75-191.25	0.006944	0.031944	0.016667	0.009722	0.000000	0.000000	0.065278
191.25-213.75	0.008333	0.022222	0.030556	0.015278	0.000000	0.000000	0.076389
213.75-236.25	0.013889	0.018056	0.055556	0.020833	0.000000	0.000000	0.108333
236.25-258.75	0.012500	0.009722	0.016667	0.005556	0.000000	0.000000	0.044444
258.75-281.25	0.006944	0.004167	0.004167	0.001389	0.000000	0.000000	0.016667
281.25-303.75	0.004167	0.009722	0.001389	0.008333	0.000000	0.000000	0.023611
303.75-326.25	0.006944	0.005556	0.013889	0.008333	0.000000	0.000000	0.034722
326.25-348.75	0.009722	0.023611	0.044444	0.027778	0.002778	0.000000	0.108333
Total	0.191667	0.331944	0.293056	0.151389	0.005556	0.000000	0.973611

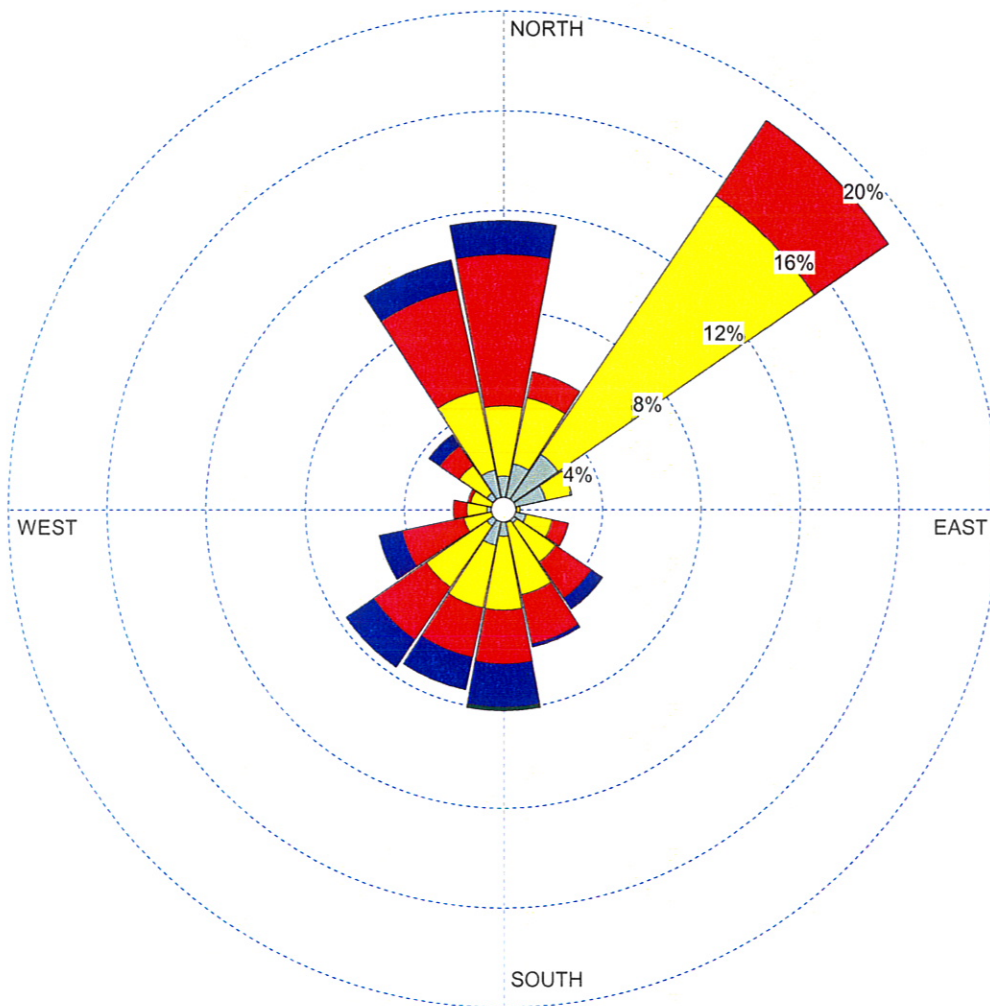
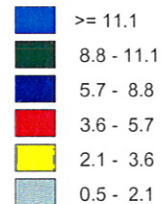
Frequency of Calm Winds: 2.64%  
 Average Wind Speed: 3.62 m/s

WIND ROSE PLOT:

Alton Coal Development, LLC , Alton, Utah  
2017 May

DISPLAY:

Wind Speed  
Direction (blowing from)

WIND SPEED  
(m/s)

Calms: 0.26%

COMMENTS:

DATA PERIOD:

Start Date: 5/1/2017 - 00:00  
End Date: 5/31/2017 - 23:00

COMPANY NAME:

Alton Coal Development, LLC - Coal Hollow Mine

MODELER:

B. Kirk Nicholes

CALM WINDS:

0.26%

TOTAL COUNT:

744 hrs.

AVG. WIND SPEED:

3.36 m/s

DATE:

7/19/2017

PROJECT NO.:



Station ID: 1  
 Start Date: 5/1/2017 - 00:00  
 End Date: 5/31/2017 - 23:00

Run ID:

Frequency Distribution  
 (Count)

	Wind Direction (Blowing From) / Wind Speed (m/s)						Total
	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	
348.75-11.25	10	21	45	10	0	0	86
11.25-33.75	14	20	8	0	0	0	42
33.75-56.25	20	93	27	0	0	0	140
56.25-78.75	13	8	0	0	0	0	21
78.75-101.25	4	1	0	0	0	0	5
101.25-123.75	7	8	5	0	0	0	20
123.75-146.25	5	14	13	4	0	0	36
146.25-168.75	4	22	15	1	0	0	42
168.75-191.25	8	22	16	13	1	0	60
191.25-213.75	11	19	15	10	0	0	55
213.75-236.25	6	22	19	10	0	0	57
236.25-258.75	2	10	19	7	0	0	38
258.75-281.25	5	6	4	0	0	0	15
281.25-303.75	3	7	1	0	0	0	11
303.75-326.25	6	10	7	4	0	0	27
326.25-348.75	12	24	31	9	0	0	76
Total	130	307	225	68	1	0	744

Frequency of Calm Winds: 13  
 Average Wind Speed: 3.36 m/s



Station ID: 1  
 Start Date: 5/1/2017 - 00:00  
 End Date: 5/31/2017 - 23:00

Run ID:

Frequency Distribution  
 (Normalized)

Wind Direction (Blowing From) / Wind Speed (m/s)							
	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
348.75-11.25	0.013441	0.028226	0.060484	0.013441	0.000000	0.000000	0.115591
11.25-33.75	0.018817	0.026882	0.010753	0.000000	0.000000	0.000000	0.056452
33.75-56.25	0.026882	0.125000	0.036290	0.000000	0.000000	0.000000	0.188172
56.25-78.75	0.017473	0.010753	0.000000	0.000000	0.000000	0.000000	0.028226
78.75-101.25	0.005376	0.001344	0.000000	0.000000	0.000000	0.000000	0.006720
101.25-123.75	0.009409	0.010753	0.006720	0.000000	0.000000	0.000000	0.026882
123.75-146.25	0.006720	0.018817	0.017473	0.005376	0.000000	0.000000	0.048387
146.25-168.75	0.005376	0.029570	0.020161	0.001344	0.000000	0.000000	0.056452
168.75-191.25	0.010753	0.029570	0.021505	0.017473	0.001344	0.000000	0.080645
191.25-213.75	0.014785	0.025538	0.020161	0.013441	0.000000	0.000000	0.073925
213.75-236.25	0.008065	0.029570	0.025538	0.013441	0.000000	0.000000	0.076613
236.25-258.75	0.002688	0.013441	0.025538	0.009409	0.000000	0.000000	0.051075
258.75-281.25	0.006720	0.008065	0.005376	0.000000	0.000000	0.000000	0.020161
281.25-303.75	0.004032	0.009409	0.001344	0.000000	0.000000	0.000000	0.014785
303.75-326.25	0.008065	0.013441	0.009409	0.005376	0.000000	0.000000	0.036290
326.25-348.75	0.016129	0.032258	0.041667	0.012097	0.000000	0.000000	0.102151
Total	0.174731	0.412634	0.302419	0.091398	0.001344	0.000000	0.982527

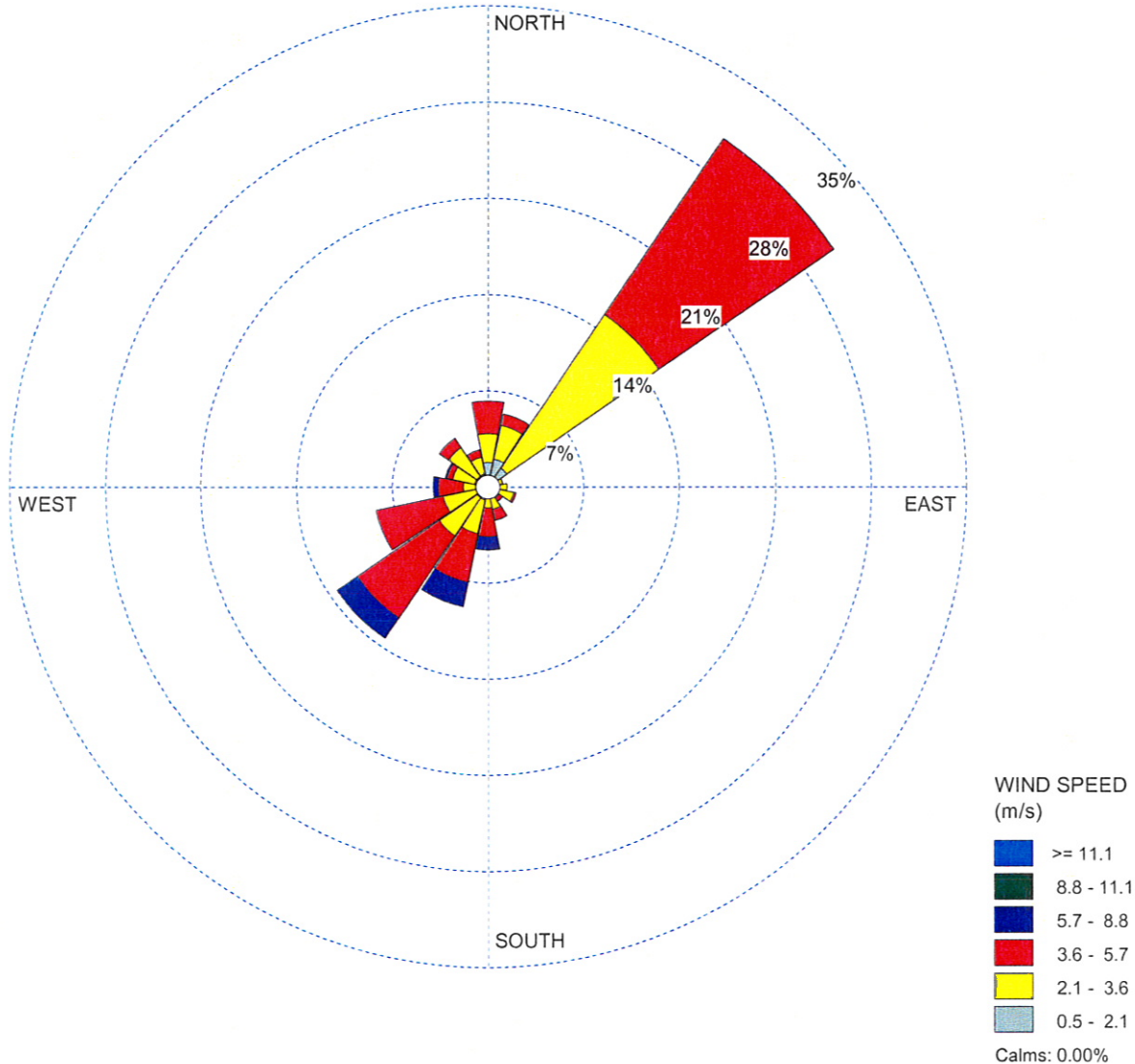
Frequency of Calm Winds: 1.75%  
 Average Wind Speed: 3.36 m/s

WIND ROSE PLOT:

Alton Coal Development, LLC , Alton, Utah  
2017 June

DISPLAY:

Wind Speed  
Direction (blowing from)



COMMENTS:

DATA PERIOD:

Start Date: 6/1/2017 - 00:00  
End Date: 6/30/2017 - 23:00

COMPANY NAME:

Alton Coal Development, LLC - Coal Hollow Mine

MODELER:

B. Kirk Nicholes

CALM WINDS:

0.00%

TOTAL COUNT:

720 hrs.

AVG. WIND SPEED:

3.44 m/s

DATE:

7/19/2017

PROJECT NO.:



Station ID: 1  
 Start Date: 6/1/2017 - 00:00  
 End Date: 6/30/2017 - 23:00

Run ID:

Frequency Distribution  
 (Count)

Wind Direction (Blowing From) / Wind Speed (m/s)							
	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
348.75-11.25	13	15	17	0	0	0	45
11.25-33.75	15	18	6	0	0	0	39
33.75-56.25	12	97	111	0	0	0	220
56.25-78.75	4	4	0	0	0	0	8
78.75-101.25	4	6	0	0	0	0	10
101.25-123.75	2	12	1	0	0	0	15
123.75-146.25	3	4	2	0	0	0	9
146.25-168.75	4	8	6	0	0	0	18
168.75-191.25	4	7	15	7	0	0	33
191.25-213.75	7	18	26	13	0	0	64
213.75-236.25	7	24	52	13	0	0	96
236.25-258.75	6	18	36	0	0	0	60
258.75-281.25	4	9	13	3	0	0	29
281.25-303.75	7	12	3	1	0	0	23
303.75-326.25	7	18	6	0	0	0	31
326.25-348.75	7	9	4	0	0	0	20
Total	106	279	298	37	0	0	720

Frequency of Calm Winds: 0

Average Wind Speed: 3.44 m/s

Station ID: 1  
 Start Date: 6/1/2017 - 00:00  
 End Date: 6/30/2017 - 23:00

Run ID:

Frequency Distribution  
 (Normalized)

Wind Direction (Blowing From) / Wind Speed (m/s)							
	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	>= 11.1	Total
348.75-11.25	0.018056	0.020833	0.023611	0.000000	0.000000	0.000000	0.062500
11.25-33.75	0.020833	0.025000	0.008333	0.000000	0.000000	0.000000	0.054167
33.75-56.25	0.016667	0.134722	0.154167	0.000000	0.000000	0.000000	0.305556
56.25-78.75	0.005556	0.005556	0.000000	0.000000	0.000000	0.000000	0.011111
78.75-101.25	0.005556	0.008333	0.000000	0.000000	0.000000	0.000000	0.013889
101.25-123.75	0.002778	0.016667	0.001389	0.000000	0.000000	0.000000	0.020833
123.75-146.25	0.004167	0.005556	0.002778	0.000000	0.000000	0.000000	0.012500
146.25-168.75	0.005556	0.011111	0.008333	0.000000	0.000000	0.000000	0.025000
168.75-191.25	0.005556	0.009722	0.020833	0.009722	0.000000	0.000000	0.045833
191.25-213.75	0.009722	0.025000	0.036111	0.018056	0.000000	0.000000	0.088889
213.75-236.25	0.009722	0.033333	0.072222	0.018056	0.000000	0.000000	0.133333
236.25-258.75	0.008333	0.025000	0.050000	0.000000	0.000000	0.000000	0.083333
258.75-281.25	0.005556	0.012500	0.018056	0.004167	0.000000	0.000000	0.040278
281.25-303.75	0.009722	0.016667	0.004167	0.001389	0.000000	0.000000	0.031944
303.75-326.25	0.009722	0.025000	0.008333	0.000000	0.000000	0.000000	0.043056
326.25-348.75	0.009722	0.012500	0.005556	0.000000	0.000000	0.000000	0.027778
Total	0.147222	0.387500	0.413889	0.051389	0.000000	0.000000	1.000000

Frequency of Calm Winds: 0.00%  
 Average Wind Speed: 3.44 m/s

## **APPENDIX B**

### **Listing of PM<sub>10</sub> Concentrations**

## **Background Monitor 962A**



**PM<sub>10</sub> Sampler Summary****April 1, 2017 - June 30, 2017****Network: Alton Coal Development****Site:** Coal Hollow**Sampler ID:** Coal Hollow-A**AQS ID:****Sampler Type:** BGI FRM Single

Date	Filter ID	Concentration (µg/m3) LTP	Concentration (µg/m3) STP	Sample Period (hr:min)	Sample Volume (m3)	Std Volume (m3)	Tare (mg)	Mass Gross (mg)	Net (mg)	Flag	Comments
04/01/17	P2938101	2.5	3.0	23:59	24.0	19.8	389.428	389.489	0.061		
04/07/17	P2938772	5.5	6.8	23:59	24.0	19.5	386.092	386.225	0.133		
04/13/17	P2938773	10.4	13.0	23:59	24.0	19.3	384.803	385.055	0.252		
04/19/17	P2938778	4.4	5.4	23:59	24.0	19.5	385.908	386.015	0.107	HT	
04/25/17	P2939178	5.7	6.9	23:59	24.0	19.6	393.296	393.433	0.137	HT	
05/01/17	P2939183	4.9	6.1	23:59	24.0	19.4	382.276	382.396	0.120		
05/07/17	P2939724	15.7	19.5	23:59	24.0	19.4	381.936	382.315	0.379	HT	
05/13/17	P2939729	7.8	9.8	23:59	24.0	19.2	390.388	390.576	0.188		
05/19/17	P2939734	1.5	1.8	23:59	24.0	19.8	386.878	386.915	0.037	HT	
05/25/17	P2940166	13.1	16.6	23:59	24.0	18.9	384.971	385.286	0.315		
05/31/17	P2940171	Invalid - AN	Invalid - AN	11:03	11.1	8.9	386.861	386.990	0.129	SP,FE	
06/06/17	P2940177	Invalid - AN	Invalid - AN	0:03			397.632	397.637	0.005	SP,FE,TD	
06/12/17	P2940670	Invalid - AN	Invalid - AN	0:03			388.777	388.787	0.010	SP,FE	
06/18/17	P2941054	Invalid - AN	Invalid - AN	0:03			388.770	388.777	0.007	SP,FE,TD	
06/24/17		Invalid - AF	Invalid - AF								
06/30/17		Invalid - AF	Invalid - AF								
05/22/17	P2940165	Field Blank					389.805	389.803	-0.002		
# Valid		Recovery	Average	St. Dev.	Max	Min					
10		63%	8.9	5.8	19.5	1.8					

Inter-Mountain Laboratories' (IML) data validation is limited by the provided information. Data have been validated based on laboratory QC, field observations and other information available to IML. Additional data validation based on information not provided to IML may be required. According to 40 CFR 58.15 final responsibilities for data review and validation lies with each agency submitting data to AQS.

# BGI PQ200 Air Sampling System Downloaded 2017 04 apr 07:38:22

## Job Details:

Job Name: 17Apr04A.JOB  
Version: 5.62  
Serial No: 962  
Pump Time: 8978:00  
Flags:

Job Code:  
Site Name:  
Station Code:  
Operators:  
User1:  
User2:

	Max	Min	Avg	Units
BP	584	577	581	mmHg
TA	12.2	-0.6	3.9	°C
Q	---	---	16.71	Lpm

QCV 0.63 %  
Max overheat 4.6 °C  
occured 02-apr 15:55:28

## Timer Information:

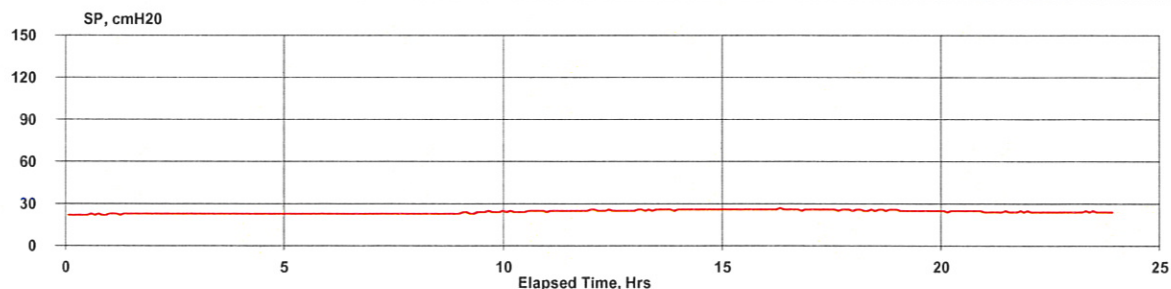
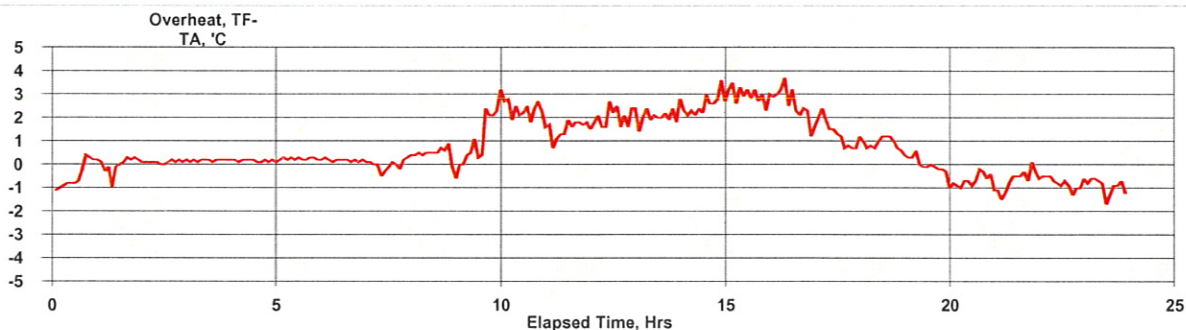
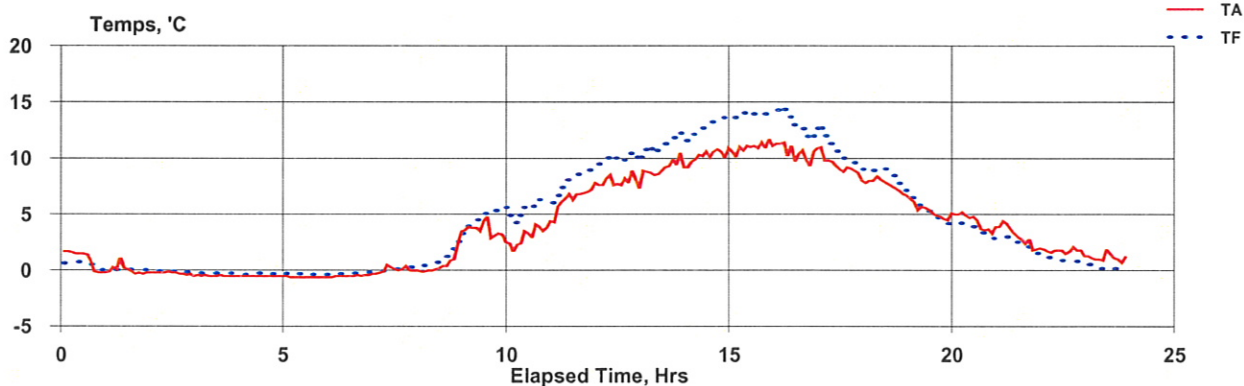
Date	Time
dd-mmm	hh:mm:ss
Start: 17-01-apr	0:00:08
Stop: 17-02-apr	0:00:05
ET: 23:59	

## Mass Concentration Data:

Filter ID:	24
Final Wt:	mg
Initial Wt:	mg
Delta Wt:	0.000 mg
Total Vol:	24.037 m <sup>3</sup>
Mass Conc:	0 µg/m <sup>3</sup>

Notes 1:

Notes 2:



# Hourly

17-01-apr	0:05:08	578	0.9	0.5	-0.4	22	16.71
17-01-apr	1:05:08	579	0.0	0.0	0.0	23	16.71
17-01-apr	2:05:08	579	-0.3	-0.2	0.1	23	16.71
17-01-apr	3:05:08	579	-0.5	-0.3	0.2	23	16.72
17-01-apr	4:05:08	579	-0.5	-0.3	0.2	23	16.71
17-01-apr	5:05:08	580	-0.6	-0.4	0.2	23	16.71
17-01-apr	6:05:08	580	-0.5	-0.3	0.2	23	16.72
17-01-apr	7:05:08	581	0.1	0.1	0.0	23	16.71
17-01-apr	8:05:08	581	0.7	1.1	0.4	23	16.72
17-01-apr	9:05:08	582	3.6	4.8	1.2	24	16.71
17-01-apr	10:05:08	582	3.2	5.5	2.3	25	16.71
17-01-apr	11:05:08	582	6.5	8.0	1.5	25	16.70
17-01-apr	12:05:08	582	7.9	10.0	2.1	25	16.72
17-01-apr	13:05:08	582	9.2	11.2	2.1	26	16.71
17-01-apr	14:05:08	582	10.2	12.8	2.6	26	16.71
17-01-apr	15:05:08	582	11.0	13.9	3.0	26	16.71
17-01-apr	16:05:08	582	10.6	13.1	2.5	26	16.70
17-01-apr	17:05:08	582	9.3	10.6	1.3	26	16.71
17-01-apr	18:05:08	583	7.6	8.5	0.9	26	16.71
17-01-apr	19:05:08	583	5.3	5.2	-0.1	25	16.71
17-01-apr	20:05:08	583	4.4	3.7	-0.7	25	16.71
17-01-apr	21:05:08	583	3.0	2.4	-0.7	24	16.71
17-01-apr	22:05:08	583	1.7	1.0	-0.8	24	16.71
17-01-apr	23:05:08	583	1.2	0.2	-0.9	24	16.70

# BGI PQ200 Air Sampling System Downloaded 2017 10 apr 12:49:50

## Job Details:

Job Name: 17Apr10A.JOB  
Version: 5.62  
Serial No: 962  
Pump Time: 9001:59  
Flags:

Job Code:  
Site Name:  
Station Code:  
Operators:  
User1:  
User2:

	Max	Min	Avg	Units
BP	585	581	583	mmHg
TA	17.2	0.6	9.4	°C
Q	---	---	16.71	Lpm

## Timer Information:

Date Time  
dd-mmm hh:mm:ss  
Start: 17-07-apr 0:00:08  
Stop: 17-08-apr 0:00:05  
ET: 23:59

## Mass Concentration Data:

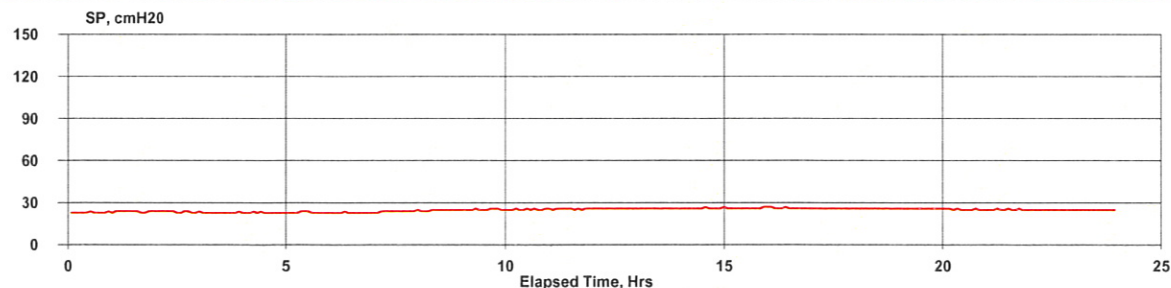
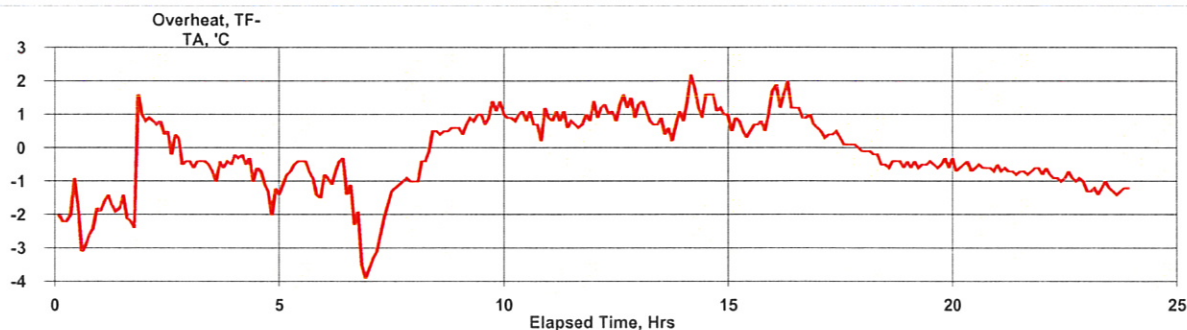
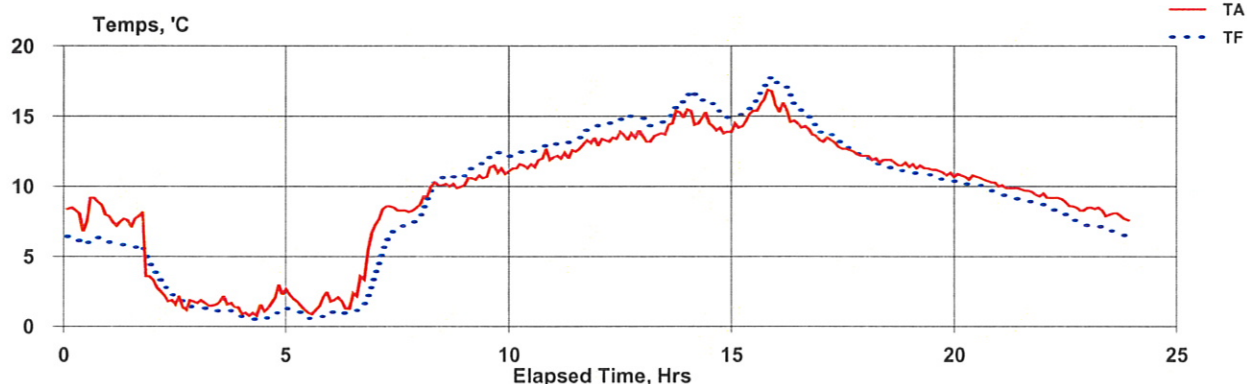
Filter ID: 4  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.04 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

QCV 0.54 %

Max overheat 6.1 °C  
occured 09-apr 18:54:20

Notes 1:

Notes 2:



# Hourly

17-07-apr	0:05:08	584	8.3	6.2	-2.1	23	16.71
17-07-apr	1:05:08	584	6.6	5.5	-1.1	24	16.71
17-07-apr	2:05:08	584	1.9	2.2	0.3	24	16.71
17-07-apr	3:05:08	584	1.6	1.1	-0.5	23	16.71
17-07-apr	4:05:08	583	1.6	0.7	-0.9	23	16.71
17-07-apr	5:05:08	584	1.7	0.9	-0.8	23	16.71
17-07-apr	6:05:08	584	3.3	1.5	-1.8	23	16.71
17-07-apr	7:05:08	584	8.4	6.7	-1.7	24	16.71
17-07-apr	8:05:08	584	10.0	10.2	0.2	25	16.72
17-07-apr	9:05:08	585	10.9	11.9	0.9	25	16.71
17-07-apr	10:05:08	584	11.7	12.6	0.9	25	16.71
17-07-apr	11:05:08	584	12.7	13.6	0.9	26	16.71
17-07-apr	12:05:08	584	13.6	14.7	1.2	26	16.70
17-07-apr	13:05:08	583	14.3	15.1	0.8	26	16.70
17-07-apr	14:05:08	583	14.4	15.8	1.4	26	16.71
17-07-apr	15:05:08	583	15.4	16.2	0.7	26	16.71
17-07-apr	16:05:08	582	14.5	15.7	1.2	26	16.70
17-07-apr	17:05:08	582	12.8	13.0	0.2	26	16.71
17-07-apr	18:05:08	582	11.8	11.4	-0.4	26	16.71
17-07-apr	19:05:08	582	11.2	10.7	-0.5	26	16.71
17-07-apr	20:05:08	582	10.5	10.0	-0.6	25	16.71
17-07-apr	21:05:08	582	9.7	9.0	-0.7	25	16.69
17-07-apr	22:05:08	582	8.8	7.9	-0.9	25	16.71
17-07-apr	23:05:08	582	8.1	6.8	-1.2	25	16.70



# BGI PQ200 Air Sampling System Downloaded 2017 14 apr 09:57:03

## Job Details:

Job Name: 17Apr14A.JOB  
Version: 5.62  
Serial No: 962  
Pump Time: 9025:58  
Flags:

Job Code:  
Site Name:  
Station Code:  
Operators:  
User1:  
User2:

	Max	Min	Avg	Units
BP	584	579	581	mmHg
TA	18.8	0.9	10.5	°C
Q	---	---	16.7	Lpm

## Timer Information:

Date	Time
dd-mmm	hh:mm:ss
Start: 17-13-apr	0:00:08
Stop: 17-14-apr	0:00:04

## Mass Concentration Data:

Filter ID:	5
Final Wt:	mg
Initial Wt:	mg
Delta Wt:	0.000 mg
Total Vol:	24.036 m <sup>3</sup>

QCV 0.65 %

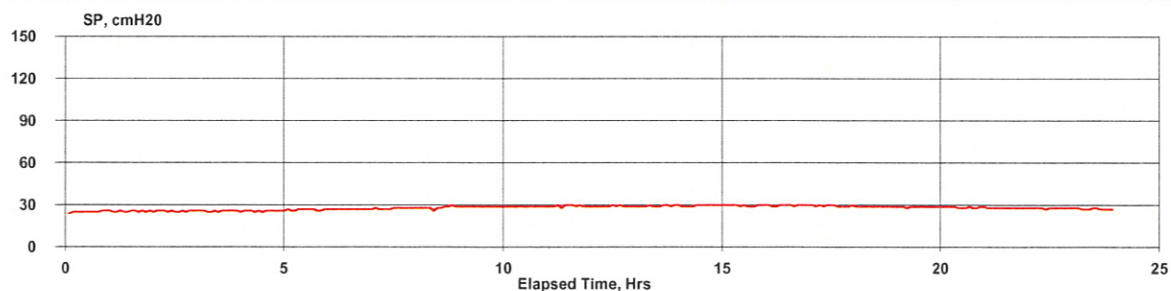
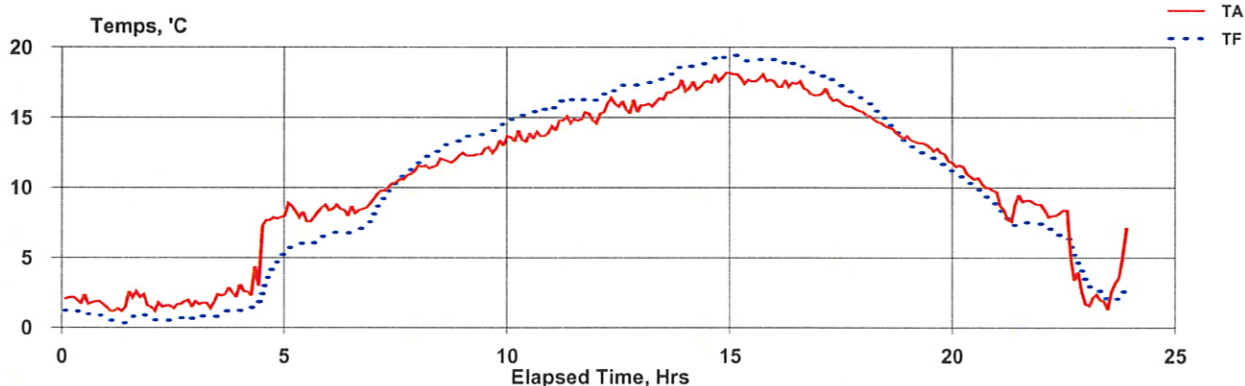
Max overheat 2.4 °C  
occured 13-apr 10:19:07

ET: 23:59

Mass Conc: 0 µg/m<sup>3</sup>

Notes 1:

Notes 2:



Hourly

17-13-apr	0:05:08	584	1.9	1.0	-0.9	25	16.71
17-13-apr	1:05:08	583	1.8	0.6	-1.2	25	16.73
17-13-apr	2:05:08	583	1.7	0.6	-1.0	26	16.71
17-13-apr	3:05:08	583	2.2	0.9	-1.3	26	16.71
17-13-apr	4:05:08	583	5.8	3.0	-2.8	26	16.70
17-13-apr	5:05:08	583	8.3	6.1	-2.2	27	16.72
17-13-apr	6:05:08	583	8.6	7.0	-1.5	27	16.71
17-13-apr	7:05:08	583	10.5	10.3	-0.2	28	16.71
17-13-apr	8:05:08	583	11.9	12.8	0.9	28	16.68
17-13-apr	9:05:08	582	12.7	14.0	1.3	29	16.71
17-13-apr	10:05:08	582	13.7	15.3	1.5	29	16.72
17-13-apr	11:05:08	582	14.8	16.2	1.3	29	16.68
17-13-apr	12:05:08	581	15.8	17.0	1.2	29	16.70
17-13-apr	13:05:08	581	16.6	17.9	1.3	29	16.71
17-13-apr	14:05:08	580	17.6	19.0	1.4	30	16.71
17-13-apr	15:05:08	580	17.8	19.1	1.4	30	16.72
17-13-apr	16:05:08	580	17.2	18.6	1.4	30	16.71
17-13-apr	17:05:08	579	16.1	17.2	1.1	30	16.70
17-13-apr	18:05:08	579	14.4	14.7	0.4	29	16.71
17-13-apr	19:05:08	580	12.8	12.1	-0.6	29	16.71
17-13-apr	20:05:08	580	10.6	10.0	-0.7	29	16.72
17-13-apr	21:05:08	580	8.7	7.6	-1.1	28	16.71
17-13-apr	22:05:08	580	6.2	6.0	-0.2	28	16.70
17-13-apr	23:05:08	580	3.0	2.4	-0.6	27	16.76

# BGI PQ200 Air Sampling System Downloaded 2017 20 apr 09:30:02

## Job Details:

Job Name: 17Apr20A.JOB  
Version: 5.62  
Serial No: 962  
Pump Time: 9049:57  
Flags:

Job Code:  
Site Name:  
Station Code:  
Operators:  
User1:  
User2:

	Max	Min	Avg	Units
BP	586	582	584	mmHg
TA	18.1	-1.3	8.7	°C
Q	---	---	16.7	Lpm

## Timer Information:

Date	Time
dd-mmm	hh:mm:ss
Start: 17-19-apr	0:00:08
Stop: 17-20-apr	0:00:04

## Mass Concentration Data:

Filter ID:	14
Final Wt:	mg
Initial Wt:	mg
Delta Wt:	0.000 mg
Total Vol:	24.037 m <sup>3</sup>

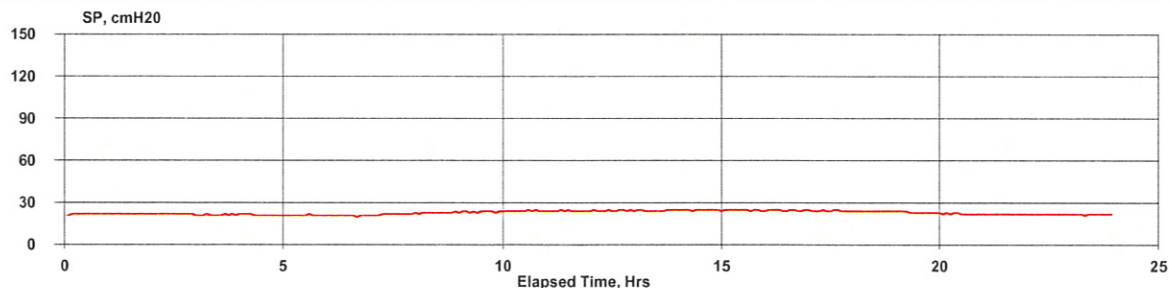
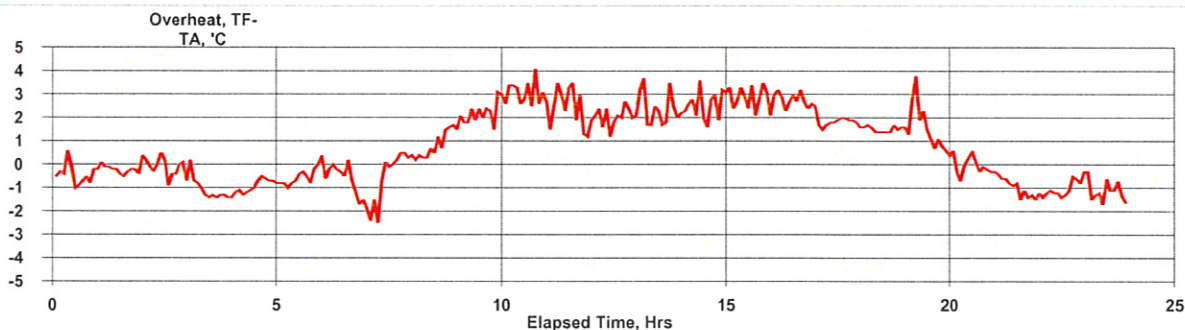
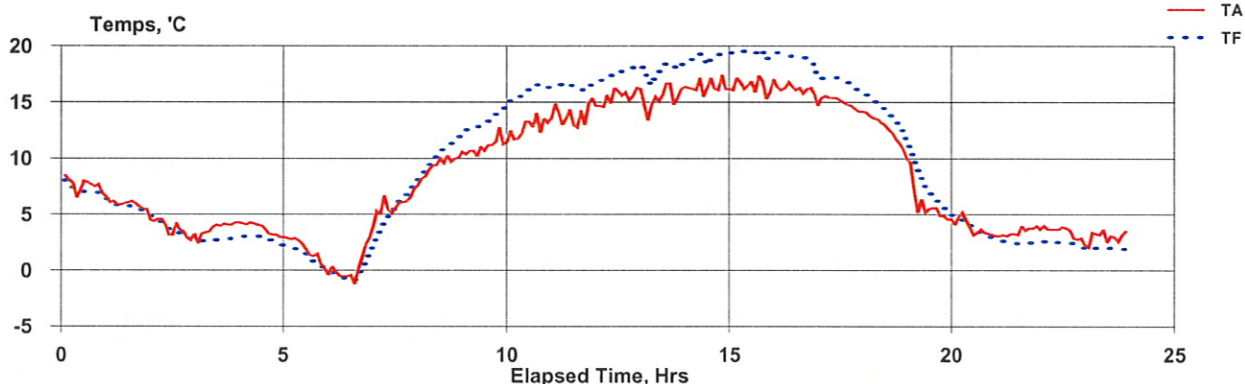
QCV 0.55 %  
Max overheat 4.3 °C  
occured 19-apr 10:45:12

ET: 23:59

Mass Conc: 0 µg/m<sup>3</sup>

Notes 1:

Notes 2:





Hourly

17-19-apr	0:05:08	584	7.5	7.1	-0.4	22	16.71
17-19-apr	1:05:08	584	5.8	5.6	-0.2	22	16.71
17-19-apr	2:05:08	584	3.7	3.6	-0.2	22	16.70
17-19-apr	3:05:08	584	3.8	2.7	-1.1	21	16.71
17-19-apr	4:05:08	584	3.7	2.8	-0.9	21	16.71
17-19-apr	5:05:08	584	1.7	1.2	-0.5	21	16.71
17-19-apr	6:05:08	584	0.7	-0.1	-0.7	21	16.71
17-19-apr	7:05:08	585	6.1	5.7	-0.4	22	16.71
17-19-apr	8:05:08	585	9.6	10.4	0.9	23	16.71
17-19-apr	9:05:08	585	11.1	13.3	2.2	24	16.71
17-19-apr	10:05:08	585	12.9	15.9	3.1	24	16.72
17-19-apr	11:05:08	585	14.0	16.4	2.4	24	16.73
17-19-apr	12:05:08	585	15.6	17.7	2.1	24	16.70
17-19-apr	13:05:08	585	15.5	17.9	2.4	25	16.71
17-19-apr	14:05:08	585	16.4	19.0	2.6	25	16.70
17-19-apr	15:05:08	585	16.5	19.4	2.8	25	16.70
17-19-apr	16:05:08	585	16.1	18.9	2.8	25	16.70
17-19-apr	17:05:08	585	15.0	16.8	1.8	24	16.72
17-19-apr	18:05:08	585	12.5	14.0	1.5	24	16.71
17-19-apr	19:05:08	585	5.8	7.3	1.5	23	16.71
17-19-apr	20:05:08	585	3.8	3.8	-0.1	22	16.71
17-19-apr	21:05:08	585	3.5	2.5	-1.0	22	16.70
17-19-apr	22:05:08	585	3.4	2.4	-1.0	22	16.71
17-19-apr	23:05:08	585	3.1	1.9	-1.1	22	16.64

# BGI PQ200 Air Sampling System Downloaded 2017 26 apr 13:42:13

## Job Details:

Job Name: 17Apr26A.JOB  
Version: 5.62  
Serial No: 962  
Pump Time: 9073:56  
Flags:

Job Code:  
Site Name:  
Station Code:  
Operators:  
User1:  
User2:

	Max	Min	Avg	Units
BP	581	575	577	mmHg
TA	9.9	-2.7	4.6	°C
Q	---	---	16.7	Lpm

## Timer Information:

Date Time  
dd-mmm hh:mm:ss  
Start: 17-25-apr 0:00:08  
Stop: 17-26-apr 0:00:05  
ET: 23:59

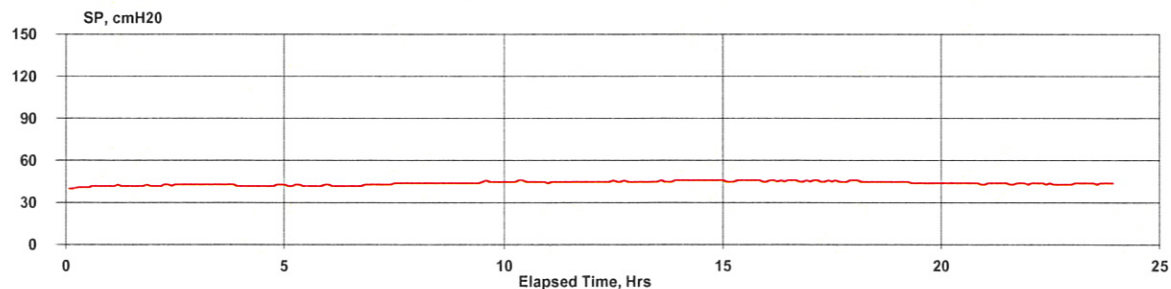
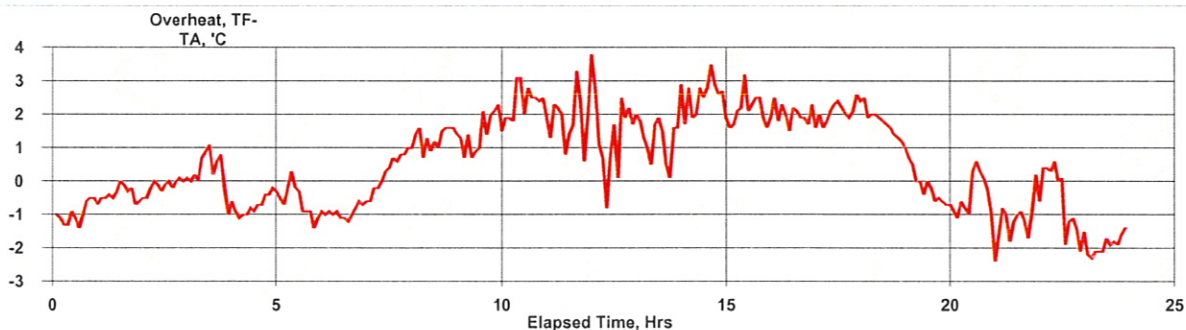
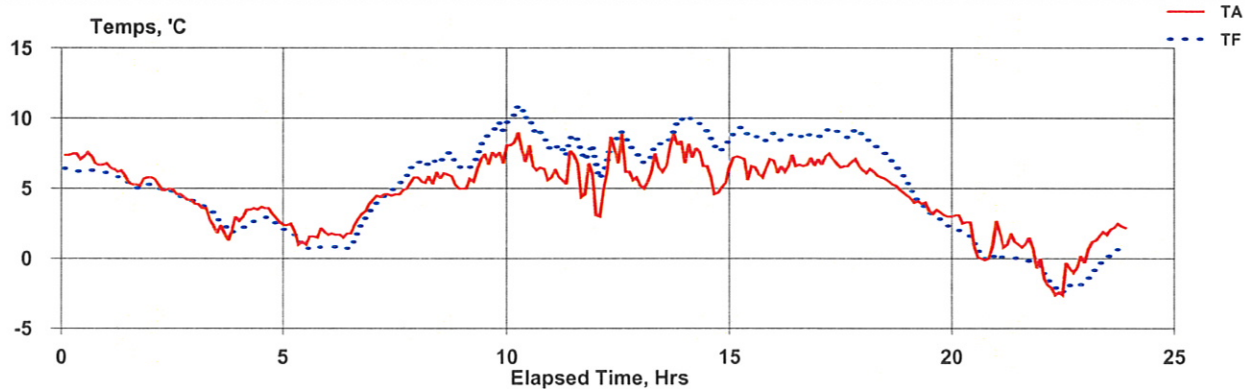
## Mass Concentration Data:

Filter ID: 10  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.039 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

QCV 0.58 %  
Max overheat 5.2 °C  
occured 26-apr 13:25:27

Notes 1:

Notes 2:



# Hourly

17-25-apr	0:05:08	576	7.2	6.2	-1.0	41	16.71
17-25-apr	1:05:08	576	5.8	5.4	-0.4	42	16.71
17-25-apr	2:05:08	576	4.7	4.6	-0.1	43	16.70
17-25-apr	3:05:08	575	2.6	2.8	0.2	43	16.71
17-25-apr	4:05:08	575	3.3	2.6	-0.7	42	16.71
17-25-apr	5:05:08	575	1.7	1.1	-0.6	42	16.70
17-25-apr	6:05:08	576	2.5	1.6	-0.9	42	16.71
17-25-apr	7:05:08	576	4.9	5.3	0.4	44	16.70
17-25-apr	8:05:08	577	5.6	6.9	1.3	44	16.71
17-25-apr	9:05:08	577	6.8	8.2	1.5	45	16.74
17-25-apr	10:05:08	577	7.1	9.5	2.4	45	16.71
17-25-apr	11:05:08	578	5.8	7.8	2.0	45	16.71
17-25-apr	12:05:08	577	6.3	7.7	1.4	45	16.73
17-25-apr	13:05:08	578	7.0	8.3	1.4	45	16.73
17-25-apr	14:05:08	579	6.4	8.9	2.5	46	16.71
17-25-apr	15:05:08	579	6.7	8.8	2.1	46	16.71
17-25-apr	16:05:08	579	6.7	8.7	2.0	46	16.71
17-25-apr	17:05:08	579	6.8	9.0	2.1	46	16.70
17-25-apr	18:05:08	579	5.5	7.2	1.7	45	16.70
17-25-apr	19:05:08	580	3.6	3.4	-0.2	44	16.71
17-25-apr	20:05:08	580	1.5	1.0	-0.6	44	16.70
17-25-apr	21:05:08	581	0.9	-0.1	-1.0	44	16.70
17-25-apr	22:05:08	581	-1.3	-1.9	-0.6	43	16.72
17-25-apr	23:05:08	580	1.8	-0.1	-1.9	44	16.70

# BGI PQ200 Air Sampling System Downloaded 2017 02 may 11:20:34

## Job Details:

Job Name: 17May02A.JOB  
Version: 5.62  
Serial No: 962  
Pump Time: 9097:55  
Flags:

Job Code:  
Site Name: 962A  
Station Code:  
Operators: KN  
User1:  
User2:

	Max	Min	Avg	Units
BP	584	582	583	mmHg
TA	19.3	-1	9.9	°C
Q	---	---	16.7	Lpm

QCV 0.56 %  
Max overheat 4.7 °C  
occured 01-may 15:41:59

## Timer Information:

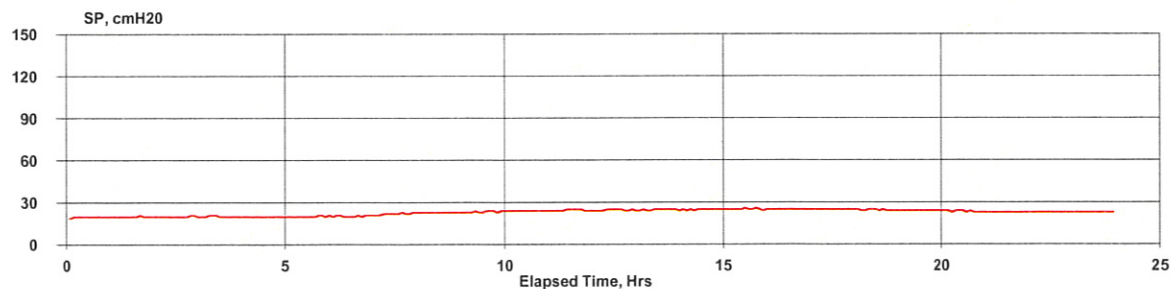
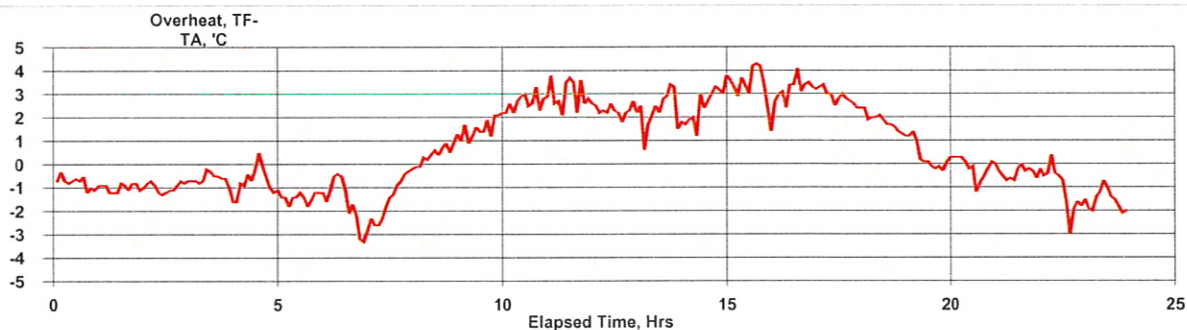
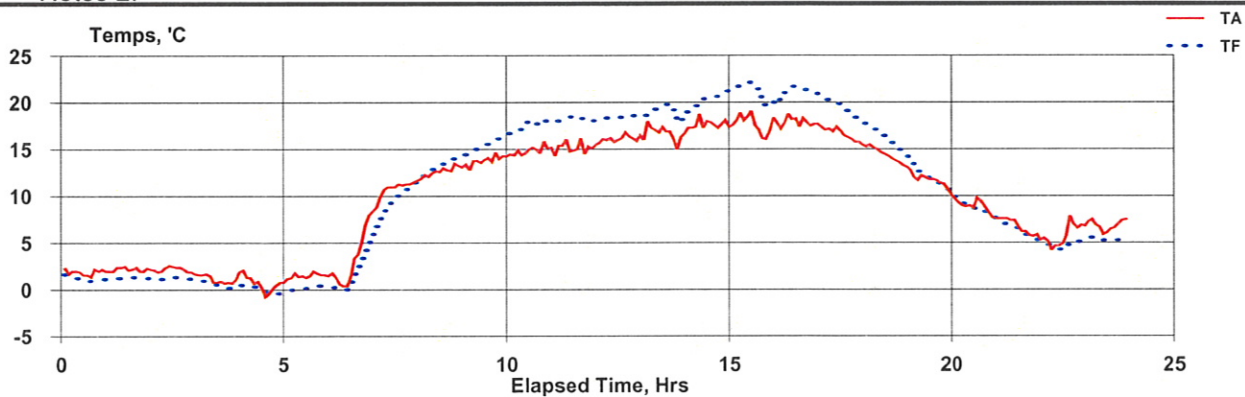
Date Time  
dd-mmm hh:mm:ss  
Start: 17-01-may 0:00:08  
Stop: 17-02-may 0:00:05  
ET: 23:59

## Mass Concentration Data:

Filter ID: 19  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.037 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

Notes 1:

Notes 2:



# Hourly

17-01-may	0:05:08	584	1.9	1.1	-0.8	20	16.72
17-01-may	1:05:08	584	2.2	1.2	-1.0	20	16.71
17-01-may	2:05:08	584	2.2	1.2	-1.0	20	16.71
17-01-may	3:05:08	584	1.2	0.5	-0.7	20	16.71
17-01-may	4:05:08	584	0.6	0.0	-0.7	20	16.72
17-01-may	5:05:08	584	1.5	0.1	-1.4	20	16.71
17-01-may	6:05:08	584	3.5	1.8	-1.7	21	16.72
17-01-may	7:05:08	584	10.9	9.5	-1.4	22	16.71
17-01-may	8:05:08	584	12.7	13.2	0.5	23	16.71
17-01-may	9:05:08	584	13.9	15.4	1.6	24	16.72
17-01-may	10:05:08	584	14.9	17.6	2.7	24	16.73
17-01-may	11:05:08	584	15.2	18.2	3.0	24	16.71
17-01-may	12:05:08	584	16.2	18.4	2.3	25	16.71
17-01-may	13:05:08	583	16.7	19.0	2.3	25	16.71
17-01-may	14:05:08	583	17.7	20.3	2.6	25	16.71
17-01-may	15:05:08	583	17.7	21.1	3.3	25	16.71
17-01-may	16:05:08	583	17.9	21.1	3.2	25	16.72
17-01-may	17:05:08	583	16.6	19.4	2.8	25	16.72
17-01-may	18:05:08	583	14.4	16.1	1.8	24	16.72
17-01-may	19:05:08	583	11.6	11.9	0.3	24	16.71
17-01-may	20:05:08	584	8.9	8.7	-0.2	24	16.70
17-01-may	21:05:08	584	6.6	6.2	-0.4	23	16.71
17-01-may	22:05:08	584	5.9	4.7	-1.1	23	16.70
17-01-may	23:05:08	584	6.9	5.3	-1.5	23	16.70



# BGI PQ200 Air Sampling System

Downloaded 2017 08 may 13:00:13

## Job Details:

Job Name: 17May08A.JOB  
Version: 5.62  
Serial No: 962  
Pump Time: 9121:54  
Flags:

Job Code:

Site Name:  
Station Code:  
Operators:  
User1:  
User2:

	Max	Min	Avg	Units
BP	582	577	579	mmHg
TA	16.6	-0.2	8.3	°C
Q	---	---	16.7	Lpm

QCV 0.55 %  
Max overheat 3.4 °C  
occured 07-may 12:00:22

## Timer Information:

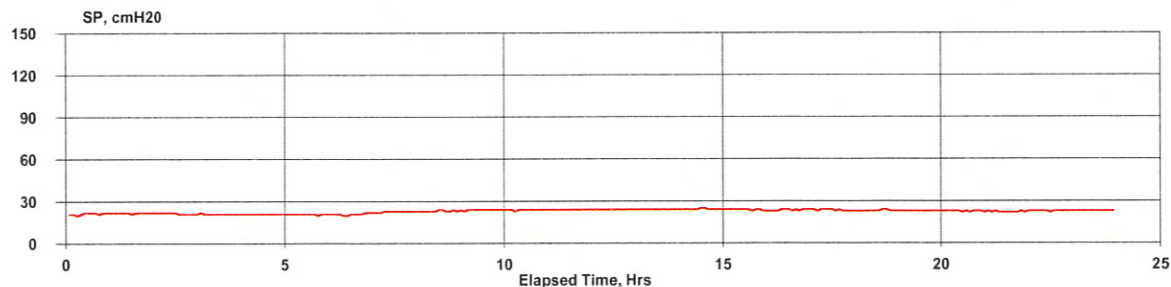
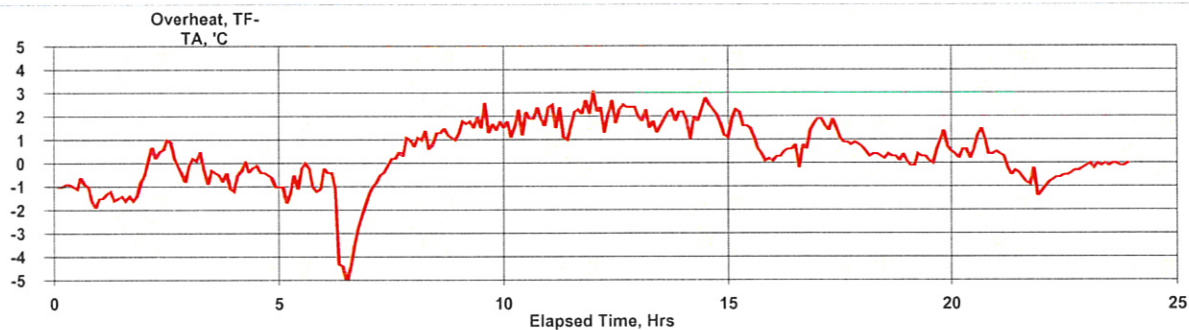
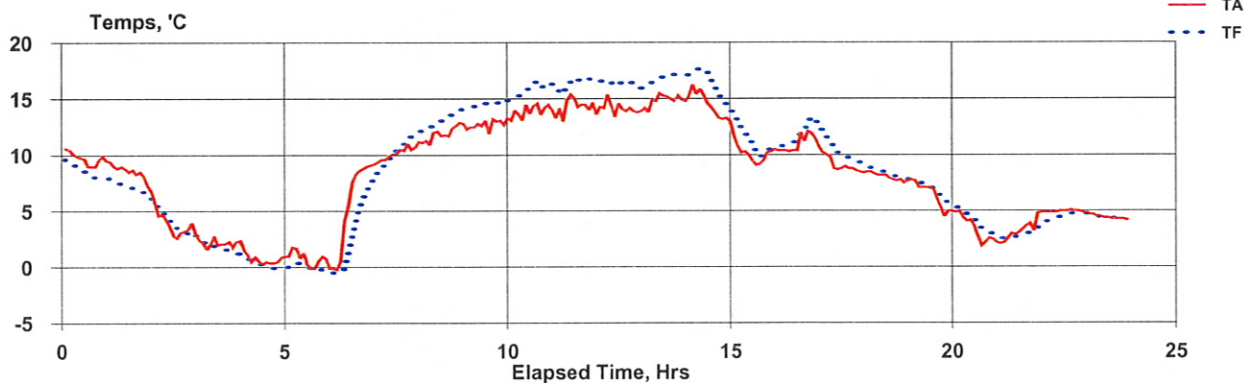
	Date	Time
	dd-mmm	hh:mm:ss
Start:	17-07-may	0:00:08
Stop:	17-08-may	0:00:05
ET:	23:59	

## Mass Concentration Data:

Filter ID:	28
Final Wt:	mg
Initial Wt:	mg
Delta Wt:	0.000 mg
Total Vol:	24.033 m <sup>3</sup>
Mass Conc:	0 µg/m <sup>3</sup>

Notes 1:

Notes 2:



Hourly

17-07-may	0:05:08	578	9.7	8.6	-1.1	22	16.69
17-07-may	1:05:08	579	8.4	7.1	-1.3	22	16.71
17-07-may	2:05:08	579	3.7	4.0	0.2	22	16.71
17-07-may	3:05:08	579	2.2	1.8	-0.4	21	16.71
17-07-may	4:05:08	579	0.7	0.3	-0.4	21	16.71
17-07-may	5:05:08	579	0.7	-0.1	-0.8	21	16.70
17-07-may	6:05:08	579	5.9	3.2	-2.7	21	16.71
17-07-may	7:05:08	579	10.3	10.4	0.1	23	16.71
17-07-may	8:05:08	579	11.9	13.1	1.1	23	16.70
17-07-may	9:05:08	579	12.8	14.5	1.7	24	16.70
17-07-may	10:05:08	579	13.9	15.8	1.9	24	16.71
17-07-may	11:05:08	579	14.3	16.3	2.1	24	16.69
17-07-may	12:05:08	579	14.2	16.4	2.2	24	16.70
17-07-may	13:05:08	579	14.9	16.8	1.9	24	16.70
17-07-may	14:05:08	578	14.5	16.4	1.9	24	16.71
17-07-may	15:05:08	579	10.1	11.2	1.1	24	16.71
17-07-may	16:05:08	579	11.0	11.7	0.8	24	16.72
17-07-may	17:05:08	580	9.0	10.2	1.2	24	16.71
17-07-may	18:05:08	579	8.0	8.3	0.3	23	16.70
17-07-may	19:05:08	580	6.4	6.8	0.4	23	16.71
17-07-may	20:05:08	580	3.4	4.0	0.6	23	16.71
17-07-may	21:05:08	580	3.3	2.8	-0.5	22	16.70
17-07-may	22:05:08	582	5.0	4.5	-0.5	23	16.70
17-07-may	23:05:08	582	4.4	4.4	-0.1	23	16.71



# BGI PQ200 Air Sampling System

Downloaded 2017 16 may 13:25:03

## Job Details:

Job Name: 17May16A.JOB  
Version: 5.62  
Serial No: 962  
Pump Time: 9145:53  
Flags:

Job Code:  
Site Name:  
Station Code:  
Operators:  
User1:  
User2:

	Max	Min	Avg	Units
BP	581	578	579	mmHg
TA	17.6	1.9	11.4	°C
Q	---	---	16.7	Lpm

QCV 0.75 %

Max overheat 5.5 °C  
occured 13-may 19:41:50

## Timer Information:

Date	Time
dd-mmm	hh:mm:ss
Start: 17-13-may	0:00:08
Stop: 17-14-may	0:00:05

ET: 23:59

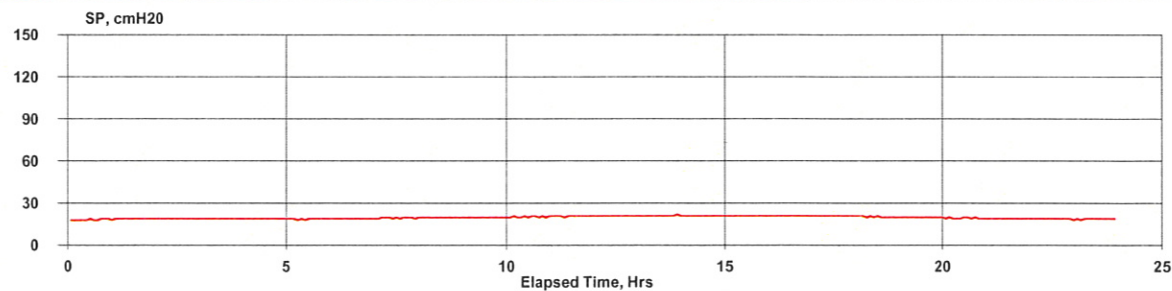
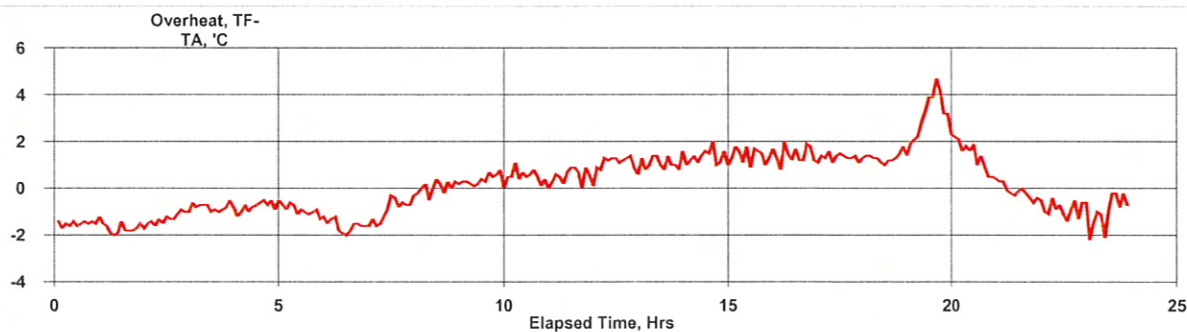
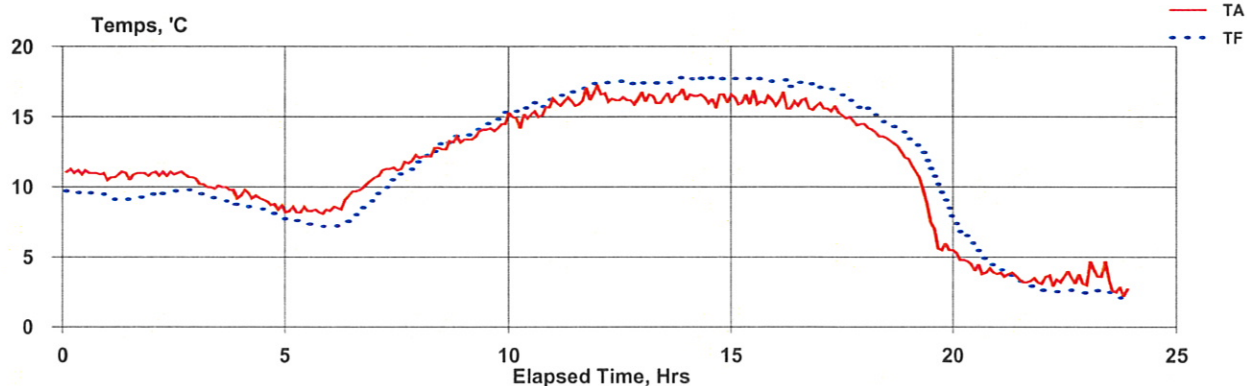
## Mass Concentration Data:

Filter ID:	33
Final Wt:	mg
Initial Wt:	mg
Delta Wt:	0.000 mg
Total Vol:	24.024 m <sup>3</sup>

Mass Conc: 0 µg/m<sup>3</sup>

Notes 1:

Notes 2:



# Hourly

17-13-may	0:05:08	581	11.0	9.5	-1.5	18	16.70
17-13-may	1:05:08	580	10.9	9.2	-1.7	19	16.71
17-13-may	2:05:08	580	10.9	9.6	-1.3	19	16.72
17-13-may	3:05:08	579	9.9	9.1	-0.8	19	16.72
17-13-may	4:05:08	579	9.0	8.3	-0.8	19	16.71
17-13-may	5:05:08	579	8.3	7.4	-1.0	19	16.69
17-13-may	6:05:08	579	9.6	7.9	-1.6	19	16.71
17-13-may	7:05:08	579	11.5	10.7	-0.9	20	16.71
17-13-may	8:05:08	579	12.9	12.9	0.1	20	16.72
17-13-may	9:05:08	580	14.1	14.5	0.4	20	16.72
17-13-may	10:05:08	580	15.2	15.7	0.5	21	16.70
17-13-may	11:05:08	580	16.3	16.8	0.5	21	16.70
17-13-may	12:05:08	580	16.3	17.4	1.1	21	16.71
17-13-may	13:05:08	580	16.4	17.5	1.1	21	16.74
17-13-may	14:05:08	580	16.4	17.7	1.3	21	16.71
17-13-may	15:05:08	580	16.2	17.6	1.4	21	16.73
17-13-may	16:05:08	579	16.0	17.4	1.4	21	16.69
17-13-may	17:05:08	579	15.1	16.4	1.3	21	16.71
17-13-may	18:05:08	579	13.2	14.6	1.3	20	16.71
17-13-may	19:05:08	580	7.9	11.0	3.1	20	16.71
17-13-may	20:05:08	580	4.4	5.7	1.3	19	16.71
17-13-may	21:05:08	580	3.5	3.3	-0.2	19	16.70
17-13-may	22:05:08	580	3.4	2.5	-0.9	19	16.71
17-13-may	23:05:08	580	3.4	2.4	-1.0	19	16.71

# BGI PQ200 Air Sampling System Downloaded 2017 22 may 12:31:56

## Job Details:

Job Name: 17May22A.JOB  
Version: 5.62  
Serial No: 962  
Pump Time: 9169:52  
Flags:

## Job Code:

Site Name: 962A  
Station Code:  
Operators: KN  
User1:  
User2:

	Max	Min	Avg	Units
BP	585	581	583	mmHg
TA	13.9	-1.8	5.2	°C
Q	---	---	16.71	Lpm

## Timer Information:

Date Time  
dd-mmm hh:mm:ss  
Start: 17-19-may 0:00:08  
Stop: 17-20-may 0:00:05  
ET: 23:59

## Mass Concentration Data:

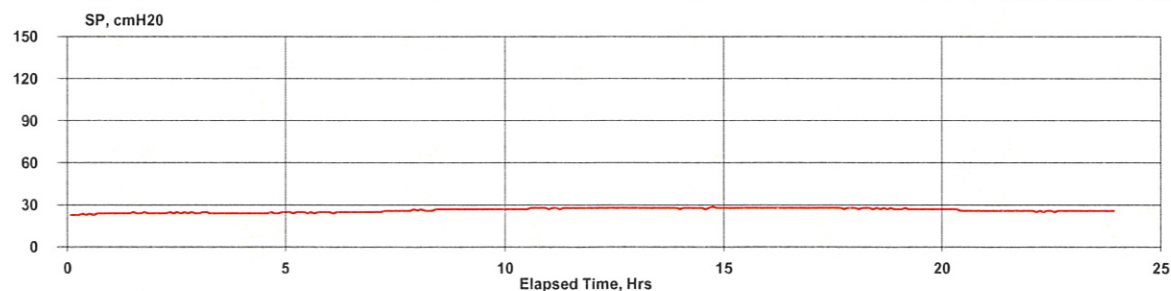
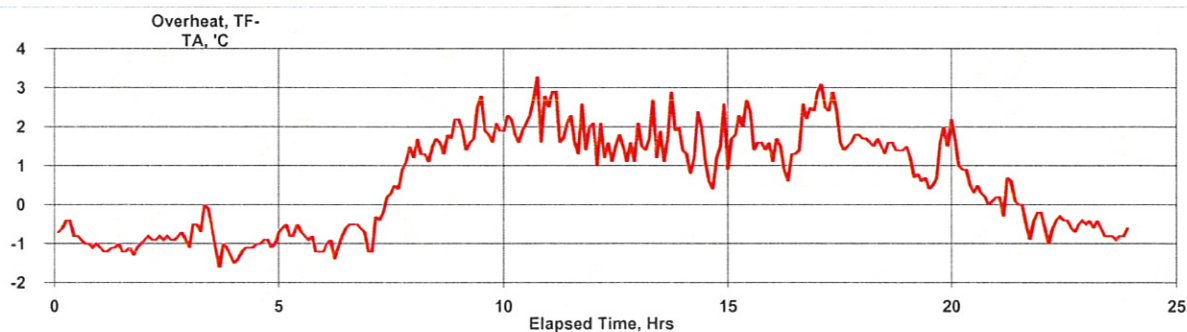
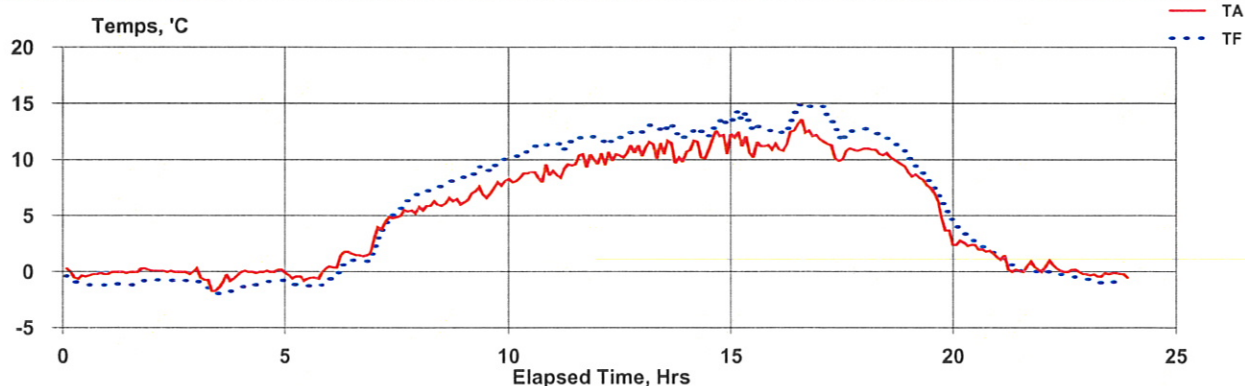
Filter ID: 38  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.036 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

QCV 0.57 %

Max overheat 6.6 °C  
occured 21-may 19:48:04

Notes 1:

Notes 2:



Hourly

17-19-may	0:05:08	582	-0.2	-1.0	-0.8	24	16.70
17-19-may	1:05:08	582	0.1	-1.1	-1.1	24	16.70
17-19-may	2:05:08	582	0.0	-0.8	-0.9	24	16.72
17-19-may	3:05:08	582	-0.8	-1.6	-0.8	24	16.71
17-19-may	4:05:08	582	0.0	-1.0	-1.0	24	16.71
17-19-may	5:05:08	583	-0.3	-1.2	-0.8	25	16.71
17-19-may	6:05:08	583	1.5	0.7	-0.8	25	16.70
17-19-may	7:05:08	583	4.9	5.3	0.3	26	16.71
17-19-may	8:05:08	583	6.1	7.7	1.6	27	16.71
17-19-may	9:05:08	584	7.4	9.3	1.9	27	16.72
17-19-may	10:05:08	584	8.6	10.9	2.3	27	16.72
17-19-may	11:05:08	584	9.6	11.6	2.0	28	16.72
17-19-may	12:05:08	583	10.5	12.0	1.5	28	16.72
17-19-may	13:05:08	583	10.8	12.6	1.8	28	16.72
17-19-may	14:05:08	583	11.4	12.7	1.3	28	16.75
17-19-may	15:05:08	583	11.4	13.2	1.8	28	16.72
17-19-may	16:05:08	583	12.2	14.0	1.8	28	16.72
17-19-may	17:05:08	584	10.8	12.9	2.1	28	16.73
17-19-may	18:05:08	584	10.2	11.7	1.5	28	16.71
17-19-may	19:05:08	584	6.4	7.5	1.1	27	16.72
17-19-may	20:05:08	585	2.1	2.7	0.6	26	16.71
17-19-may	21:05:08	585	0.4	0.4	-0.1	26	16.72
17-19-may	22:05:08	585	0.2	-0.3	-0.5	26	16.72
17-19-may	23:05:08	585	-0.2	-0.9	-0.7	26	16.72

# BGI PQ200 Air Sampling System

Downloaded 2017 26 may 08:35:34

## Job Details:

Job Name: 17May26A.JOB  
Version: 5.62  
Serial No: 962  
Pump Time: 9193:51  
Flags:

Job Code:  
Site Name: 962A  
Station Code:  
Operators: KN  
User1:  
User2:

	Max	Min	Avg	Units
BP	580	577	577	mmHg
TA	22.3	3.9	14.3	°C
Q	---	---	16.7	Lpm

QCV 0.5 %  
Max overheat 5.1 °C  
occured 26-may 02:43:58

## Timer Information:

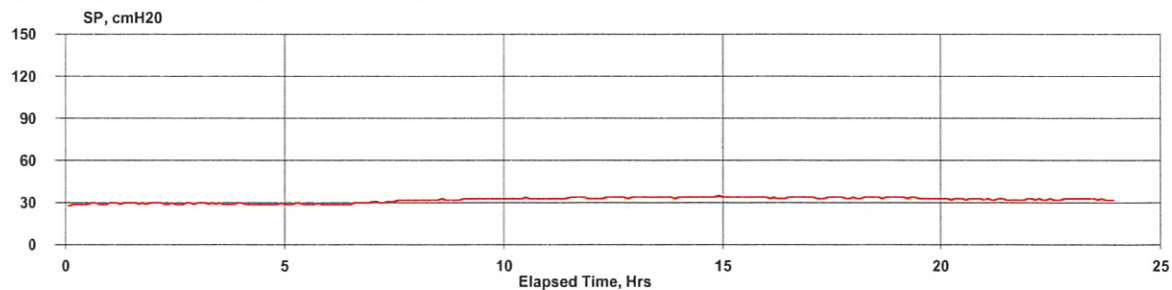
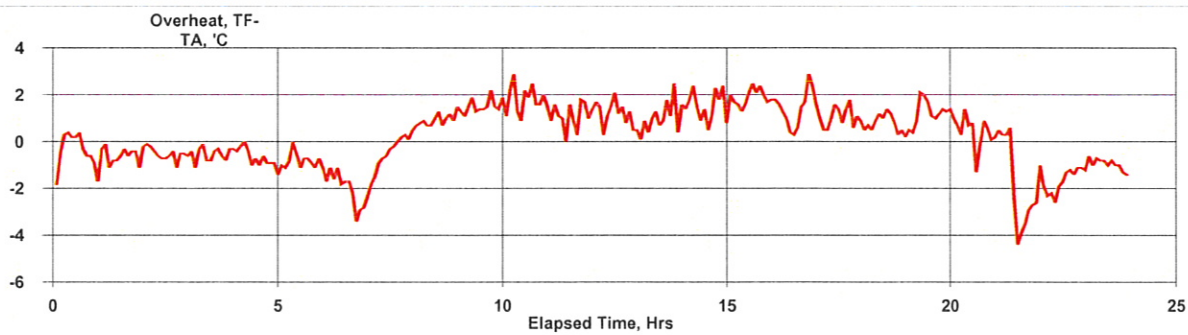
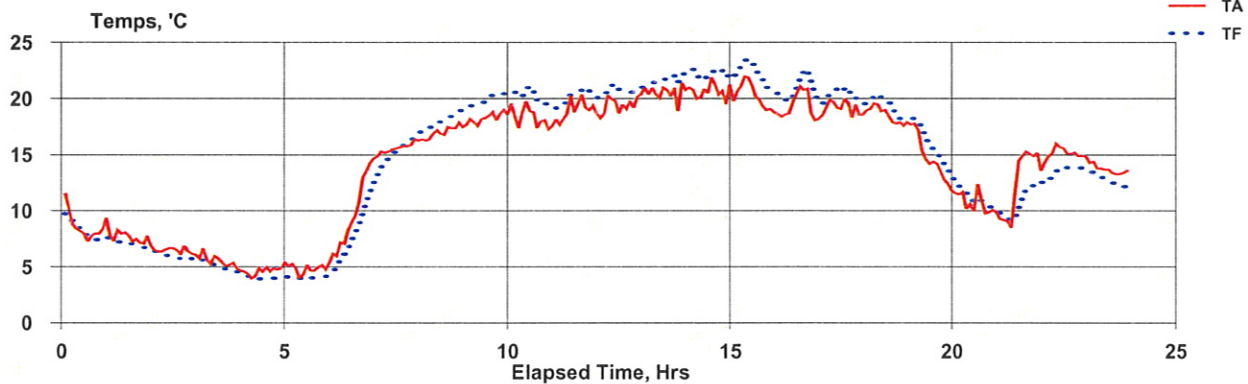
Date	Time
dd-mmm	hh:mm:ss
Start: 17-25-may	0:00:08
Stop: 17-26-may	0:00:05
ET: 23:59	

## Mass Concentration Data:

Filter ID:	5
Final Wt:	mg
Initial Wt:	mg
Delta Wt:	0.000 mg
Total Vol:	24.03 m <sup>3</sup>
Mass Conc:	0 µg/m <sup>3</sup>

Notes 1:

Notes 2:





Hourly

17-25-may	0:05:08	578	8.7	8.3	-0.4	29	16.71
17-25-may	1:05:08	578	7.6	7.0	-0.6	30	16.71
17-25-may	2:05:08	577	6.5	5.9	-0.5	30	16.72
17-25-may	3:05:08	577	5.5	5.0	-0.5	30	16.72
17-25-may	4:05:08	577	4.7	4.0	-0.7	29	16.72
17-25-may	5:05:08	577	4.9	4.1	-0.8	29	16.72
17-25-may	6:05:08	577	10.0	8.0	-2.0	30	16.71
17-25-may	7:05:08	577	15.6	15.2	-0.4	31	16.72
17-25-may	8:05:08	578	17.1	18.0	1.0	32	16.71
17-25-may	9:05:08	578	18.3	19.8	1.5	33	16.71
17-25-may	10:05:08	578	18.3	20.2	1.8	33	16.71
17-25-may	11:05:08	578	19.0	20.1	1.1	33	16.71
17-25-may	12:05:08	578	19.5	20.7	1.2	34	16.70
17-25-may	13:05:08	578	20.6	21.6	1.1	34	16.70
17-25-may	14:05:08	578	20.7	22.2	1.5	34	16.72
17-25-may	15:05:08	577	20.3	22.2	1.9	34	16.70
17-25-may	16:05:08	577	19.4	20.8	1.4	34	16.72
17-25-may	17:05:08	577	19.2	20.2	1.1	34	16.72
17-25-may	18:05:08	577	18.6	19.3	0.8	34	16.72
17-25-may	19:05:08	578	14.7	15.9	1.3	33	16.71
17-25-may	20:05:08	578	10.7	11.2	0.4	33	16.72
17-25-may	21:05:08	579	12.6	10.8	-1.8	32	16.72
17-25-may	22:05:08	579	15.2	13.5	-1.7	33	16.70
17-25-may	23:05:08	579	13.7	12.8	-0.9	33	16.72

# BGI PQ200 Air Sampling System Downloaded 2017 01 jun 09:14:03

## Job Details:

Job Name: 17Jun01A.JOB  
Version: 5.62  
Serial No: 962  
Pump Time: 9204:54  
Flags: Q T

Job Code:  
Site Name: 962A  
Station Code:  
Operators: KN  
User1:  
User2:

	Max	Min	Avg	Units
BP	585	583	584	mmHg
TA	22.2	5.6	12.2	°C
Q	---	---	16.7	Lpm

QCV 0.28 %  
Max overheat 4 °C  
occured 31-may 14:39:58

## Timer Information:

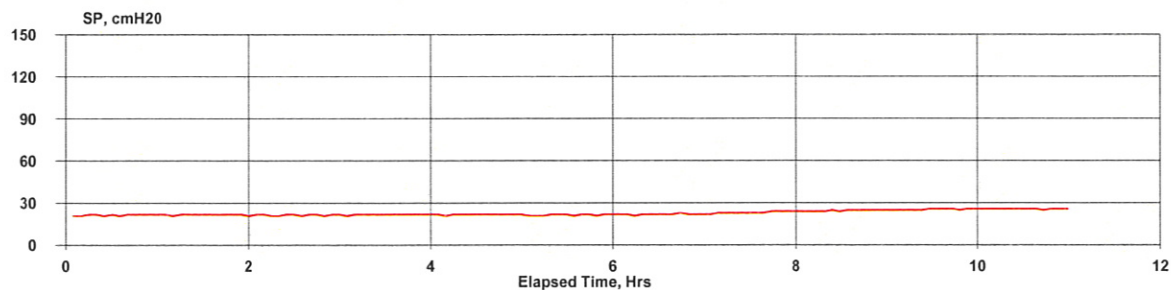
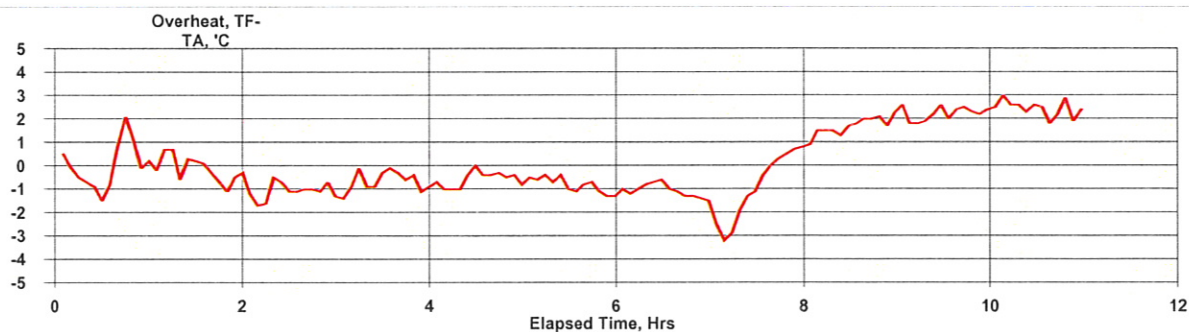
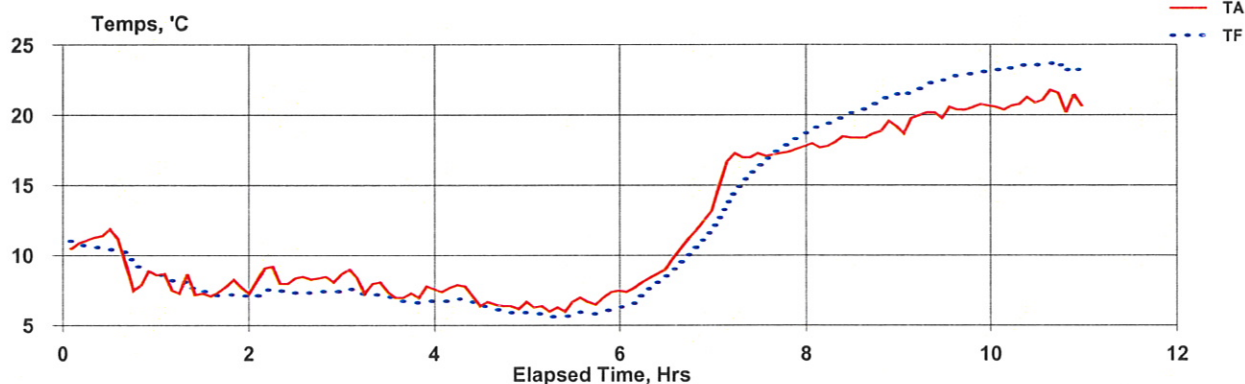
Date Time  
dd-mmm hh:mm:ss  
Start: 17-31-may 0:00:08  
Stop: 17-01-jun 0:00:05  
ET: 11:03

## Mass Concentration Data:

Filter ID: 10  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 11.078 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

Notes 1:

Notes 2:





# Hourly

17-31-may	0:05:08	584	10.1	10.1	0.0	22	16.70
17-31-may	1:05:08	584	7.7	7.6	-0.1	22	16.71
17-31-may	2:05:08	584	8.5	7.4	-1.1	22	16.71
17-31-may	3:05:08	584	7.7	7.0	-0.7	22	16.71
17-31-may	4:05:08	584	6.9	6.4	-0.6	22	16.71
17-31-may	5:05:08	584	6.7	5.8	-0.8	22	16.71
17-31-may	6:05:08	584	9.9	8.8	-1.1	22	16.70
17-31-may	7:05:08	584	17.1	16.1	-0.9	23	16.70
17-31-may	8:05:08	585	18.5	20.2	1.7	25	16.71
17-31-may	9:05:08	585	20.2	22.4	2.2	26	16.72
17-31-may	10:05:08	584	21.0	23.4	2.4	26	16.71

# BGI PQ200 Air Sampling System Downloaded 2017 07 jun 09:27:29

## Job Details:

Job Name: 17Jun07A.JOB  
Version: 5.62  
Serial No: 962  
Pump Time: 9204:57  
Flags: Q F T

Job Code:  
Site Name:  
Station Code:  
Operators:  
User1:  
User2:

	Max	Min	Avg	Units
BP	586	584	584	mmHg
TA	12.4	11.5	12.4	°C
Q	---	---	0	Lpm

QCV 0 %  
Max overheat 6.8 °C  
occured 06-jun 19:49:27

## Timer Information:

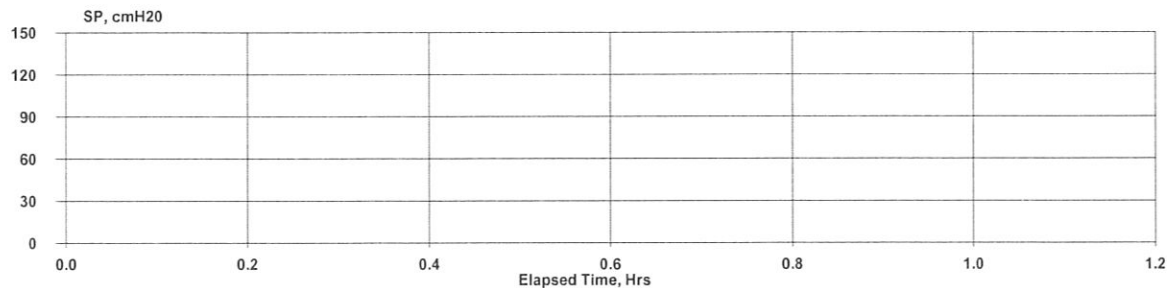
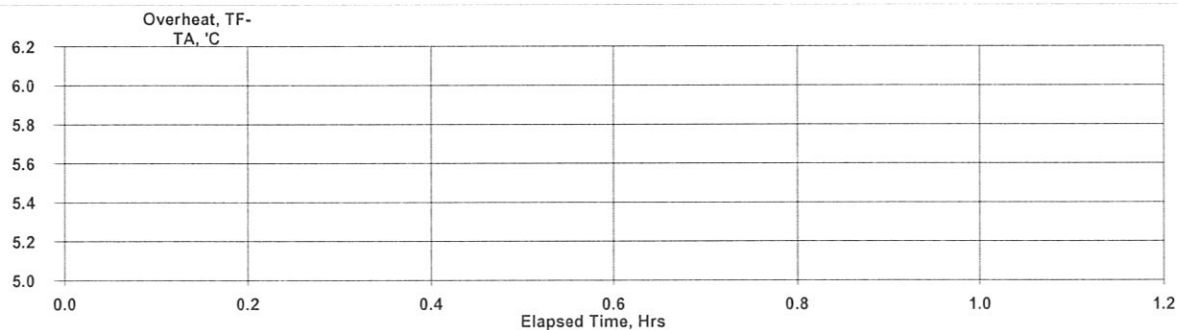
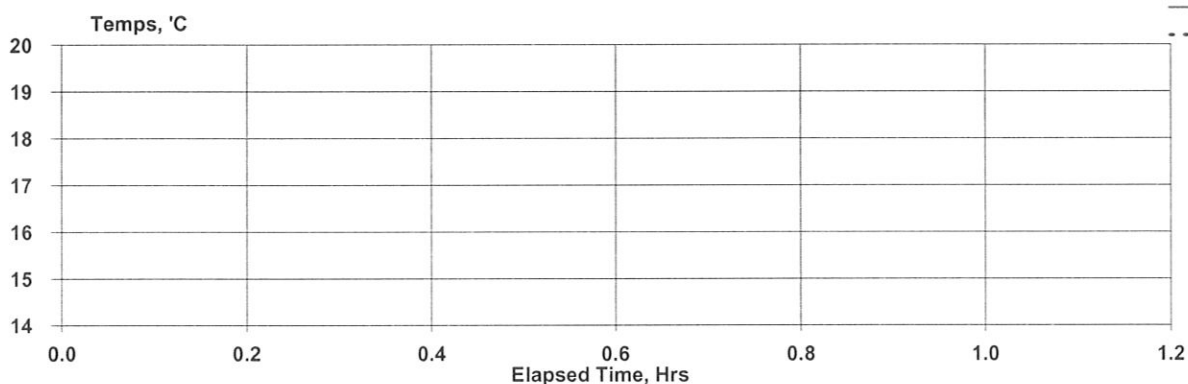
Date Time  
dd-mmm hh:mm:ss  
Start: 17-06-jun 0:00:08  
Stop: 17-07-jun 0:00:05  
ET: 0:03

## Mass Concentration Data:

Filter ID: 15  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 0.011 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

Notes 1:

Notes 2:



Hourly

17-06-jun	20:15:08	586	14.2	19.3	5.1		0.00
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# BGI PQ200 Air Sampling System

Downloaded 2017 13 jun 09:39:42

## Job Details:

Job Name: 17Jun13A.JOB  
Version: 5.62  
Serial No: 962  
Pump Time: 9205:00  
Flags: Q T

Job Code:  
Site Name:  
Station Code:  
Operators:  
User1:  
User2:

	Max	Min	Avg	Units
BP	580	578	579	mmHg
TA	13.9	13	13.8	°C
Q	---	---	0	Lpm

QCV 0 %  
Max overheat 4.9 °C  
occured 12-jun 20:26:06

## Timer Information:

	Date	Time
	dd-mmm	hh:mm:ss
Start:	17-12-jun	0:00:08
Stop:	17-13-jun	0:00:05
ET:	0:03	

## Mass Concentration Data:

Filter ID:	22	
Final Wt:		mg
Initial Wt:		mg
Delta Wt:	0.000	mg
Total Vol:	0.012	m^3
Mass Conc:	0	µg/m3

Notes 1:

Notes 2:

Hourly

yy-dd-mmm	hh:mm:ss	mmHg	°C	°C	°C	cmH2O	aLpm

# BGI PQ200 Air Sampling System Downloaded 2017 21 jun 12:42:28

## Job Details:

Job Name: 17Jun21A.JOB  
Version: 5.62  
Serial No: 962  
Pump Time: 9205:03  
Flags: Q F T

Job Code:  
Site Name:  
Station Code:  
Operators:  
User1:  
User2:

	Max	Min	Avg	Units
BP	586	584	584	mmHg
TA	15.2	14.6	15.2	°C
Q	---	---	0	Lpm

QCV 0 %  
Max overheat 8.6 °C  
occured 20-jun 19:38:24

## Timer Information:

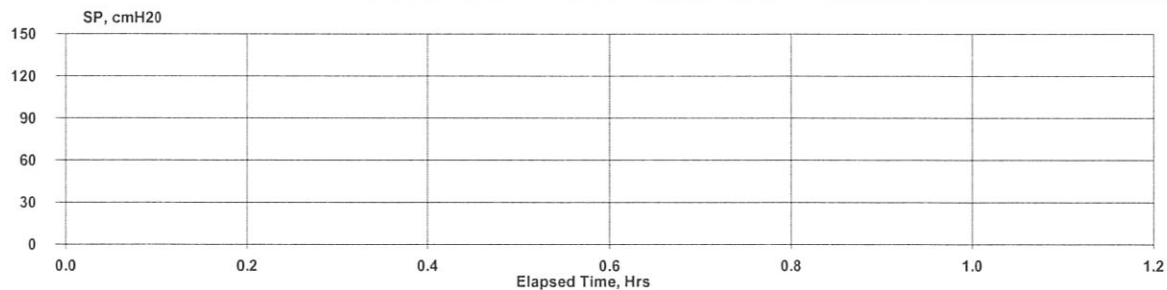
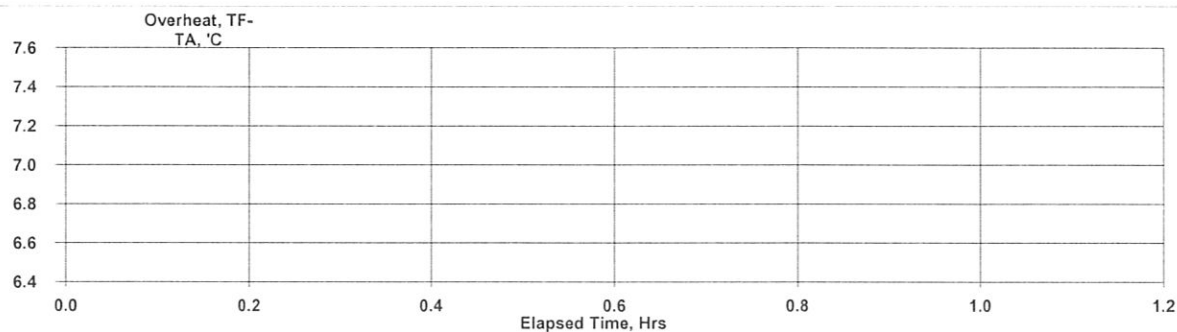
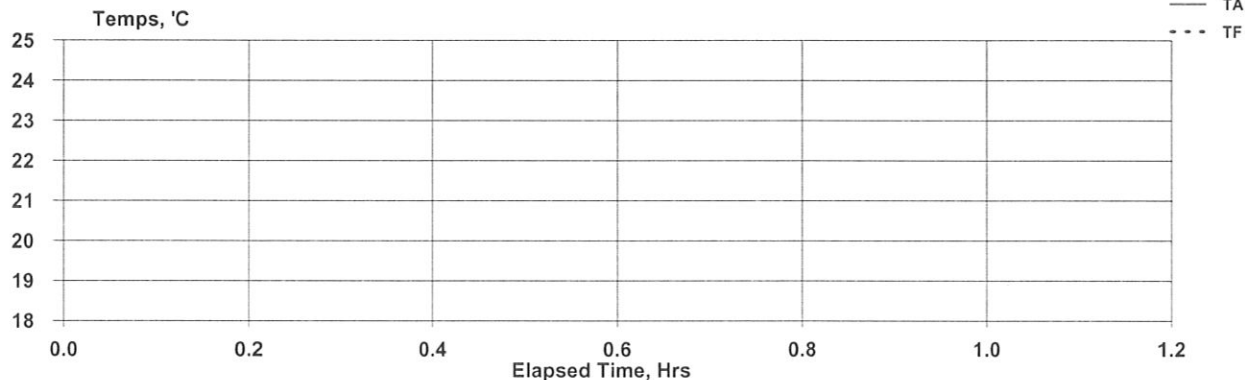
Date Time  
dd-mmm hh:mm:ss  
Start: 17-18-jun 0:00:08  
Stop: 17-19-jun 0:00:05  
ET: 0:03

## Mass Concentration Data:

Filter ID: 4  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 0.012 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

Notes 1:

Notes 2:



Hourly

17-20-jun	19:55:09	586	18.3	24.8	6.5		0.00
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## BGI PQ200 Air Sampling System

### Job Details:

Job Name: 17Jul05A.JOB  
Version:  
Serial No:  
Pump Time:  
Flags:

Job Code:  
Site Name:  
Station Code:  
Operators:  
User1:  
User2:

	Max	Min	Avg	Units
BP	0	0	0	mmHg
TA	0	0	0	°C
Q	---	---	0	Lpm

QCV 0 %

Max overheat 0 °C  
occured

### Timer Information:

Date Time  
dd-mmm hh:mm:ss

Start:   
Stop:

ET:

### Mass Concentration Data:

Filter ID:  31  
Final Wt:  mg  
Initial Wt:  mg  
Delta Wt:  0.000 mg  
Total Vol:  0 m<sup>3</sup>

Mass Conc:  µg/m<sup>3</sup>

Notes 1:

Notes 2:

Hourly

yy-dd-mmm	hh:mm:ss	mmHg	°C	°C	°C	cmH2O	aLpm

## **Compliance Monitor 963B**

**PM<sub>10</sub> Sampler Summary****April 1, 2017 - June 30, 2017****Network: Alton Coal Development****Site: Coal Hollow****Sampler ID: Coal Hollow-B****AQS ID:****Sampler Type: BGI FRM Single**

Date	Filter ID	Concentration (µg/m3) LTP	Concentration (µg/m3) STP	Sample Period (hr:min)	Sample Volume (m3)	Std Volume (m3)	Tare (mg)	Mass Gross (mg)	Net (mg)	Flag	Comments
04/01/17	P2938102	2.8	3.4	23:59	24.0	19.9	391.635	391.703	0.068		
04/07/17	P2938107	4.7	5.8	23:59	24.0	19.6	384.708	384.822	0.114		
04/13/17	P2938774	17.2	21.3	23:59	24.0	19.5	385.697	386.112	0.415		Lighter
04/19/17	P2938779	8.0	9.8	23:59	24.0	19.7	388.520	388.714	0.194	HT	Lighter
04/25/17	P2939179	21.5	26.2	23:59	24.0	19.7	392.171	392.688	0.517	HT	Much lighter
05/01/17	P2939184	22.4	27.5	23:59	24.0	19.6	377.577	378.116	0.539		
05/07/17	P2939725	12.2	15.0	24:00	24.0	19.5	387.489	387.783	0.294	HT	
05/13/17	P2939730	8.1	10.1	23:59	24.0	19.3	380.172	380.369	0.197		
05/19/17	P2939735	21.8	26.4	23:59	24.0	19.8	385.117	385.642	0.525	HT	
05/25/17	P2940167	21.4	27.0	23:59	24.0	19.0	385.980	386.495	0.515		Much lighter
05/31/17	P2940172	52.0	65.1	23:59	24.0	19.2	389.057	390.308	1.251		Lighter; discoloration
06/06/17	P2940665	122.1	153.6	23:59	24.0	19.1	393.726	396.662	2.936		Very dark; discoloration
06/12/17	P2940671	28.8	35.5	23:59	24.0	19.5	387.695	388.389	0.694		
06/18/17	P2941055	5.3	6.8	23:59	24.0	18.7	398.446	398.575	0.129		Much lighter
06/24/17	P2941060	47.0	60.0	23:59	24.0	18.8	376.162	377.292	1.130		
06/30/17	P2941064	28.7	36.3	23:59	24.0	19.0	378.674	379.365	0.691		
# Valid		Recovery	Average	St. Dev.	Max	Min					
16		100%	33.1	36.8	153.6	3.4					

Inter-Mountain Laboratories' (IML) data validation is limited by the provided information. Data have been validated based on laboratory QC, field observations and other information available to IML. Additional data validation based on information not provided to IML may be required. According to 40 CFR 58.15 final responsibilities for data review and validation lies with each agency submitting data to AQS.

# BGI PQ200 Air Sampling System Downloaded 2017 04 apr 07:57:28

## Job Details:

Job Name: 17Apr04B.JOB  
Version: 5.62  
Serial No: 963  
Pump Time: 4536:47  
Flags:

Job Code:

Site Name:

Station Code:

Operators:

User1: ++++++

User2:

	Max	Min	Avg	Units
BP	590	582	587	mmHg
TA	12.5	-0.1	4.6	°C
Q	---	---	16.7	Lpm

QCV 0.54 %

Max overheat 2.5 °C  
occured 01-apr 11:20:44

## Timer Information:

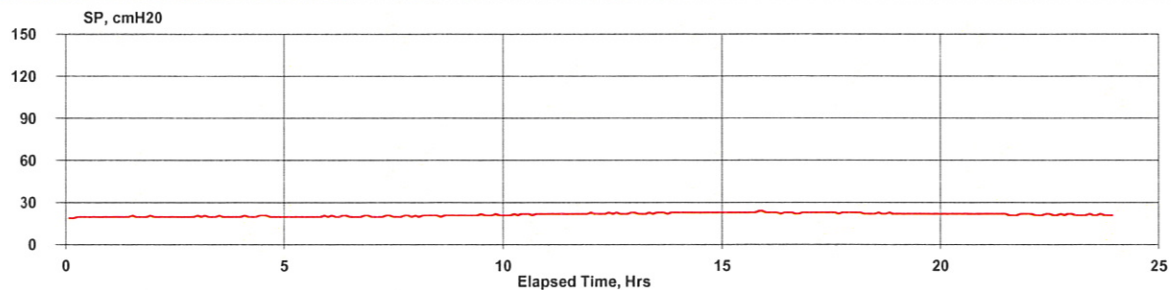
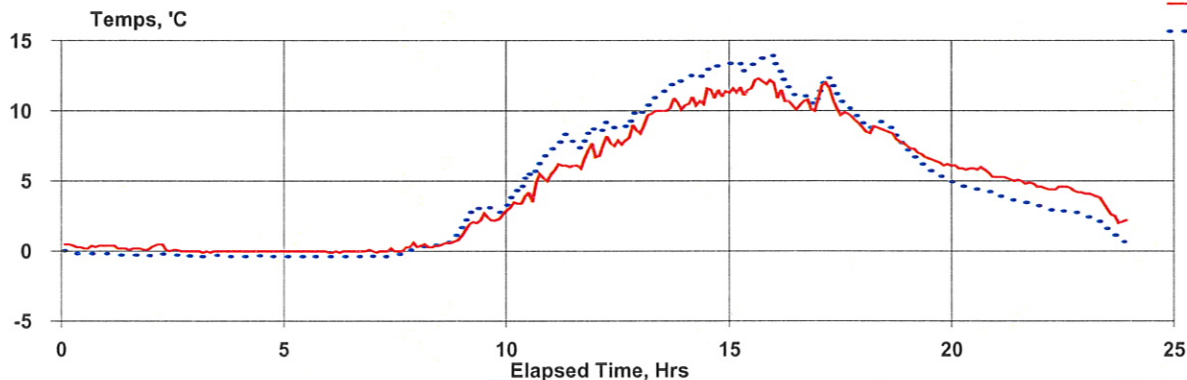
Date	Time
dd-mmm	hh:mm:ss
Start: 17-01-apr	0:00:08
Stop: 17-02-apr	0:00:05
ET: 23:59	

## Mass Concentration Data:

Filter ID:	28	
Final Wt:		mg
Initial Wt:		mg
Delta Wt:	0.000	mg
Total Vol:	24.041	m^3
Mass Conc:	0	µg/m3

Notes 1:

Notes 2:



Hourly

17-01-apr	0:05:08	585	0.4	-0.2	-0.5	20	16.71
17-01-apr	1:05:08	585	0.2	-0.3	-0.5	20	16.71
17-01-apr	2:05:08	585	0.1	-0.3	-0.5	20	16.71
17-01-apr	3:05:08	586	0.0	-0.4	-0.4	20	16.71
17-01-apr	4:05:08	586	0.0	-0.4	-0.4	20	16.71
17-01-apr	5:05:08	586	0.0	-0.4	-0.4	20	16.71
17-01-apr	6:05:08	587	0.0	-0.4	-0.4	20	16.71
17-01-apr	7:05:08	587	0.1	-0.2	-0.3	20	16.71
17-01-apr	8:05:08	588	0.6	0.6	0.0	21	16.71
17-01-apr	9:05:08	588	2.3	2.8	0.6	21	16.71
17-01-apr	10:05:08	589	4.3	5.4	1.1	22	16.70
17-01-apr	11:05:08	589	6.4	7.9	1.6	22	16.70
17-01-apr	12:05:08	589	7.9	9.0	1.1	22	16.70
17-01-apr	13:05:08	589	10.1	11.3	1.2	23	16.71
17-01-apr	14:05:08	588	11.0	12.8	1.8	23	16.71
17-01-apr	15:05:08	588	11.8	13.5	1.7	23	16.70
17-01-apr	16:05:08	588	10.6	11.4	0.8	23	16.71
17-01-apr	17:05:08	589	10.2	10.8	0.6	23	16.70
17-01-apr	18:05:08	589	8.3	8.6	0.2	22	16.70
17-01-apr	19:05:08	589	6.6	5.9	-0.8	22	16.71
17-01-apr	20:05:08	589	5.8	4.4	-1.3	22	16.71
17-01-apr	21:05:08	590	5.0	3.6	-1.4	22	16.70
17-01-apr	22:05:08	590	4.4	2.8	-1.6	22	16.71
17-01-apr	23:05:08	590	3.1	1.6	-1.5	21	16.71

# BGI PQ200 Air Sampling System Downloaded 2017 10 apr 13:23:12

## Job Details:

Job Name: 17Apr10B.JOB  
Version: 5.62  
Serial No: 963  
Pump Time: 4560:46  
Flags:

Job Code:

Site Name:

Station Code:

Operators:

User1: ++++++

User2:

	Max	Min	Avg	Units
BP	591	587	589	mmHg
TA	16.5	3.2	9.9	°C
Q	---	---	16.7	Lpm

QCV 0.51 %

Max overheat 2.3 °C  
occured 09-apr 19:25:04

## Timer Information:

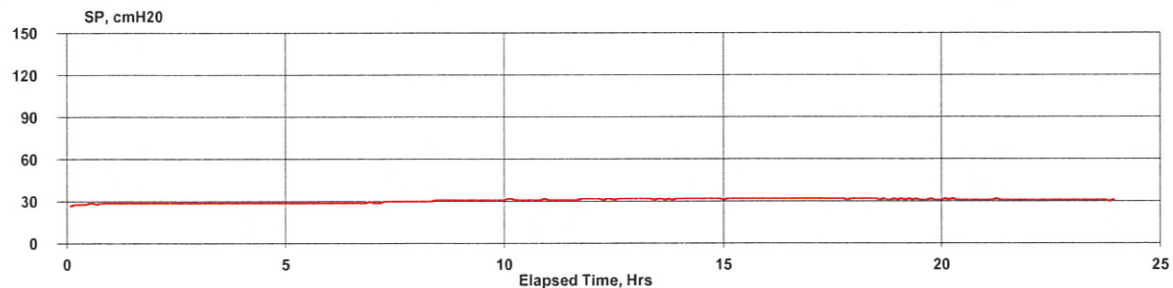
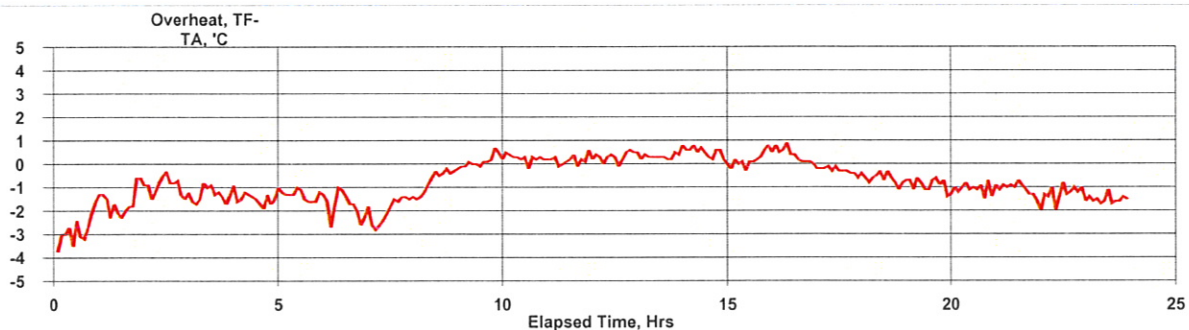
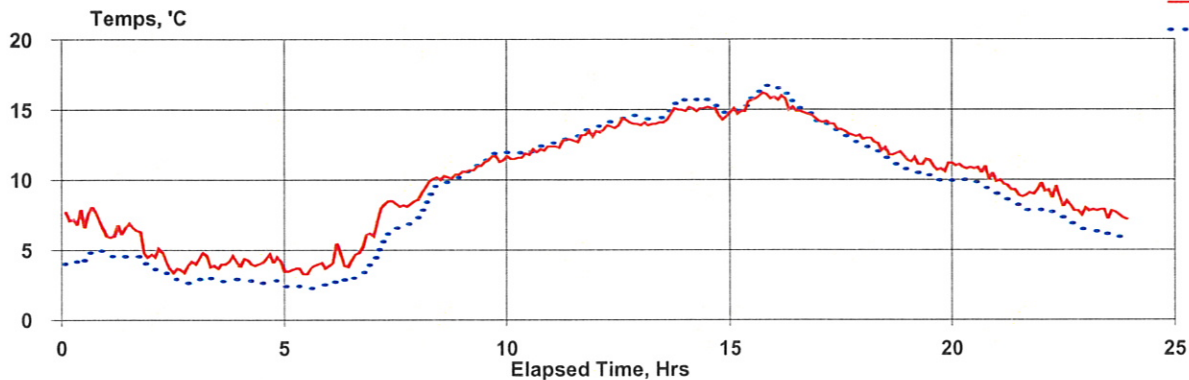
Date Time  
dd-mmm hh:mm:ss  
Start: 17-07-apr 0:00:08  
Stop: 17-08-apr 0:00:05  
ET: 23:59

## Mass Concentration Data:

Filter ID: 32  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.038 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

Notes 1:

Notes 2:



Hourly

17-07-apr	0:05:08	590	7.2	4.5	-2.7	28	16.71
17-07-apr	1:05:08	590	6.0	4.4	-1.6	29	16.71
17-07-apr	2:05:08	590	4.0	3.1	-1.0	29	16.71
17-07-apr	3:05:08	590	4.2	2.9	-1.3	29	16.71
17-07-apr	4:05:08	590	4.2	2.7	-1.5	29	16.72
17-07-apr	5:05:08	590	3.7	2.4	-1.3	29	16.72
17-07-apr	6:05:08	590	5.0	3.1	-1.8	29	16.71
17-07-apr	7:05:08	590	8.2	6.3	-1.9	30	16.71
17-07-apr	8:05:08	590	10.1	9.4	-0.7	31	16.71
17-07-apr	9:05:08	591	11.2	11.3	0.1	31	16.70
17-07-apr	10:05:08	591	11.9	12.2	0.3	31	16.70
17-07-apr	11:05:08	590	12.9	13.1	0.2	31	16.71
17-07-apr	12:05:08	590	13.9	14.2	0.3	32	16.70
17-07-apr	13:05:08	590	14.4	14.8	0.3	32	16.71
17-07-apr	14:05:08	589	14.9	15.4	0.5	32	16.71
17-07-apr	15:05:08	589	15.6	15.8	0.2	32	16.72
17-07-apr	16:05:08	588	15.0	15.3	0.3	32	16.70
17-07-apr	17:05:08	588	13.6	13.3	-0.3	32	16.70
17-07-apr	18:05:08	588	12.2	11.5	-0.7	32	16.71
17-07-apr	19:05:08	588	11.1	10.2	-0.9	31	16.70
17-07-apr	20:05:08	588	10.7	9.6	-1.1	31	16.71
17-07-apr	21:05:08	588	9.3	8.2	-1.2	31	16.71
17-07-apr	22:05:08	588	8.5	7.2	-1.3	31	16.71
17-07-apr	23:05:08	588	7.6	6.1	-1.5	31	16.72



# BGI PQ200 Air Sampling System Downloaded 2017 14 apr 10:18:38

## Job Details:

Job Name: 17Apr14B.JOB  
Version: 5.62  
Serial No: 963  
Pump Time: 4584:45  
Flags:

Job Code:

Site Name:

Station Code:

Operators:

User1: ++++++

User2:

	Max	Min	Avg	Units
BP	590	585	587	mmHg
TA	19.6	1.7	11	°C
Q	---	---	16.7	Lpm

## Timer Information:

Date Time  
dd-mmm hh:mm:ss  
Start: 17-13-apr 0:00:08  
Stop: 17-14-apr 0:00:04  
ET: 23:59

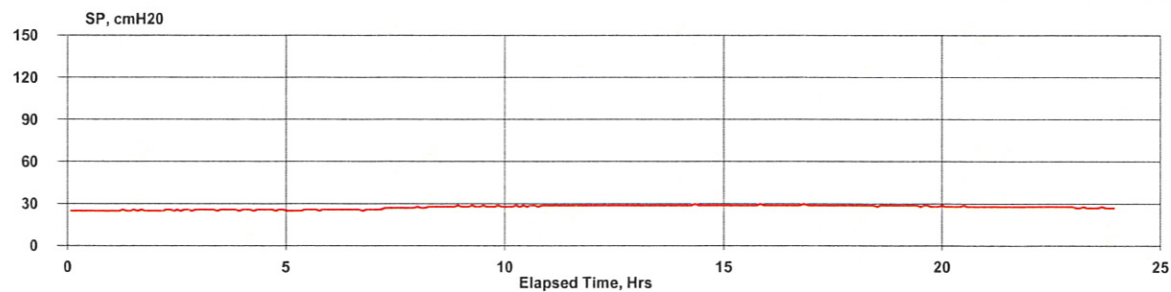
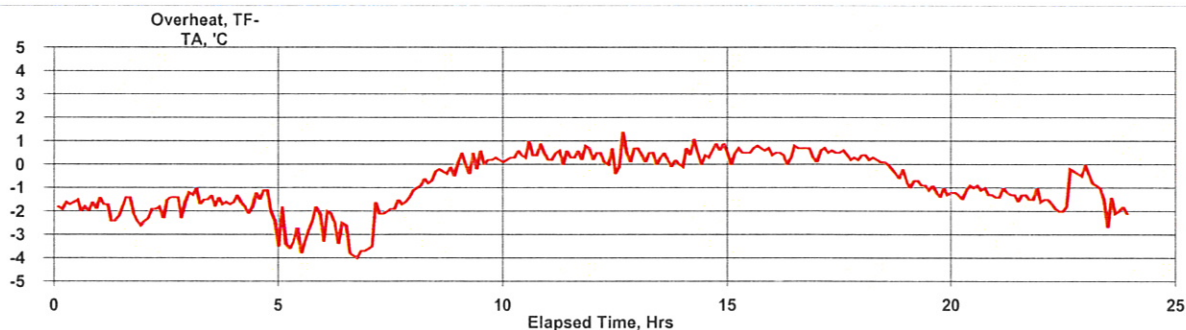
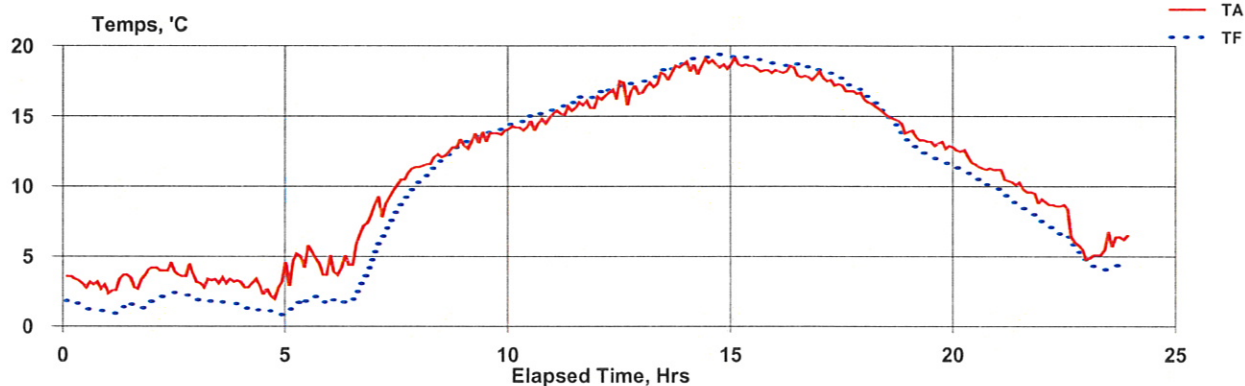
## Mass Concentration Data:

Filter ID: 6  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.035 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

QCV 0.47 %  
Max overheat 1.7 °C  
occured 13-apr 14:21:27

Notes 1:

Notes 2:



Hourly

17-13-apr	0:05:08	590	3.1	1.4	-1.7	25	16.72
17-13-apr	1:05:08	590	3.4	1.3	-2.0	25	16.71
17-13-apr	2:05:08	590	3.9	2.2	-1.8	26	16.70
17-13-apr	3:05:08	589	3.2	1.7	-1.5	26	16.71
17-13-apr	4:05:08	589	2.9	1.1	-1.8	26	16.71
17-13-apr	5:05:08	589	4.6	1.7	-2.9	26	16.72
17-13-apr	6:05:08	589	5.8	2.6	-3.2	26	16.72
17-13-apr	7:05:08	589	10.1	8.2	-1.9	27	16.71
17-13-apr	8:05:08	589	12.3	11.8	-0.5	28	16.71
17-13-apr	9:05:08	589	13.6	13.8	0.2	28	16.72
17-13-apr	10:05:08	589	14.5	14.9	0.5	29	16.72
17-13-apr	11:05:08	588	15.7	16.1	0.4	29	16.71
17-13-apr	12:05:08	588	16.7	17.1	0.4	29	16.70
17-13-apr	13:05:08	587	18.0	18.2	0.2	29	16.70
17-13-apr	14:05:08	586	18.6	19.2	0.6	29	16.71
17-13-apr	15:05:08	586	18.5	19.1	0.6	29	16.71
17-13-apr	16:05:08	586	18.1	18.5	0.5	29	16.71
17-13-apr	17:05:08	586	17.0	17.5	0.5	29	16.71
17-13-apr	18:05:08	586	15.0	14.9	-0.1	29	16.71
17-13-apr	19:05:08	586	13.2	12.2	-1.0	29	16.71
17-13-apr	20:05:08	586	11.7	10.6	-1.2	28	16.71
17-13-apr	21:05:08	586	9.9	8.6	-1.3	28	16.72
17-13-apr	22:05:08	587	7.4	6.3	-1.2	28	16.71
17-13-apr	23:05:08	586	5.8	4.3	-1.5	27	16.71

# BGI PQ200 Air Sampling System Downloaded 2017 20 apr 10:49:31

## Job Details:

Job Name: 17Apr20B.JOB  
Version: 5.62  
Serial No: 963  
Pump Time: 4608:44  
Flags:

Job Code:

Site Name:

Station Code:

Operators:

User1: ++++++

User2:

	Max	Min	Avg	Units
BP	592	588	590	mmHg
TA	18.5	0.7	9.5	°C
Q	---	---	16.7	Lpm

## Timer Information:

Date Time  
dd-mmm hh:mm:ss  
Start: 17-19-apr 0:00:08  
Stop: 17-20-apr 0:00:05  
ET: 23:59

## Mass Concentration Data:

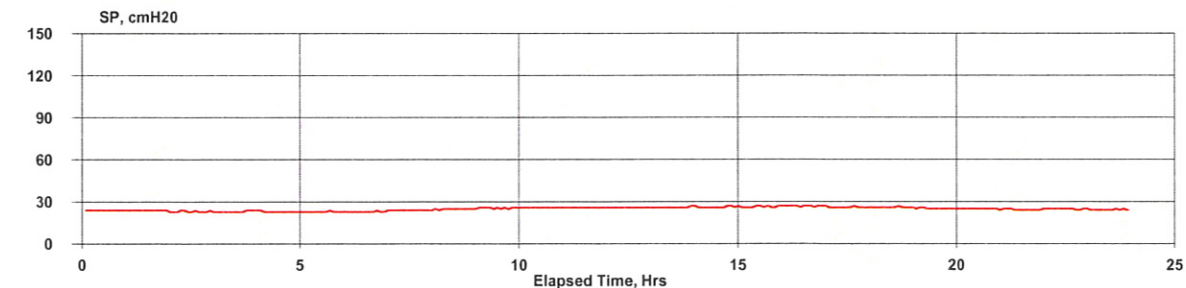
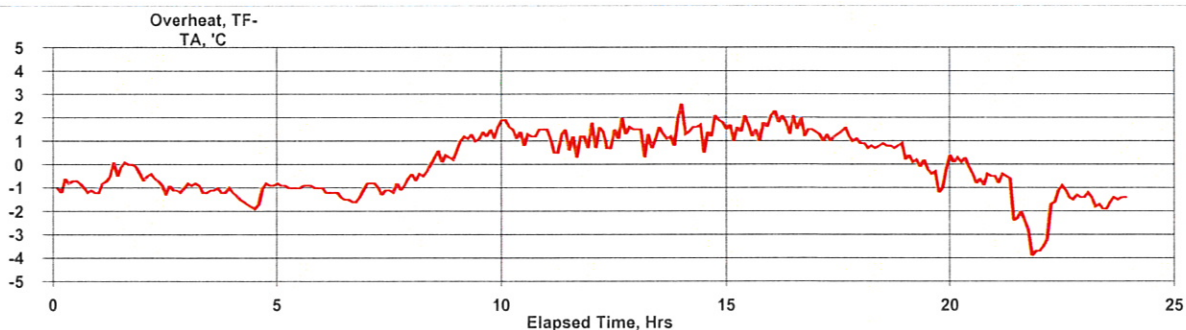
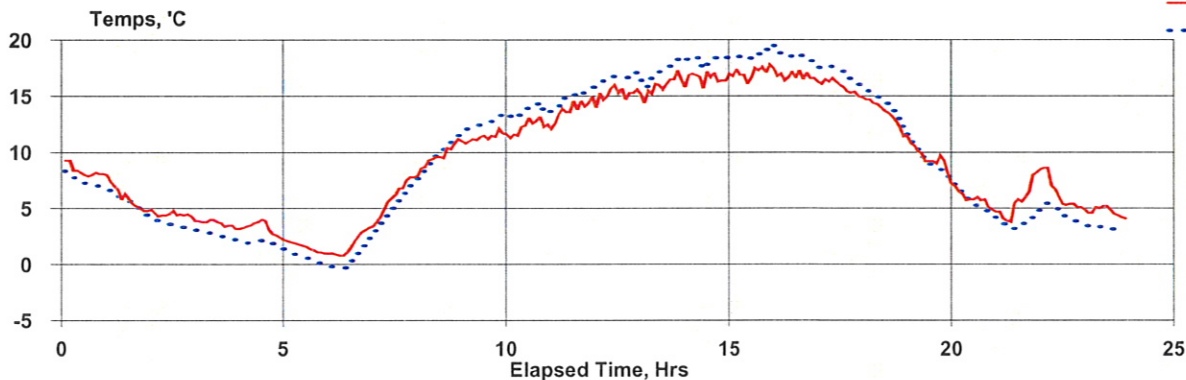
Filter ID: 15  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.04 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

QCV 0.54 %

Max overheat 2.9 °C  
occured 19-apr 16:01:22

Notes 1:

Notes 2:



Hourly

17-19-apr	0:05:08	590	8.3	7.4	-1.0	24	16.71
17-19-apr	1:05:08	590	5.8	5.5	-0.3	24	16.71
17-19-apr	2:05:08	590	4.4	3.5	-0.9	23	16.71
17-19-apr	3:05:08	590	3.7	2.6	-1.1	23	16.71
17-19-apr	4:05:08	590	3.2	1.9	-1.3	23	16.71
17-19-apr	5:05:08	590	1.5	0.5	-1.0	23	16.71
17-19-apr	6:05:08	591	2.0	0.7	-1.3	23	16.71
17-19-apr	7:05:08	591	6.3	5.3	-0.9	24	16.71
17-19-apr	8:05:08	591	9.9	9.9	0.1	25	16.70
17-19-apr	9:05:08	591	11.4	12.7	1.3	26	16.71
17-19-apr	10:05:08	591	12.3	13.7	1.4	26	16.70
17-19-apr	11:05:08	592	14.0	15.0	1.0	26	16.70
17-19-apr	12:05:08	592	15.3	16.6	1.3	26	16.71
17-19-apr	13:05:08	591	16.0	17.3	1.3	26	16.70
17-19-apr	14:05:08	591	16.7	18.2	1.5	26	16.70
17-19-apr	15:05:08	591	17.1	18.7	1.6	26	16.71
17-19-apr	16:05:08	591	16.8	18.5	1.7	27	16.71
17-19-apr	17:05:08	591	15.8	17.0	1.2	26	16.71
17-19-apr	18:05:08	591	13.4	14.1	0.8	26	16.71
17-19-apr	19:05:08	591	9.4	9.2	-0.2	25	16.71
17-19-apr	20:05:08	591	5.8	5.5	-0.3	25	16.71
17-19-apr	21:05:08	592	5.9	3.8	-2.1	24	16.71
17-19-apr	22:05:08	592	6.1	4.5	-1.7	25	16.71
17-19-apr	23:05:08	592	4.7	3.1	-1.6	24	16.71



# BGI PQ200 Air Sampling System Downloaded 2017 26 apr 14:04:28

## Job Details:

Job Name: 17Apr26B.JOB  
Version: 5.62  
Serial No: 963  
Pump Time: 4632:43  
Flags:

Job Code:

Site Name:

Station Code:

Operators:

User1: |||||

User2:

	Max	Min	Avg	Units
BP	588	580	583	mmHg
TA	10.2	0.4	5.7	°C
Q	---	---	16.7	Lpm

QCV 0.55 %  
Max overheat 3.5 °C  
occured 25-apr 11:41:21

## Timer Information:

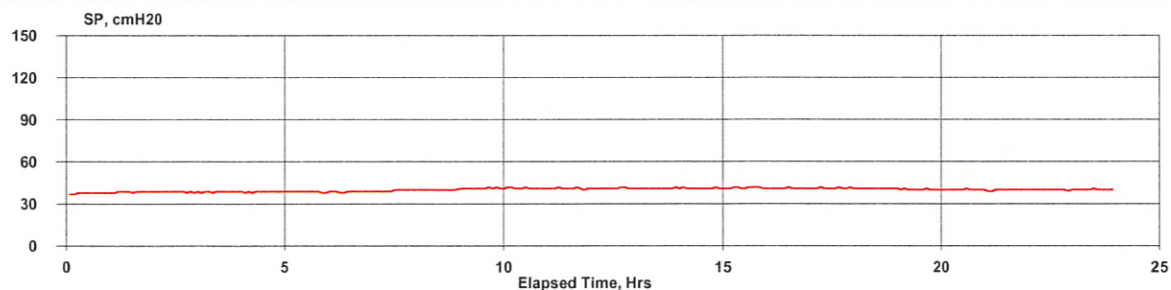
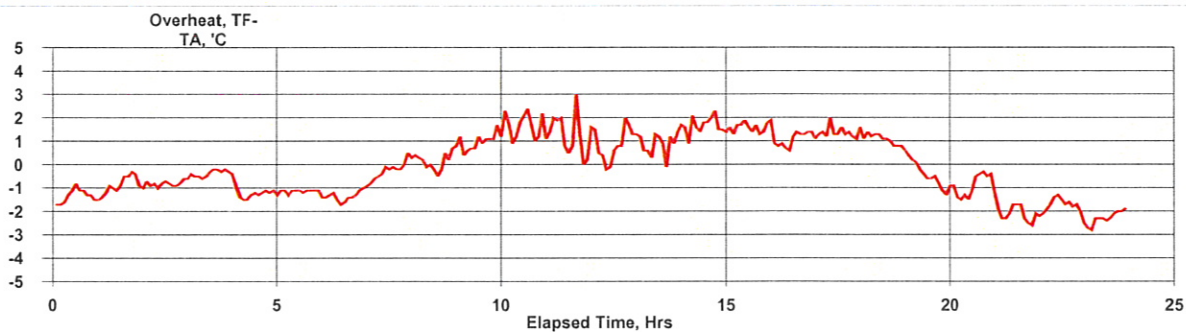
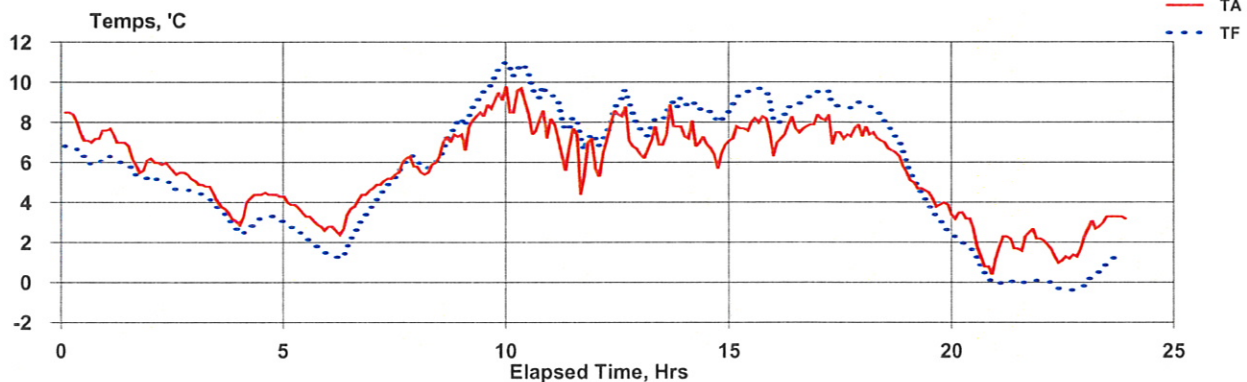
Date Time  
dd-mmm hh:mm:ss  
Start: 17-25-apr 0:00:08  
Stop: 17-26-apr 0:00:05  
ET: 23:59

## Mass Concentration Data:

Filter ID: 11  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.041 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

Notes 1:

Notes 2:



Hourly

17-25-apr	0:05:08	582	7.6	6.3	-1.3	38	16.70
17-25-apr	1:05:08	582	6.5	5.7	-0.8	39	16.71
17-25-apr	2:05:08	582	5.6	4.8	-0.8	39	16.71
17-25-apr	3:05:08	582	4.0	3.7	-0.4	39	16.71
17-25-apr	4:05:08	582	4.3	3.0	-1.3	39	16.71
17-25-apr	5:05:08	582	3.3	2.2	-1.2	39	16.70
17-25-apr	6:05:08	582	3.6	2.3	-1.3	39	16.71
17-25-apr	7:05:08	583	5.5	5.3	-0.2	40	16.70
17-25-apr	8:05:08	583	6.5	6.7	0.2	40	16.71
17-25-apr	9:05:08	583	8.6	9.6	1.0	41	16.70
17-25-apr	10:05:08	583	8.4	10.1	1.6	41	16.70
17-25-apr	11:05:08	584	6.6	7.8	1.3	41	16.71
17-25-apr	12:05:08	584	7.3	8.2	0.9	41	16.70
17-25-apr	13:05:08	584	7.4	8.3	0.9	41	16.72
17-25-apr	14:05:08	585	6.9	8.5	1.7	41	16.70
17-25-apr	15:05:08	585	7.7	9.3	1.6	42	16.71
17-25-apr	16:05:08	585	7.7	8.8	1.1	41	16.71
17-25-apr	17:05:08	585	7.6	9.0	1.4	41	16.71
17-25-apr	18:05:08	585	6.8	7.8	1.0	41	16.71
17-25-apr	19:05:08	586	4.3	3.8	-0.5	40	16.71
17-25-apr	20:05:08	587	2.1	1.2	-0.9	40	16.72
17-25-apr	21:05:08	587	2.1	0.0	-2.1	40	16.71
17-25-apr	22:05:08	587	1.5	-0.2	-1.8	40	16.71
17-25-apr	23:05:08	587	3.1	0.8	-2.3	40	16.72

# BGI PQ200 Air Sampling System Downloaded 2017 02 may 12:03:34

## Job Details:

Job Name: 17May02B.JOB  
Version: 5.62  
Serial No: 963  
Pump Time: 4656:42  
Flags:

Job Code:  
Site Name: 963B  
Station Code:  
Operators: KN  
User1: |||||  
User2:

	Max	Min	Avg	Units
BP	591	588	589	mmHg
TA	20.7	-0.7	10.4	°C
Q	---	---	16.7	Lpm

## Timer Information:

Date Time  
dd-mmm hh:mm:ss  
Start: 17-01-may 0:00:08  
Stop: 17-02-may 0:00:04  
ET: 23:59

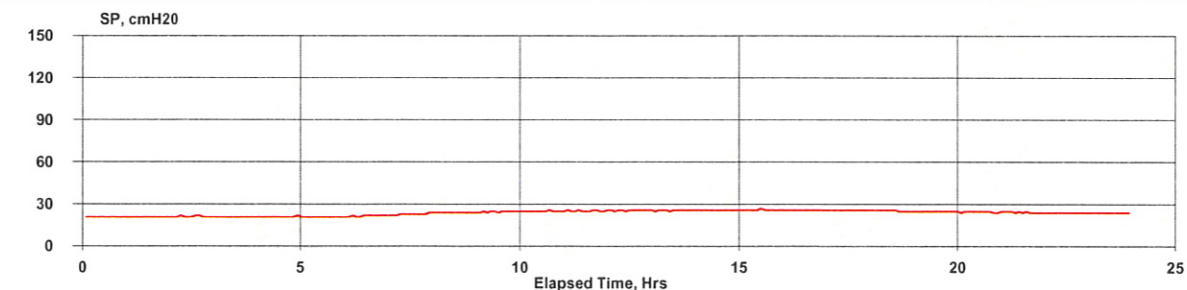
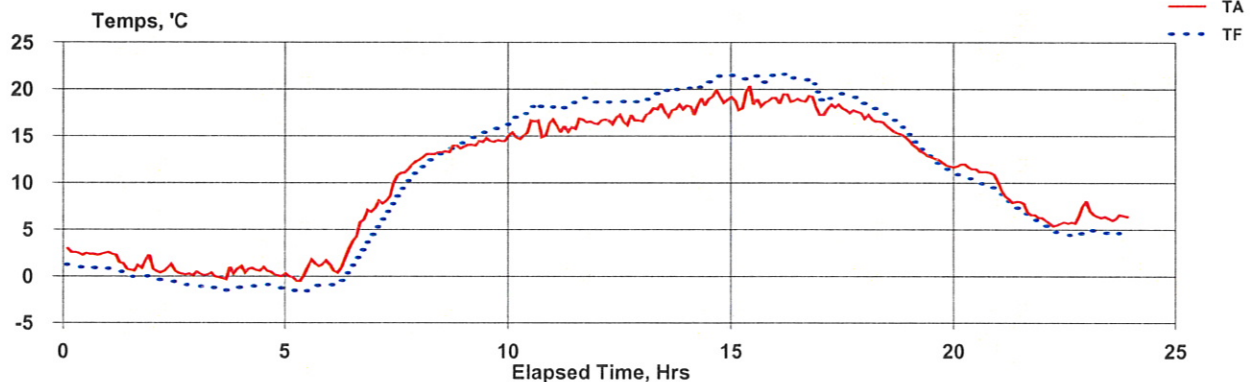
## Mass Concentration Data:

Filter ID: 20  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.041 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

QCV 0.56 %  
Max overheat 3.8 °C  
occured 01-may 10:44:29

Notes 1:

Notes 2:





Hourly

17-01-may	0:05:08	590	2.5	0.9	-1.6	21	16.71
17-01-may	1:05:08	590	1.4	0.2	-1.2	21	16.71
17-01-may	2:05:08	590	0.5	-0.7	-1.2	21	16.71
17-01-may	3:05:08	590	0.3	-1.3	-1.6	21	16.71
17-01-may	4:05:08	590	0.5	-1.1	-1.6	21	16.71
17-01-may	5:05:08	590	0.7	-1.3	-2.0	21	16.70
17-01-may	6:05:08	590	4.0	1.5	-2.6	22	16.72
17-01-may	7:05:08	590	10.3	8.5	-1.8	23	16.70
17-01-may	8:05:08	590	13.4	13.1	-0.3	24	16.71
17-01-may	9:05:08	590	14.5	15.4	0.9	25	16.70
17-01-may	10:05:08	590	15.7	17.6	1.9	25	16.72
17-01-may	11:05:08	590	16.2	18.6	2.4	25	16.70
17-01-may	12:05:08	590	16.7	18.6	1.9	26	16.72
17-01-may	13:05:08	590	17.9	19.7	1.8	26	16.72
17-01-may	14:05:08	589	18.8	20.8	2.0	26	16.70
17-01-may	15:05:08	589	18.8	21.2	2.4	26	16.71
17-01-may	16:05:08	589	18.8	21.1	2.3	26	16.71
17-01-may	17:05:08	589	17.8	19.1	1.3	26	16.71
17-01-may	18:05:08	589	15.9	17.1	1.1	26	16.70
17-01-may	19:05:08	590	12.7	12.7	0.0	25	16.72
17-01-may	20:05:08	590	11.4	10.2	-1.2	25	16.71
17-01-may	21:05:08	590	7.5	7.1	-0.4	24	16.71
17-01-may	22:05:08	590	6.1	4.7	-1.4	24	16.70
17-01-may	23:05:08	590	6.4	4.7	-1.7	24	16.71

# BGI PQ200 Air Sampling System

Downloaded 2017 08 may 13:22:04

## Job Details:

Job Name: 17May08B.JOB  
Version: 5.62  
Serial No: 963  
Pump Time: 4680:42  
Flags:

## Job Code:

Site Name:  
Station Code:  
Operators:

User1: |||||

User2:

	Max	Min	Avg	Units
BP	588	582	585	mmHg
TA	17.6	1	9.4	°C
Q	---	---	16.7	Lpm

QCV 0.54 %  
Max overheat 2.4 °C  
occured 07-may 12:00:16

## Timer Information:

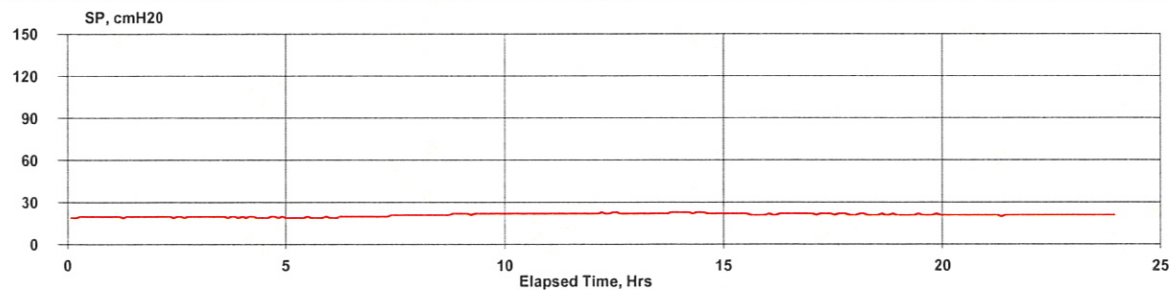
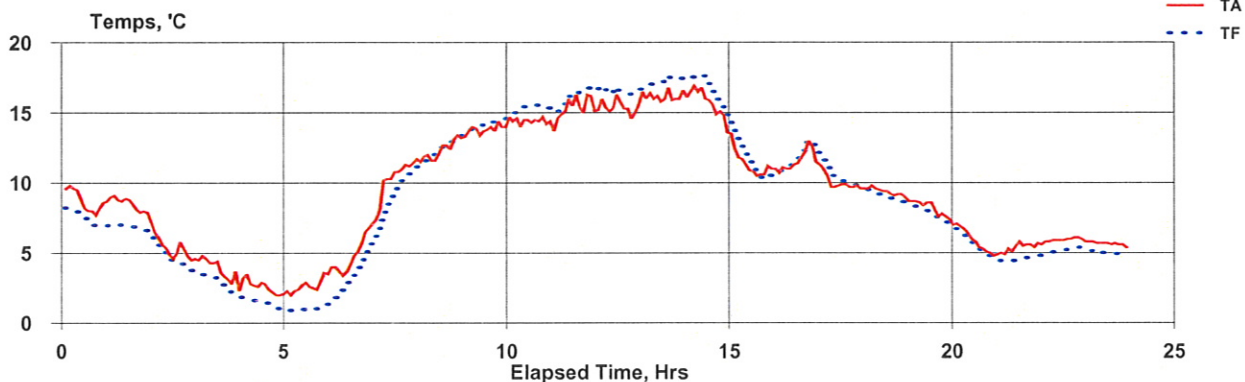
Date Time  
dd-mmm hh:mm:ss  
Start: 17-07-may 0:00:08  
Stop: 17-08-may 0:00:05  
ET: 24:00:00

## Mass Concentration Data:

Filter ID: 29  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.039 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

Notes 1:

Notes 2:



# Hourly

17-07-may	0:04:34	584	8.7	7.5	-1.2	20	16.70
17-07-may	1:04:34	585	8.4	6.8	-1.6	20	16.71
17-07-may	2:04:34	585	5.3	4.6	-0.6	20	16.70
17-07-may	3:04:34	585	3.8	2.9	-0.9	20	16.71
17-07-may	4:04:34	585	2.6	1.4	-1.2	19	16.70
17-07-may	5:04:34	585	2.7	1.0	-1.7	19	16.71
17-07-may	6:04:34	585	4.9	3.3	-1.6	20	16.71
17-07-may	7:04:34	586	10.4	9.1	-1.3	21	16.71
17-07-may	8:04:34	586	12.4	12.3	0.0	21	16.70
17-07-may	9:04:34	585	13.8	14.1	0.3	22	16.71
17-07-may	10:04:34	586	14.4	15.3	0.9	22	16.71
17-07-may	11:04:34	585	15.3	16.0	0.7	22	16.71
17-07-may	12:04:34	585	15.4	16.5	1.1	22	16.70
17-07-may	13:04:34	585	16.2	17.2	1.0	22	16.71
17-07-may	14:04:34	585	15.7	16.8	1.1	23	16.71
17-07-may	15:04:34	585	11.4	11.8	0.5	22	16.72
17-07-may	16:04:34	585	11.6	11.7	0.1	22	16.71
17-07-may	17:04:34	586	10.1	10.5	0.5	22	16.71
17-07-may	18:04:34	585	9.4	9.1	-0.3	21	16.71
17-07-may	19:04:34	586	8.2	7.9	-0.4	21	16.72
17-07-may	20:04:34	587	6.0	5.7	-0.2	21	16.71
17-07-may	21:04:34	587	5.4	4.5	-0.9	21	16.72
17-07-may	22:04:34	588	5.9	5.1	-0.8	21	16.71
17-07-may	23:04:34	588	5.7	5.0	-0.7	21	16.70

# BGI PQ200 Air Sampling System Downloaded 2017 16 may 13:41:42

## Job Details:

Job Name: 17May16B.JOB  
Version: 5.62  
Serial No: 963  
Pump Time: 4704:41  
Flags:

Job Code:

Site Name:

Station Code:

Operators:

User1: |||||

User2:

	Max	Min	Avg	Units
BP	587	584	585	mmHg
TA	18.7	3.1	12.3	°C
Q	---	---	16.7	Lpm

## Timer Information:

Date Time  
dd-mmm hh:mm:ss  
Start: 17-13-may 0:00:08  
Stop: 17-14-may 0:00:05  
ET: 23:59

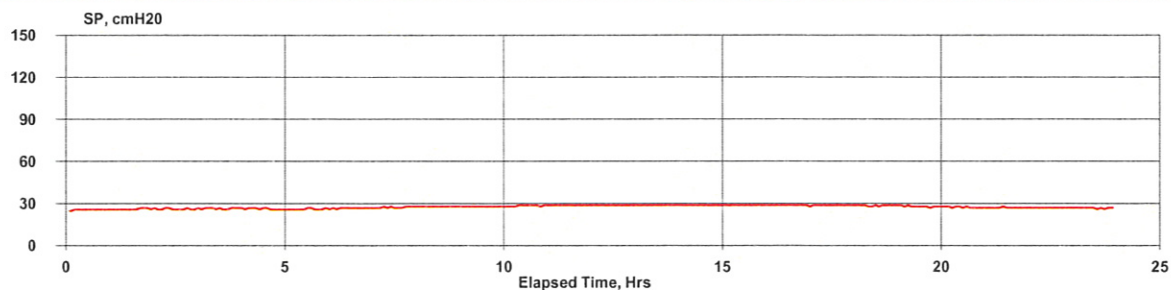
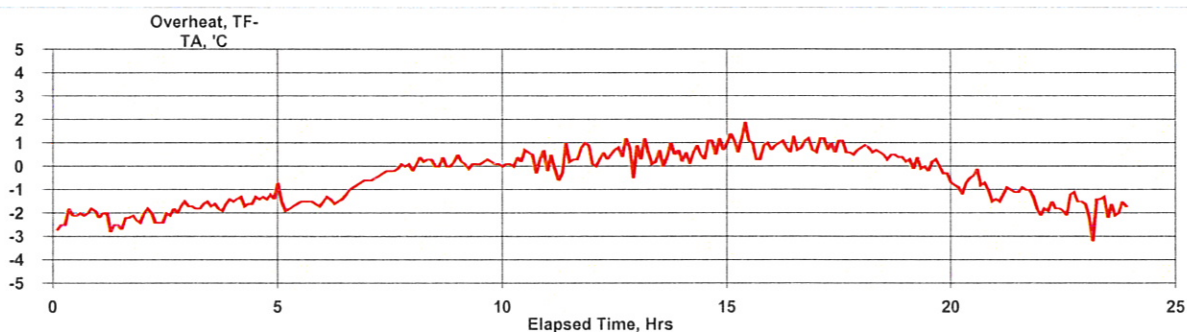
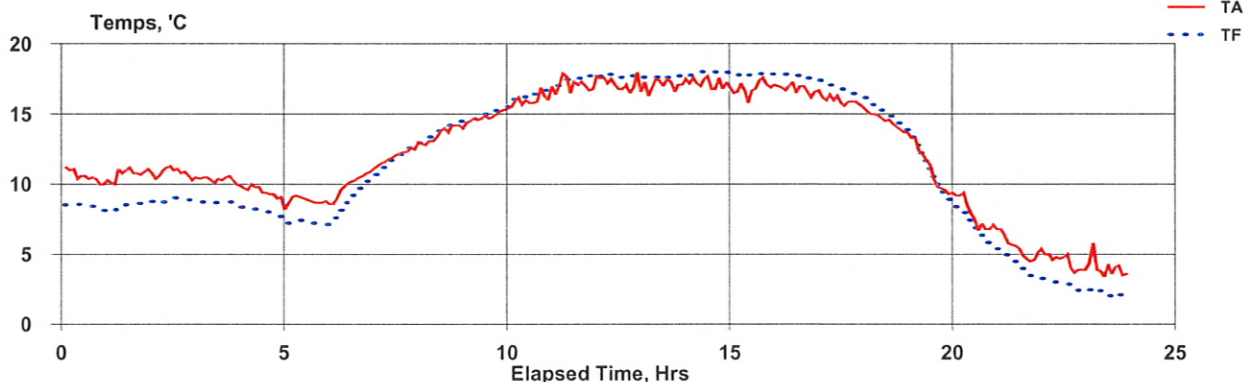
## Mass Concentration Data:

Filter ID: 34  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.037 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

QCV 0.48 %  
Max overheat 2.3 °C  
occured 15-may 16:35:40

Notes 1:

Notes 2:



Hourly

17-13-may	0:05:08	587	10.5	8.4	-2.1	26	16.71
17-13-may	1:05:08	586	10.8	8.5	-2.3	26	16.69
17-13-may	2:05:08	586	10.8	8.8	-2.0	26	16.70
17-13-may	3:05:08	585	10.3	8.7	-1.7	27	16.71
17-13-may	4:05:08	585	9.4	8.0	-1.4	26	16.70
17-13-may	5:05:08	585	8.9	7.3	-1.6	26	16.72
17-13-may	6:05:08	585	10.1	9.1	-1.1	27	16.70
17-13-may	7:05:08	585	12.1	11.9	-0.2	28	16.71
17-13-may	8:05:08	586	13.6	13.8	0.2	28	16.72
17-13-may	9:05:08	586	14.9	15.0	0.1	28	16.71
17-13-may	10:05:08	586	16.1	16.3	0.3	29	16.71
17-13-may	11:05:08	586	17.1	17.5	0.3	29	16.71
17-13-may	12:05:08	586	17.1	17.6	0.5	29	16.71
17-13-may	13:05:08	586	17.1	17.6	0.5	29	16.71
17-13-may	14:05:08	586	17.2	17.9	0.7	29	16.71
17-13-may	15:05:08	586	16.9	17.8	1.0	29	16.71
17-13-may	16:05:08	586	16.8	17.7	0.9	29	16.71
17-13-may	17:05:08	586	15.9	16.8	0.8	29	16.71
17-13-may	18:05:08	586	14.5	15.0	0.5	29	16.71
17-13-may	19:05:08	586	11.0	11.0	0.0	28	16.70
17-13-may	20:05:08	586	7.8	6.9	-0.8	27	16.71
17-13-may	21:05:08	586	5.4	4.2	-1.2	27	16.70
17-13-may	22:05:08	587	4.4	2.8	-1.6	27	16.70
17-13-may	23:05:08	586	4.1	2.2	-1.9	27	16.69



# BGI PQ200 Air Sampling System

Downloaded 2017 22 may 12:54:53

## Job Details:

Job Name: 17May22B.JOB  
Version: 5.62  
Serial No: 963  
Pump Time: 4728:40  
Flags:

## Job Code:

Site Name: 963B  
Station Code:  
Operators: KN

User1: |||||

User2:

	Max	Min	Avg	Units
BP	592	587	589	mmHg
TA	14.6	-1.4	6.8	°C
Q	---	---	16.7	Lpm

QCV 0.54 %  
Max overheat 4 °C  
occured 21-may 15:32:52

## Timer Information:

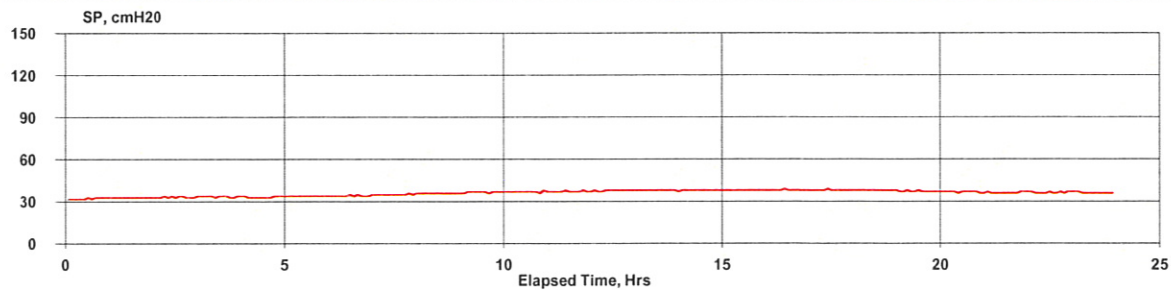
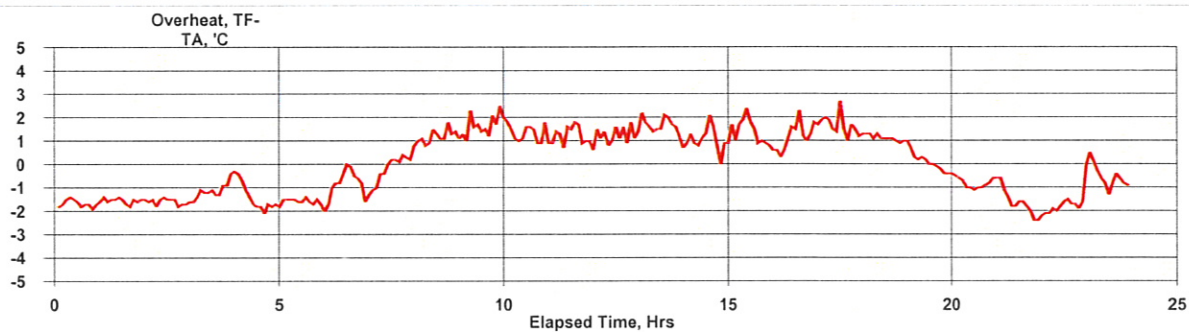
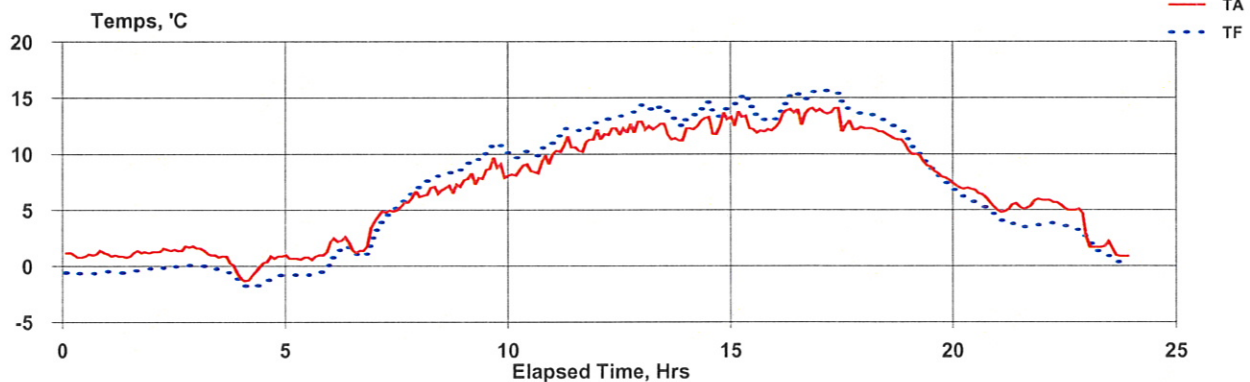
	Date	Time
	dd-mmm	hh:mm:ss
Start:	17-19-may	0:00:08
Stop:	17-20-may	0:00:04
ET:	23:59	

## Mass Concentration Data:

Filter ID:	39	
Final Wt:		mg
Initial Wt:		mg
Delta Wt:	0.000	mg
Total Vol:	24.04	m <sup>3</sup>
Mass Conc:	0	µg/m <sup>3</sup>

Notes 1:

Notes 2:



Hourly

17-19-may	0:05:08	589	1.1	-0.6	-1.7	33	16.71
17-19-may	1:05:08	589	1.1	-0.5	-1.5	33	16.71
17-19-may	2:05:08	589	1.5	-0.1	-1.6	33	16.71
17-19-may	3:05:08	589	0.6	-0.4	-1.1	34	16.71
17-19-may	4:05:08	589	0.1	-1.4	-1.5	33	16.71
17-19-may	5:05:08	589	0.9	-0.7	-1.6	34	16.71
17-19-may	6:05:08	589	2.2	1.4	-0.8	34	16.70
17-19-may	7:05:08	590	5.4	5.3	-0.1	35	16.71
17-19-may	8:05:08	590	6.9	8.1	1.2	36	16.72
17-19-may	9:05:08	590	8.3	10.0	1.7	37	16.71
17-19-may	10:05:08	590	8.9	10.2	1.3	37	16.71
17-19-may	11:05:08	590	10.9	12.1	1.2	37	16.70
17-19-may	12:05:08	590	12.1	13.4	1.3	38	16.71
17-19-may	13:05:08	590	12.0	13.6	1.6	38	16.72
17-19-may	14:05:08	590	12.7	13.8	1.1	38	16.72
17-19-may	15:05:08	590	12.5	13.9	1.4	38	16.70
17-19-may	16:05:08	590	13.7	14.9	1.3	38	16.71
17-19-may	17:05:08	590	13.0	14.6	1.6	38	16.70
17-19-may	18:05:08	590	11.6	12.7	1.1	38	16.71
17-19-may	19:05:08	590	8.8	8.8	0.0	37	16.72
17-19-may	20:05:08	591	6.4	5.6	-0.8	37	16.71
17-19-may	21:05:08	591	5.4	3.7	-1.7	36	16.71
17-19-may	22:05:08	591	5.1	3.5	-1.7	36	16.71
17-19-may	23:05:08	591	1.5	0.9	-0.5	36	16.72



# BGI PQ200 Air Sampling System

Downloaded 2017 26 may 08:51:43

## Job Details:

Job Name: 17May26B.JOB  
Version: 5.62  
Serial No: 963  
Pump Time: 4752:39  
Flags:

Job Code:  
Site Name: 963B  
Station Code:  
Operators: KN  
User1: |||||  
User2:

	Max	Min	Avg	Units
BP	586	582	583	mmHg
TA	23.7	5.4	15.5	°C
Q	---	---	16.7	Lpm

## Timer Information:

	Date	Time
	dd-mmm	hh:mm:ss
Start:	17-25-may	0:00:08
Stop:	17-26-may	0:00:04
ET:	23:59	

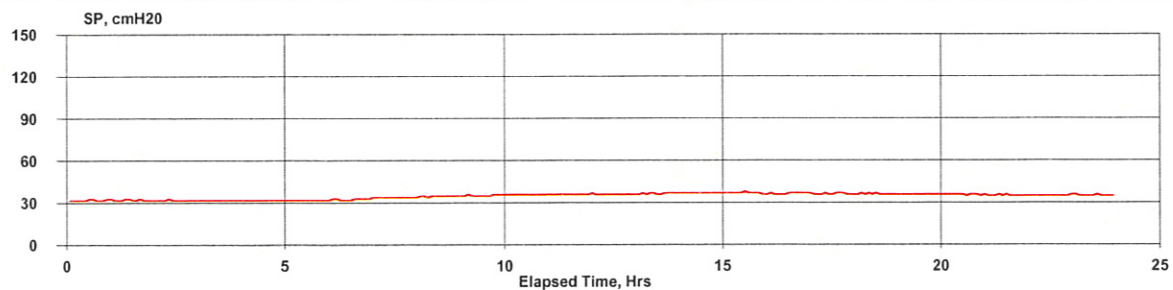
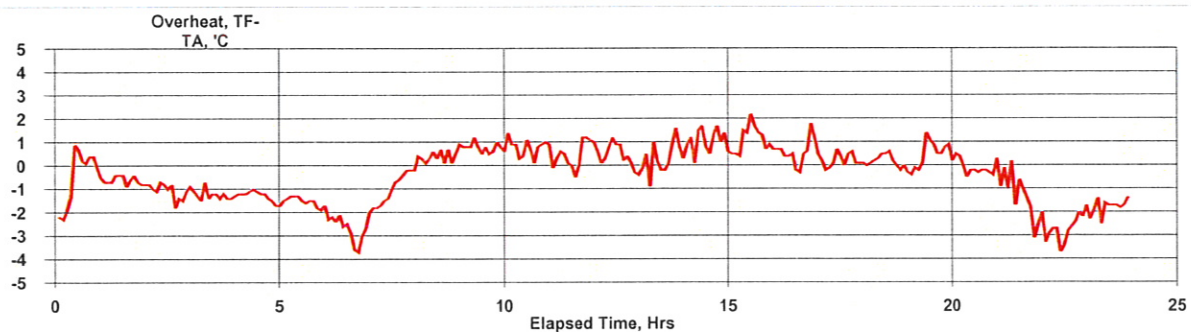
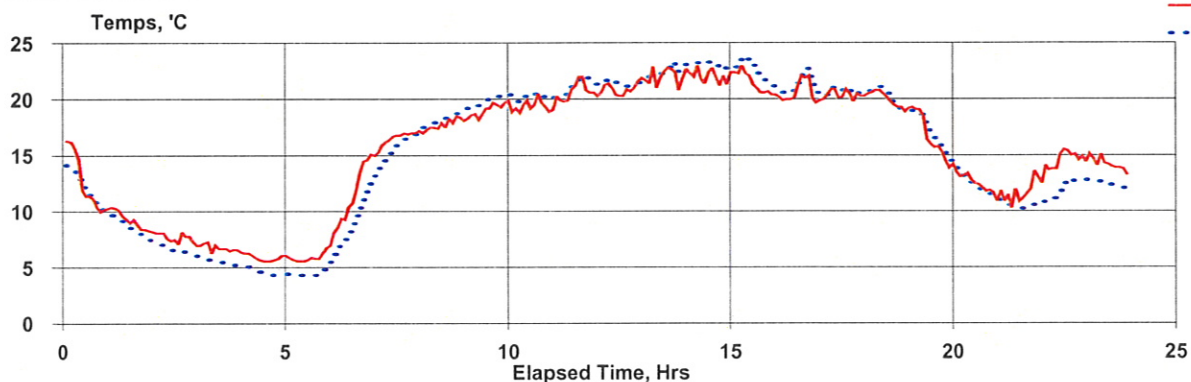
## Mass Concentration Data:

Filter ID:	6	
Final Wt:		mg
Initial Wt:		mg
Delta Wt:	0.000	mg
Total Vol:	24.04	m^3
Mass Conc:	0	µg/m3

QCV 0.51 %  
Max overheat 2.6 °C  
occured 25-may 13:47:06

Notes 1:

Notes 2:



Hourly

17-25-may	0:05:08	584	12.5	12.0	-0.5	32	16.70
17-25-may	1:05:08	584	9.2	8.5	-0.6	32	16.70
17-25-may	2:05:08	583	7.7	6.6	-1.1	32	16.71
17-25-may	3:05:08	583	6.8	5.5	-1.3	32	16.70
17-25-may	4:05:08	583	5.9	4.6	-1.3	32	16.70
17-25-may	5:05:08	583	6.0	4.5	-1.5	32	16.71
17-25-may	6:05:08	583	11.8	9.1	-2.7	33	16.70
17-25-may	7:05:08	584	16.6	15.6	-1.0	34	16.71
17-25-may	8:05:08	584	17.8	18.2	0.4	35	16.70
17-25-may	9:05:08	584	19.1	19.9	0.8	35	16.71
17-25-may	10:05:08	584	19.4	20.2	0.8	36	16.71
17-25-may	11:05:08	584	20.7	21.1	0.5	36	16.71
17-25-may	12:05:08	584	21.0	21.4	0.4	36	16.70
17-25-may	13:05:08	584	22.1	22.4	0.3	37	16.72
17-25-may	14:05:08	584	22.1	23.1	1.1	37	16.70
17-25-may	15:05:08	584	21.4	22.5	1.1	37	16.71
17-25-may	16:05:08	583	20.6	21.2	0.6	37	16.71
17-25-may	17:05:08	583	20.4	20.6	0.2	36	16.70
17-25-may	18:05:08	584	20.0	20.1	0.2	36	16.71
17-25-may	19:05:08	584	16.5	17.0	0.5	36	16.71
17-25-may	20:05:08	584	12.4	12.4	-0.1	36	16.71
17-25-may	21:05:08	585	11.8	10.5	-1.3	35	16.71
17-25-may	22:05:08	585	14.6	11.9	-2.7	35	16.70
17-25-may	23:05:08	586	14.2	12.4	-1.8	35	16.71

# BGI PQ200 Air Sampling System Downloaded 2017 01 jun 09:33:25

## Job Details:

Job Name: 17Jun01B.JOB  
Version: 5.62  
Serial No: 963  
Pump Time: 4776:38  
Flags:

## Job Code:

Site Name: 963B  
Station Code:  
Operators: KN

User1: |||||  
User2:

	Max	Min	Avg	Units
BP	591	588	589	mmHg
TA	26	5.7	15.8	°C
Q	---	---	16.7	Lpm

## Timer Information:

Date Time  
dd-mmm hh:mm:ss  
Start: 17-31-may 0:00:08  
Stop: 17-01-jun 0:00:05  
ET: 23:59

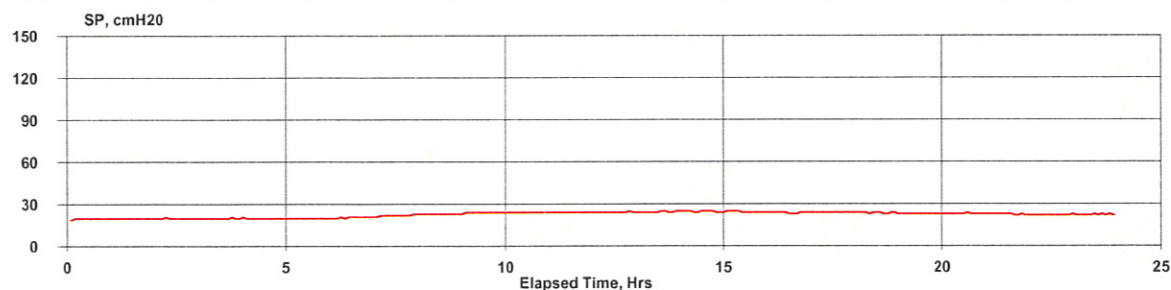
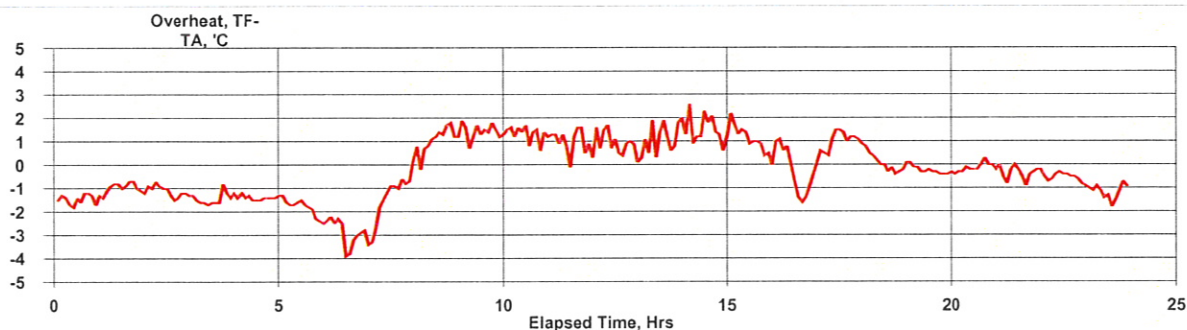
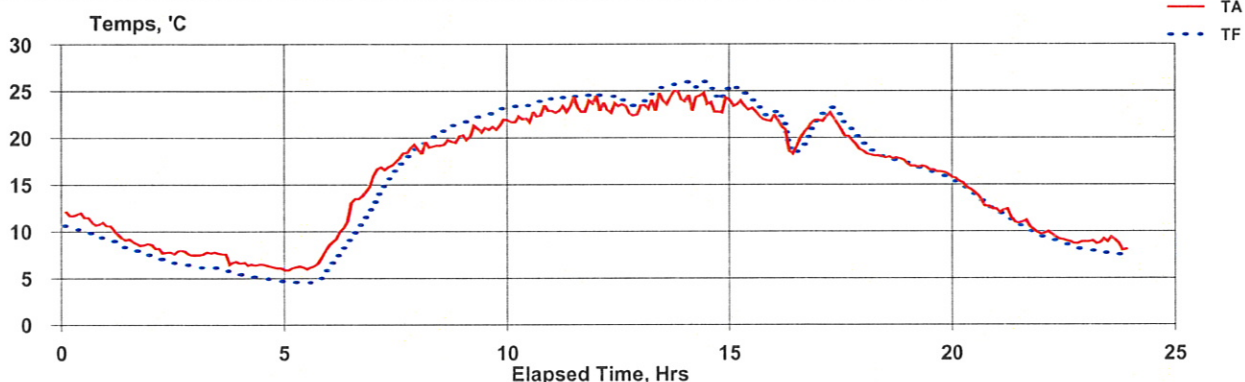
## Mass Concentration Data:

Filter ID: 11  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.038 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

QCV 0.54 %  
Max overheat 2.7 °C  
occured 31-may 14:09:44

Notes 1:

Notes 2:



Hourly

17-31-may	0:05:08	590	11.4	9.9	-1.5	20	16.71
17-31-may	1:05:08	590	9.2	8.2	-1.0	20	16.70
17-31-may	2:05:08	590	7.8	6.7	-1.1	20	16.71
17-31-may	3:05:08	590	7.3	5.9	-1.4	20	16.71
17-31-may	4:05:08	590	6.3	4.9	-1.4	20	16.72
17-31-may	5:05:08	590	6.6	4.8	-1.8	20	16.71
17-31-may	6:05:08	590	12.4	9.5	-2.9	21	16.71
17-31-may	7:05:08	591	17.8	16.5	-1.3	22	16.70
17-31-may	8:05:08	591	19.4	20.5	1.1	23	16.71
17-31-may	9:05:08	591	21.0	22.5	1.4	24	16.71
17-31-may	10:05:08	591	22.4	23.7	1.3	24	16.70
17-31-may	11:05:08	590	23.4	24.4	1.0	24	16.71
17-31-may	12:05:08	590	23.1	24.1	0.9	24	16.72
17-31-may	13:05:08	590	24.0	25.2	1.2	24	16.70
17-31-may	14:05:08	589	23.8	25.3	1.5	25	16.70
17-31-may	15:05:08	589	22.8	23.9	1.1	24	16.71
17-31-may	16:05:08	589	20.6	20.4	-0.2	24	16.71
17-31-may	17:05:08	589	20.7	21.7	1.0	24	16.71
17-31-may	18:05:08	589	17.9	18.0	0.1	24	16.71
17-31-may	19:05:08	590	16.6	16.3	-0.3	23	16.71
17-31-may	20:05:08	589	13.9	13.8	-0.1	23	16.71
17-31-may	21:05:08	590	11.1	10.7	-0.3	23	16.70
17-31-may	22:05:08	590	9.2	8.6	-0.5	22	16.71
17-31-may	23:05:08	590	8.8	7.6	-1.2	22	16.72



# BGI PQ200 Air Sampling System

Downloaded 2017 07 jun 09:40:55

## Job Details:

Job Name: 17Jun07B.JOB  
Version: 5.62  
Serial No: 963  
Pump Time: 4800:37  
Flags:

Job Code:

Site Name:

Station Code:

Operators:

User1: |||||

User2:

	Max	Min	Avg	Units
BP	594	590	592	mmHg
TA	29.6	7.1	19	°C
Q	---	---	16.7	Lpm

## Timer Information:

Date Time  
dd-mmm hh:mm:ss  
Start: 17-06-jun 0:00:08  
Stop: 17-07-jun 0:00:05  
ET: 23:59

## Mass Concentration Data:

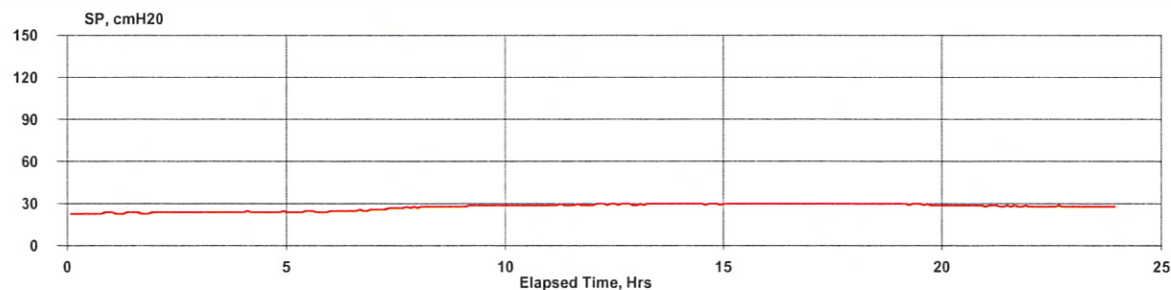
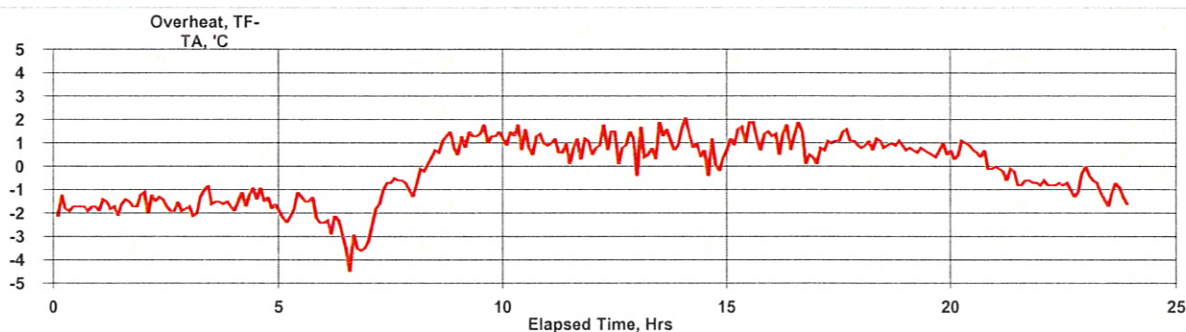
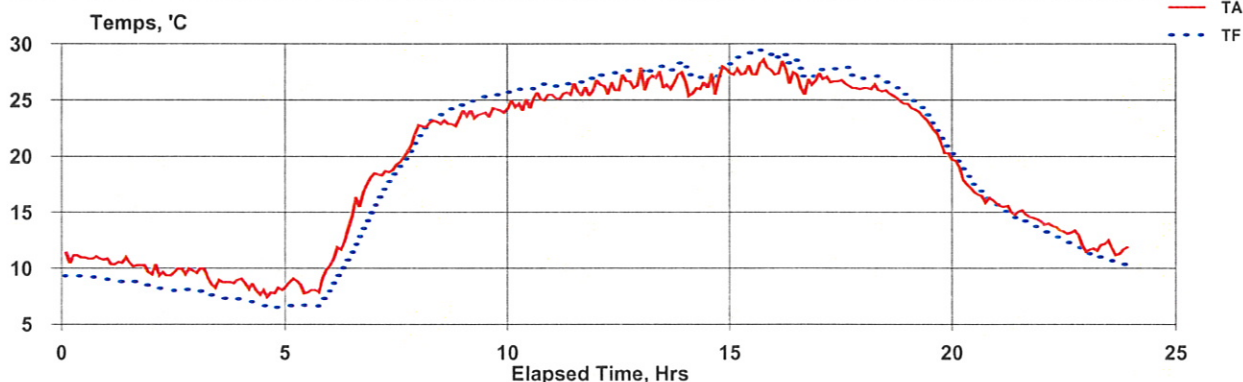
Filter ID: 17  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.036 m<sup>3</sup>

QCV 0.5 %  
Max overheat 2.4 °C  
occured 06-jun 10:12:06

Mass Conc: 0 µg/m<sup>3</sup>

Notes 1:

Notes 2:



# Hourly

17-06-jun	0:05:08	592	11.0	9.2	-1.8	23	16.71
17-06-jun	1:05:08	592	10.3	8.8	-1.6	24	16.71
17-06-jun	2:05:08	592	9.7	8.1	-1.7	24	16.71
17-06-jun	3:05:08	592	9.0	7.5	-1.5	24	16.71
17-06-jun	4:05:08	592	8.1	6.7	-1.4	24	16.71
17-06-jun	5:05:08	592	8.7	6.9	-1.9	24	16.70
17-06-jun	6:05:08	593	14.8	11.7	-3.1	25	16.71
17-06-jun	7:05:08	593	19.8	18.7	-1.1	27	16.71
17-06-jun	8:05:08	594	23.1	23.6	0.5	28	16.71
17-06-jun	9:05:08	594	23.9	25.2	1.3	29	16.71
17-06-jun	10:05:08	593	25.0	26.1	1.1	29	16.70
17-06-jun	11:05:08	593	25.8	26.6	0.8	29	16.70
17-06-jun	12:05:08	593	26.5	27.4	0.9	30	16.71
17-06-jun	13:05:08	593	26.8	27.8	1.1	30	16.71
17-06-jun	14:05:08	592	26.6	27.3	0.7	30	16.71
17-06-jun	15:05:08	592	27.7	29.1	1.4	30	16.70
17-06-jun	16:05:08	592	27.0	28.0	1.0	30	16.71
17-06-jun	17:05:08	591	26.5	27.6	1.1	30	16.70
17-06-jun	18:05:08	591	25.6	26.5	0.9	30	16.70
17-06-jun	19:05:08	592	22.4	23.0	0.7	30	16.70
17-06-jun	20:05:08	592	17.1	17.6	0.5	29	16.71
17-06-jun	21:05:08	592	14.9	14.4	-0.5	29	16.71
17-06-jun	22:05:08	592	13.2	12.5	-0.7	28	16.71
17-06-jun	23:05:08	592	11.8	10.8	-1.0	28	16.71

# BGI PQ200 Air Sampling System Downloaded 2017 13 jun 10:06:39

## Job Details:

Job Name: 17Jun13B.JOB  
Version: 5.62  
Serial No: 963  
Pump Time: 4824:36  
Flags:

Job Code:

Site Name:

Station Code:

Operators:

User1: ++++++

User2:

	Max	Min	Avg	Units
BP	589	583	587	mmHg
TA	15.6	1.5	10.3	°C
Q	---	---	16.7	Lpm

## Timer Information:

Date Time  
dd-mmm hh:mm:ss  
Start: 17-12-jun 0:00:08  
Stop: 17-13-jun 0:00:05  
ET: 23:59

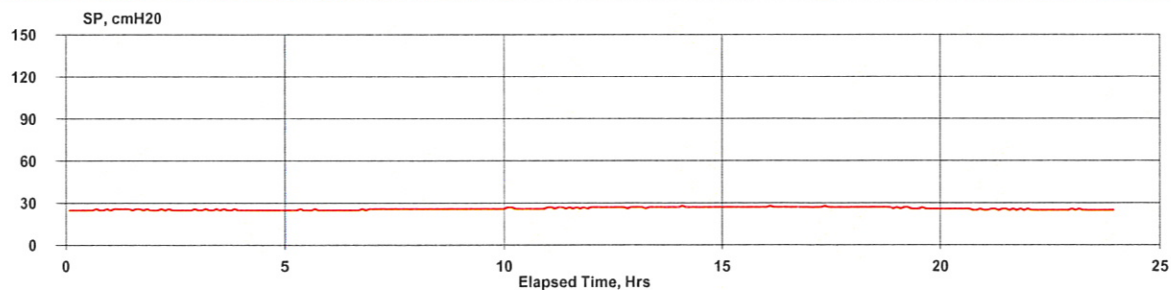
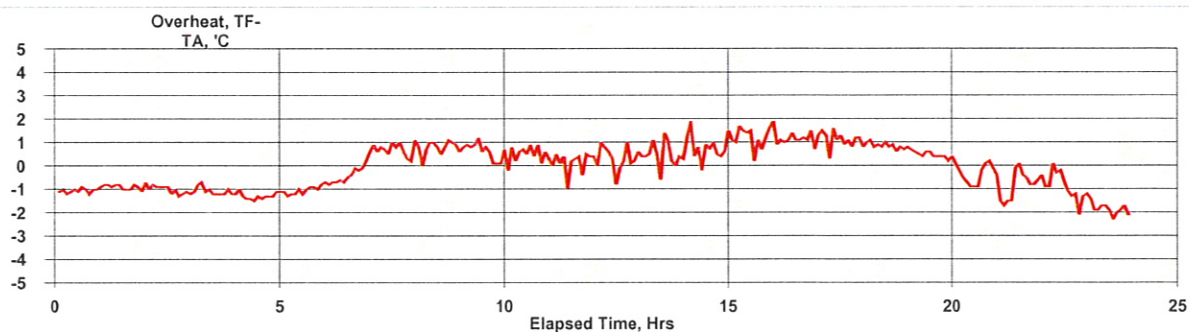
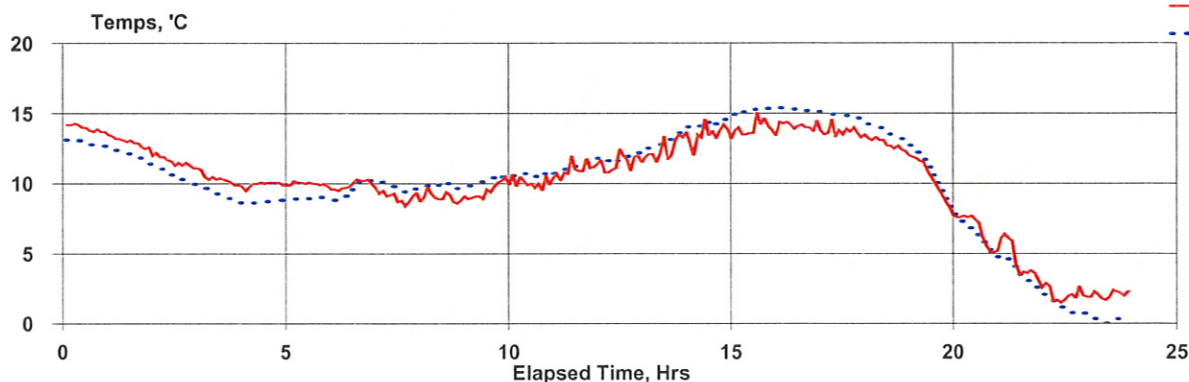
## Mass Concentration Data:

Filter ID: 23  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.038 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

QCV 0.52 %  
Max overheat 2.4 °C  
occured 12-jun 14:39:02

Notes 1:

Notes 2:





# Hourly

17-12-jun	0:05:08	586	13.9	12.9	-1.0	25	16.71
17-12-jun	1:05:08	585	12.9	12.0	-0.9	26	16.71
17-12-jun	2:05:08	585	11.5	10.5	-1.0	25	16.71
17-12-jun	3:05:08	585	10.3	9.2	-1.1	25	16.71
17-12-jun	4:05:08	585	10.0	8.7	-1.3	25	16.70
17-12-jun	5:05:08	585	10.0	9.0	-1.0	25	16.71
17-12-jun	6:05:08	585	9.9	9.6	-0.3	25	16.71
17-12-jun	7:05:08	586	9.0	9.7	0.7	26	16.72
17-12-jun	8:05:08	586	9.1	9.8	0.8	26	16.71
17-12-jun	9:05:08	587	9.5	10.2	0.6	26	16.71
17-12-jun	10:05:08	587	10.1	10.6	0.5	26	16.70
17-12-jun	11:05:08	588	11.1	11.2	0.2	27	16.71
17-12-jun	12:05:08	588	11.5	11.8	0.3	27	16.73
17-12-jun	13:05:08	588	12.5	13.0	0.5	27	16.71
17-12-jun	14:05:08	588	13.5	14.3	0.8	27	16.71
17-12-jun	15:05:08	588	13.9	15.2	1.2	27	16.71
17-12-jun	16:05:08	588	14.1	15.3	1.1	27	16.70
17-12-jun	17:05:08	588	13.7	14.8	1.1	27	16.72
17-12-jun	18:05:08	588	12.8	13.6	0.8	27	16.71
17-12-jun	19:05:08	588	10.2	10.6	0.5	26	16.70
17-12-jun	20:05:08	588	6.7	6.3	-0.4	26	16.70
17-12-jun	21:05:08	589	4.4	3.6	-0.8	26	16.70
17-12-jun	22:05:08	589	2.1	1.1	-0.9	25	16.71
17-12-jun	23:05:08	589	2.1	0.2	-1.9	25	16.71

# BGI PQ200 Air Sampling System Downloaded 2017 21 jun 12:54:55

## Job Details:

Job Name: 17Jun21B.JOB  
Version: 5.62  
Serial No: 963  
Pump Time: 4848:35  
Flags:

Job Code:

Site Name:

Station Code:

Operators:

User1: |||||

User2:

	Max	Min	Avg	Units
BP	593	589	592	mmHg
TA	33.3	14.8	24.7	°C
Q	---	---	16.7	Lpm

QCV 0.47 %

Max overheat 3.4 °C

occured 20-jun 19:48:13

## Timer Information:

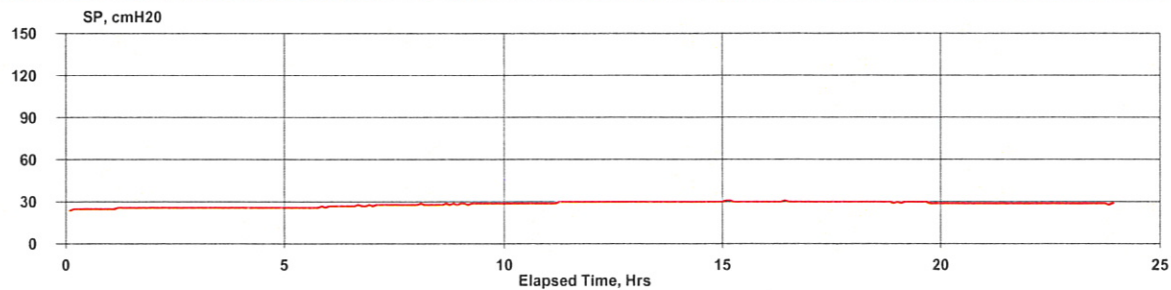
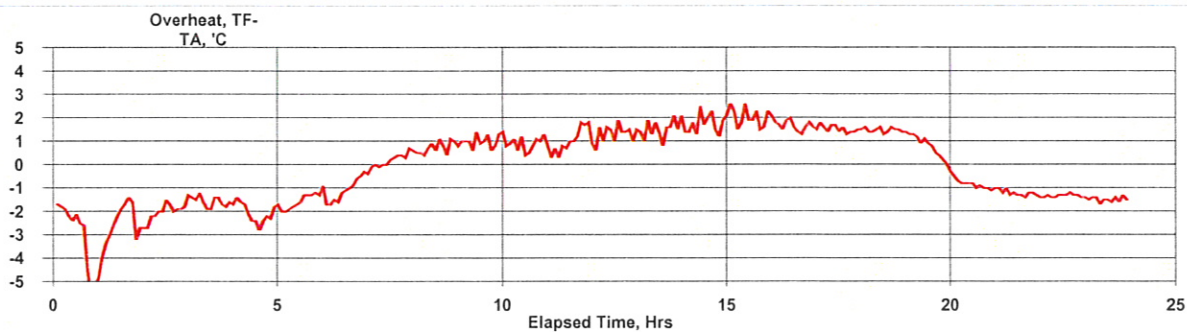
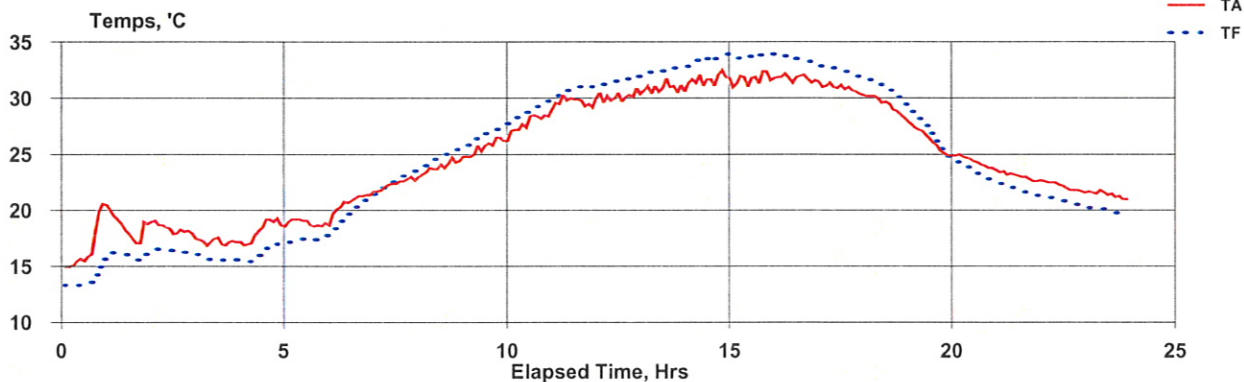
Date	Time
dd-mmm	hh:mm:ss
Start: 17-18-jun	0:00:08
Stop: 17-19-jun	0:00:05
ET: 23:59	

## Mass Concentration Data:

Filter ID:	5
Final Wt:	mg
Initial Wt:	mg
Delta Wt:	0.000 mg
Total Vol:	24.037 m <sup>3</sup>
Mass Conc:	0 µg/m <sup>3</sup>

Notes 1:

Notes 2:



Hourly

17-18-jun	0:05:08	592	16.9	13.8	-3.1	25	16.71
17-18-jun	1:05:08	592	18.5	16.0	-2.5	26	16.71
17-18-jun	2:05:08	592	18.3	16.4	-1.9	26	16.71
17-18-jun	3:05:08	592	17.2	15.6	-1.6	26	16.71
17-18-jun	4:05:08	592	18.3	16.2	-2.1	26	16.71
17-18-jun	5:05:08	592	18.9	17.4	-1.5	26	16.71
17-18-jun	6:05:08	593	20.9	19.9	-1.0	27	16.71
17-18-jun	7:05:08	593	22.5	22.7	0.2	28	16.71
17-18-jun	8:05:08	593	24.0	24.7	0.7	28	16.70
17-18-jun	9:05:08	593	25.7	26.8	1.0	29	16.71
17-18-jun	10:05:08	593	28.0	28.9	0.9	29	16.71
17-18-jun	11:05:08	593	29.7	30.8	1.0	30	16.70
17-18-jun	12:05:08	593	30.2	31.5	1.3	30	16.71
17-18-jun	13:05:08	592	30.9	32.5	1.5	30	16.70
17-18-jun	14:05:08	592	31.7	33.5	1.8	30	16.71
17-18-jun	15:05:08	592	31.7	33.7	2.0	30	16.71
17-18-jun	16:05:08	592	31.8	33.4	1.6	30	16.71
17-18-jun	17:05:08	592	30.9	32.4	1.5	30	16.71
17-18-jun	18:05:08	592	29.4	30.8	1.5	30	16.70
17-18-jun	19:05:08	592	26.2	26.9	0.7	30	16.71
17-18-jun	20:05:08	592	24.3	23.5	-0.9	29	16.70
17-18-jun	21:05:08	593	23.0	21.8	-1.2	29	16.71
17-18-jun	22:05:08	593	22.1	20.8	-1.3	29	16.71
17-18-jun	23:05:08	593	21.4	19.9	-1.5	29	16.71

# BGI PQ200 Air Sampling System

Downloaded 2017 27 jun 11:31:01

## Job Details:

Job Name: 17Jun27B.JOB  
Version: 5.62  
Serial No: 963  
Pump Time: 4872:34  
Flags:

Job Code:

Site Name:

Station Code:

Operators:

User1: |||||

User2:

	Max	Min	Avg	Units
BP	595	591	593	mmHg
TA	33.8	14.1	24.1	°C
Q	---	---	16.7	Lpm

QCV 0.49 %  
Max overheat 2.9 °C  
occured 25-jun 14:31:02

## Timer Information:

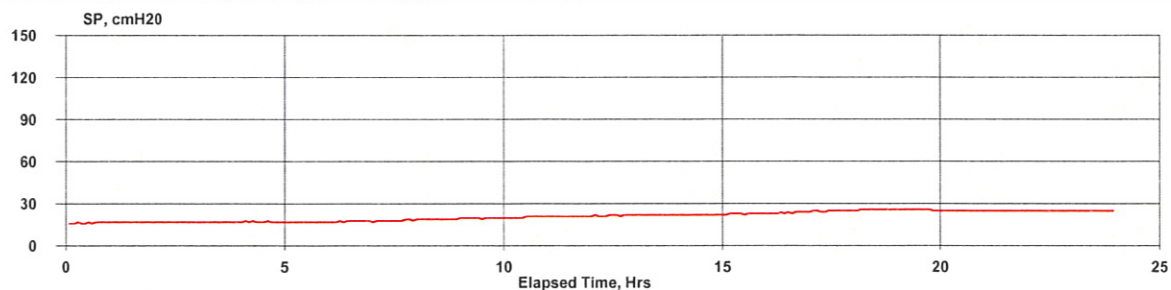
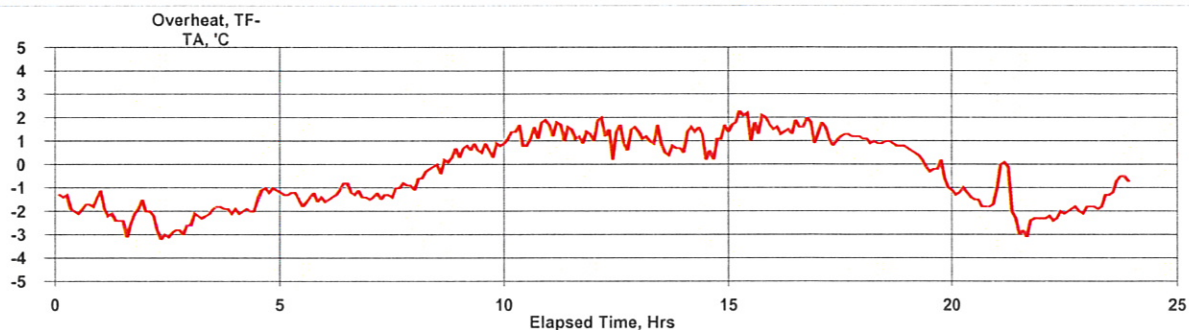
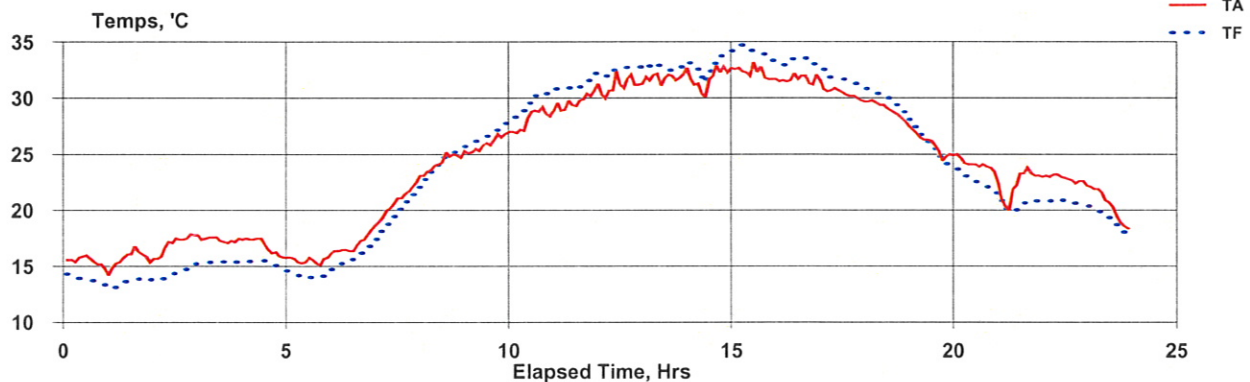
Date	Time
dd-mmm	hh:mm:ss
Start: 17-24-jun	0:00:08
Stop: 17-25-jun	0:00:04
ET: 23:59	

## Mass Concentration Data:

Filter ID:	16
Final Wt:	mg
Initial Wt:	mg
Delta Wt:	0.000 mg
Total Vol:	24.037 m <sup>3</sup>
Mass Conc:	0 µg/m <sup>3</sup>

Notes 1:

Notes 2:



# Hourly

17-24-jun	0:05:08	593	15.4	13.8	-1.6	17	16.71
17-24-jun	1:05:08	593	15.8	13.6	-2.2	17	16.70
17-24-jun	2:05:08	593	17.2	14.4	-2.8	17	16.71
17-24-jun	3:05:08	593	17.4	15.4	-2.0	17	16.71
17-24-jun	4:05:08	594	16.7	15.2	-1.5	17	16.72
17-24-jun	5:05:08	594	15.6	14.2	-1.4	17	16.71
17-24-jun	6:05:08	594	17.1	15.9	-1.2	18	16.71
17-24-jun	7:05:08	594	21.0	19.9	-1.2	18	16.70
17-24-jun	8:05:08	594	24.4	24.3	-0.1	19	16.70
17-24-jun	9:05:08	594	26.0	26.7	0.7	20	16.71
17-24-jun	10:05:08	594	28.2	29.5	1.4	21	16.71
17-24-jun	11:05:08	594	29.9	31.2	1.3	21	16.70
17-24-jun	12:05:08	594	31.2	32.5	1.3	22	16.71
17-24-jun	13:05:08	593	31.9	32.8	0.9	22	16.71
17-24-jun	14:05:08	593	31.8	32.9	1.1	22	16.71
17-24-jun	15:05:08	593	32.3	34.1	1.8	23	16.70
17-24-jun	16:05:08	593	31.7	33.2	1.5	24	16.70
17-24-jun	17:05:08	593	30.4	31.6	1.2	25	16.71
17-24-jun	18:05:08	593	28.9	29.8	0.9	26	16.70
17-24-jun	19:05:08	593	25.8	25.7	-0.1	26	16.71
17-24-jun	20:05:08	593	24.0	22.6	-1.4	25	16.71
17-24-jun	21:05:08	594	22.4	20.5	-1.9	25	16.71
17-24-jun	22:05:08	594	22.8	20.7	-2.1	25	16.71
17-24-jun	23:05:08	594	20.4	19.2	-1.2	25	16.70



# BGI PQ200 Air Sampling System Downloaded 2017 05 jul 09:38:41

## Job Details:

Job Name: 17Jul05B.JOB  
Version: 5.62  
Serial No: 963  
Pump Time: 4896:33  
Flags:

## Job Code:

Site Name:  
Station Code:  
Operators:

User1: |||||  
User2:

	Max	Min	Avg	Units
BP	593	589	592	mmHg
TA	31.2	9.4	20.8	°C
Q	---	---	16.7	Lpm

QCV 0.51 %  
Max overheat 4.3 °C  
occured 01-jul 19:56:16

## Timer Information:

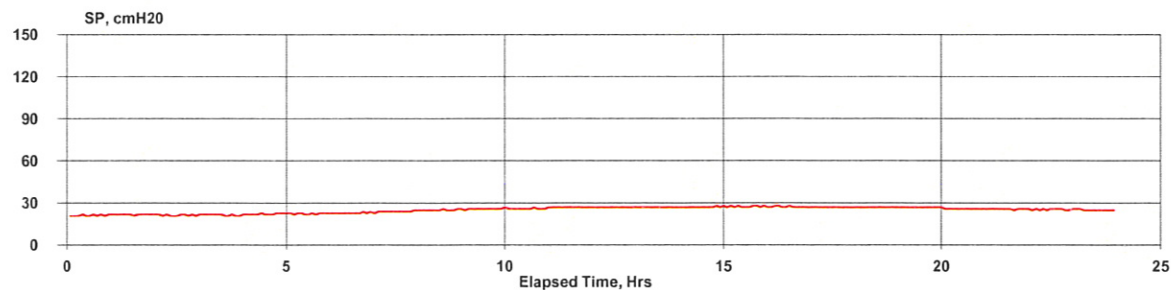
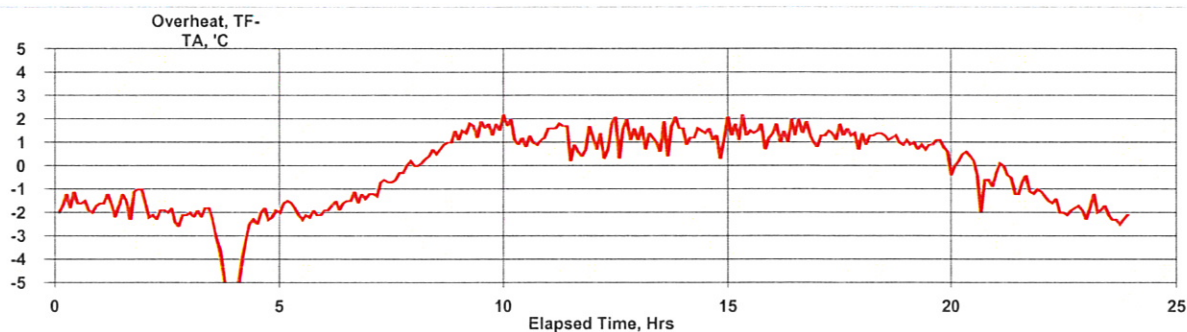
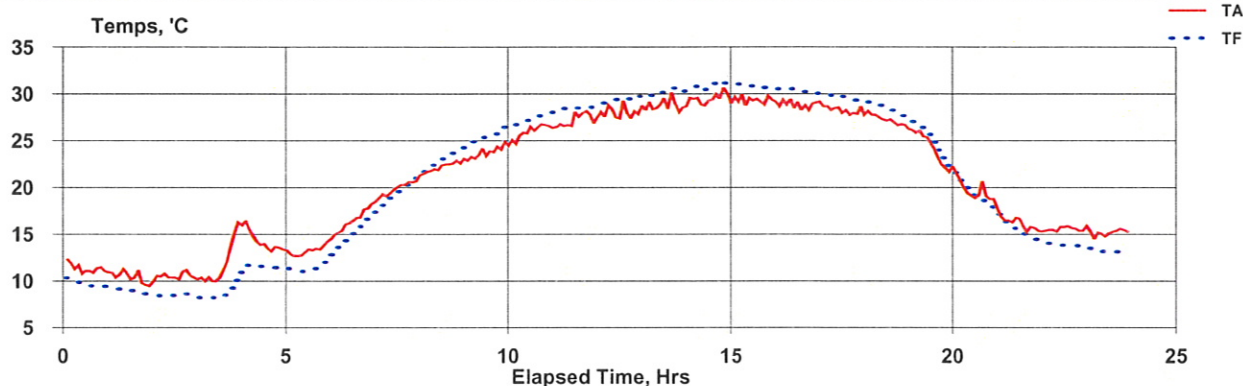
Date Time  
dd-mmm hh:mm:ss  
Start: 17-30-jun 0:00:08  
Stop: 17-01-jul 0:00:05  
ET: 23:59

## Mass Concentration Data:

Filter ID: 31  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.037 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

Notes 1:

Notes 2:



Hourly

17-30-jun	0:05:08	592	11.3	9.7	-1.6	21	16.71
17-30-jun	1:05:08	592	10.4	8.9	-1.5	22	16.70
17-30-jun	2:05:08	591	10.6	8.4	-2.1	22	16.70
17-30-jun	3:05:08	592	12.1	8.8	-3.4	22	16.70
17-30-jun	4:05:08	592	14.2	11.5	-2.6	22	16.71
17-30-jun	5:05:08	592	13.4	11.4	-1.9	23	16.71
17-30-jun	6:05:08	593	16.7	15.2	-1.5	23	16.70
17-30-jun	7:05:08	593	20.0	19.5	-0.5	24	16.71
17-30-jun	8:05:08	593	22.3	23.0	0.7	25	16.71
17-30-jun	9:05:08	593	23.8	25.5	1.6	26	16.70
17-30-jun	10:05:08	593	26.1	27.3	1.2	26	16.71
17-30-jun	11:05:08	593	27.3	28.5	1.2	27	16.70
17-30-jun	12:05:08	592	28.1	29.3	1.2	27	16.70
17-30-jun	13:05:08	592	28.8	30.1	1.3	27	16.70
17-30-jun	14:05:08	592	29.5	30.8	1.3	27	16.69
17-30-jun	15:05:08	592	29.4	30.8	1.4	27	16.70
17-30-jun	16:05:08	592	28.9	30.3	1.4	27	16.71
17-30-jun	17:05:08	591	28.3	29.6	1.3	27	16.70
17-30-jun	18:05:08	591	27.2	28.4	1.2	27	16.71
17-30-jun	19:05:08	592	24.2	24.9	0.8	27	16.71
17-30-jun	20:05:08	592	19.5	19.3	-0.2	26	16.71
17-30-jun	21:05:08	592	16.1	15.4	-0.7	26	16.72
17-30-jun	22:05:08	592	15.6	13.8	-1.8	26	16.71
17-30-jun	23:05:08	592	15.2	13.2	-2.0	25	16.71



## **Collocated Monitor 964C**

**PM<sub>10</sub> Sampler Summary****April 1, 2017 - June 30, 2017****Network: Alton Coal Development****Site:** Coal Hollow**Sampler ID:** Coal Hollow-C**AQS ID:****Sampler Type:** BGI FRM Single

		Concentration (µg/m3)	Concentration (µg/m3)	Sample Period	Sample Volume	Std Volume		Mass Gross	Net			
Date	Filter ID	LTP	STP	(hr:min)	(m3)	(m3)	Tare (mg)	(mg)	(mg)	Flag	Comments	
04/01/17	P2938103	2.7	3.3	23:59	24.0	20.0	391.525	391.591	0.066			
04/07/17	P2938108	5.7	7.0	23:59	24.0	19.7	382.100	382.239	0.139			
04/13/17	P2938775	35.5	43.7	23:59	24.0	19.5	393.768	394.622	0.854		Darker; discoloration	
04/19/17	P2939188	13.9	16.9	23:59	24.0	19.8	379.086	379.421	0.335	HT	Darker	
04/25/17	P2939180	42.9	52.1	23:59	24.0	19.8	386.855	387.887	1.032	HT	Much darker; discoloration	
05/01/17	P2939185	29.9	36.6	23:59	24.0	19.6	380.885	381.605	0.720			
05/07/17	P2939726	14.3	17.6	23:59	24.0	19.6	387.479	387.825	0.346	HT		
05/13/17	P2939731	9.6	11.9	23:59	24.0	19.4	386.840	387.072	0.232			
05/19/17	P2939736	26.0	31.5	23:59	24.0	19.9	384.561	385.188	0.627	HT		
05/25/17	P2940168	54.3	68.3	23:59	24.0	19.1	387.896	389.202	1.306		Much darker; discoloration	
05/31/17	P2940173	72.3	90.2	23:59	24.0	19.3	381.415	383.154	1.739		Darker; discoloration	
06/06/17	P2940667	177.2	222.3	23:59	24.0	19.2	384.443	388.704	4.261		Very dark; discoloration	
06/12/17	P2940672	34.4	42.2	23:59	24.0	19.6	378.463	379.290	0.827			
06/18/17	P2941056	13.6	17.3	23:59	24.0	18.8	389.513	389.840	0.327		Darker; specks	
06/24/17	P2941061	42.9	54.7	23:59	24.0	18.9	384.481	385.514	1.033			
06/30/17	P2941065	36.4	46.1	23:59	24.0	19.0	393.366	394.243	0.877			
06/01/17	P2940666	Field Blank						392.778	392.787	0.009		
# Valid		Recovery	Average	St. Dev.	Max	Min						
16		100%	47.6	52.2	222.3	3.3						

Inter-Mountain Laboratories' (IML) data validation is limited by the provided information. Data have been validated based on laboratory QC, field observations and other information available to IML. Additional data validation based on information not provided to IML may be required. According to 40 CFR 58.15 final responsibilities for data review and validation lies with each agency submitting data to AQS.

# BGI PQ200 Air Sampling System Downloaded 2017 04 apr 07:58:50

## Job Details:

Job Name: 17Apr04C.JOB  
Version: 5.62  
Serial No: 964  
Pump Time: 6693:08  
Flags:

## Job Code:

Site Name:  
Station Code:  
Operators:  
User1:  
User2:

	Max	Min	Avg	Units
BP	592	585	589	mmHg
TA	12.7	-0.1	4.7	°C
Q	---	---	16.71	Lpm

QCV 0.6 %  
Max overheat 2.6 °C  
occured 01-apr 14:13:44

## Timer Information:

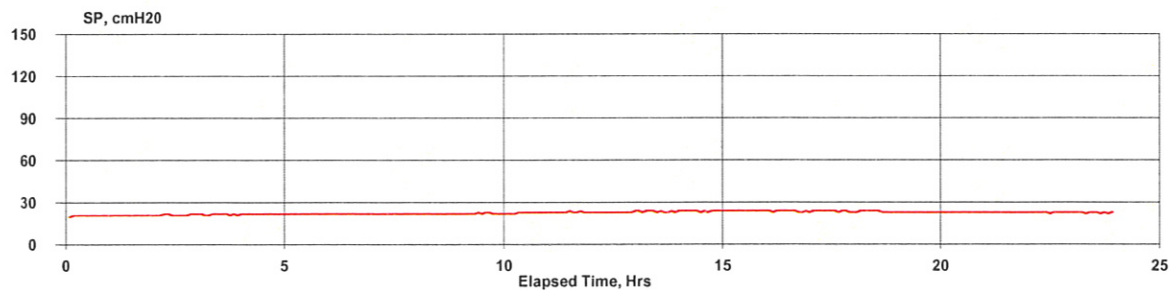
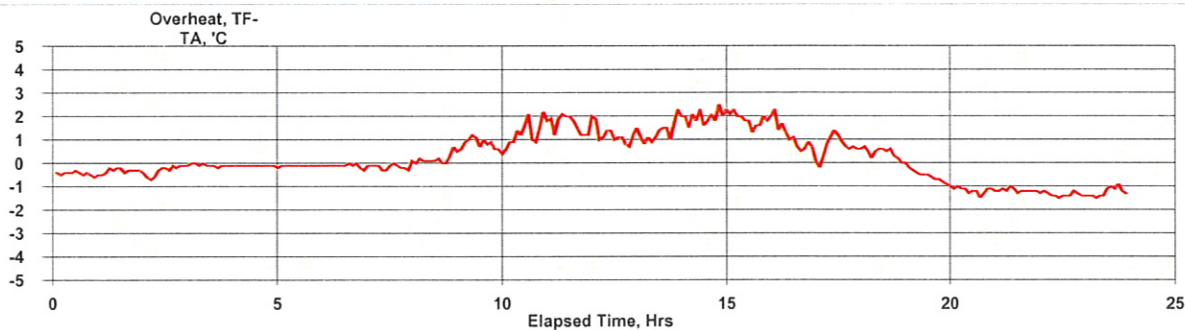
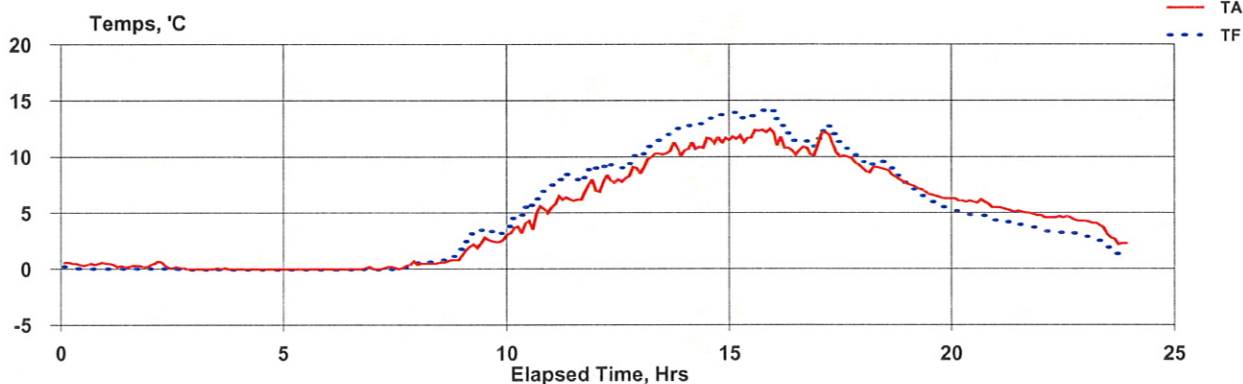
Date Time  
dd-mmm hh:mm:ss  
Start: 17-01-apr 0:00:08  
Stop: 17-02-apr 0:00:05  
ET: 23:59

## Mass Concentration Data:

Filter ID: 29  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.044 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

Notes 1:

Notes 2:



# Hourly

17-01-apr	0:05:08	587	0.5	0.0	-0.4	21	16.70
17-01-apr	1:05:08	587	0.3	0.0	-0.3	21	16.73
17-01-apr	2:05:08	588	0.2	-0.1	-0.3	21	16.71
17-01-apr	3:05:08	588	0.0	-0.1	-0.1	22	16.71
17-01-apr	4:05:08	588	0.0	-0.1	-0.1	22	16.71
17-01-apr	5:05:08	588	0.0	-0.1	-0.1	22	16.72
17-01-apr	6:05:08	589	0.0	-0.1	-0.1	22	16.72
17-01-apr	7:05:08	590	0.2	0.1	-0.1	22	16.71
17-01-apr	8:05:08	590	0.7	0.9	0.2	22	16.71
17-01-apr	9:05:08	591	2.4	3.2	0.8	22	16.71
17-01-apr	10:05:08	591	4.4	5.7	1.3	23	16.71
17-01-apr	11:05:08	591	6.6	8.2	1.7	23	16.72
17-01-apr	12:05:08	591	8.1	9.3	1.2	23	16.71
17-01-apr	13:05:08	591	10.3	11.6	1.4	24	16.71
17-01-apr	14:05:08	590	11.3	13.2	2.0	24	16.71
17-01-apr	15:05:08	590	12.0	13.9	1.9	24	16.71
17-01-apr	16:05:08	590	10.7	11.8	1.0	24	16.71
17-01-apr	17:05:08	591	10.5	11.2	0.7	24	16.71
17-01-apr	18:05:08	591	8.5	8.9	0.4	24	16.71
17-01-apr	19:05:08	591	6.8	6.2	-0.6	23	16.71
17-01-apr	20:05:08	591	6.0	4.8	-1.2	23	16.71
17-01-apr	21:05:08	592	5.1	3.9	-1.2	23	16.71
17-01-apr	22:05:08	592	4.5	3.2	-1.4	23	16.71
17-01-apr	23:05:08	592	3.2	2.0	-1.2	23	16.72

# BGI PQ200 Air Sampling System Downloaded 2017 10 apr 13:24:52

## Job Details:

Job Name: 17Apr10C.JOB  
Version: 5.62  
Serial No: 964  
Pump Time: 6717:07  
Flags:

Job Code:  
Site Name:  
Station Code:  
Operators:  
User1:  
User2:

	Max	Min	Avg	Units
BP	593	590	591	mmHg
TA	16.7	3.4	10	°C
Q	---	---	16.71	Lpm

## Timer Information:

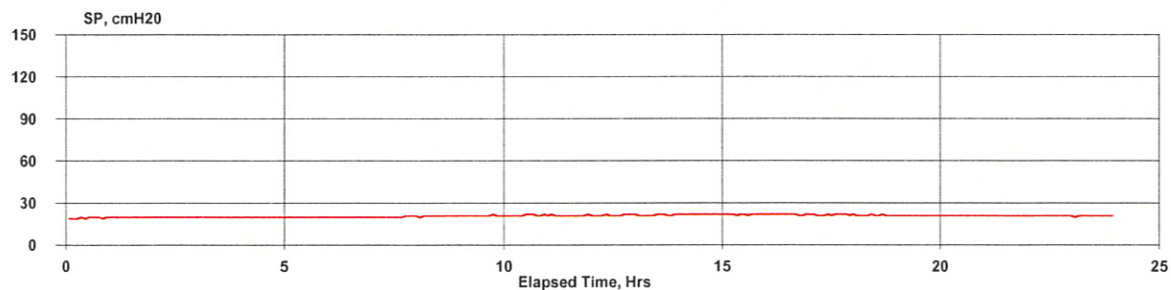
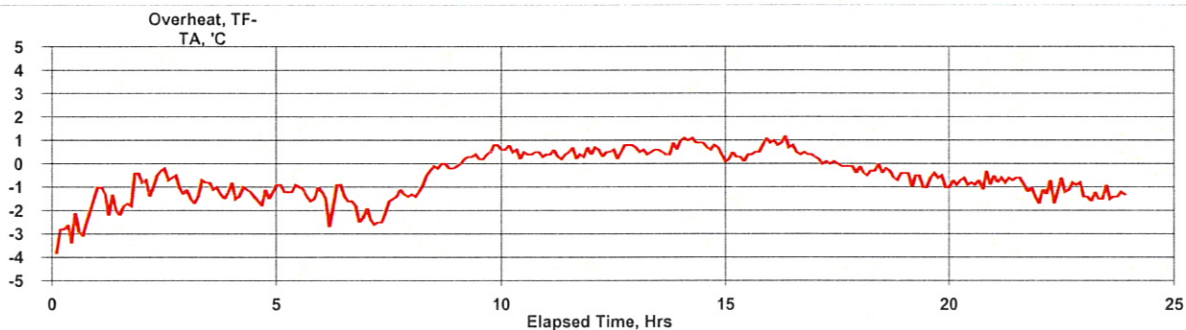
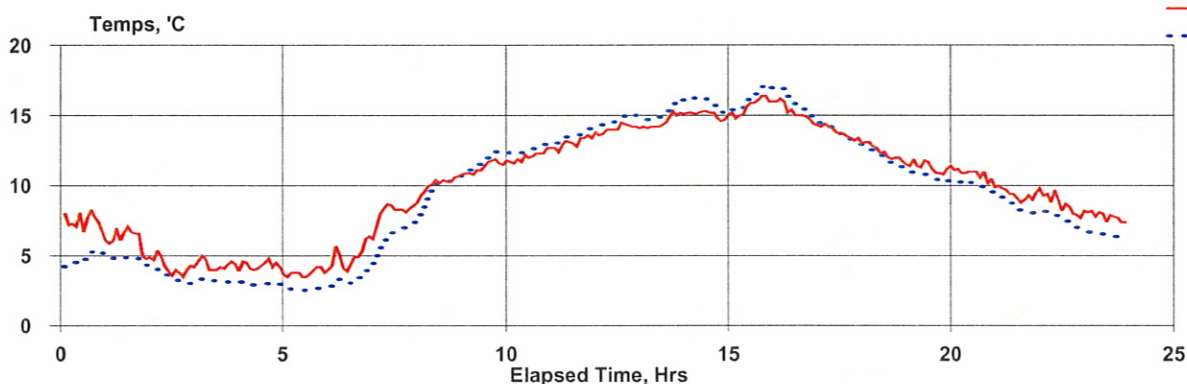
Date Time  
dd-mmm hh:mm:ss  
Start: 17-07-apr 0:00:08  
Stop: 17-08-apr 0:00:05  
ET: 23:59

## Mass Concentration Data:

Filter ID: 33  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.039 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

QCV 0.55 %  
Max overheat 2.3 °C  
occured 09-apr 16:17:45

Notes 1:  
Notes 2:



Hourly

17-07-apr	0:05:08	592	7.4	4.8	-2.5	20	16.71
17-07-apr	1:05:08	592	6.1	4.7	-1.4	20	16.70
17-07-apr	2:05:08	592	4.2	3.5	-0.8	20	16.71
17-07-apr	3:05:08	592	4.3	3.2	-1.2	20	16.71
17-07-apr	4:05:08	592	4.3	3.0	-1.3	20	16.71
17-07-apr	5:05:08	592	3.8	2.6	-1.2	20	16.71
17-07-apr	6:05:08	592	5.1	3.4	-1.7	20	16.70
17-07-apr	7:05:08	593	8.3	6.5	-1.8	20	16.71
17-07-apr	8:05:08	593	10.2	9.8	-0.4	21	16.72
17-07-apr	9:05:08	593	11.4	11.8	0.4	21	16.72
17-07-apr	10:05:08	593	12.1	12.6	0.5	21	16.74
17-07-apr	11:05:08	592	13.1	13.6	0.4	21	16.71
17-07-apr	12:05:08	592	14.1	14.7	0.6	21	16.71
17-07-apr	13:05:08	592	14.6	15.2	0.6	21	16.72
17-07-apr	14:05:08	591	15.1	15.8	0.8	22	16.71
17-07-apr	15:05:08	591	15.7	16.2	0.5	22	16.70
17-07-apr	16:05:08	590	15.2	15.8	0.7	22	16.71
17-07-apr	17:05:08	590	13.7	13.7	0.0	22	16.71
17-07-apr	18:05:08	590	12.3	11.9	-0.4	21	16.71
17-07-apr	19:05:08	590	11.3	10.6	-0.7	21	16.71
17-07-apr	20:05:08	590	10.8	10.0	-0.8	21	16.72
17-07-apr	21:05:08	590	9.4	8.5	-0.9	21	16.71
17-07-apr	22:05:08	590	8.6	7.6	-1.1	21	16.71
17-07-apr	23:05:08	590	7.8	6.4	-1.4	21	16.72



# BGI PQ200 Air Sampling System Downloaded 2017 14 apr 10:19:51

## Job Details:

Job Name: 17Apr14C.JOB  
Version: 5.62  
Serial No: 964  
Pump Time: 6741:06  
Flags:

Job Code:  
Site Name:  
Station Code:  
Operators:  
User1:  
User2:

	Max	Min	Avg	Units
BP	592	587	589	mmHg
TA	19.8	1.9	11.2	°C
Q	---	---	16.71	Lpm

QCV 0.4 %  
Max overheat 1.9 °C  
occured 13-apr 13:52:58

## Timer Information:

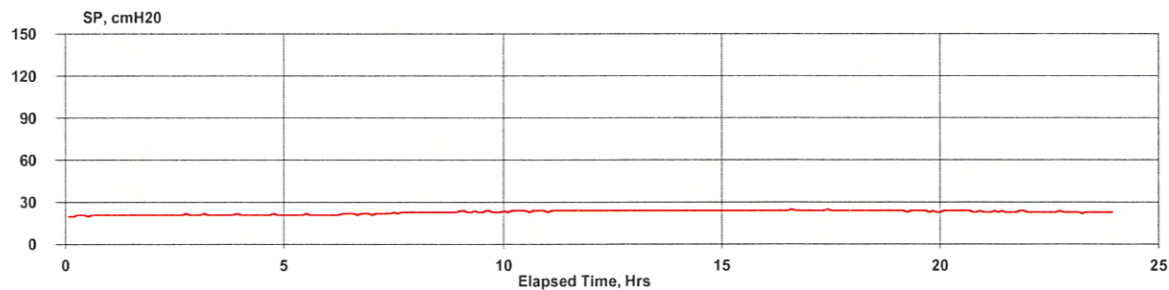
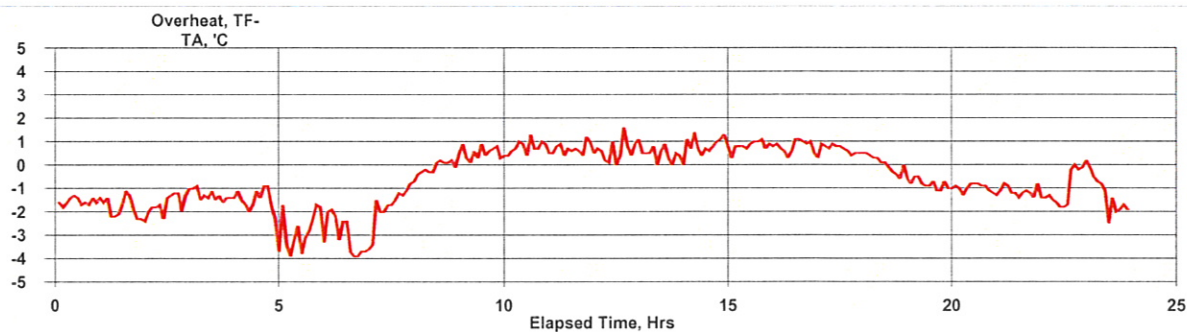
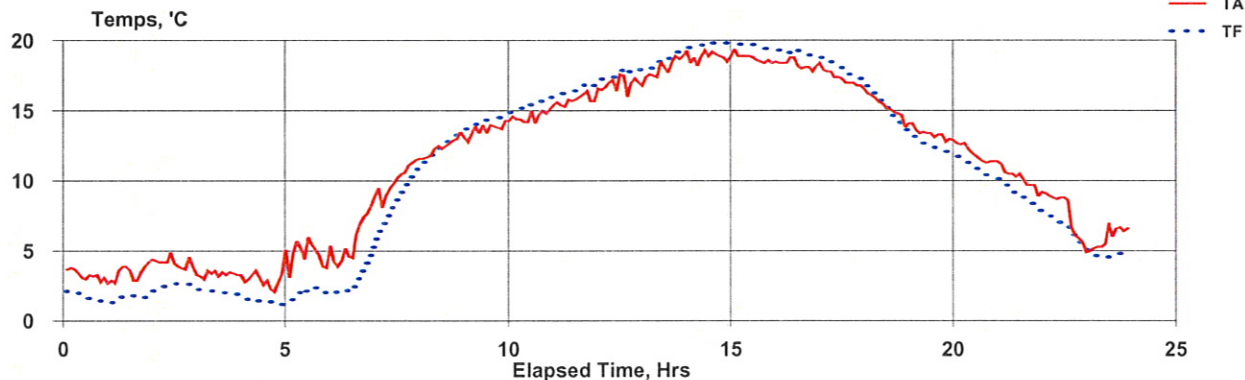
Date Time  
dd-mmm hh:mm:ss  
Start: 17-13-apr 0:00:08  
Stop: 17-14-apr 0:00:05  
ET: 23:59

## Mass Concentration Data:

Filter ID: 7  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.038 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

Notes 1:

Notes 2:



Hourly

17-13-apr	0:05:08	592	3.3	1.7	-1.5	21	16.71
17-13-apr	1:05:08	592	3.5	1.7	-1.9	21	16.70
17-13-apr	2:05:08	592	4.1	2.5	-1.6	21	16.71
17-13-apr	3:05:08	591	3.4	2.0	-1.3	21	16.72
17-13-apr	4:05:08	591	3.1	1.4	-1.7	21	16.70
17-13-apr	5:05:08	591	4.8	2.0	-2.8	21	16.71
17-13-apr	6:05:08	591	6.0	3.0	-3.1	22	16.72
17-13-apr	7:05:08	591	10.2	8.7	-1.6	23	16.70
17-13-apr	8:05:08	591	12.5	12.5	0.0	23	16.72
17-13-apr	9:05:08	591	13.7	14.3	0.5	23	16.71
17-13-apr	10:05:08	591	14.7	15.4	0.8	24	16.71
17-13-apr	11:05:08	590	15.9	16.5	0.7	24	16.71
17-13-apr	12:05:08	589	16.9	17.6	0.6	24	16.72
17-13-apr	13:05:08	589	18.2	18.6	0.4	24	16.72
17-13-apr	14:05:08	588	18.8	19.7	0.9	24	16.70
17-13-apr	15:05:08	588	18.7	19.6	0.8	24	16.71
17-13-apr	16:05:08	588	18.3	19.1	0.8	24	16.71
17-13-apr	17:05:08	588	17.2	17.9	0.7	24	16.70
17-13-apr	18:05:08	588	15.2	15.1	0.0	24	16.71
17-13-apr	19:05:08	588	13.3	12.5	-0.8	24	16.70
17-13-apr	20:05:08	588	11.9	10.9	-1.0	24	16.71
17-13-apr	21:05:08	589	10.1	8.9	-1.1	23	16.71
17-13-apr	22:05:08	589	7.6	6.6	-1.0	23	16.71
17-13-apr	23:05:08	589	6.0	4.6	-1.3	23	16.71

# BGI PQ200 Air Sampling System Downloaded 2017 20 apr 10:51:03

## Job Details:

Job Name: 17Apr20C.JOB  
Version: 5.62  
Serial No: 964  
Pump Time: 6765:05  
Flags:

## Job Code:

Site Name:  
Station Code:  
Operators:  
User1:  
User2:

	Max	Min	Avg	Units
BP	594	590	593	mmHg
TA	18.6	0.8	9.7	°C
Q	---	---	16.71	Lpm

## Timer Information:

Date Time  
dd-mmm hh:mm:ss  
Start: 17-19-apr 0:00:08  
Stop: 17-20-apr 0:00:05  
ET: 23:59

## Mass Concentration Data:

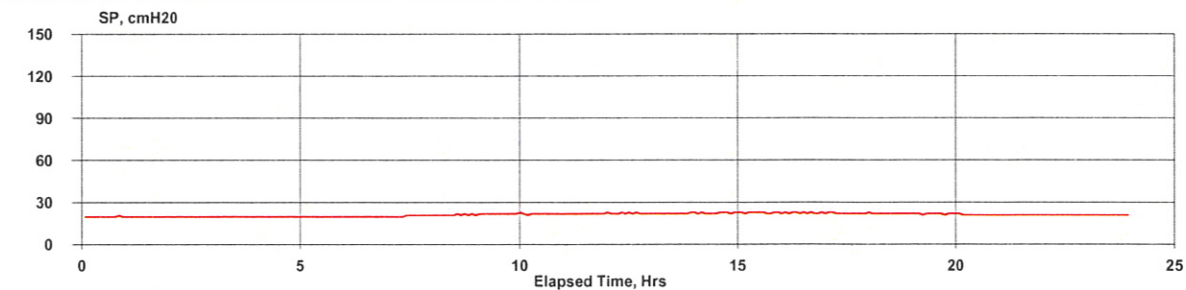
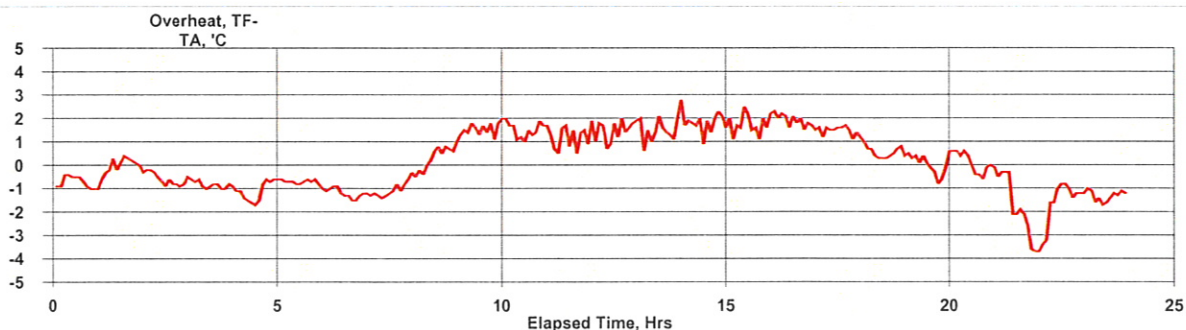
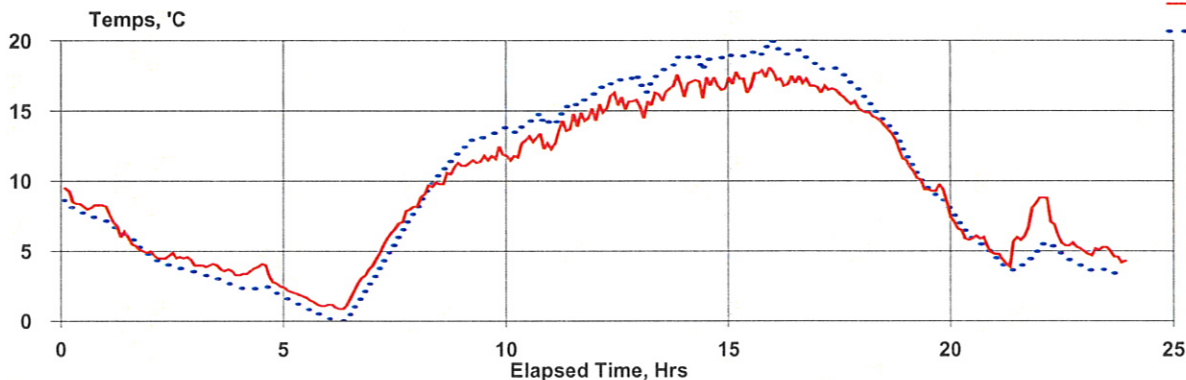
Filter ID: 25  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.04 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

QCV 0.56 %

Max overheat 3 °C  
occured 19-apr 14:21:42

Notes 1:

Notes 2:



Hourly

17-19-apr	0:05:08	592	8.5	7.7	-0.7	20	16.72
17-19-apr	1:05:08	592	5.9	5.9	0.0	20	16.71
17-19-apr	2:05:08	592	4.5	3.9	-0.6	20	16.70
17-19-apr	3:05:08	593	3.8	2.9	-0.8	20	16.71
17-19-apr	4:05:08	593	3.3	2.2	-1.1	20	16.70
17-19-apr	5:05:08	593	1.6	0.9	-0.7	20	16.73
17-19-apr	6:05:08	593	2.2	1.0	-1.2	20	16.72
17-19-apr	7:05:08	593	6.7	5.7	-1.0	21	16.71
17-19-apr	8:05:08	593	10.1	10.5	0.3	21	16.71
17-19-apr	9:05:08	593	11.6	13.2	1.6	22	16.71
17-19-apr	10:05:08	593	12.5	14.1	1.5	22	16.71
17-19-apr	11:05:08	594	14.2	15.3	1.2	22	16.70
17-19-apr	12:05:08	594	15.6	17.1	1.5	22	16.71
17-19-apr	13:05:08	593	16.2	17.7	1.6	22	16.72
17-19-apr	14:05:08	593	16.9	18.7	1.8	23	16.71
17-19-apr	15:05:08	593	17.4	19.2	1.8	23	16.70
17-19-apr	16:05:08	593	17.1	19.0	1.9	23	16.71
17-19-apr	17:05:08	593	16.0	17.5	1.5	22	16.72
17-19-apr	18:05:08	593	13.6	14.1	0.5	22	16.71
17-19-apr	19:05:08	593	9.5	9.6	0.0	22	16.71
17-19-apr	20:05:08	593	5.9	6.0	0.1	21	16.71
17-19-apr	21:05:08	594	6.1	4.1	-1.9	21	16.71
17-19-apr	22:05:08	594	6.3	4.7	-1.5	21	16.71
17-19-apr	23:05:08	594	4.8	3.5	-1.3	21	16.72



# BGI PQ200 Air Sampling System

Downloaded 2017 26 apr 14:05:28

## Job Details:

Job Name: 17Apr26C.JOB  
Version: 5.62  
Serial No: 964  
Pump Time: 6789:04  
Flags:

Job Code:  
Site Name:  
Station Code:  
Operators:  
User1:  
User2:

	Max	Min	Avg	Units
BP	590	582	586	mmHg
TA	10.5	0.5	5.9	°C
Q	---	---	16.7	Lpm

QCV 0.52 %

Max overheat 3.6 °C  
occured 25-apr 11:41:06

## Timer Information:

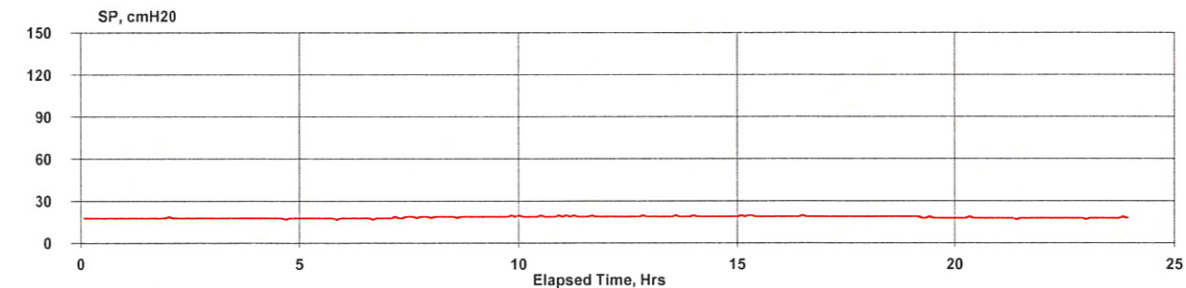
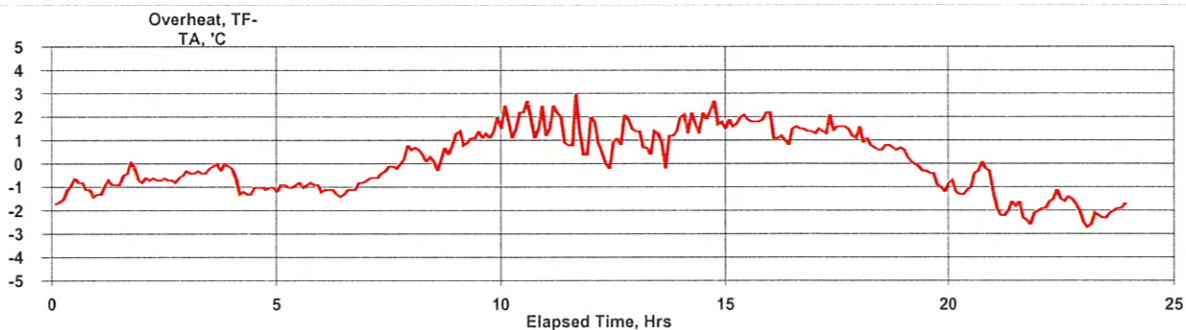
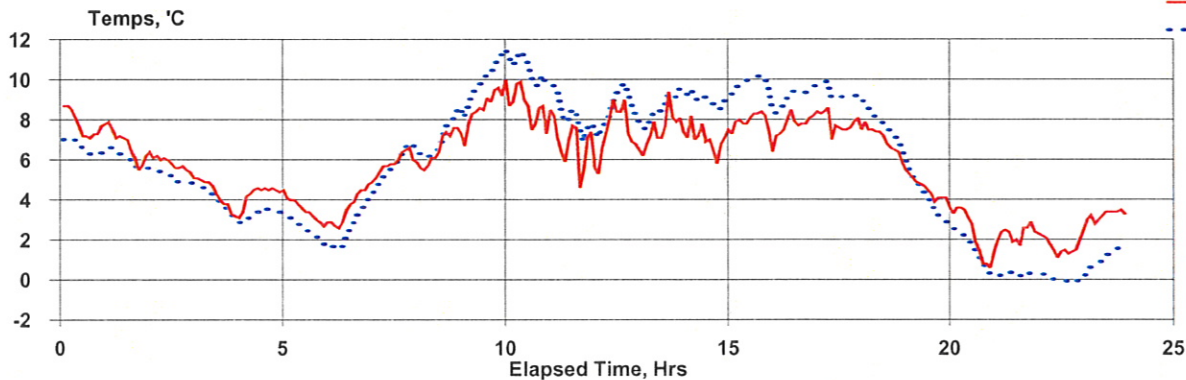
	Date	Time
	dd-mmm	hh:mm:ss
Start:	17-25-apr	0:00:08
Stop:	17-26-apr	0:00:05
ET:	23:59	

## Mass Concentration Data:

Filter ID:	12	
Final Wt:		mg
Initial Wt:		mg
Delta Wt:	0.000	mg
Total Vol:	24.04	m <sup>3</sup>
Mass Conc:	0	µg/m <sup>3</sup>

Notes 1:

Notes 2:



# Hourly

17-25-apr	0:05:08	584	7.8	6.6	-1.2	18	16.71
17-25-apr	1:05:08	584	6.7	6.0	-0.7	18	16.70
17-25-apr	2:05:08	585	5.8	5.1	-0.6	18	16.71
17-25-apr	3:05:08	584	4.2	3.9	-0.2	18	16.71
17-25-apr	4:05:08	584	4.4	3.3	-1.1	18	16.71
17-25-apr	5:05:08	584	3.4	2.5	-0.9	18	16.72
17-25-apr	6:05:08	584	3.8	2.7	-1.1	18	16.71
17-25-apr	7:05:08	585	5.9	5.8	-0.1	19	16.71
17-25-apr	8:05:08	585	6.6	7.1	0.4	19	16.73
17-25-apr	9:05:08	585	8.7	10.0	1.3	19	16.71
17-25-apr	10:05:08	585	8.6	10.5	1.9	19	16.72
17-25-apr	11:05:08	586	6.7	8.2	1.5	19	16.71
17-25-apr	12:05:08	586	7.5	8.5	1.1	19	16.70
17-25-apr	13:05:08	586	7.6	8.6	1.0	19	16.71
17-25-apr	14:05:08	587	7.1	9.0	1.9	19	16.71
17-25-apr	15:05:08	587	7.8	9.7	1.9	19	16.70
17-25-apr	16:05:08	587	7.9	9.2	1.3	19	16.72
17-25-apr	17:05:08	587	7.8	9.3	1.5	19	16.70
17-25-apr	18:05:08	587	6.9	7.6	0.7	19	16.71
17-25-apr	19:05:08	588	4.4	4.0	-0.4	18	16.71
17-25-apr	20:05:08	589	2.2	1.5	-0.7	18	16.71
17-25-apr	21:05:08	589	2.3	0.3	-2.1	18	16.71
17-25-apr	22:05:08	589	1.7	0.0	-1.7	18	16.71
17-25-apr	23:05:08	589	3.2	1.1	-2.2	18	16.72



# BGI PQ200 Air Sampling System Downloaded 2017 02 may 12:08:41

## Job Details:

Job Name: 17May02C.JOB  
Version: 5.62  
Serial No: 964  
Pump Time: 6813:03  
Flags:

## Job Code:

Site Name: 964C  
Station Code:  
Operators: KN  
User1:  
User2:

	Max	Min	Avg	Units
BP	593	590	591	mmHg
TA	20.8	-0.6	10.6	°C
Q	---	---	16.7	Lpm

## Timer Information:

Date Time  
dd-mmm hh:mm:ss  
Start: 17-01-may 0:00:08  
Stop: 17-02-may 0:00:04  
ET: 23:59

## Mass Concentration Data:

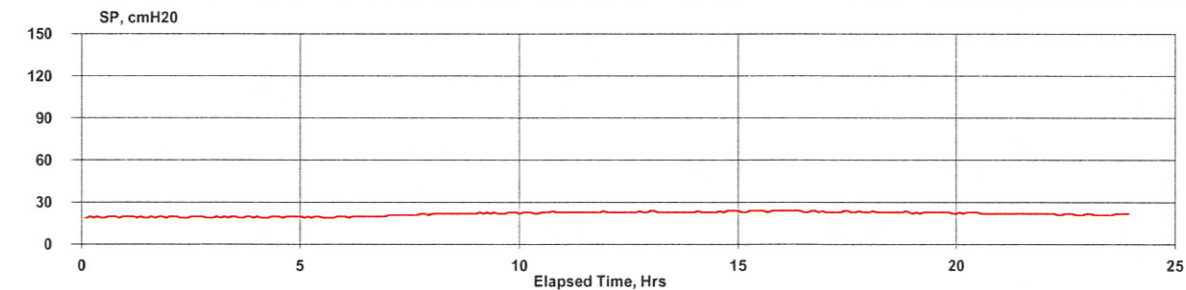
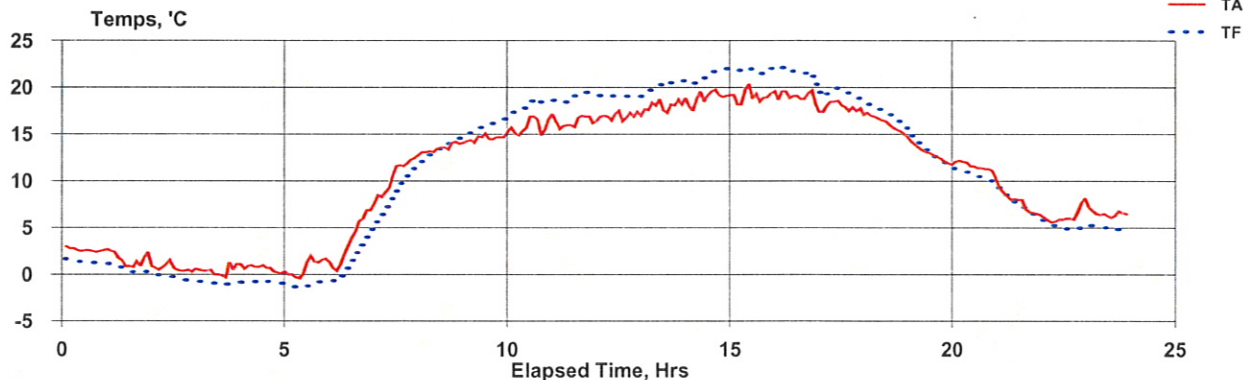
Filter ID: 21  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.035 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

QCV 0.49 %

Max overheat 4.1 °C  
occured 01-may 11:47:13

Notes 1:

Notes 2:



## Hourly

17-01-may	0:05:08	592	2.6	1.3	-1.3	20	16.70
17-01-may	1:05:08	592	1.5	0.5	-1.1	20	16.71
17-01-may	2:05:08	592	0.7	-0.4	-1.1	20	16.71
17-01-may	3:05:08	592	0.5	-1.0	-1.4	20	16.71
17-01-may	4:05:08	592	0.6	-0.9	-1.5	20	16.72
17-01-may	5:05:08	592	0.9	-1.1	-1.9	20	16.71
17-01-may	6:05:08	592	4.1	1.7	-2.4	20	16.73
17-01-may	7:05:08	592	10.8	8.8	-2.0	21	16.71
17-01-may	8:05:08	592	13.6	13.5	-0.1	22	16.70
17-01-may	9:05:08	592	14.7	15.8	1.2	23	16.71
17-01-may	10:05:08	592	16.0	18.0	2.1	23	16.70
17-01-may	11:05:08	592	16.3	19.0	2.7	23	16.71
17-01-may	12:05:08	592	17.0	19.1	2.1	23	16.71
17-01-may	13:05:08	591	18.1	20.2	2.0	23	16.71
17-01-may	14:05:08	591	19.0	21.3	2.3	24	16.70
17-01-may	15:05:08	591	19.1	21.8	2.7	24	16.71
17-01-may	16:05:08	591	18.9	21.6	2.6	24	16.70
17-01-may	17:05:08	591	17.9	19.3	1.4	23	16.71
17-01-may	18:05:08	591	16.1	17.1	1.1	23	16.71
17-01-may	19:05:08	592	12.9	13.1	0.2	23	16.72
17-01-may	20:05:08	592	11.5	10.6	-1.0	22	16.71
17-01-may	21:05:08	592	7.7	7.6	-0.1	22	16.72
17-01-may	22:05:08	592	6.3	5.1	-1.2	22	16.71
17-01-may	23:05:08	592	6.5	5.0	-1.6	21	16.70

# BGI PQ200 Air Sampling System Downloaded 2017 08 may 13:22:50

## Job Details:

Job Name: 17May08C.JOB  
Version: 5.62  
Serial No: 964  
Pump Time: 6837:02  
Flags:

Job Code:  
Site Name:  
Station Code:  
Operators:  
User1:  
User2:

	Max	Min	Avg	Units
BP	591	584	587	mmHg
TA	17.8	1.1	9.5	°C
Q	---	---	16.7	Lpm

QCV 0.52 %  
Max overheat 2.7 °C  
occured 07-may 12:00:06

## Timer Information:

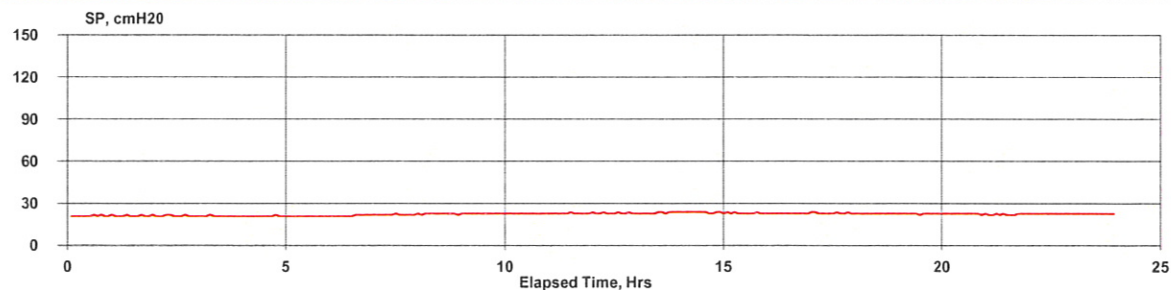
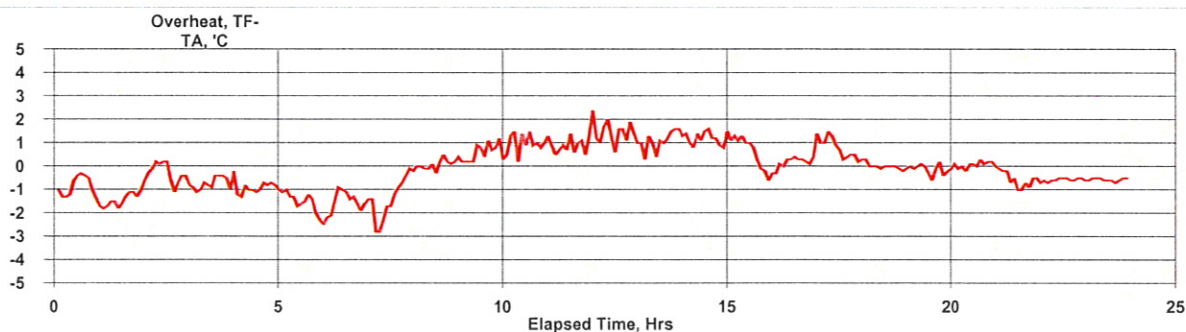
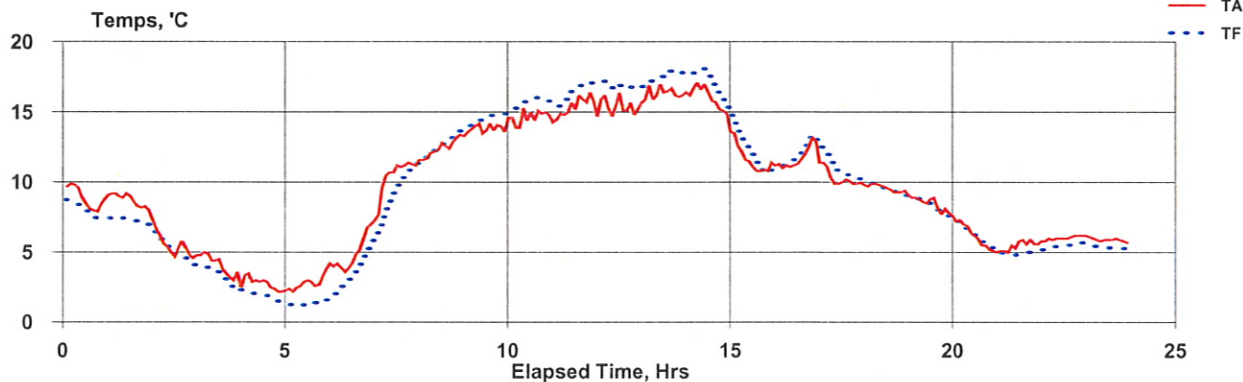
Date Time  
dd-mmm hh:mm:ss  
Start: 17-07-may 0:00:08  
Stop: 17-08-may 0:00:05  
ET: 23:59

## Mass Concentration Data:

Filter ID: 30  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.033 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

Notes 1:

Notes 2:



# Hourly

17-07-may	0:05:05	587	8.9	8.0	-0.9	21	16.70
17-07-may	1:05:05	587	8.6	7.2	-1.4	21	16.71
17-07-may	2:05:05	587	5.4	5.0	-0.3	21	16.71
17-07-may	3:05:05	587	4.0	3.3	-0.7	21	16.71
17-07-may	4:05:05	587	2.8	1.8	-1.0	21	16.71
17-07-may	5:05:05	587	2.9	1.4	-1.6	21	16.71
17-07-may	6:05:05	587	5.1	3.6	-1.5	22	16.71
17-07-may	7:05:05	588	10.7	9.3	-1.4	22	16.71
17-07-may	8:05:05	588	12.5	12.6	0.1	23	16.71
17-07-may	9:05:05	587	13.9	14.5	0.6	23	16.70
17-07-may	10:05:05	587	14.6	15.7	1.0	23	16.70
17-07-may	11:05:05	587	15.4	16.4	1.0	23	16.70
17-07-may	12:05:05	587	15.5	16.8	1.4	23	16.71
17-07-may	13:05:05	587	16.4	17.5	1.1	24	16.72
17-07-may	14:05:05	587	15.9	17.1	1.2	24	16.72
17-07-may	15:05:05	587	11.5	12.1	0.6	23	16.72
17-07-may	16:05:05	587	11.7	12.0	0.3	23	16.70
17-07-may	17:05:05	588	10.2	10.9	0.7	23	16.71
17-07-may	18:05:05	587	9.5	9.5	0.0	23	16.71
17-07-may	19:05:05	588	8.4	8.3	-0.1	23	16.71
17-07-may	20:05:05	589	6.1	6.2	0.1	23	16.71
17-07-may	21:05:05	589	5.5	4.9	-0.6	23	16.70
17-07-may	22:05:05	590	6.1	5.5	-0.6	23	16.71
17-07-may	23:05:05	590	5.9	5.3	-0.6	23	16.71



# BGI PQ200 Air Sampling System Downloaded 2017 16 may 13:42:25

## Job Details:

Job Name: 17May16C.JOB  
Version: 5.62  
Serial No: 964  
Pump Time: 6861:01  
Flags:

Job Code:  
Site Name:  
Station Code:  
Operators:  
User1:  
User2:

	Max	Min	Avg	Units
BP	589	586	587	mmHg
TA	18.9	3.3	12.5	°C
Q	---	---	16.71	Lpm

QCV 0.52 %  
Max overheat 2.4 °C  
occured 15-may 16:30:57

## Timer Information:

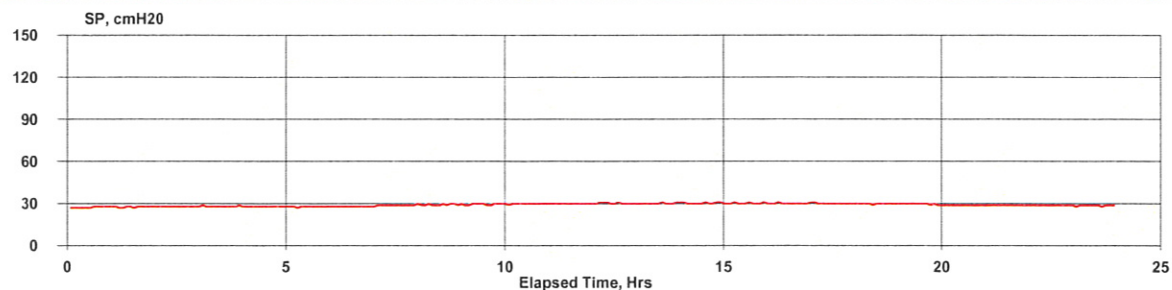
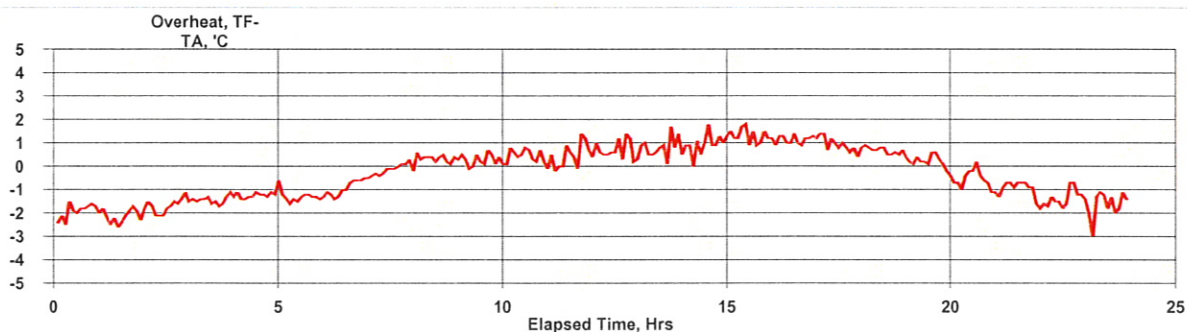
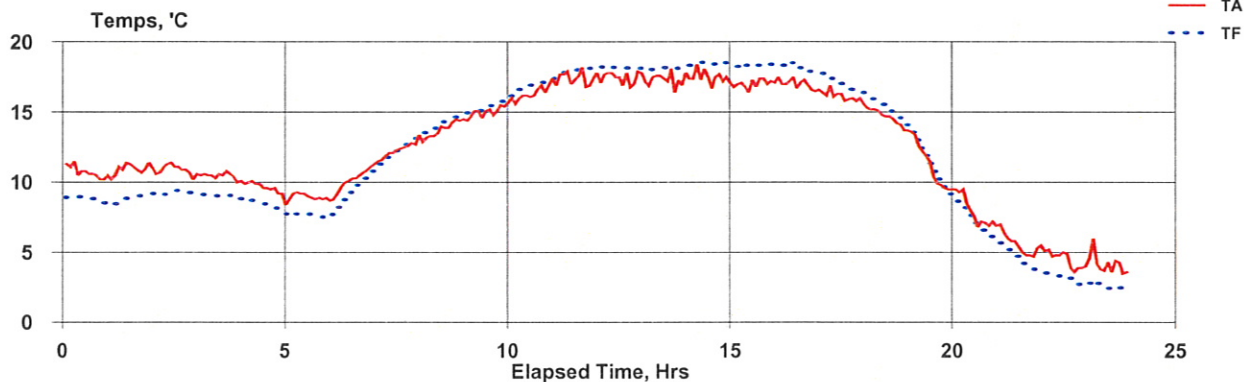
Date Time  
dd-mmm hh:mm:ss  
Start: 17-13-may 0:00:08  
Stop: 17-14-may 0:00:04  
ET: 23:59

## Mass Concentration Data:

Filter ID: 35  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.033 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

Notes 1:

Notes 2:



Hourly

17-13-may	0:05:08	589	10.7	8.8	-1.9	28	16.71
17-13-may	1:05:08	588	11.0	8.8	-2.1	28	16.71
17-13-may	2:05:08	588	10.9	9.2	-1.7	28	16.72
17-13-may	3:05:08	587	10.5	9.0	-1.4	28	16.72
17-13-may	4:05:08	587	9.6	8.4	-1.2	28	16.71
17-13-may	5:05:08	587	9.0	7.6	-1.3	28	16.72
17-13-may	6:05:08	587	10.2	9.4	-0.9	28	16.71
17-13-may	7:05:08	588	12.3	12.2	-0.1	29	16.71
17-13-may	8:05:08	588	13.8	14.2	0.4	29	16.71
17-13-may	9:05:08	588	15.1	15.3	0.3	30	16.71
17-13-may	10:05:08	588	16.4	16.8	0.4	30	16.70
17-13-may	11:05:08	588	17.4	17.9	0.5	30	16.72
17-13-may	12:05:08	588	17.5	18.2	0.7	30	16.71
17-13-may	13:05:08	588	17.3	18.1	0.8	30	16.70
17-13-may	14:05:08	588	17.5	18.5	1.0	30	16.71
17-13-may	15:05:08	588	17.0	18.3	1.3	30	16.70
17-13-may	16:05:08	588	17.0	18.1	1.1	30	16.69
17-13-may	17:05:08	587	16.1	17.0	0.9	30	16.71
17-13-may	18:05:08	587	14.6	15.3	0.7	30	16.70
17-13-may	19:05:08	588	11.2	11.3	0.2	30	16.71
17-13-may	20:05:08	588	7.9	7.3	-0.6	29	16.71
17-13-may	21:05:08	589	5.5	4.6	-1.0	29	16.71
17-13-may	22:05:08	589	4.5	3.1	-1.4	29	16.71
17-13-may	23:05:08	588	4.2	2.5	-1.6	29	16.71



# BGI PQ200 Air Sampling System Downloaded 2017 22 may 12:58:52

## Job Details:

Job Name: 17May22C.JOB  
Version: 5.62  
Serial No: 964  
Pump Time: 6885:00  
Flags:

Job Code:  
Site Name: 963B  
Station Code:  
Operators: KN  
User1:  
User2:

	Max	Min	Avg	Units
BP	594	589	591	mmHg
TA	14.8	-1.3	7	°C
Q	---	---	16.71	Lpm

QCV 0.53 %  
Max overheat 4.1 °C  
occured 21-may 15:31:56

## Timer Information:

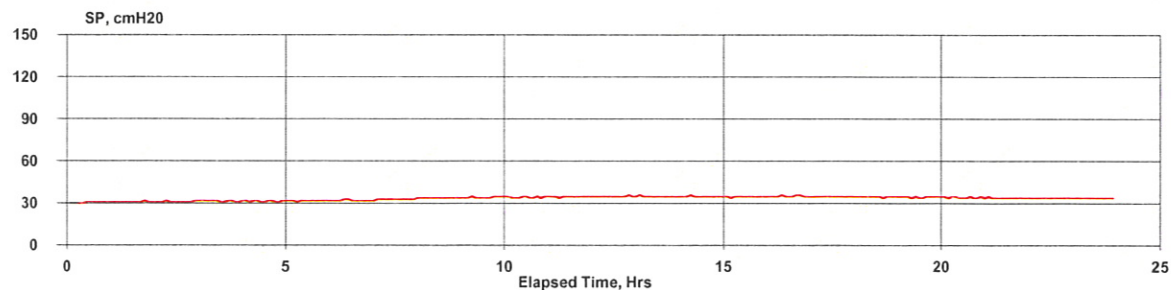
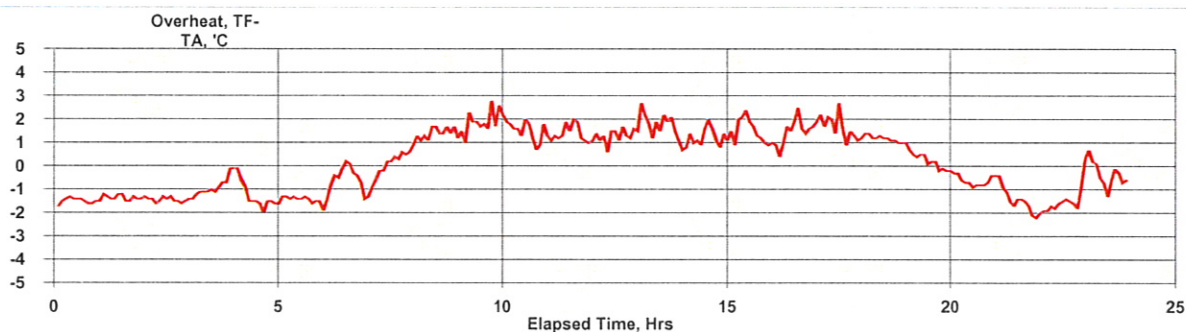
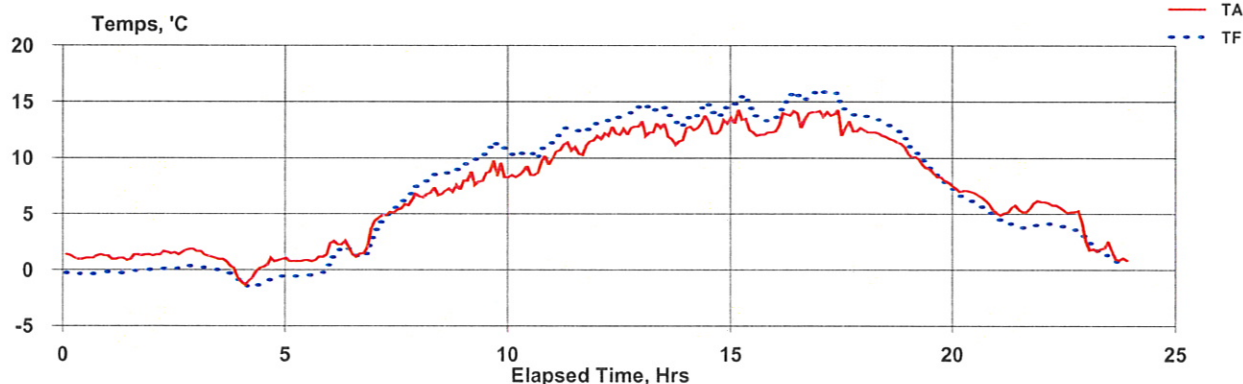
Date Time  
dd-mmm hh:mm:ss  
Start: 17-19-may 0:00:08  
Stop: 17-20-may 0:00:05  
ET: 23:59

## Mass Concentration Data:

Filter ID: 40  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.04 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

Notes 1:

Notes 2:



## Hourly

17-19-may	0:05:08	591	1.2	-0.3	-1.5	31	16.71
17-19-may	1:05:08	591	1.2	-0.2	-1.3	31	16.71
17-19-may	2:05:08	591	1.6	0.2	-1.5	31	16.71
17-19-may	3:05:08	591	0.7	-0.2	-0.9	32	16.71
17-19-may	4:05:08	591	0.2	-1.1	-1.3	32	16.71
17-19-may	5:05:08	591	1.1	-0.4	-1.4	32	16.71
17-19-may	6:05:08	592	2.3	1.7	-0.6	32	16.71
17-19-may	7:05:08	592	5.6	5.7	0.2	33	16.71
17-19-may	8:05:08	592	7.1	8.5	1.4	34	16.72
17-19-may	9:05:08	592	8.5	10.4	1.9	34	16.71
17-19-may	10:05:08	592	9.0	10.5	1.5	35	16.71
17-19-may	11:05:08	592	11.0	12.4	1.4	35	16.73
17-19-may	12:05:08	592	12.4	13.8	1.3	35	16.72
17-19-may	13:05:08	592	12.2	13.9	1.7	35	16.72
17-19-may	14:05:08	592	12.9	14.2	1.2	35	16.71
17-19-may	15:05:08	592	12.7	14.2	1.5	35	16.71
17-19-may	16:05:08	592	13.8	15.3	1.5	35	16.71
17-19-may	17:05:08	592	13.2	14.8	1.6	35	16.72
17-19-may	18:05:08	592	11.7	12.9	1.2	35	16.72
17-19-may	19:05:08	592	8.8	9.0	0.2	35	16.71
17-19-may	20:05:08	593	6.5	5.9	-0.6	34	16.72
17-19-may	21:05:08	593	5.5	4.0	-1.5	34	16.71
17-19-may	22:05:08	594	5.2	3.8	-1.4	34	16.71
17-19-may	23:05:08	594	1.6	1.2	-0.3	34	16.71

# BGI PQ200 Air Sampling System Downloaded 2017 26 may 08:53:56

## Job Details:

Job Name: 17May26C.JOB  
Version: 5.62  
Serial No: 964  
Pump Time: 6908:59  
Flags:

Job Code:  
Site Name: 964C  
Station Code:  
Operators: KN  
User1:  
User2:

	Max	Min	Avg	Units
BP	588	584	585	mmHg
TA	23.9	5.6	15.6	°C
Q	---	---	16.7	Lpm

QCV 0.54 %  
Max overheat 2.9 °C  
occured 25-may 13:46:25

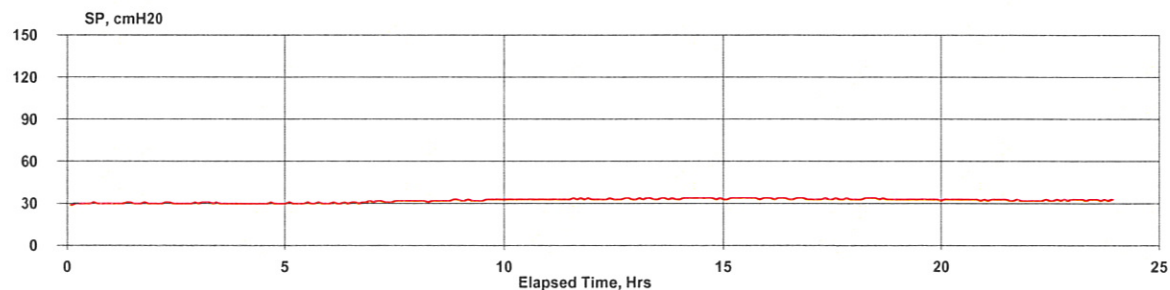
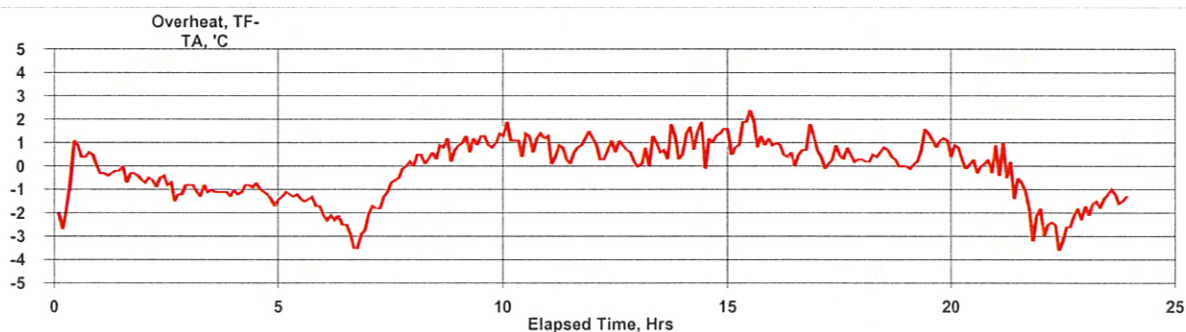
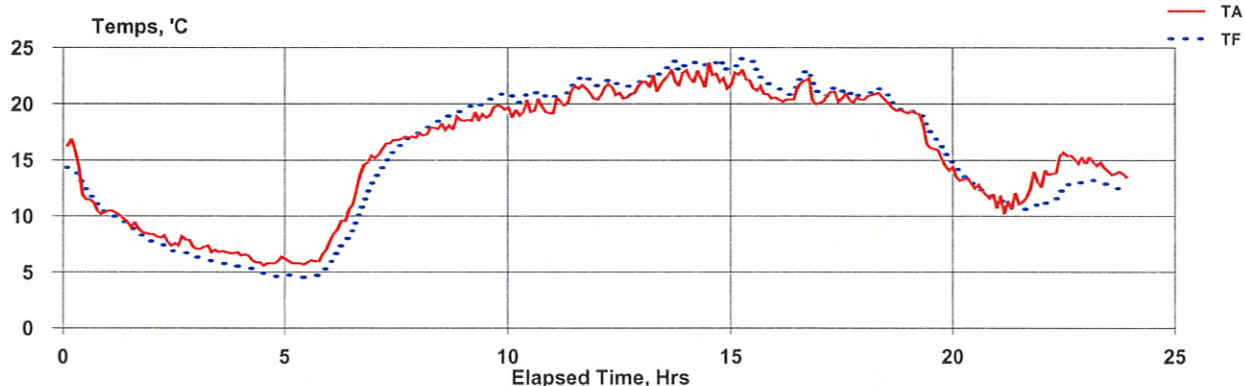
## Timer Information:

Date Time  
dd-mmm hh:mm:ss  
Start: 17-25-may 0:00:08  
Stop: 17-26-may 0:00:05  
ET: 23:59

## Mass Concentration Data:

Filter ID: 7  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.041 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

Notes 1:  
Notes 2:



Hourly

17-25-may	0:05:08	586	12.6	12.3	-0.3	30	16.71
17-25-may	1:05:08	586	9.3	8.9	-0.4	30	16.71
17-25-may	2:05:08	585	7.8	6.9	-0.8	30	16.71
17-25-may	3:05:08	585	6.9	5.8	-1.1	30	16.71
17-25-may	4:05:08	585	6.0	4.9	-1.1	30	16.71
17-25-may	5:05:08	585	6.2	4.8	-1.4	30	16.72
17-25-may	6:05:08	585	12.0	9.4	-2.6	31	16.71
17-25-may	7:05:08	586	16.7	15.9	-0.8	32	16.71
17-25-may	8:05:08	586	18.0	18.6	0.6	32	16.71
17-25-may	9:05:08	586	19.2	20.3	1.1	33	16.71
17-25-may	10:05:08	586	19.5	20.6	1.2	33	16.71
17-25-may	11:05:08	586	20.8	21.6	0.7	33	16.70
17-25-may	12:05:08	586	21.2	21.8	0.6	33	16.71
17-25-may	13:05:08	586	22.2	22.9	0.7	34	16.70
17-25-may	14:05:08	586	22.3	23.5	1.3	34	16.71
17-25-may	15:05:08	585	21.7	22.9	1.3	34	16.71
17-25-may	16:05:08	585	20.8	21.6	0.8	34	16.71
17-25-may	17:05:08	585	20.6	21.0	0.4	33	16.71
17-25-may	18:05:08	586	20.1	20.4	0.3	33	16.71
17-25-may	19:05:08	586	16.6	17.4	0.8	33	16.71
17-25-may	20:05:08	586	12.5	12.8	0.3	33	16.71
17-25-may	21:05:08	587	11.9	10.8	-1.0	33	16.71
17-25-may	22:05:08	587	14.8	12.2	-2.5	32	16.68
17-25-may	23:05:08	588	14.2	12.8	-1.5	33	16.70



# BGI PQ200 Air Sampling System

Downloaded 2017 01 jun 09:39:08

## Job Details:

Job Name: 17Jun01C.JOB  
Version: 5.62  
Serial No: 964  
Pump Time: 6932:58  
Flags:

Job Code:  
Site Name: 964C  
Station Code:  
Operators: KN  
User1:  
User2:

	Max	Min	Avg	Units
BP	593	590	591	mmHg
TA	26.1	5.9	16	°C
Q	---	---	16.7	Lpm

QCV 0.58 %  
Max overheat 3.1 °C  
occured 31-may 14:29:00

## Timer Information:

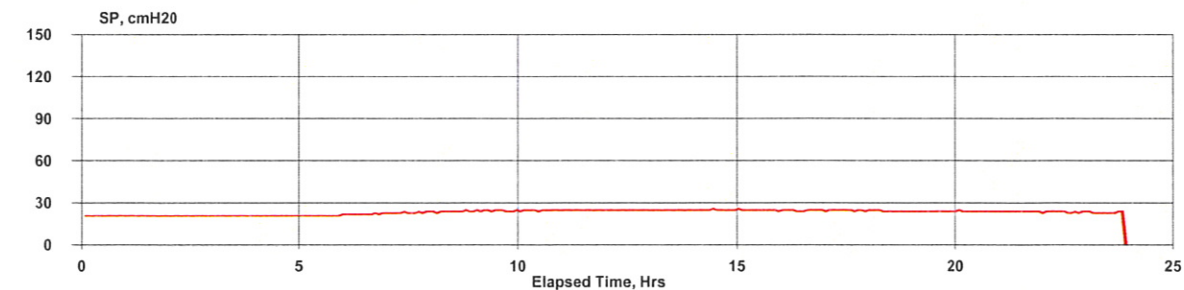
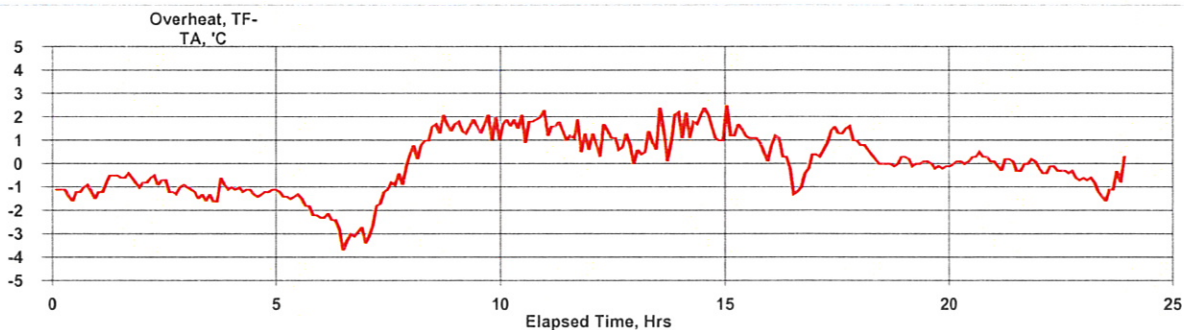
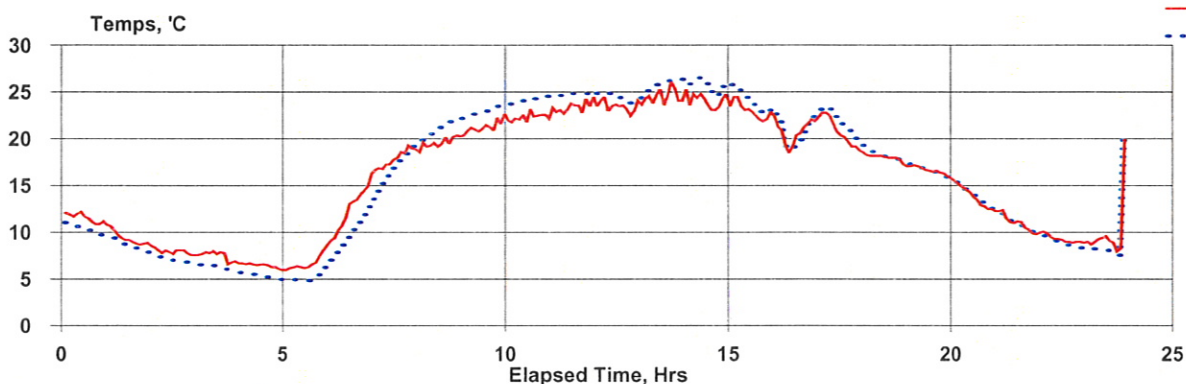
	Date	Time
	dd-mmm	hh:mm:ss
Start:	17-31-may	0:00:08
Stop:	17-01-jun	0:00:05
ET:	23:59	

## Mass Concentration Data:

Filter ID:	12	
Final Wt:		mg
Initial Wt:		mg
Delta Wt:	0.000	mg
Total Vol:	24.035	m <sup>3</sup>
Mass Conc:	0	µg/m <sup>3</sup>

Notes 1:

Notes 2:



Hourly

17-31-may	0:05:08	592	11.5	10.3	-1.2	21	16.71
17-31-may	1:05:08	592	9.3	8.6	-0.7	21	16.71
17-31-may	2:05:08	592	7.9	7.0	-0.9	21	16.72
17-31-may	3:05:08	592	7.5	6.2	-1.2	21	16.71
17-31-may	4:05:08	592	6.5	5.3	-1.2	21	16.71
17-31-may	5:05:08	592	6.8	5.1	-1.7	21	16.72
17-31-may	6:05:08	592	12.6	9.7	-2.8	22	16.71
17-31-may	7:05:08	593	17.9	16.7	-1.2	23	16.71
17-31-may	8:05:08	593	19.6	20.9	1.3	24	16.72
17-31-may	9:05:08	593	21.3	22.9	1.6	25	16.69
17-31-may	10:05:08	592	22.3	24.1	1.8	25	16.72
17-31-may	11:05:08	592	23.4	24.7	1.3	25	16.71
17-31-may	12:05:08	592	23.5	24.4	0.9	25	16.71
17-31-may	13:05:08	591	24.5	25.7	1.1	25	16.71
17-31-may	14:05:08	591	24.1	25.7	1.6	25	16.71
17-31-may	15:05:08	591	23.1	24.2	1.2	25	16.71
17-31-may	16:05:08	591	20.8	20.8	0.0	25	16.71
17-31-may	17:05:08	591	20.9	21.9	1.1	25	16.72
17-31-may	18:05:08	591	18.1	18.3	0.2	24	16.70
17-31-may	19:05:08	591	16.7	16.7	0.0	24	16.71
17-31-may	20:05:08	592	14.0	14.2	0.2	24	16.71
17-31-may	21:05:08	592	11.1	11.1	0.0	24	16.71
17-31-may	22:05:08	592	9.3	9.0	-0.3	24	16.72
17-31-may	23:05:08	592	8.9	8.0	-0.9	23	16.70
17-01-jun	9:30:00	591	19.9	20.2	0.3		0.00



# BGI PQ200 Air Sampling System Downloaded 2017 07 jun 09:41:24

## Job Details:

Job Name: 17Jun07C.JOB  
Version: 5.62  
Serial No: 964  
Pump Time: 6956:57  
Flags:

Job Code:  
Site Name:  
Station Code:  
Operators:  
User1:  
User2:

	Max	Min	Avg	Units
BP	596	592	594	mmHg
TA	29.9	7.2	19.2	°C
Q	---	---	16.71	Lpm

QCV 0.55 %  
Max overheat 2.6 °C  
occured 06-jun 15:55:24

## Timer Information:

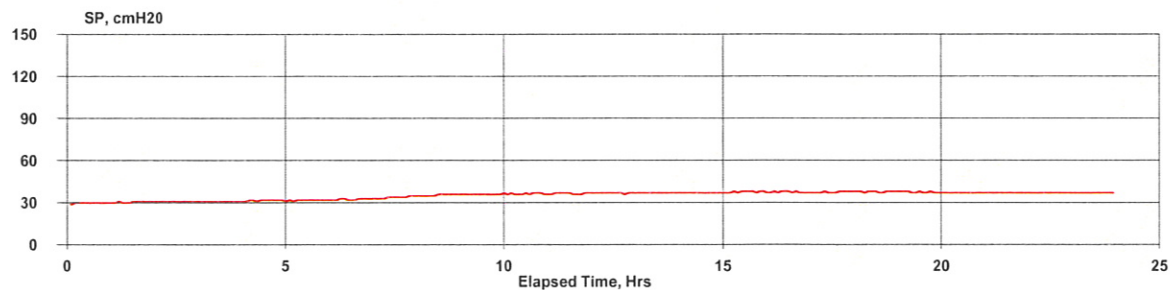
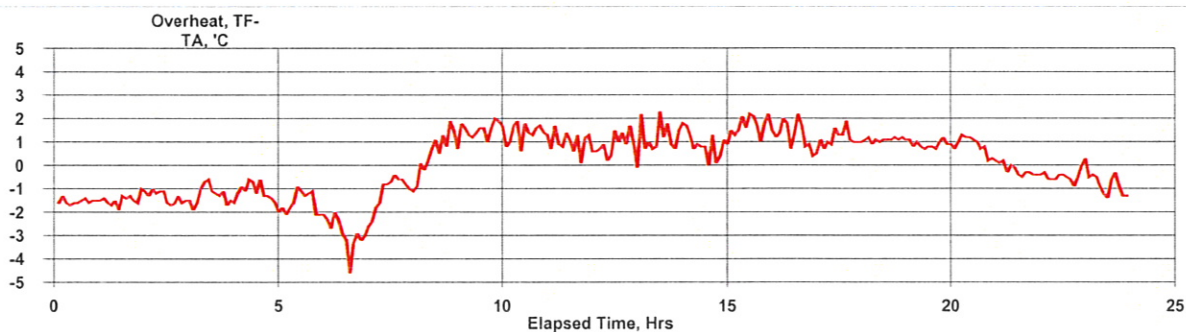
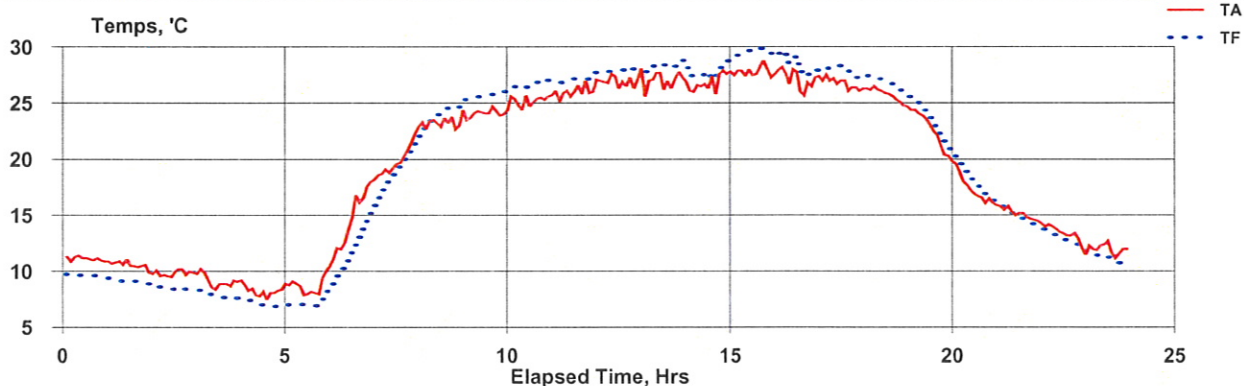
Date Time  
dd-mmm hh:mm:ss  
Start: 17-06-jun 0:00:08  
Stop: 17-07-jun 0:00:05  
ET: 23:59

## Mass Concentration Data:

Filter ID: 19  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.042 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

Notes 1:

Notes 2:



Hourly

17-06-jun	0:05:08	594	11.1	9.6	-1.5	30	16.71
17-06-jun	1:05:08	594	10.5	9.1	-1.4	31	16.71
17-06-jun	2:05:08	594	9.9	8.5	-1.4	31	16.71
17-06-jun	3:05:08	594	9.1	7.8	-1.3	31	16.72
17-06-jun	4:05:08	594	8.2	7.1	-1.2	32	16.72
17-06-jun	5:05:08	594	8.8	7.2	-1.6	32	16.71
17-06-jun	6:05:08	595	15.0	12.1	-2.9	33	16.71
17-06-jun	7:05:08	595	20.1	19.1	-1.1	34	16.71
17-06-jun	8:05:08	595	23.3	24.0	0.6	36	16.71
17-06-jun	9:05:08	595	24.1	25.7	1.6	36	16.71
17-06-jun	10:05:08	595	25.3	26.6	1.4	36	16.71
17-06-jun	11:05:08	595	26.1	27.1	1.0	37	16.71
17-06-jun	12:05:08	595	27.0	27.9	0.8	37	16.72
17-06-jun	13:05:08	594	27.0	28.3	1.3	37	16.71
17-06-jun	14:05:08	594	26.9	27.7	0.8	37	16.71
17-06-jun	15:05:08	593	27.8	29.5	1.7	38	16.71
17-06-jun	16:05:08	593	27.2	28.4	1.2	37	16.70
17-06-jun	17:05:08	593	26.7	27.9	1.2	38	16.72
17-06-jun	18:05:08	593	25.7	26.8	1.1	38	16.70
17-06-jun	19:05:08	593	22.5	23.4	0.9	37	16.71
17-06-jun	20:05:08	594	17.2	18.0	0.8	37	16.72
17-06-jun	21:05:08	594	15.1	14.8	-0.2	37	16.71
17-06-jun	22:05:08	594	13.3	12.8	-0.4	37	16.71
17-06-jun	23:05:08	594	12.0	11.2	-0.8	37	16.71

# BGI PQ200 Air Sampling System Downloaded 2017 13 jun 10:07:06

## Job Details:

Job Name: 17Jun13C.JOB  
Version: 5.62  
Serial No: 964  
Pump Time: 6980:56  
Flags:

Job Code:  
Site Name:  
Station Code:  
Operators:  
User1:  
User2:

	Max	Min	Avg	Units
BP	591	585	589	mmHg
TA	15.9	1.5	10.5	°C
Q	---	---	16.7	Lpm

QCV 0.54 %  
Max overheat 2.5 °C  
occured 12-jun 14:38:08

## Timer Information:

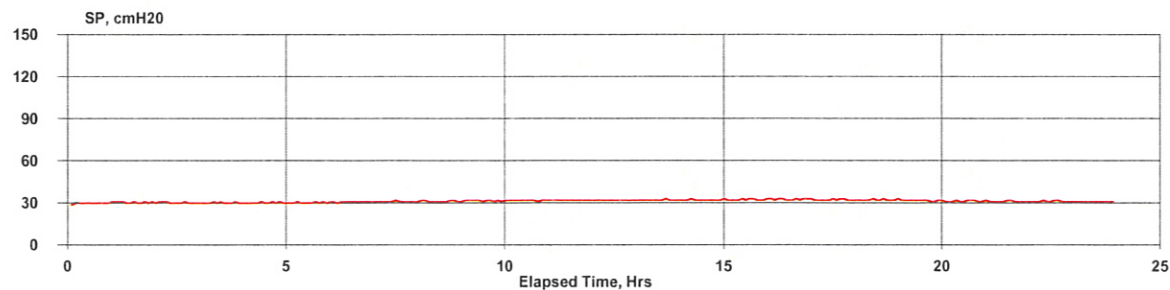
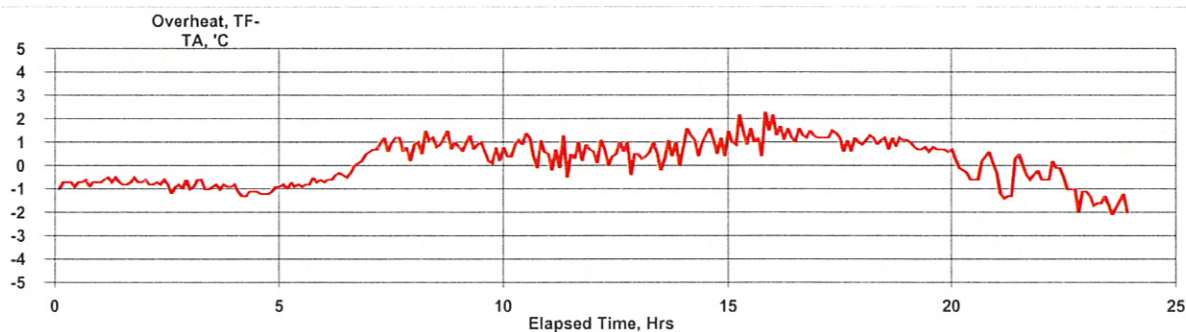
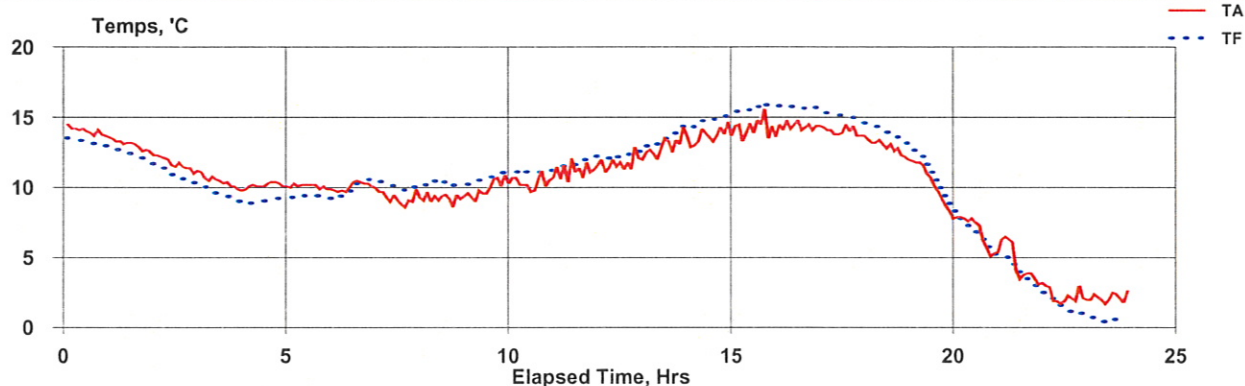
Date Time  
dd-mmm hh:mm:ss  
Start: 17-12-jun 0:00:08  
Stop: 17-13-jun 0:00:05  
ET: 23:59

## Mass Concentration Data:

Filter ID: 24  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.04 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

Notes 1:

Notes 2:



Hourly

17-12-jun	0:05:08	588	14.0	13.3	-0.8	30	16.70
17-12-jun	1:05:08	587	13.0	12.3	-0.7	31	16.73
17-12-jun	2:05:08	587	11.7	10.8	-0.8	30	16.69
17-12-jun	3:05:08	587	10.4	9.6	-0.9	30	16.71
17-12-jun	4:05:08	587	10.2	9.0	-1.1	30	16.72
17-12-jun	5:05:08	587	10.1	9.3	-0.8	30	16.71
17-12-jun	6:05:08	587	10.1	9.9	-0.1	31	16.72
17-12-jun	7:05:08	587	9.3	10.1	0.8	31	16.73
17-12-jun	8:05:08	588	9.3	10.3	1.0	31	16.70
17-12-jun	9:05:08	589	10.0	10.6	0.7	32	16.71
17-12-jun	10:05:08	589	10.4	11.1	0.7	32	16.72
17-12-jun	11:05:08	590	11.3	11.7	0.4	32	16.71
17-12-jun	12:05:08	590	11.8	12.3	0.5	32	16.71
17-12-jun	13:05:08	590	13.0	13.5	0.5	32	16.71
17-12-jun	14:05:08	590	13.7	14.8	1.1	32	16.71
17-12-jun	15:05:08	590	14.3	15.6	1.4	32	16.71
17-12-jun	16:05:08	590	14.4	15.7	1.3	33	16.71
17-12-jun	17:05:08	590	14.0	15.1	1.1	32	16.71
17-12-jun	18:05:08	590	12.8	13.9	1.1	32	16.71
17-12-jun	19:05:08	590	10.2	11.0	0.7	32	16.71
17-12-jun	20:05:08	590	6.8	6.7	-0.1	31	16.71
17-12-jun	21:05:08	591	4.5	4.0	-0.6	31	16.71
17-12-jun	22:05:08	591	2.2	1.5	-0.7	31	16.71
17-12-jun	23:05:08	591	2.2	0.5	-1.6	31	16.70



# BGI PQ200 Air Sampling System Downloaded 2017 21 jun 12:55:22

## Job Details:

Job Name: 17Jun21C.JOB  
Version: 5.62  
Serial No: 964  
Pump Time: 7004:55  
Flags:

Job Code:  
Site Name:  
Station Code:  
Operators:  
User1:  
User2:

	Max	Min	Avg	Units
BP	595	591	594	mmHg
TA	33.6	15	24.9	°C
Q	---	---	16.7	Lpm

QCV 0.54 %  
Max overheat 3.5 °C  
occured 20-jun 19:48:16

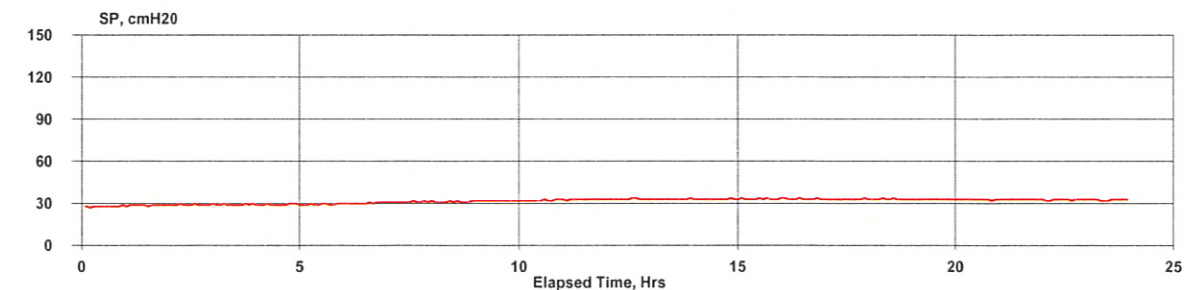
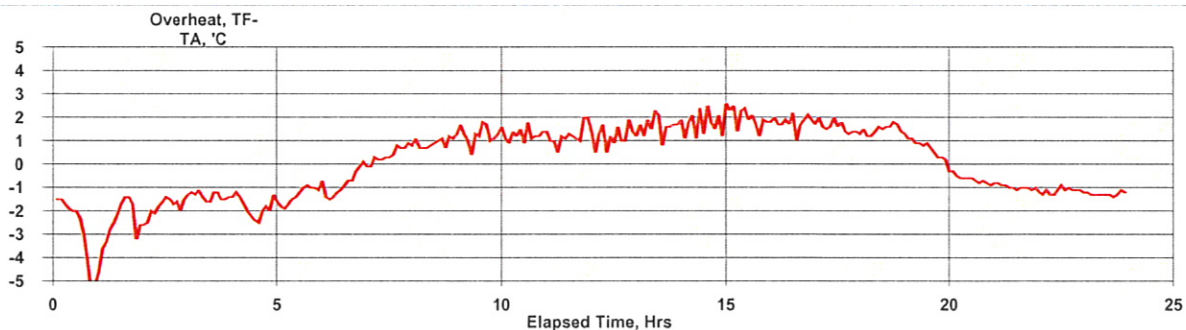
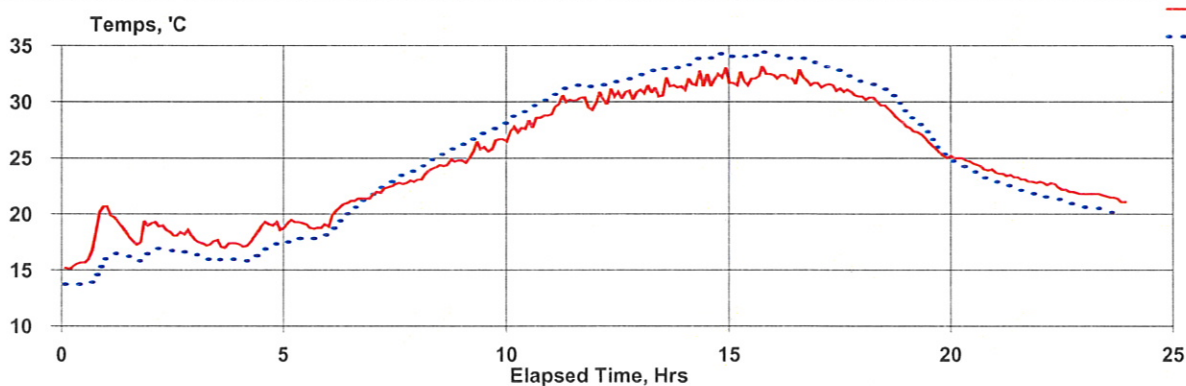
## Timer Information:

Date Time  
dd-mmm hh:mm:ss  
Start: 17-18-jun 0:00:08  
Stop: 17-19-jun 0:00:05  
ET: 23:59

## Mass Concentration Data:

Filter ID: 6  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.042 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

Notes 1:  
Notes 2:



Hourly

17-18-jun	0:05:08	594	17.1	14.2	-2.9	28	16.71
17-18-jun	1:05:08	594	18.7	16.3	-2.4	29	16.71
17-18-jun	2:05:08	594	18.5	16.7	-1.8	29	16.71
17-18-jun	3:05:08	594	17.4	16.0	-1.4	29	16.70
17-18-jun	4:05:08	594	18.5	16.6	-1.8	29	16.71
17-18-jun	5:05:08	594	19.1	17.8	-1.3	30	16.71
17-18-jun	6:05:08	594	21.0	20.3	-0.8	30	16.70
17-18-jun	7:05:08	595	22.6	23.1	0.5	31	16.70
17-18-jun	8:05:08	595	24.3	25.2	0.9	31	16.72
17-18-jun	9:05:08	595	26.0	27.2	1.3	32	16.72
17-18-jun	10:05:08	595	28.1	29.4	1.3	32	16.71
17-18-jun	11:05:08	594	30.0	31.2	1.2	33	16.72
17-18-jun	12:05:08	594	30.7	31.8	1.2	33	16.70
17-18-jun	13:05:08	594	31.2	32.9	1.7	33	16.71
17-18-jun	14:05:08	594	32.1	33.9	1.8	33	16.70
17-18-jun	15:05:08	593	32.2	34.1	1.9	33	16.70
17-18-jun	16:05:08	593	32.1	33.8	1.8	33	16.71
17-18-jun	17:05:08	593	31.1	32.6	1.6	33	16.71
17-18-jun	18:05:08	593	29.3	30.8	1.5	33	16.72
17-18-jun	19:05:08	594	26.3	26.9	0.6	33	16.71
17-18-jun	20:05:08	594	24.4	23.8	-0.7	33	16.71
17-18-jun	21:05:08	594	23.2	22.2	-1.0	33	16.71
17-18-jun	22:05:08	595	22.3	21.1	-1.1	33	16.71
17-18-jun	23:05:08	595	21.6	20.3	-1.3	33	16.69



# BGI PQ200 Air Sampling System Downloaded 2017 27 jun 11:30:56

## Job Details:

Job Name: 17Jun27C.JOB  
Version: 5.62  
Serial No: 964  
Pump Time: 7028:54  
Flags:

Job Code:  
Site Name:  
Station Code:  
Operators:  
User1:  
User2:

	Max	Min	Avg	Units
BP	596	593	595	mmHg
TA	34.1	14.3	24.3	°C
Q	---	---	16.7	Lpm

QCV 0.55 %  
Max overheat 3.1 °C  
occured 26-jun 20:27:52

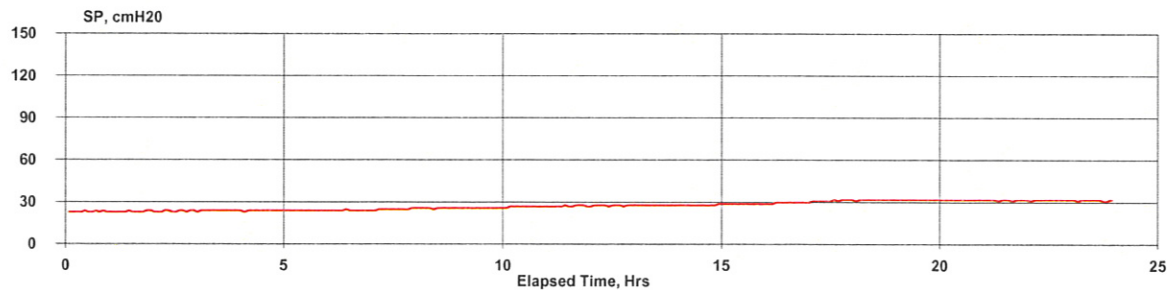
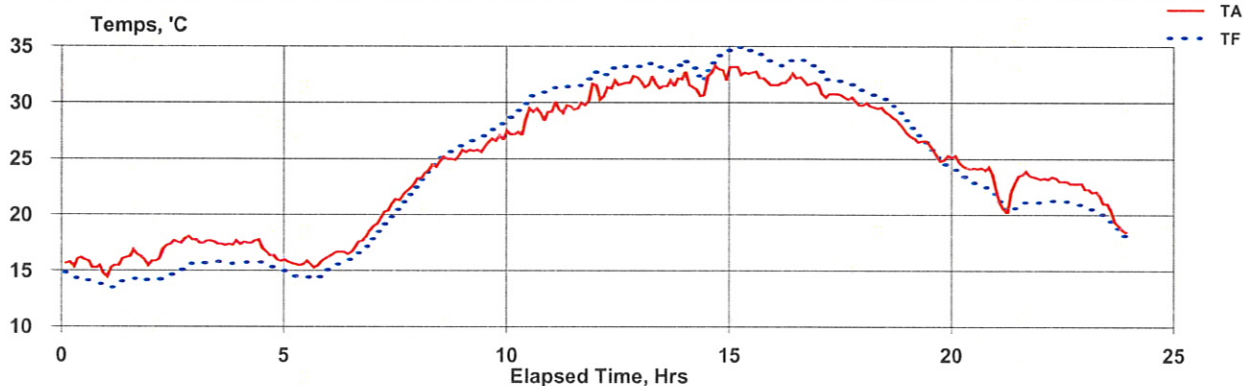
## Timer Information:

Date Time  
dd-mmm hh:mm:ss  
Start: 17-24-jun 0:00:08  
Stop: 17-25-jun 0:00:05  
ET: 23:59

## Mass Concentration Data:

Filter ID: 28  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.042 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

Notes 1:  
Notes 2:



# Hourly

17-24-jun	0:05:08	595	15.5	14.2	-1.4	23	16.70
17-24-jun	1:05:08	595	16.0	14.0	-2.0	23	16.71
17-24-jun	2:05:08	595	17.3	14.8	-2.5	24	16.71
17-24-jun	3:05:08	595	17.5	15.7	-1.8	24	16.71
17-24-jun	4:05:08	595	16.9	15.5	-1.4	24	16.70
17-24-jun	5:05:08	596	15.7	14.5	-1.2	24	16.71
17-24-jun	6:05:08	596	17.3	16.3	-1.0	24	16.71
17-24-jun	7:05:08	596	21.3	20.3	-1.0	25	16.71
17-24-jun	8:05:08	596	24.7	24.8	0.2	26	16.71
17-24-jun	9:05:08	596	26.3	27.3	0.9	26	16.71
17-24-jun	10:05:08	596	28.5	30.1	1.7	27	16.71
17-24-jun	11:05:08	595	30.0	31.6	1.6	27	16.70
17-24-jun	12:05:08	595	31.6	32.9	1.3	28	16.71
17-24-jun	13:05:08	595	31.8	33.2	1.4	28	16.70
17-24-jun	14:05:08	594	32.1	33.4	1.3	28	16.71
17-24-jun	15:05:08	594	32.4	34.4	2.0	29	16.72
17-24-jun	16:05:08	594	31.9	33.5	1.6	30	16.71
17-24-jun	17:05:08	594	30.5	31.8	1.3	31	16.70
17-24-jun	18:05:08	594	28.9	30.0	1.1	32	16.71
17-24-jun	19:05:08	595	25.9	26.0	0.1	32	16.71
17-24-jun	20:05:08	595	24.1	22.9	-1.2	32	16.71
17-24-jun	21:05:08	595	22.6	20.9	-1.7	32	16.71
17-24-jun	22:05:08	595	23.0	21.1	-1.9	32	16.71
17-24-jun	23:05:08	595	20.6	19.6	-1.0	32	16.71

# BGI PQ200 Air Sampling System

Downloaded 2017 05 jul 09:38:30

## Job Details:

Job Name: 17Jul05C.JOB  
Version: 5.62  
Serial No: 964  
Pump Time: 7052:53  
Flags:

Job Code:  
Site Name:  
Station Code:  
Operators:  
User1:  
User2:

	Max	Min	Avg	Units
BP	595	591	593	mmHg
TA	31.5	9.6	21	°C
Q	---	---	16.7	Lpm

QCV 0.54 %  
Max overheat 4.3 °C  
occured 01-jul 19:54:42

## Timer Information:

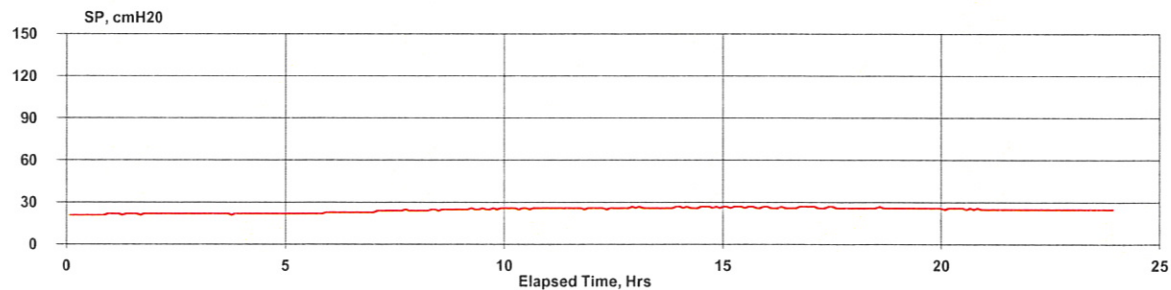
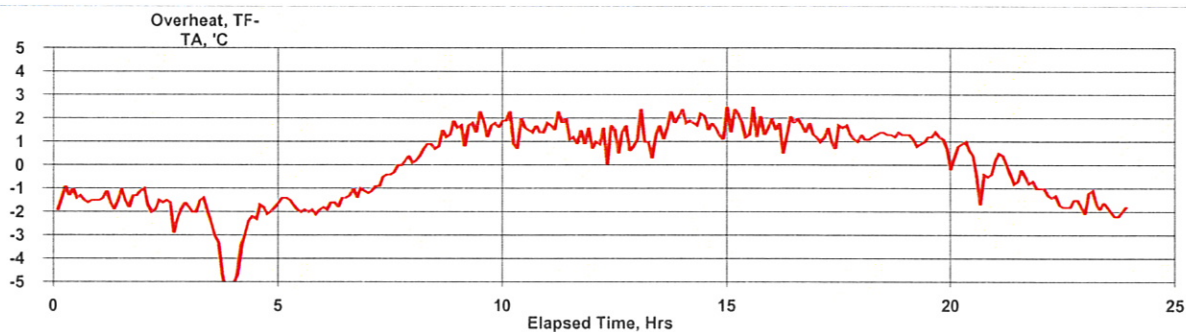
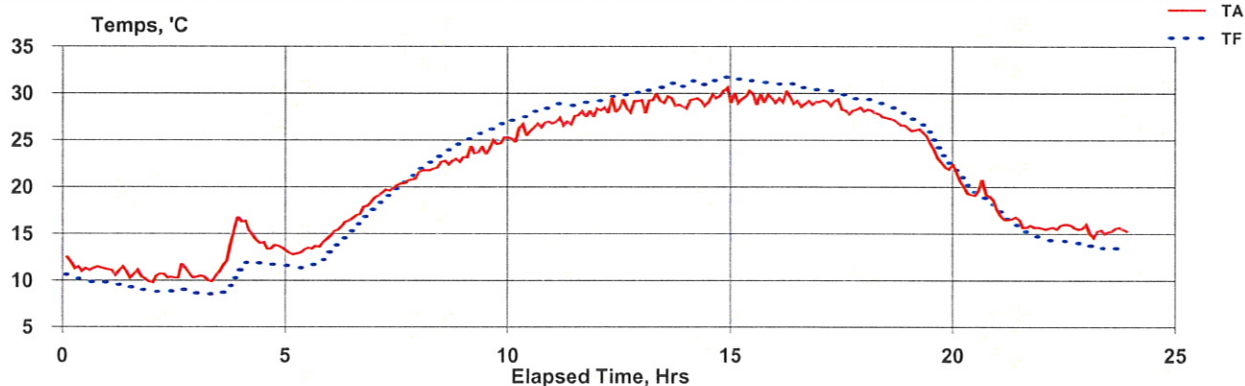
Date Time  
dd-mmm hh:mm:ss  
Start: 17-30-jun 0:00:08  
Stop: 17-01-jul 0:00:05  
ET: 23:59

## Mass Concentration Data:

Filter ID: 32  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.041 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

Notes 1:

Notes 2:



Hourly

17-30-jun	0:05:08	593	11.5	10.1	-1.4	21	16.71
17-30-jun	1:05:08	593	10.6	9.3	-1.4	22	16.70
17-30-jun	2:05:08	593	10.6	8.8	-1.9	22	16.72
17-30-jun	3:05:08	594	12.4	9.1	-3.3	22	16.71
17-30-jun	4:05:08	594	14.2	11.8	-2.4	22	16.71
17-30-jun	5:05:08	594	13.5	11.7	-1.8	22	16.71
17-30-jun	6:05:08	595	16.9	15.5	-1.4	23	16.71
17-30-jun	7:05:08	595	20.2	19.9	-0.3	24	16.71
17-30-jun	8:05:08	595	22.4	23.4	1.0	25	16.71
17-30-jun	9:05:08	595	24.3	26.0	1.7	25	16.71
17-30-jun	10:05:08	594	26.2	27.8	1.6	26	16.71
17-30-jun	11:05:08	594	27.5	28.9	1.4	26	16.71
17-30-jun	12:05:08	594	28.7	29.7	1.1	26	16.71
17-30-jun	13:05:08	594	29.0	30.6	1.6	26	16.71
17-30-jun	14:05:08	593	29.5	31.3	1.8	27	16.71
17-30-jun	15:05:08	593	29.6	31.3	1.8	27	16.71
17-30-jun	16:05:08	593	29.2	30.7	1.5	26	16.71
17-30-jun	17:05:08	593	28.6	29.9	1.3	26	16.70
17-30-jun	18:05:08	593	27.3	28.6	1.3	26	16.71
17-30-jun	19:05:08	593	24.2	25.2	1.0	26	16.70
17-30-jun	20:05:08	594	19.6	19.6	0.1	26	16.70
17-30-jun	21:05:08	594	16.2	15.7	-0.4	25	16.73
17-30-jun	22:05:08	594	15.7	14.2	-1.6	25	16.72
17-30-jun	23:05:08	594	15.3	13.5	-1.8	25	16.72

**Compliance Monitor 2366D**

**PM<sub>10</sub> Sampler Summary****April 1, 2017 - June 30, 2017****Network: Alton Coal Development****Site:** Coal Hollow**Sampler ID:** Coal Hollow-D**AQS ID:****Sampler Type:** BGI FRM Single

Date	Filter ID	Concentration (µg/m3) LTP	Concentration (µg/m3) STP	Sample Period (hr:min)	Sample Volume (m3)	Std Volume (m3)	Tare (mg)	Mass Gross (mg)	Net (mg)	Flag	Comments
04/01/17	P2938105	2.5	3.0	23:59	24.0	19.9	388.786	388.847	0.061		
04/07/17	P2938109	111.8	136.5	23:59	24.0	19.7	386.292	388.980	2.688		
04/13/17	P2938776	85.4	105.1	23:59	24.0	19.5	390.154	392.208	2.054		
04/19/17	P2938780	22.7	27.8	23:59	24.0	19.7	392.689	393.237	0.548	HT	
04/25/17	P2939181	24.8	30.2	23:59	24.0	19.8	382.392	382.989	0.597	HT	
05/01/17	P2939186	6.4	7.9	23:59	24.0	19.6	378.380	378.536	0.156		
05/07/17	P2939728	15.8	19.4	23:59	24.0	19.6	386.937	387.319	0.382	HT	
05/13/17	P2939732	11.9	14.8	23:59	24.0	19.4	382.041	382.329	0.288		
05/19/17	P2939737	9.7	11.7	23:59	24.0	19.9	386.721	386.956	0.235	HT	
05/25/17	P2940169	48.4	60.8	23:59	24.0	19.1	386.171	387.335	1.164		
05/31/17	P2940175	27.0	33.8	23:59	24.0	19.2	384.412	385.063	0.651		
06/06/17	P2940668	26.0	32.7	23:59	24.0	19.1	388.805	389.431	0.626		
06/12/17	P2940673	19.6	24.1	23:59	24.0	19.5	380.649	381.121	0.472		Lighter
06/18/17	P2941057	7.0	9.0	23:59	24.0	18.8	388.722	388.892	0.170		
06/24/17	P2941062	41.9	53.4	23:59	24.0	18.9	389.601	390.608	1.007		
06/30/17	P2941066	14.8	18.8	23:59	24.0	19.0	389.098	389.455	0.357		
# Valid		Recovery	Average	St. Dev.	Max	Min					
16		100%	36.8	36.8	136.5	3.0					

Inter-Mountain Laboratories' (IML) data validation is limited by the provided information. Data have been validated based on laboratory QC, field observations and other information available to IML. Additional data validation based on information not provided to IML may be required. According to 40 CFR 58.15 final responsibilities for data review and validation lies with each agency submitting data to AQS.



# BGI PQ200 Air Sampling System Downloaded 2017 04 apr 09:41:25

## Job Details:

Job Name: 17Apr04D.JOB  
Version: 5.62  
Serial No: 2366  
Pump Time: 1765:09  
Flags:

Job Code:

Site Name:

Station Code:

Operators:

User1: yyyyyyyyyyyyyyyyyyyyyyyyyyy

User2: yyyyyyyyyyyyyyyyyyyyyyyyyyy

	Max	Min	Avg	Units
BP	590	584	587	mmHg
TA	12.3	-0.3	4.3	°C
Q	---	---	16.71	Lpm

QCV 0.52 %

Max overheat 3 °C  
occured 01-apr 14:45:27

## Timer Information:

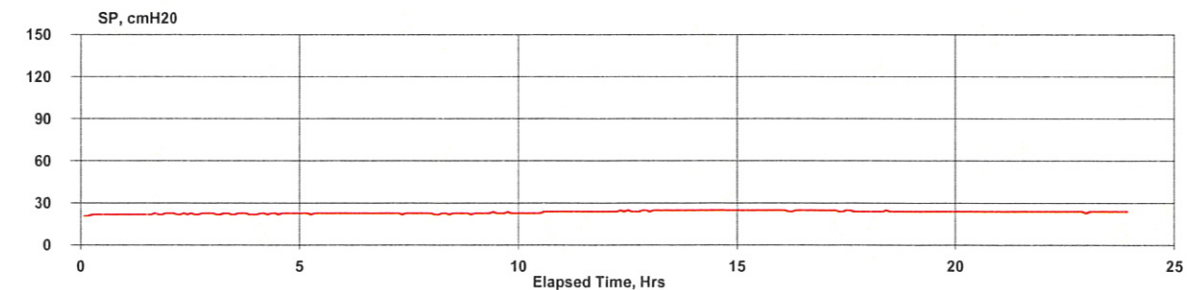
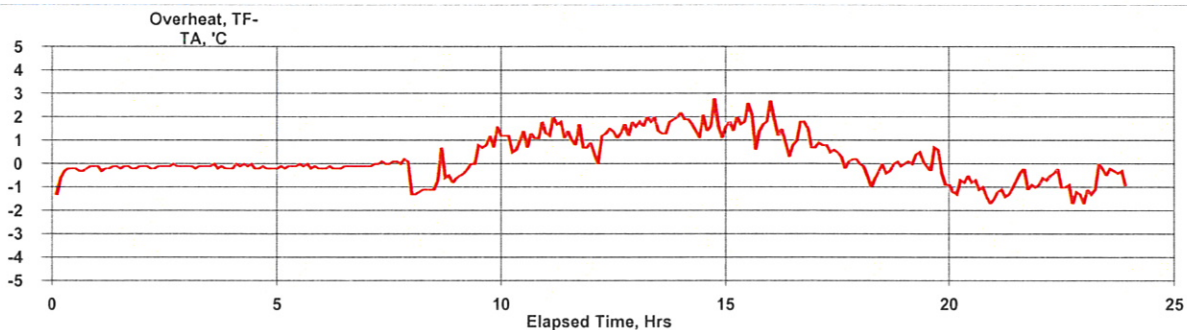
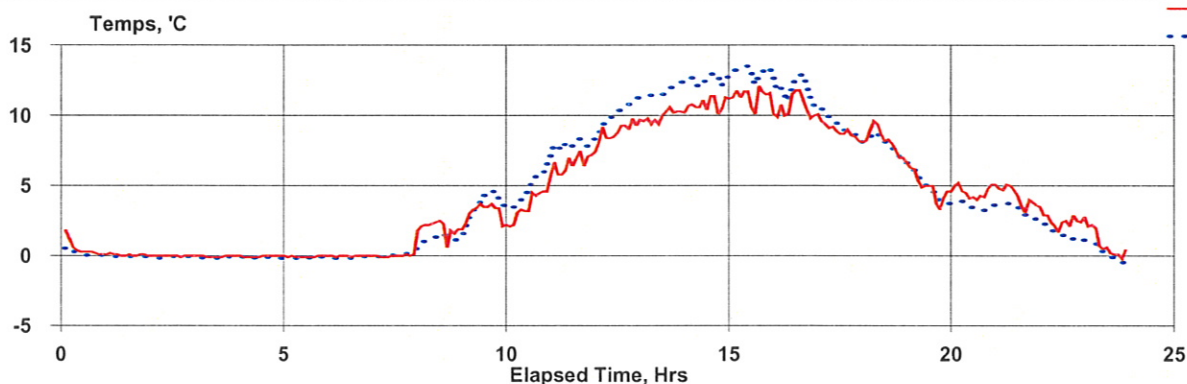
Date	Time
dd-mmm	hh:mm:ss
Start: 17-01-apr	0:00:08
Stop: 17-02-apr	0:00:05
ET: 23:59	

## Mass Concentration Data:

Filter ID:	30
Final Wt:	mg
Initial Wt:	mg
Delta Wt:	0.000 mg
Total Vol:	24.035 m <sup>3</sup>
Mass Conc:	0 µg/m <sup>3</sup>

Notes 1:

Notes 2:



# Hourly

17-01-apr	0:05:08	585	0.5	0.2	-0.3	22	16.71
17-01-apr	1:05:08	585	0.1	-0.1	-0.2	22	16.72
17-01-apr	2:05:08	586	0.0	-0.1	-0.1	23	16.71
17-01-apr	3:05:08	586	0.0	-0.2	-0.1	22	16.71
17-01-apr	4:05:08	586	0.0	-0.2	-0.1	23	16.71
17-01-apr	5:05:08	586	-0.1	-0.2	-0.1	23	16.71
17-01-apr	6:05:08	587	0.0	-0.2	-0.1	23	16.71
17-01-apr	7:05:08	588	0.1	0.1	-0.1	23	16.71
17-01-apr	8:05:08	588	2.0	1.2	-0.8	23	16.72
17-01-apr	9:05:08	588	3.1	3.6	0.5	23	16.71
17-01-apr	10:05:08	589	3.8	4.9	1.1	24	16.71
17-01-apr	11:05:08	588	6.7	8.0	1.3	24	16.71
17-01-apr	12:05:08	588	9.0	10.2	1.2	24	16.70
17-01-apr	13:05:08	588	10.0	11.7	1.8	25	16.71
17-01-apr	14:05:08	588	10.8	12.5	1.7	25	16.70
17-01-apr	15:05:08	588	11.3	13.1	1.8	25	16.70
17-01-apr	16:05:08	588	10.6	11.8	1.2	25	16.72
17-01-apr	17:05:08	588	8.8	9.2	0.4	24	16.71
17-01-apr	18:05:08	589	8.1	7.9	-0.3	24	16.71
17-01-apr	19:05:08	589	4.8	4.8	0.0	24	16.71
17-01-apr	20:05:08	589	4.6	3.5	-1.1	24	16.71
17-01-apr	21:05:08	590	4.2	3.3	-0.9	24	16.70
17-01-apr	22:05:08	590	2.5	1.5	-0.9	24	16.72
17-01-apr	23:05:08	590	0.8	0.2	-0.6	24	16.70

# BGI PQ200 Air Sampling System Downloaded 2017 10 apr 13:39:48

## Job Details:

Job Name: 17Apr10D.JOB  
Version: 5.62  
Serial No: 2366  
Pump Time: 1789:08  
Flags:

## Job Code:

Site Name:  
Station Code:  
Operators:

User1: yyyyyyyyyyyyyyyyyyyyyyyyyyyyyyy

User2: yyyyyyyyyyyyyyyyyyyyyyyyyyyyyyy

	Max	Min	Avg	Units
BP	591	587	589	mmHg
TA	16.8	-1.2	9	°C
Q	---	---	16.71	Lpm

## Timer Information:

Date Time  
dd-mmm hh:mm:ss  
Start: 17-07-apr 0:00:08  
Stop: 17-08-apr 0:00:05  
ET: 23:59

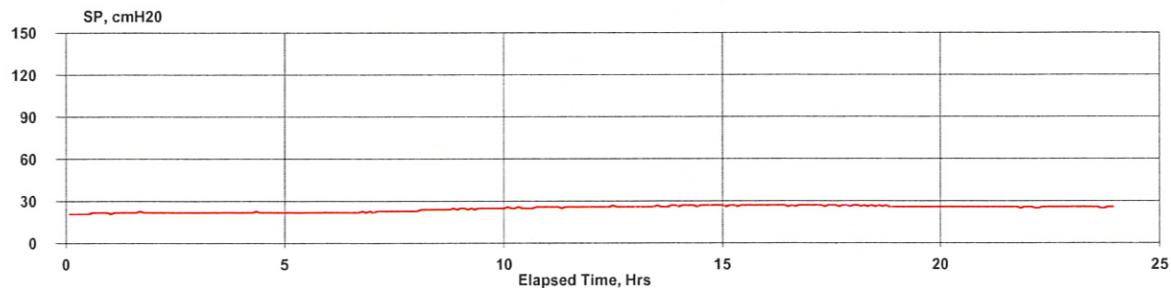
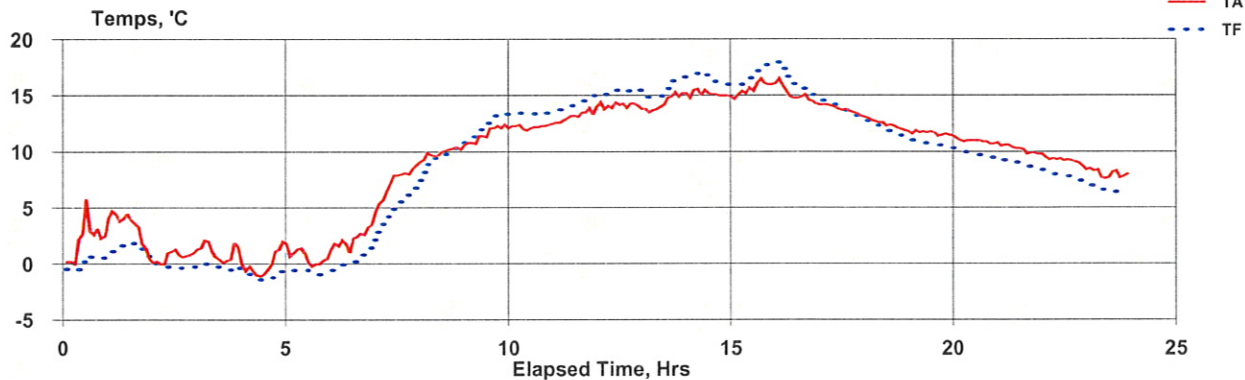
## Mass Concentration Data:

Filter ID: 34  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.037 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

QCV 0.54 %  
Max overheat 2.4 °C  
occured 08-apr 16:48:17

Notes 1:

Notes 2:



Hourly

17-07-apr	0:05:08	590	2.4	0.1	-2.3	21	16.71
17-07-apr	1:05:08	590	3.0	1.4	-1.6	22	16.71
17-07-apr	2:05:08	590	0.7	-0.3	-1.0	22	16.72
17-07-apr	3:05:08	590	1.0	-0.3	-1.3	22	16.71
17-07-apr	4:05:08	590	0.1	-1.1	-1.2	22	16.72
17-07-apr	5:05:08	590	0.6	-0.7	-1.3	22	16.73
17-07-apr	6:05:08	590	2.5	0.4	-2.1	22	16.70
17-07-apr	7:05:08	590	7.6	5.2	-2.4	23	16.70
17-07-apr	8:05:08	590	10.0	9.6	-0.4	24	16.71
17-07-apr	9:05:08	590	11.6	12.4	0.7	25	16.70
17-07-apr	10:05:08	590	12.2	13.4	1.1	26	16.70
17-07-apr	11:05:08	590	13.2	14.2	1.0	26	16.70
17-07-apr	12:05:08	589	14.1	15.3	1.2	26	16.70
17-07-apr	13:05:08	589	14.4	15.5	1.1	26	16.70
17-07-apr	14:05:08	588	15.1	16.5	1.3	27	16.71
17-07-apr	15:05:08	588	15.7	16.8	1.1	27	16.71
17-07-apr	16:05:08	588	15.0	16.0	1.1	27	16.71
17-07-apr	17:05:08	588	13.7	13.7	0.0	27	16.72
17-07-apr	18:05:08	587	12.4	11.9	-0.4	26	16.71
17-07-apr	19:05:08	588	11.6	10.7	-1.0	26	16.71
17-07-apr	20:05:08	588	10.9	9.8	-1.2	26	16.71
17-07-apr	21:05:08	588	10.2	8.9	-1.3	26	16.70
17-07-apr	22:05:08	588	9.2	7.8	-1.4	26	16.71
17-07-apr	23:05:08	588	8.0	6.5	-1.5	26	16.71



# BGI PQ200 Air Sampling System Downloaded 2017 14 apr 10:34:16

## Job Details:

Job Name: 17Apr14D.JOB  
Version: 5.62  
Serial No: 2366  
Pump Time: 1813:07  
Flags:

## Job Code:

Site Name:  
Station Code:  
Operators:

User1: yyyyyyyyyyyyyyyyyyyyyyyyyyyyyyy

User2: yyyyyyyyyyyyyyyyyyyyyyyyyyyyyyy

	Max	Min	Avg	Units
BP	590	584	587	mmHg
TA	19.4	-1.9	10.1	°C
Q	---	---	16.7	Lpm

QCV 0.5 %

Max overheat 3 °C  
occured 14-apr 02:42:02

## Timer Information:

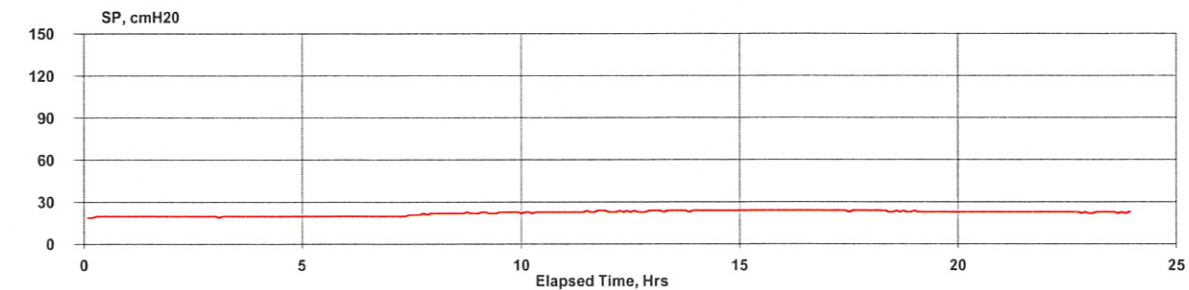
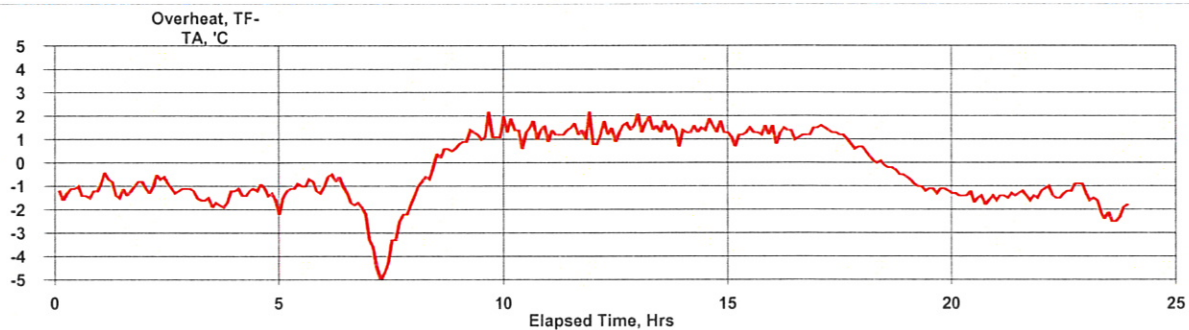
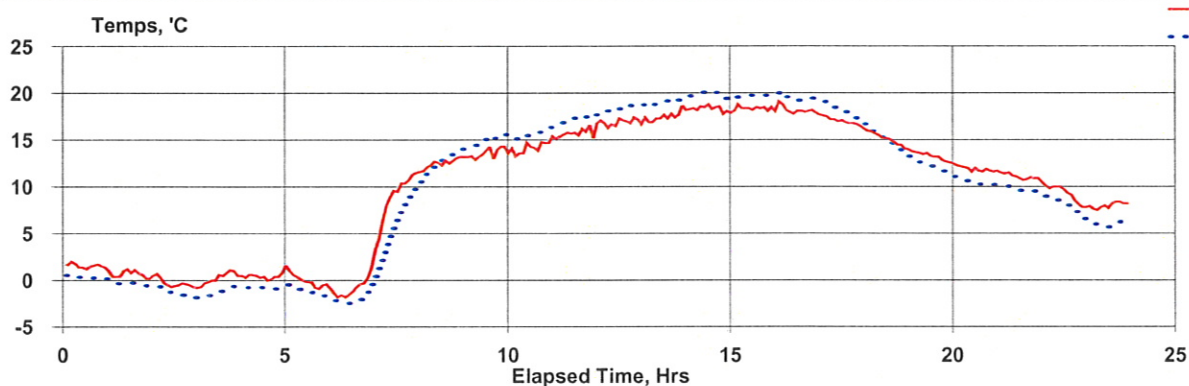
Date Time  
dd-mmm hh:mm:ss  
Start: 17-13-apr 0:00:08  
Stop: 17-14-apr 0:00:05  
ET: 23:59

## Mass Concentration Data:

Filter ID: 8  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.031 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

Notes 1:

Notes 2:



Hourly

17-13-apr	0:05:08	590	1.5	0.3	-1.2	20	16.70
17-13-apr	1:05:08	590	0.6	-0.4	-1.0	20	16.73
17-13-apr	2:05:08	590	-0.4	-1.4	-1.0	20	16.69
17-13-apr	3:05:08	589	0.3	-1.3	-1.6	20	16.71
17-13-apr	4:05:08	589	0.5	-0.8	-1.3	20	16.71
17-13-apr	5:05:08	589	-0.2	-1.2	-1.1	20	16.71
17-13-apr	6:05:08	589	-0.5	-1.9	-1.5	20	16.71
17-13-apr	7:05:08	589	9.4	6.2	-3.2	21	16.72
17-13-apr	8:05:08	588	12.6	12.6	0.0	22	16.71
17-13-apr	9:05:08	588	13.6	14.9	1.3	23	16.70
17-13-apr	10:05:08	588	14.3	15.6	1.3	23	16.70
17-13-apr	11:05:08	587	15.8	17.2	1.4	23	16.71
17-13-apr	12:05:08	587	16.9	18.3	1.4	23	16.70
17-13-apr	13:05:08	586	17.6	19.0	1.5	24	16.70
17-13-apr	14:05:08	585	18.3	19.8	1.5	24	16.72
17-13-apr	15:05:08	585	18.4	19.6	1.3	24	16.72
17-13-apr	16:05:08	585	18.2	19.4	1.3	24	16.71
17-13-apr	17:05:08	585	17.0	18.1	1.1	24	16.72
17-13-apr	18:05:08	585	15.0	14.9	-0.1	24	16.71
17-13-apr	19:05:08	585	13.2	12.1	-1.1	23	16.71
17-13-apr	20:05:08	586	11.9	10.4	-1.5	23	16.71
17-13-apr	21:05:08	586	11.0	9.7	-1.4	23	16.72
17-13-apr	22:05:08	586	9.2	8.0	-1.2	23	16.72
17-13-apr	23:05:08	586	8.0	6.0	-2.0	23	16.72



# BGI PQ200 Air Sampling System Downloaded 2017 20 apr 11:00:18

## Job Details:

Job Name: 17Apr20D.JOB  
Version: 5.62  
Serial No: 2366  
Pump Time: 1837:06  
Flags:

## Job Code:

Site Name:  
Station Code:  
Operators:

User1: yyyyyyyyyyyyyyyyyyyyyyyyyyy

User2: yyyyyyyyyyyyyyyyyyyyyyy

	Max	Min	Avg	Units
BP	592	588	590	mmHg
TA	18.1	0.3	9.2	°C
Q	---	---	16.7	Lpm

## Timer Information:

Date Time  
dd-mmm hh:mm:ss  
Start: 17-19-apr 0:00:08  
Stop: 17-20-apr 0:00:05  
ET: 23:59

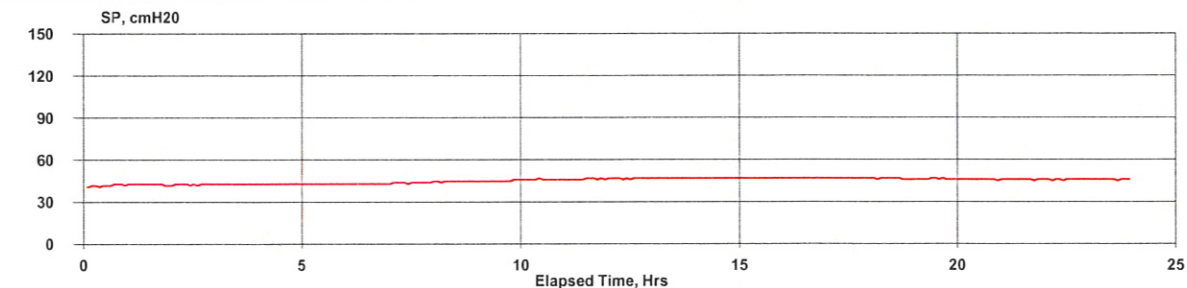
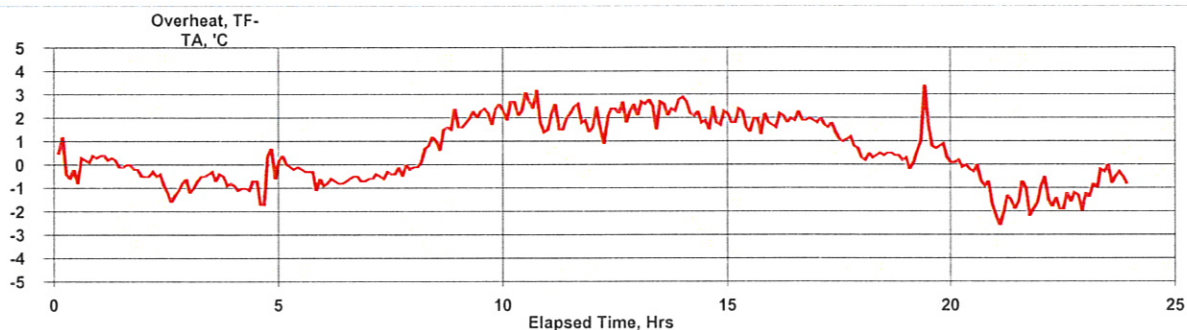
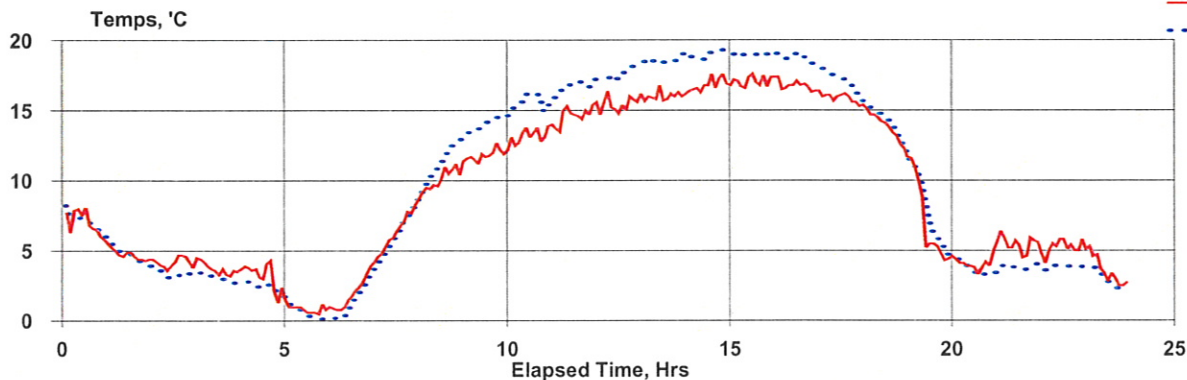
## Mass Concentration Data:

Filter ID: 16  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.04 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

QCV 0.52 %  
Max overheat 4 °C  
occured 19-apr 19:26:31

Notes 1:

Notes 2:



Hourly

17-19-apr	0:05:08	590	6.9	7.0	0.1	42	16.69
17-19-apr	1:05:08	590	4.7	4.6	0.0	43	16.72
17-19-apr	2:05:08	590	4.2	3.3	-0.9	43	16.71
17-19-apr	3:05:08	590	3.7	3.0	-0.6	43	16.71
17-19-apr	4:05:08	591	3.1	2.4	-0.7	43	16.71
17-19-apr	5:05:08	590	0.8	0.5	-0.3	43	16.71
17-19-apr	6:05:08	591	2.1	1.5	-0.7	43	16.71
17-19-apr	7:05:08	591	6.6	6.3	-0.3	44	16.71
17-19-apr	8:05:08	591	10.2	11.3	1.1	45	16.71
17-19-apr	9:05:08	591	11.9	14.0	2.1	45	16.70
17-19-apr	10:05:08	591	13.3	15.6	2.3	46	16.71
17-19-apr	11:05:08	591	14.7	16.7	2.0	46	16.70
17-19-apr	12:05:08	591	15.5	17.6	2.1	47	16.71
17-19-apr	13:05:08	591	16.0	18.5	2.5	47	16.71
17-19-apr	14:05:08	590	16.9	18.9	2.1	47	16.71
17-19-apr	15:05:08	590	17.1	19.0	1.9	47	16.70
17-19-apr	16:05:08	590	16.7	18.7	2.0	47	16.71
17-19-apr	17:05:08	590	15.8	17.1	1.2	47	16.71
17-19-apr	18:05:08	590	13.7	14.1	0.4	47	16.70
17-19-apr	19:05:08	591	6.8	7.6	0.8	46	16.71
17-19-apr	20:05:08	591	4.2	3.6	-0.5	46	16.71
17-19-apr	21:05:08	592	5.4	3.8	-1.6	46	16.71
17-19-apr	22:05:08	592	5.2	3.8	-1.5	46	16.71
17-19-apr	23:05:08	592	3.5	2.9	-0.6	46	16.71

# BGI PQ200 Air Sampling System Downloaded 2017 26 apr 14:16:01

## Job Details:

Job Name: 17Apr26D.JOB  
Version: 5.62  
Serial No: 2366  
Pump Time: 1861:05  
Flags:

## Job Code:

Site Name:  
Station Code:  
Operators:  
User1: yyyyyyyyyyyyyyyyyyyyyyyyyyy  
User2: yyyyyyyyyyyyyyyyyyyyyyyyyyy

	Max	Min	Avg	Units
BP	588	581	583	mmHg
TA	9.5	-0.2	5.2	°C
Q	---	---	16.71	Lpm

QCV 0.51 %  
Max overheat 3.3 °C  
occured 25-apr 14:33:51

## Timer Information:

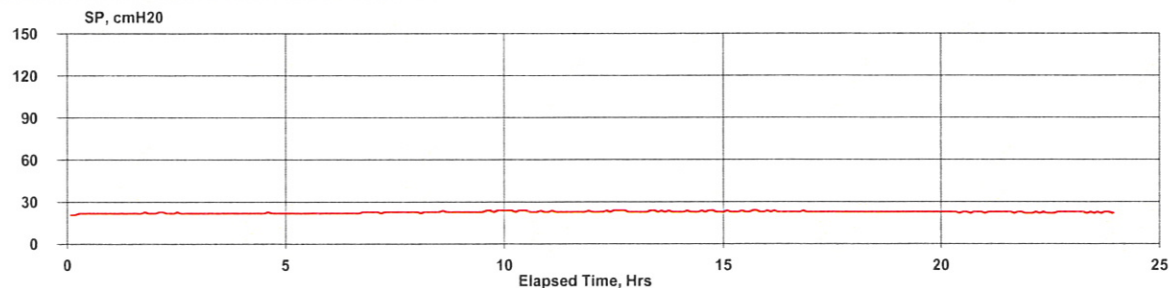
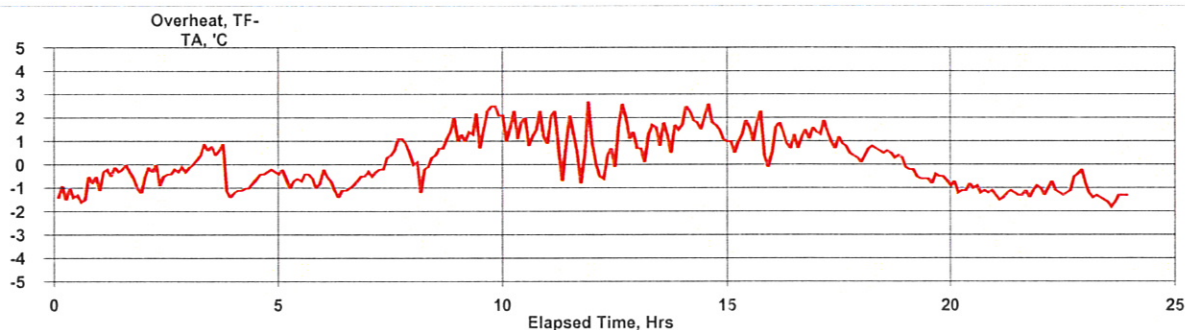
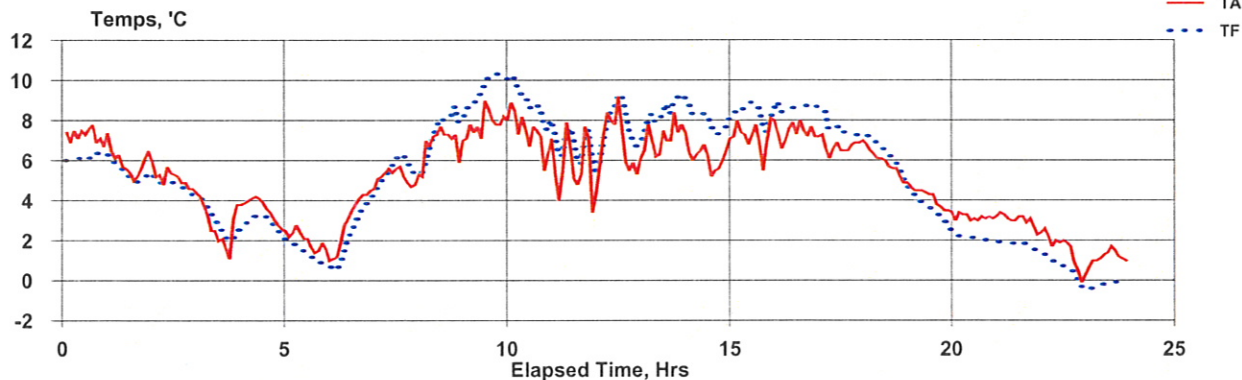
Date Time  
dd-mmm hh:mm:ss  
Start: 17-25-apr 0:00:08  
Stop: 17-26-apr 0:00:05  
ET: 23:59

## Mass Concentration Data:

Filter ID: 13  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.037 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

Notes 1:

Notes 2:



Hourly

17-25-apr	0:05:08	582	7.3	6.1	-1.1	22	16.71
17-25-apr	1:05:08	582	5.8	5.4	-0.4	22	16.72
17-25-apr	2:05:08	582	5.0	4.7	-0.3	22	16.71
17-25-apr	3:05:08	582	2.8	2.9	0.1	22	16.71
17-25-apr	4:05:08	582	3.5	2.9	-0.6	22	16.71
17-25-apr	5:05:08	582	1.9	1.3	-0.6	22	16.71
17-25-apr	6:05:08	582	3.3	2.5	-0.8	22	16.71
17-25-apr	7:05:08	583	5.2	5.6	0.3	23	16.71
17-25-apr	8:05:08	583	6.9	7.4	0.5	23	16.71
17-25-apr	9:05:08	583	7.9	9.6	1.7	23	16.71
17-25-apr	10:05:08	583	7.4	8.8	1.5	24	16.72
17-25-apr	11:05:08	584	5.6	6.6	1.0	23	16.71
17-25-apr	12:05:08	584	6.9	7.7	0.8	23	16.72
17-25-apr	13:05:08	584	7.2	8.4	1.2	23	16.71
17-25-apr	14:05:08	585	6.2	8.0	1.8	23	16.71
17-25-apr	15:05:08	585	7.3	8.4	1.1	23	16.71
17-25-apr	16:05:08	585	7.4	8.6	1.3	23	16.71
17-25-apr	17:05:08	585	6.7	7.6	0.9	23	16.71
17-25-apr	18:05:08	585	5.8	6.3	0.5	23	16.71
17-25-apr	19:05:08	586	4.1	3.6	-0.5	23	16.70
17-25-apr	20:05:08	587	3.2	2.1	-1.1	23	16.72
17-25-apr	21:05:08	587	3.0	1.8	-1.2	23	16.71
17-25-apr	22:05:08	587	1.5	0.6	-0.9	23	16.71
17-25-apr	23:05:08	587	1.2	-0.2	-1.4	23	16.71



# BGI PQ200 Air Sampling System Downloaded 2017 02 may 13:02:17

## Job Details:

Job Name: 17May02D.JOB  
Version: 5.62  
Serial No: 2366  
Pump Time: 1885:04  
Flags:

## Job Code:

Site Name: 2366D  
Station Code:  
Operators: KN

User1: yyyyyyyyyyyyyyyyyyyyyyyyyyyyyyy

User2: yyyyyyyyyyyyyyyyyyyyyyyyyyyyyyy

	Max	Min	Avg	Units
BP	591	588	589	mmHg
TA	19.3	-0.3	10.2	°C
Q	---	---	16.71	Lpm

QCV 0.51 %  
Max overheat 3.7 °C  
occured 01-may 10:36:38

## Timer Information:

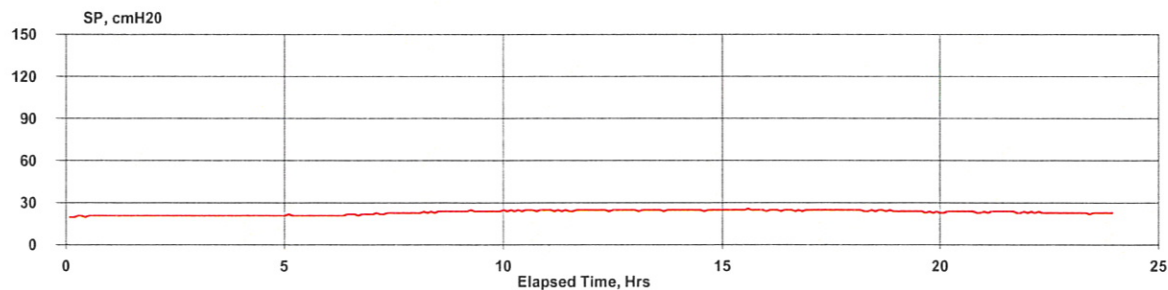
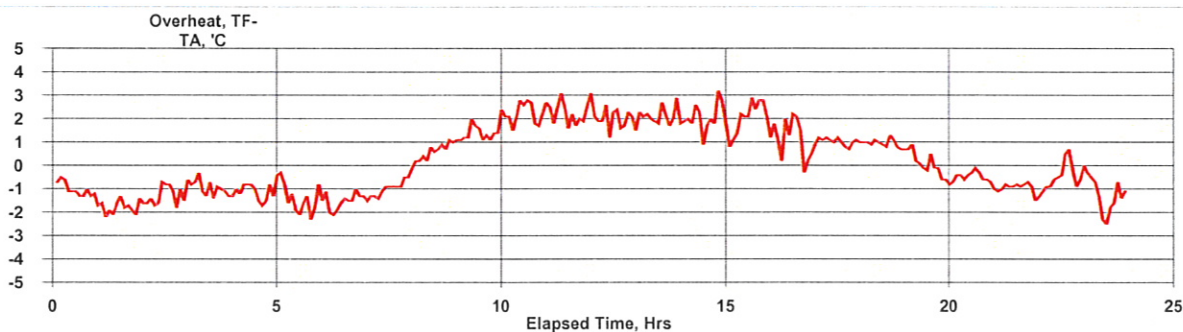
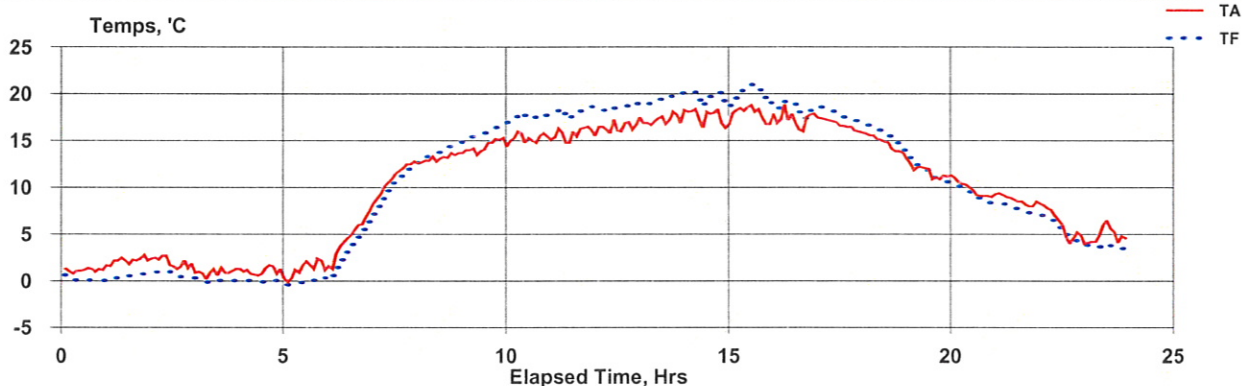
Date Time  
dd-mmm hh:mm:ss  
Start: 17-01-may 0:00:08  
Stop: 17-02-may 0:00:05  
ET: 23:59

## Mass Concentration Data:

Filter ID: 22  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.034 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

Notes 1:

Notes 2:



Hourly

17-01-may	0:05:08	590	1.2	0.1	-1.1	21	16.71
17-01-may	1:05:08	590	2.2	0.5	-1.8	21	16.71
17-01-may	2:05:08	590	1.9	0.7	-1.2	21	16.72
17-01-may	3:05:08	590	1.0	0.0	-1.0	21	16.72
17-01-may	4:05:08	590	1.0	-0.1	-1.1	21	16.72
17-01-may	5:05:08	590	1.4	-0.1	-1.4	21	16.71
17-01-may	6:05:08	590	5.2	3.6	-1.5	22	16.71
17-01-may	7:05:08	590	11.3	10.4	-0.9	23	16.71
17-01-may	8:05:08	590	13.2	13.9	0.7	24	16.70
17-01-may	9:05:08	590	14.4	15.9	1.5	24	16.72
17-01-may	10:05:08	590	15.3	17.6	2.3	25	16.73
17-01-may	11:05:08	589	15.8	18.1	2.3	25	16.69
17-01-may	12:05:08	589	16.6	18.5	2.0	25	16.70
17-01-may	13:05:08	589	17.3	19.4	2.1	25	16.71
17-01-may	14:05:08	589	17.6	19.6	2.1	25	16.71
17-01-may	15:05:08	588	18.0	20.0	2.0	25	16.70
17-01-may	16:05:08	588	17.3	18.5	1.1	25	16.71
17-01-may	17:05:08	588	16.7	17.7	1.0	25	16.70
17-01-may	18:05:08	589	14.6	15.6	0.9	25	16.72
17-01-may	19:05:08	589	11.6	11.6	0.0	24	16.71
17-01-may	20:05:08	590	9.7	9.2	-0.5	24	16.70
17-01-may	21:05:08	590	8.6	7.6	-1.0	24	16.71
17-01-may	22:05:08	590	5.9	5.5	-0.4	23	16.71
17-01-may	23:05:08	590	4.9	3.6	-1.3	23	16.72



# BGI PQ200 Air Sampling System Downloaded 2017 08 may 13:40:15

## Job Details:

Job Name: 17May08D.JOB  
Version: 5.62  
Serial No: 2366  
Pump Time: 1909:03  
Flags:

## Job Code:

Site Name:  
Station Code:  
Operators:

User1: yyyyyyyyyyyyyyyyyyyyyyyyyyy

User2: yyyyyyyyyyyyyyyyyyyyyyyyyyy

	Max	Min	Avg	Units
BP	588	583	585	mmHg
TA	17.1	-2.8	8	°C
Q	---	---	16.71	Lpm

## Timer Information:

Date Time  
dd-mmm hh:mm:ss  
Start: 17-07-may 0:00:08  
Stop: 17-08-may 0:00:05  
ET: 23:59

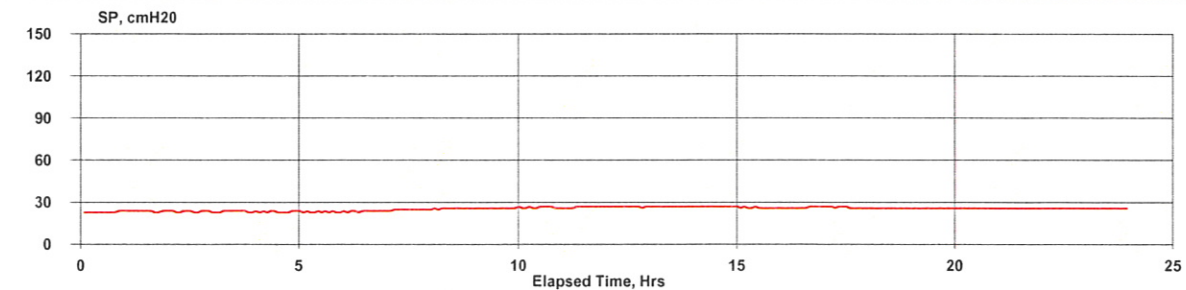
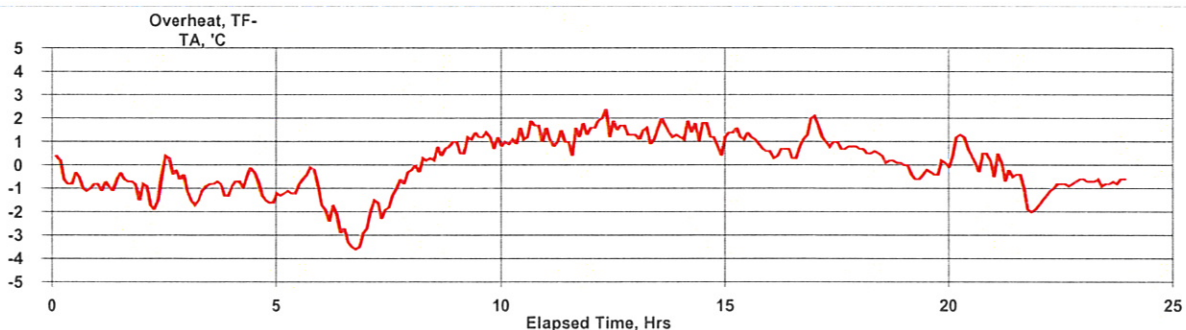
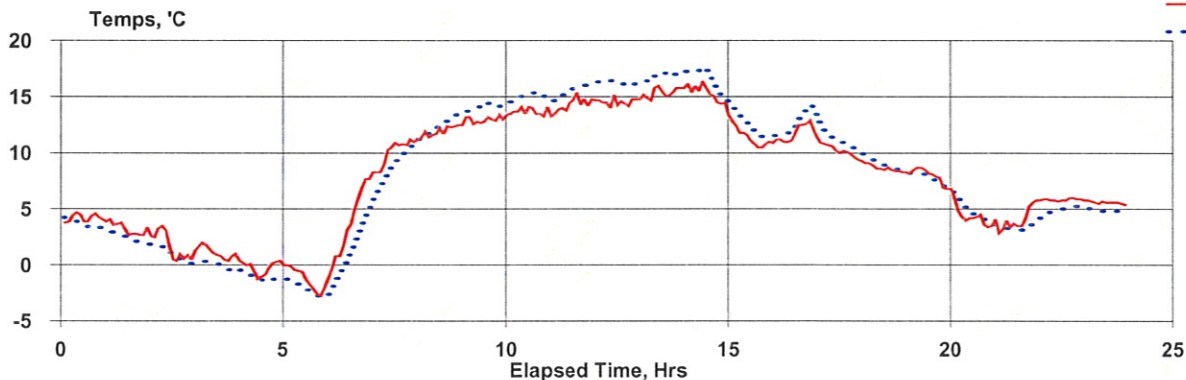
## Mass Concentration Data:

Filter ID: 32  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.036 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

QCV 0.56 %  
Max overheat 2.5 °C  
occured 07-may 12:27:33

Notes 1:

Notes 2:



Hourly

17-07-may	0:05:08	584	4.2	3.6	-0.6	23	16.72
17-07-may	1:05:08	585	3.2	2.4	-0.8	24	16.71
17-07-may	2:05:08	585	1.6	0.9	-0.7	24	16.71
17-07-may	3:05:08	585	1.1	0.0	-1.1	24	16.71
17-07-may	4:05:08	585	-0.2	-1.1	-0.9	24	16.72
17-07-may	5:05:08	585	-1.3	-2.2	-0.9	23	16.71
17-07-may	6:05:08	585	4.3	1.5	-2.8	24	16.70
17-07-may	7:05:08	585	10.2	9.0	-1.3	25	16.71
17-07-may	8:05:08	585	12.0	12.5	0.5	26	16.70
17-07-may	9:05:08	585	13.0	14.1	1.0	26	16.71
17-07-may	10:05:08	585	13.7	15.0	1.3	26	16.70
17-07-may	11:05:08	585	14.4	15.6	1.2	27	16.71
17-07-may	12:05:08	585	14.6	16.2	1.7	27	16.71
17-07-may	13:05:08	584	15.4	16.8	1.4	27	16.70
17-07-may	14:05:08	584	15.2	16.5	1.3	27	16.71
17-07-may	15:05:08	585	11.3	12.4	1.1	26	16.71
17-07-may	16:05:08	585	11.8	12.7	0.9	26	16.72
17-07-may	17:05:08	585	10.1	11.1	0.9	26	16.71
17-07-may	18:05:08	585	8.6	8.9	0.3	26	16.72
17-07-may	19:05:08	586	7.9	7.7	-0.3	26	16.73
17-07-may	20:05:08	586	4.3	4.7	0.5	26	16.71
17-07-may	21:05:08	587	4.2	3.4	-0.8	26	16.71
17-07-may	22:05:08	588	5.9	5.0	-0.9	26	16.71
17-07-may	23:05:08	588	5.6	4.9	-0.7	26	16.71

# BGI PQ200 Air Sampling System

Downloaded 2017 16 may 13:52:11

## Job Details:

Job Name: 17May16D.JOB

Version: 5.62

Serial No: 2366

Pump Time: 1933:02

Flags:

Job Code:

Site Name:

Station Code:

Operators:

User1: yyyyyyyyyyyyyyyyyyyyyyyyyyyyyyy

User2: yyyyyyyyyyyyyyyyyyyyyyyyyyy

	Max	Min	Avg	Units
BP	587	584	585	mmHg
TA	18.3	1.3	11.5	°C
Q	---	---	16.71	Lpm

QCV 0.53 %

Max overheat 3.7 °C

occured 14-may 23:30:24

## Timer Information:

Date	Time
dd-mmm	hh:mm:ss
Start: 17-13-may	0:00:08
Stop: 17-14-may	0:00:05

ET: 23:59

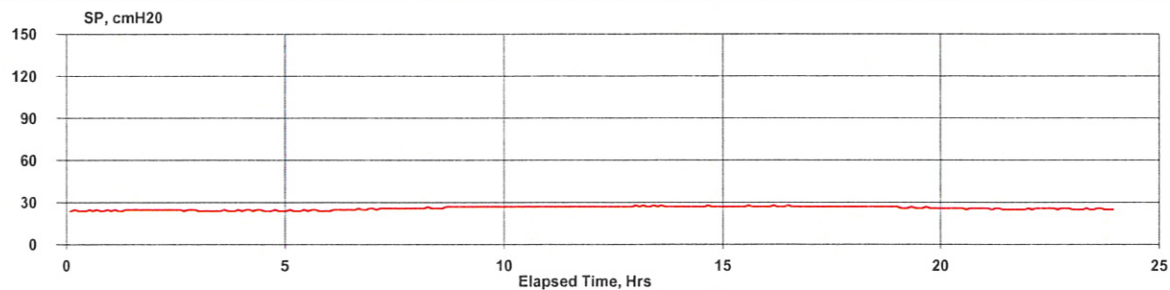
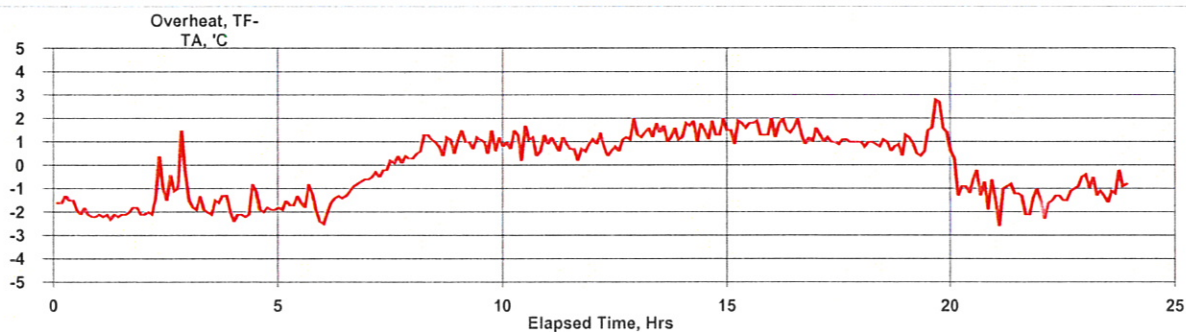
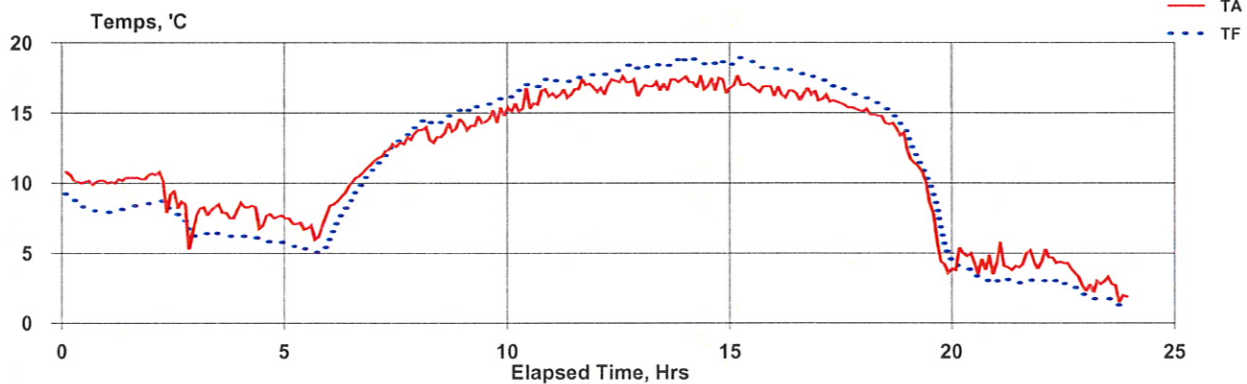
## Mass Concentration Data:

Filter ID:	36
Final Wt:	mg
Initial Wt:	mg
Delta Wt:	0.000 mg
Total Vol:	24.037 m <sup>3</sup>

Mass Conc: 0 µg/m<sup>3</sup>

Notes 1:

Notes 2:



# Hourly

17-13-may	0:05:08	586	10.2	8.4	-1.8	24	16.71
17-13-may	1:05:08	586	10.3	8.3	-2.1	25	16.70
17-13-may	2:05:08	585	8.6	7.7	-0.9	25	16.70
17-13-may	3:05:08	585	8.1	6.3	-1.8	24	16.71
17-13-may	4:05:08	585	7.7	5.9	-1.8	24	16.72
17-13-may	5:05:08	585	7.1	5.4	-1.7	24	16.71
17-13-may	6:05:08	585	10.1	9.0	-1.1	25	16.71
17-13-may	7:05:08	585	12.8	12.8	0.0	26	16.72
17-13-may	8:05:08	585	13.7	14.6	0.9	27	16.71
17-13-may	9:05:08	585	14.6	15.6	1.0	27	16.71
17-13-may	10:05:08	585	15.9	16.9	1.0	27	16.71
17-13-may	11:05:08	585	16.6	17.5	0.8	27	16.71
17-13-may	12:05:08	585	17.0	18.0	1.0	27	16.71
17-13-may	13:05:08	585	17.1	18.5	1.4	27	16.72
17-13-may	14:05:08	585	17.1	18.6	1.6	27	16.70
17-13-may	15:05:08	585	16.9	18.5	1.6	27	16.71
17-13-may	16:05:08	585	16.4	17.9	1.5	27	16.71
17-13-may	17:05:08	585	15.6	16.7	1.1	27	16.71
17-13-may	18:05:08	585	14.2	15.1	0.9	27	16.72
17-13-may	19:05:08	585	7.8	9.1	1.3	26	16.71
17-13-may	20:05:08	586	4.4	3.5	-0.9	26	16.71
17-13-may	21:05:08	586	4.4	3.0	-1.4	25	16.71
17-13-may	22:05:08	586	4.0	2.7	-1.2	26	16.72
17-13-may	23:05:08	586	2.5	1.5	-1.0	25	16.71



# BGI PQ200 Air Sampling System Downloaded 2017 22 may 13:28:06

## Job Details:

Job Name: 17May22D.JOB  
Version: 5.62  
Serial No: 2366  
Pump Time: 1957:01  
Flags:

## Job Code:

Site Name: 2366D  
Station Code:  
Operators: KN

User1: yyyyyyyyyyyyyyyyyyyyyyyyyyyyyyy

User2: yyyyyyyyyyyyyyyyyyyyyyyyyyyyyyy

	Max	Min	Avg	Units
BP	592	588	589	mmHg
TA	14.8	-4.3	5.3	°C
Q	---	---	16.7	Lpm

## Timer Information:

Date Time  
dd-mmm hh:mm:ss  
Start: 17-19-may 0:00:08  
Stop: 17-20-may 0:00:05  
ET: 23:59

## Mass Concentration Data:

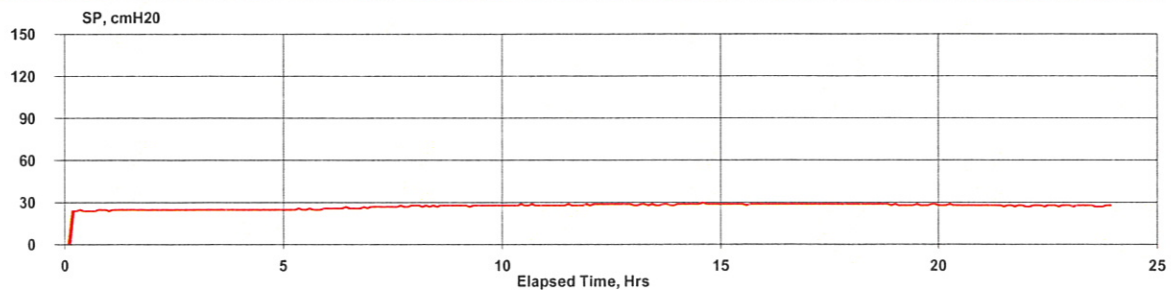
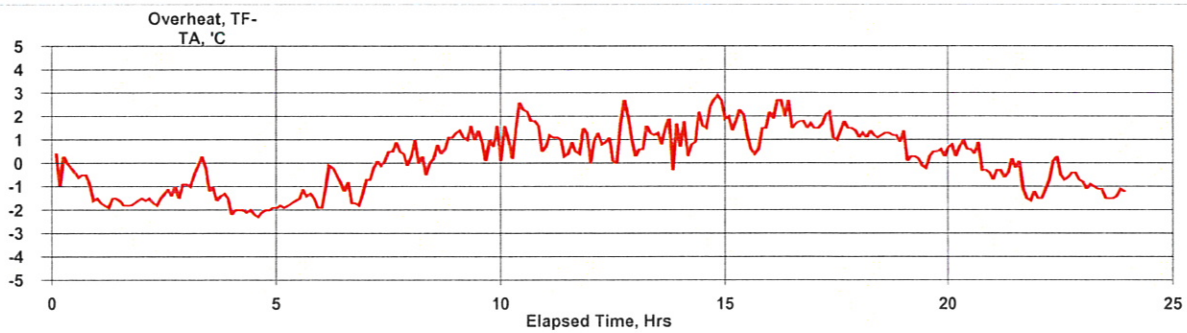
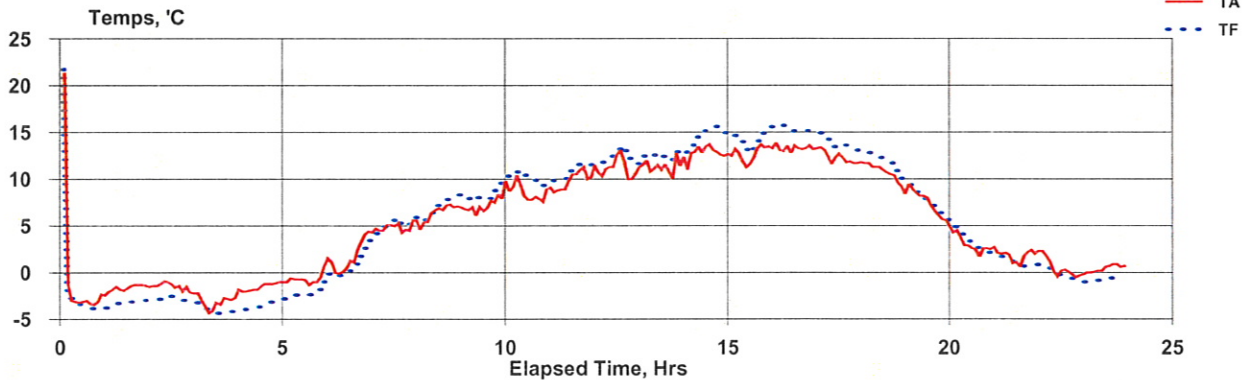
Filter ID: 41  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.028 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

QCV 0.47 %

Max overheat 5 °C  
occured 21-may 15:24:08

Notes 1:

Notes 2:



# Hourly

17-22-may	13:19:29	589	3.9	3.7	-0.2	27	16.61
17-19-may	14:20:08	589	13.0	15.0	2.0	29	16.70
17-19-may	15:20:08	589	12.9	14.5	1.6	29	16.70
17-19-may	16:20:08	589	13.2	15.0	1.8	29	16.70
17-19-may	17:20:08	590	11.9	13.3	1.4	29	16.71
17-19-may	18:20:08	590	9.9	10.9	1.0	29	16.71
17-19-may	19:20:08	590	6.1	6.5	0.4	28	16.71
17-19-may	20:20:08	591	2.4	2.5	0.1	28	16.71
17-19-may	21:20:08	591	1.7	0.8	-0.9	28	16.70
17-19-may	22:20:08	592	-0.1	-0.6	-0.6	28	16.71
17-19-may	23:20:08	592	0.6	-0.7	-1.3	28	16.70



# BGI PQ200 Air Sampling System Downloaded 2017 26 may 09:45:14

## Job Details:

Job Name: 17May26D.JOB  
Version: 5.62  
Serial No: 2366  
Pump Time: 1981:00  
Flags:

## Job Code:

Site Name: 2366D  
Station Code:  
Operators: KN

User1: yyyyyyyyyyyyyyyyyyyyyyyyyyy

User2: yyyyyyyyyyyyyyyyyyyyyyyyyyy

	Max	Min	Avg	Units
BP	585	582	583	mmHg
TA	23.4	3.4	14.2	°C
Q	---	---	16.7	Lpm

## Timer Information:

Date Time  
dd-mmm hh:mm:ss  
Start: 17-25-may 0:00:08  
Stop: 17-26-may 0:00:05  
ET: 23:59

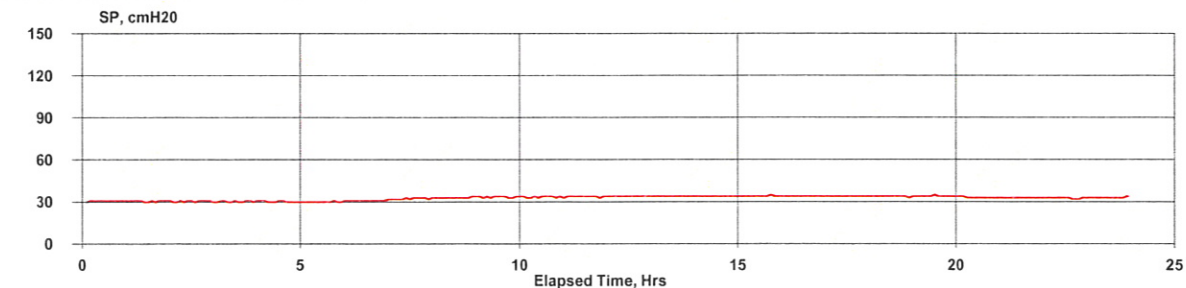
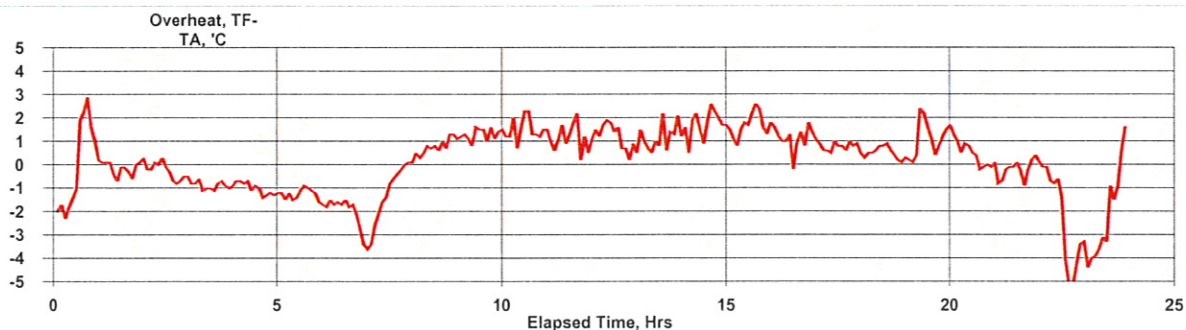
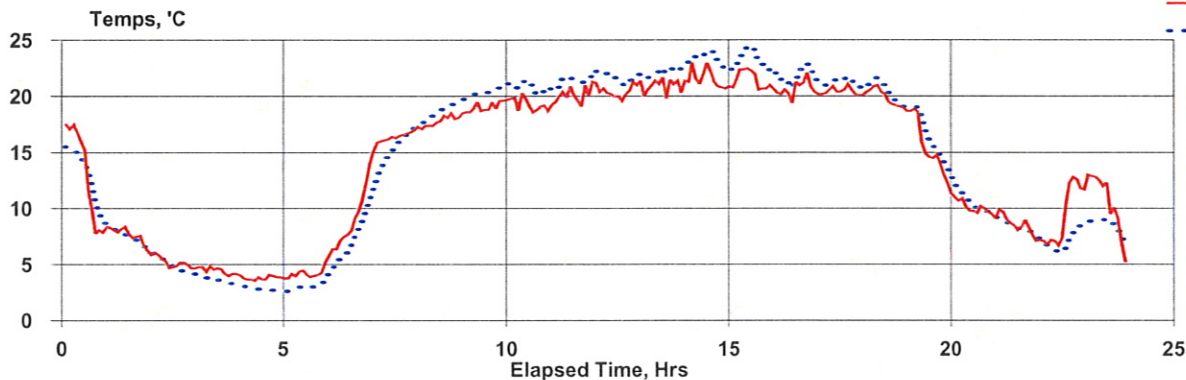
## Mass Concentration Data:

Filter ID: 8  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.042 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

QCV 0.56 %  
Max overheat 3.5 °C  
occured 25-may 00:42:43

Notes 1:

Notes 2:



Hourly

17-25-may	0:05:08	584	12.8	12.8	0.0	31	16.71
17-25-may	1:05:08	584	7.5	7.4	-0.1	31	16.70
17-25-may	2:05:08	583	5.2	4.9	-0.3	31	16.71
17-25-may	3:05:08	583	4.5	3.6	-0.9	31	16.72
17-25-may	4:05:08	583	3.8	2.8	-1.0	30	16.70
17-25-may	5:05:08	583	4.4	3.1	-1.3	30	16.71
17-25-may	6:05:08	583	9.5	7.4	-2.1	31	16.71
17-25-may	7:05:08	583	16.5	15.4	-1.1	33	16.70
17-25-may	8:05:08	583	17.9	18.7	0.8	33	16.71
17-25-may	9:05:08	583	19.1	20.4	1.3	34	16.71
17-25-may	10:05:08	583	19.3	20.8	1.5	34	16.71
17-25-may	11:05:08	583	20.3	21.4	1.1	34	16.71
17-25-may	12:05:08	583	20.5	21.6	1.2	34	16.71
17-25-may	13:05:08	583	20.9	22.1	1.2	34	16.72
17-25-may	14:05:08	583	21.6	23.3	1.7	34	16.71
17-25-may	15:05:08	583	21.5	23.2	1.7	34	16.70
17-25-may	16:05:08	582	20.7	21.8	1.1	34	16.71
17-25-may	17:05:08	582	20.5	21.2	0.8	34	16.72
17-25-may	18:05:08	583	19.9	20.4	0.5	34	16.71
17-25-may	19:05:08	583	15.1	16.3	1.1	34	16.71
17-25-may	20:05:08	584	10.0	10.5	0.4	33	16.71
17-25-may	21:05:08	584	8.5	8.3	-0.2	33	16.71
17-25-may	22:05:08	585	9.5	7.1	-2.4	33	16.70
17-25-may	23:05:08	585	10.6	8.5	-2.1	33	16.71

# BGI PQ200 Air Sampling System

Downloaded 2017 01 jun 10:23:54

## Job Details:

Job Name: 17Jun01D.JOB

Version: 5.62

Serial No: 2366

Pump Time: 2004:59

Flags:

Job Code:

Site Name: 2366D

Station Code:

Operators: KN

User1: yyyyyyyyyyyyyyyyyyyyyyyyyyyyyyy

User2: yyyyyyyyyyyyyyyyyyyyyyyyyyyyyyy

	Max	Min	Avg	Units
BP	590	587	589	mmHg
TA	25.6	5.7	15.4	°C
Q	---	---	16.7	Lpm

QCV 0.5 %

Max overheat 3.5 °C

occured 31-may 13:57:39

## Timer Information:

Date	Time
dd-mmm	hh:mm:ss
Start: 17-31-may	0:00:08
Stop: 17-01-jun	0:00:05

ET: 23:59

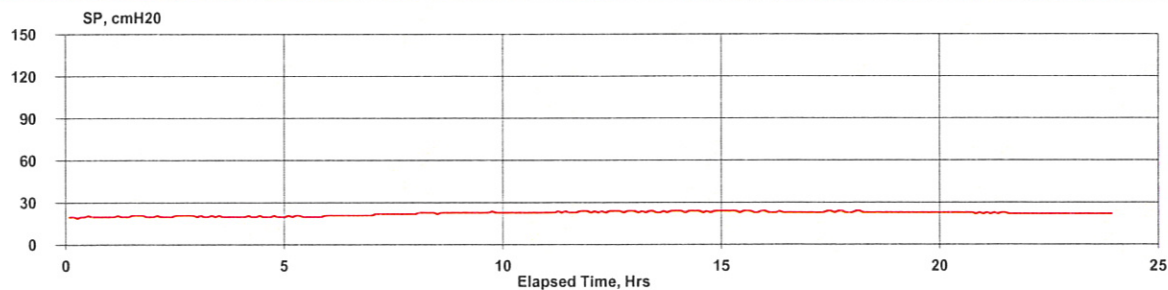
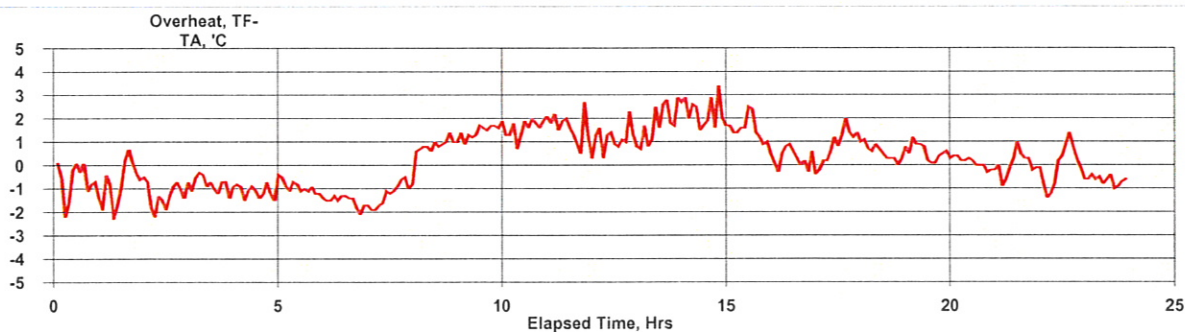
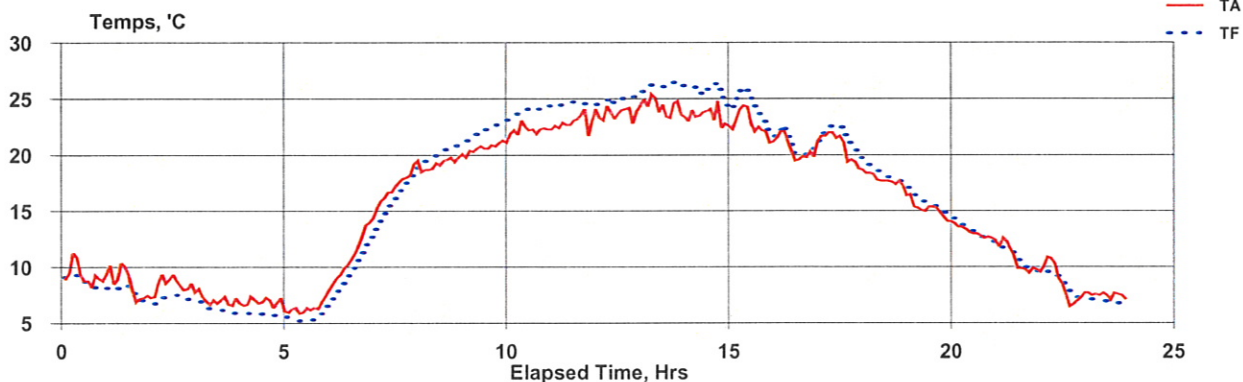
## Mass Concentration Data:

Filter ID:	13
Final Wt:	mg
Initial Wt:	mg
Delta Wt:	0.000 mg
Total Vol:	24.03 m <sup>3</sup>

Mass Conc: 0 µg/m<sup>3</sup>

Notes 1:

Notes 2:



# Hourly

17-31-may	0:05:08	590	9.4	8.7	-0.7	20	16.72
17-31-may	1:05:08	590	8.5	7.8	-0.7	20	16.73
17-31-may	2:05:08	590	8.5	7.2	-1.3	21	16.71
17-31-may	3:05:08	590	7.1	6.3	-0.8	20	16.71
17-31-may	4:05:08	590	6.9	5.8	-1.1	20	16.72
17-31-may	5:05:08	590	6.5	5.5	-1.0	20	16.72
17-31-may	6:05:08	590	11.3	9.8	-1.5	21	16.72
17-31-may	7:05:08	590	17.4	16.2	-1.2	22	16.71
17-31-may	8:05:08	590	19.3	20.2	0.9	23	16.70
17-31-may	9:05:08	589	20.7	22.2	1.5	23	16.74
17-31-may	10:05:08	589	22.3	23.9	1.6	23	16.70
17-31-may	11:05:08	589	23.0	24.5	1.5	23	16.71
17-31-may	12:05:08	589	23.7	24.9	1.2	24	16.71
17-31-may	13:05:08	588	24.3	26.2	1.9	24	16.70
17-31-may	14:05:08	588	23.5	25.7	2.2	24	16.70
17-31-may	15:05:08	587	22.7	24.2	1.5	24	16.71
17-31-may	16:05:08	588	20.6	20.9	0.3	23	16.71
17-31-may	17:05:08	588	20.6	21.6	0.9	23	16.70
17-31-may	18:05:08	589	17.7	18.2	0.5	23	16.71
17-31-may	19:05:08	589	15.1	15.6	0.5	23	16.71
17-31-may	20:05:08	589	13.1	13.1	0.1	23	16.71
17-31-may	21:05:08	589	10.6	10.7	0.0	22	16.73
17-31-may	22:05:08	589	8.5	8.5	-0.1	22	16.69
17-31-may	23:05:08	589	7.5	6.9	-0.6	22	16.72



# BGI PQ200 Air Sampling System Downloaded 2017 07 jun 09:57:29

## Job Details:

Job Name: 17Jun07D.JOB  
Version: 5.62  
Serial No: 2366  
Pump Time: 2028:58  
Flags:

## Job Code:

Site Name:

Station Code:

Operators:

User1: yyyyyyyyyyyyyyyyyyyyyyyyyyy

User2: yyyyyyyyyyyyyyyyyyyyyyyyyyy

	Max	Min	Avg	Units
BP	593	589	591	mmHg
TA	28.5	9.2	18.7	°C
Q	---	---	16.71	Lpm

## Timer Information:

Date Time  
dd-mmm hh:mm:ss  
Start: 17-06-jun 0:00:08  
Stop: 17-07-jun 0:00:04  
ET: 23:59

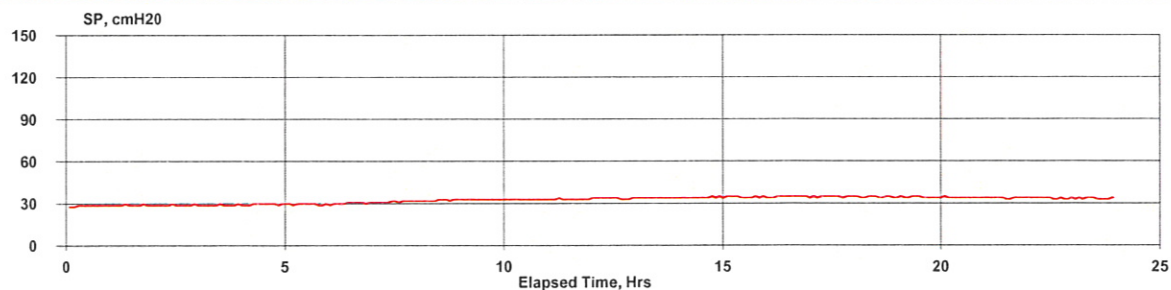
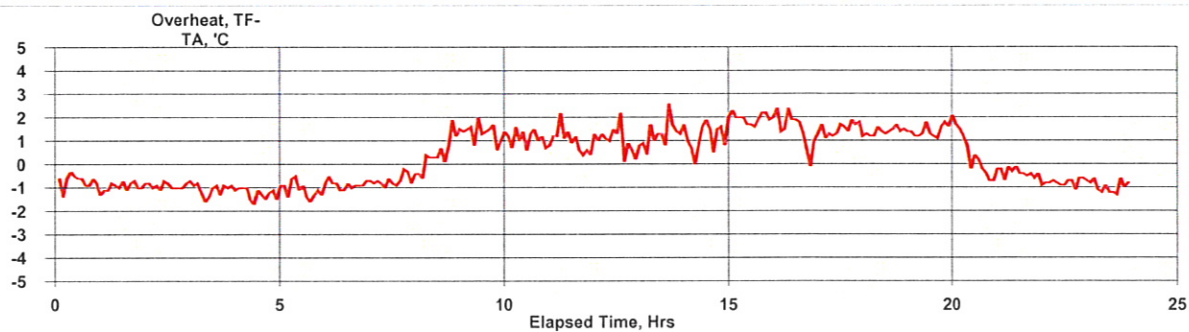
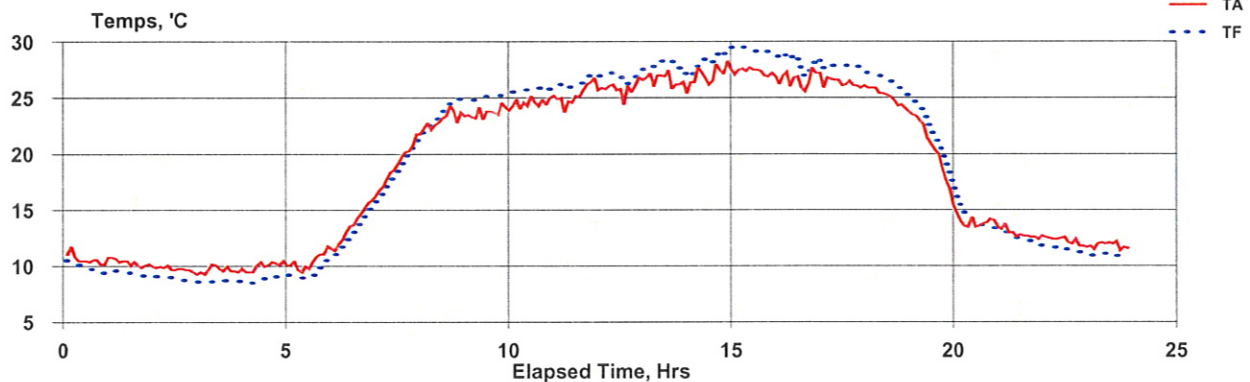
## Mass Concentration Data:

Filter ID: 20  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.042 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

QCV 0.55 %  
Max overheat 3.2 °C  
occured 06-jun 13:41:15

Notes 1:

Notes 2:



Hourly

17-06-jun	0:05:08	591	10.7	9.9	-0.8	29	16.71
17-06-jun	1:05:08	592	10.3	9.4	-0.9	29	16.71
17-06-jun	2:05:08	592	9.8	8.9	-0.9	29	16.70
17-06-jun	3:05:08	592	9.7	8.6	-1.1	29	16.71
17-06-jun	4:05:08	592	10.0	8.8	-1.2	30	16.71
17-06-jun	5:05:08	592	10.5	9.5	-1.1	30	16.72
17-06-jun	6:05:08	592	14.0	13.2	-0.8	31	16.71
17-06-jun	7:05:08	592	19.4	18.7	-0.7	32	16.71
17-06-jun	8:05:08	592	23.1	23.7	0.5	33	16.71
17-06-jun	9:05:08	592	23.7	25.1	1.4	33	16.72
17-06-jun	10:05:08	592	24.6	25.7	1.1	33	16.71
17-06-jun	11:05:08	592	25.3	26.4	1.0	33	16.72
17-06-jun	12:05:08	591	25.9	26.9	1.0	34	16.71
17-06-jun	13:05:08	591	26.5	27.9	1.3	34	16.71
17-06-jun	14:05:08	591	27.1	28.3	1.2	34	16.71
17-06-jun	15:05:08	590	27.3	29.3	2.0	35	16.71
17-06-jun	16:05:08	590	26.7	28.1	1.5	35	16.72
17-06-jun	17:05:08	590	26.3	27.8	1.5	35	16.70
17-06-jun	18:05:08	590	25.0	26.4	1.4	35	16.71
17-06-jun	19:05:08	591	20.3	21.8	1.5	34	16.71
17-06-jun	20:05:08	591	13.9	14.2	0.3	34	16.70
17-06-jun	21:05:08	591	12.9	12.4	-0.4	34	16.71
17-06-jun	22:05:08	592	12.2	11.5	-0.8	34	16.71
17-06-jun	23:05:08	592	11.9	10.9	-1.0	33	16.71



# BGI PQ200 Air Sampling System Downloaded 2017 13 jun 10:22:30

## Job Details:

Job Name: 17Jun13D.JOB  
Version: 5.62  
Serial No: 2366  
Pump Time: 2052:57  
Flags:

## Job Code:

Site Name:  
Station Code:  
Operators:

User1: yyyyyyyyyyyyyyyyyyyyyyyyyyy

User2: yyyyyyyyyyyyyyyyyyyyyyyyyyy

	Max	Min	Avg	Units
BP	589	584	586	mmHg
TA	15.1	-0.3	9.8	°C
Q	---	---	16.7	Lpm

## Timer Information:

Date Time  
dd-mmm hh:mm:ss  
Start: 17-12-jun 0:00:08  
Stop: 17-13-jun 0:00:05  
ET: 23:59

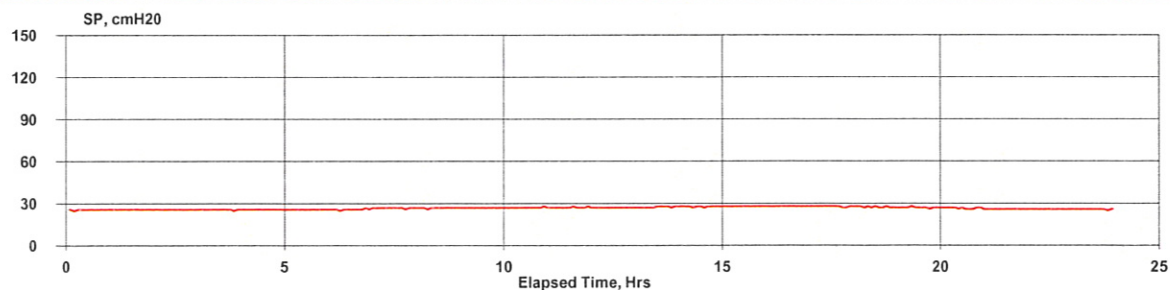
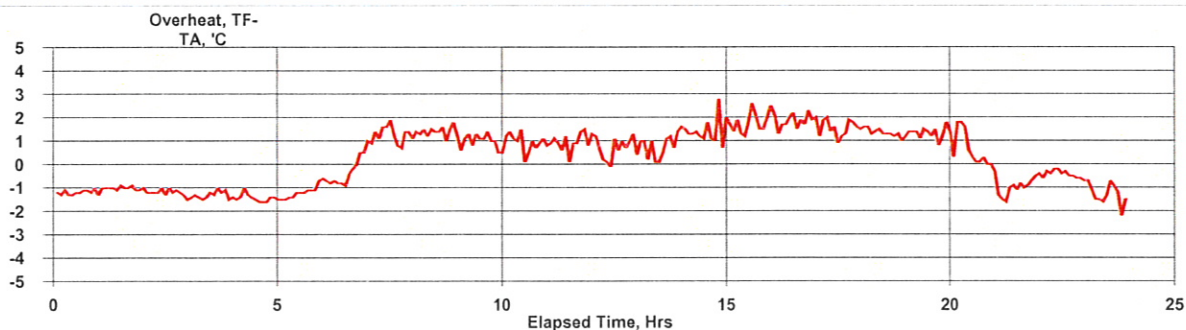
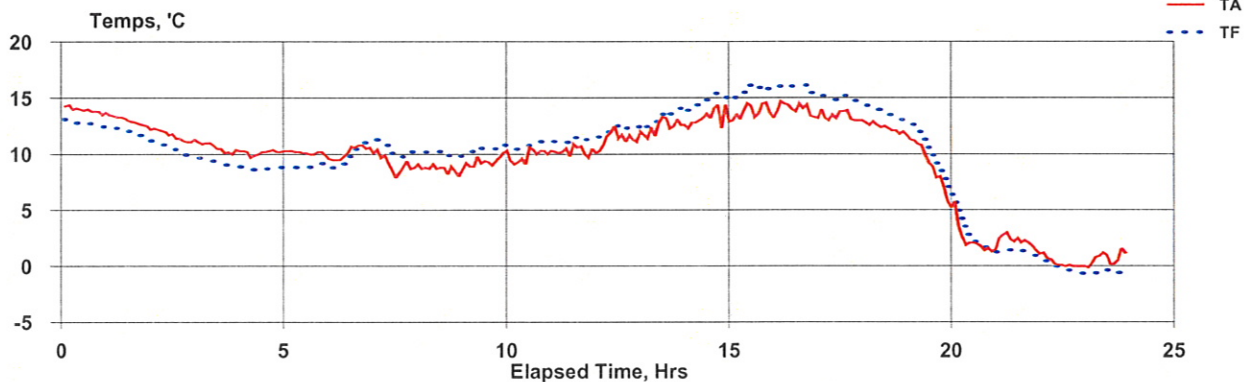
## Mass Concentration Data:

Filter ID: 25  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.036 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

QCV 0.53 %  
Max overheat 3.2 °C  
occured 12-jun 14:49:36

Notes 1:

Notes 2:



# Hourly

17-12-jun	0:05:08	585	13.9	12.8	-1.2	26	16.71
17-12-jun	1:05:08	585	13.0	11.9	-1.0	26	16.71
17-12-jun	2:05:08	585	11.6	10.4	-1.2	26	16.71
17-12-jun	3:05:08	585	10.6	9.3	-1.3	26	16.71
17-12-jun	4:05:08	584	10.2	8.7	-1.4	26	16.71
17-12-jun	5:05:08	584	10.1	8.9	-1.2	26	16.72
17-12-jun	6:05:08	585	10.2	9.9	-0.3	26	16.71
17-12-jun	7:05:08	585	9.1	10.4	1.3	27	16.72
17-12-jun	8:05:08	586	8.7	10.1	1.4	27	16.70
17-12-jun	9:05:08	586	9.4	10.4	1.0	27	16.71
17-12-jun	10:05:08	587	9.9	10.8	0.9	27	16.70
17-12-jun	11:05:08	587	10.3	11.2	1.0	27	16.70
17-12-jun	12:05:08	588	11.5	12.1	0.7	27	16.71
17-12-jun	13:05:08	587	12.5	13.3	0.8	28	16.71
17-12-jun	14:05:08	587	13.3	14.7	1.4	28	16.71
17-12-jun	15:05:08	587	13.8	15.6	1.8	28	16.71
17-12-jun	16:05:08	588	14.0	15.9	1.9	28	16.71
17-12-jun	17:05:08	587	13.4	14.9	1.5	28	16.71
17-12-jun	18:05:08	588	12.3	13.7	1.3	27	16.71
17-12-jun	19:05:08	588	8.8	10.2	1.3	27	16.72
17-12-jun	20:05:08	588	2.3	2.9	0.6	27	16.70
17-12-jun	21:05:08	588	2.2	1.2	-1.0	26	16.71
17-12-jun	22:05:08	589	0.3	-0.2	-0.4	26	16.71
17-12-jun	23:05:08	589	0.7	-0.6	-1.3	26	16.71

# BGI PQ200 Air Sampling System

Downloaded 2017 21 jun 13:11:05

## Job Details:

Job Name: 17Jun21D.JOB

Version: 5.62

Serial No: 2366

Pump Time: 2076:56

Flags:

Job Code:

Site Name:

Station Code:

Operators:

User1: yyyyyyyyyyyyyyyyyyyyyyyyyyyyyyy

User2: yyyyyyyyyyyyyyyyyyyyyyyyyyyyyyy

	Max	Min	Avg	Units
BP	592	590	591	mmHg
TA	32	14.5	23.5	°C
Q	---	---	16.7	Lpm

QCV 0.55 %

Max overheat 5.6 °C  
occured 20-jun 19:54:40

## Timer Information:

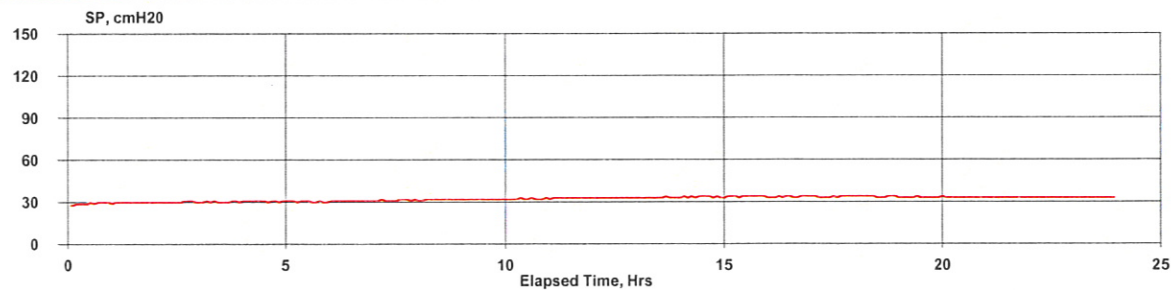
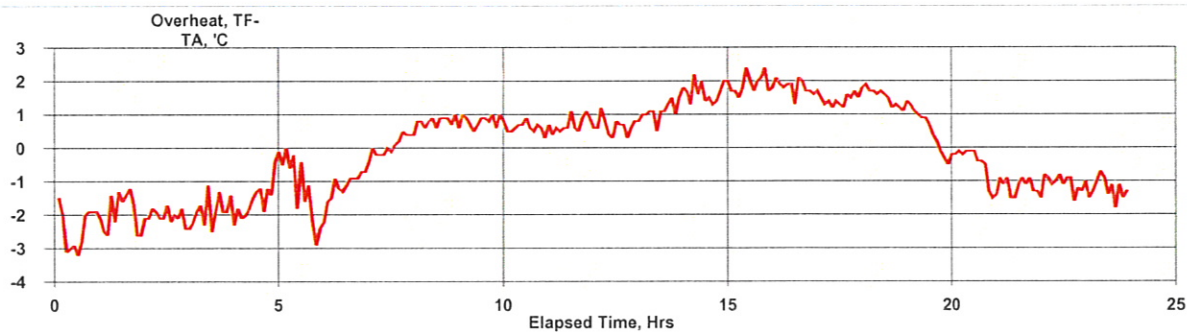
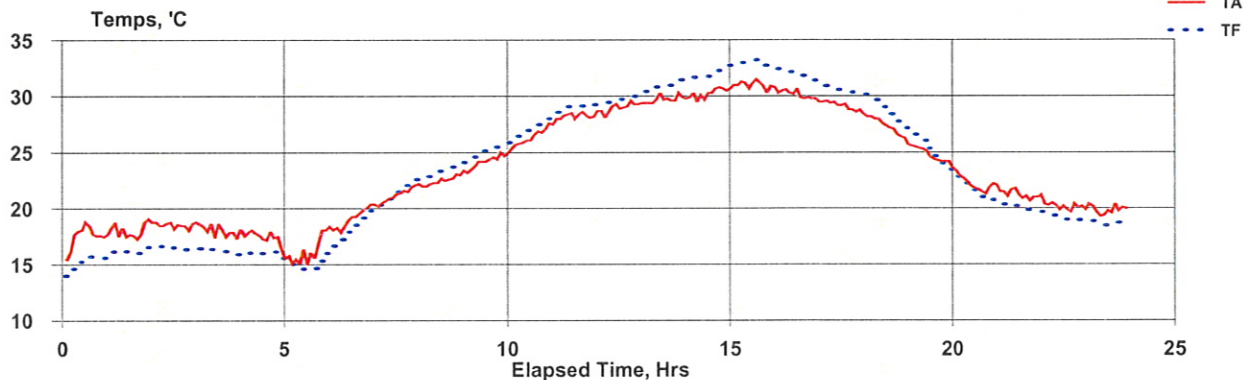
Date	Time
dd-mmm	hh:mm:ss
Start: 17-18-jun	0:00:08
Stop: 17-19-jun	0:00:05
ET: 23:59	

## Mass Concentration Data:

Filter ID:	7
Final Wt:	mg
Initial Wt:	mg
Delta Wt:	0.000 mg
Total Vol:	24.04 m <sup>3</sup>
Mass Conc:	0 µg/m <sup>3</sup>

Notes 1:

Notes 2:



Hourly

17-18-jun	0:05:08	591	17.6	15.2	-2.4	29	16.72
17-18-jun	1:05:08	591	18.1	16.2	-1.9	30	16.72
17-18-jun	2:05:08	591	18.6	16.5	-2.1	30	16.72
17-18-jun	3:05:08	591	18.1	16.2	-1.9	30	16.71
17-18-jun	4:05:08	592	17.4	16.0	-1.4	31	16.71
17-18-jun	5:05:08	592	16.3	15.0	-1.3	31	16.71
17-18-jun	6:05:08	592	19.2	18.2	-1.0	31	16.71
17-18-jun	7:05:08	592	21.3	21.4	0.1	31	16.70
17-18-jun	8:05:08	592	22.6	23.4	0.8	32	16.71
17-18-jun	9:05:08	592	24.3	25.1	0.8	32	16.71
17-18-jun	10:05:08	592	26.5	27.1	0.6	32	16.71
17-18-jun	11:05:08	591	28.3	29.0	0.7	33	16.70
17-18-jun	12:05:08	591	29.0	29.7	0.7	33	16.70
17-18-jun	13:05:08	591	29.7	30.9	1.2	33	16.70
17-18-jun	14:05:08	591	30.3	32.0	1.7	34	16.71
17-18-jun	15:05:08	590	31.0	32.9	1.9	34	16.71
17-18-jun	16:05:08	590	30.1	31.9	1.8	34	16.71
17-18-jun	17:05:08	590	29.1	30.5	1.5	34	16.73
17-18-jun	18:05:08	590	27.2	28.7	1.5	34	16.71
17-18-jun	19:05:08	591	24.7	25.2	0.4	33	16.70
17-18-jun	20:05:08	591	22.2	21.6	-0.5	33	16.71
17-18-jun	21:05:08	592	21.2	20.1	-1.2	33	16.71
17-18-jun	22:05:08	592	20.2	19.1	-1.1	33	16.71
17-18-jun	23:05:08	592	19.9	18.6	-1.2	33	16.71



# BGI PQ200 Air Sampling System Downloaded 2017 27 jun 11:45:05

## Job Details:

Job Name: 17Jun27D.JOB  
Version: 5.62  
Serial No: 2366  
Pump Time: 2100:55  
Flags:

Job Code:  
Site Name:  
Station Code:  
Operators:  
User1:   
User2:

	Max	Min	Avg	Units
BP	594	590	592	mmHg
TA	32.8	13.3	22.8	°C
Q	---	---	16.7	Lpm

QCV 0.55 %  
Max overheat 7.2 °C  
occured 26-jun 20:38:08

## Timer Information:

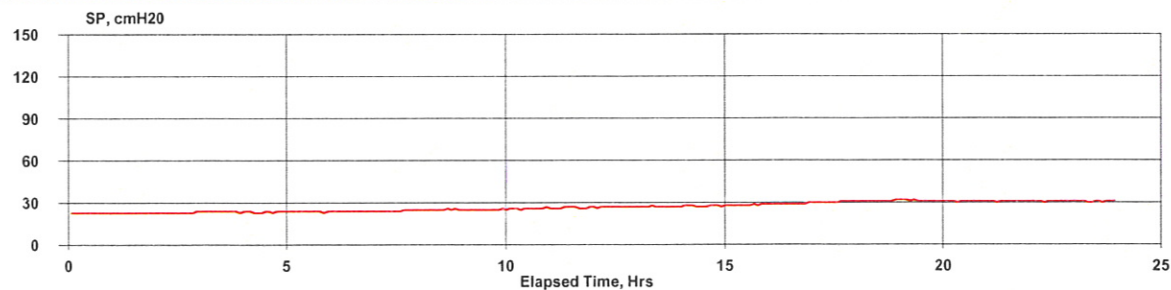
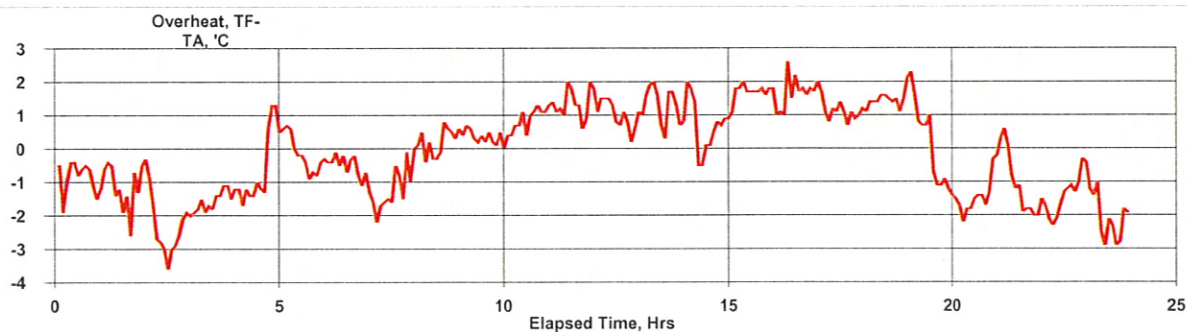
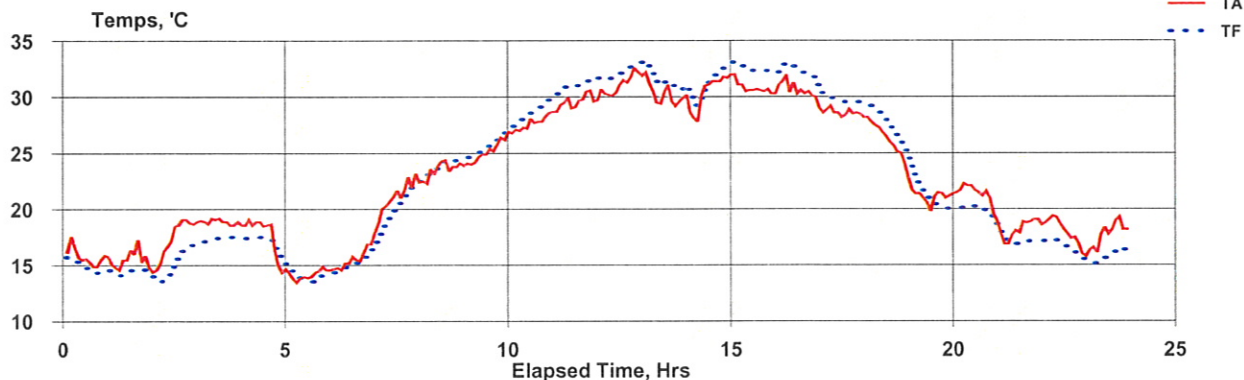
Date Time  
dd-mmm hh:mm:ss  
Start: 17-24-jun 0:00:08  
Stop: 17-25-jun 0:00:05  
ET: 23:59

## Mass Concentration Data:

Filter ID: 29  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.037 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

Notes 1:

Notes 2:



Hourly

17-24-jun	0:05:08	593	15.8	14.9	-0.9	23	16.71
17-24-jun	1:05:08	593	15.5	14.4	-1.1	23	16.71
17-24-jun	2:05:08	593	17.6	15.2	-2.4	23	16.70
17-24-jun	3:05:08	593	18.9	17.4	-1.5	24	16.71
17-24-jun	4:05:08	593	17.5	17.0	-0.6	24	16.70
17-24-jun	5:05:08	593	14.2	14.0	-0.2	24	16.71
17-24-jun	6:05:08	593	15.8	15.2	-0.6	24	16.70
17-24-jun	7:05:08	593	21.3	20.1	-1.2	24	16.71
17-24-jun	8:05:08	593	23.6	23.8	0.2	25	16.71
17-24-jun	9:05:08	593	25.2	25.6	0.3	25	16.71
17-24-jun	10:05:08	593	27.7	28.6	0.9	26	16.71
17-24-jun	11:05:08	592	29.6	31.0	1.4	27	16.71
17-24-jun	12:05:08	592	31.2	32.2	1.0	27	16.71
17-24-jun	13:05:08	591	30.2	31.5	1.3	27	16.71
17-24-jun	14:05:08	591	30.5	31.2	0.7	28	16.71
17-24-jun	15:05:08	591	30.8	32.5	1.7	28	16.71
17-24-jun	16:05:08	591	30.6	32.3	1.7	29	16.69
17-24-jun	17:05:08	591	28.6	29.7	1.1	30	16.71
17-24-jun	18:05:08	591	26.1	27.6	1.5	31	16.70
17-24-jun	19:05:08	592	21.1	21.2	0.1	31	16.71
17-24-jun	20:05:08	592	21.3	19.9	-1.4	31	16.71
17-24-jun	21:05:08	593	18.2	17.1	-1.1	31	16.72
17-24-jun	22:05:08	593	17.9	16.5	-1.4	31	16.70
17-24-jun	23:05:08	593	17.8	15.7	-2.1	31	16.71



# BGI PQ200 Air Sampling System Downloaded 2017 05 jul 09:53:43

## Job Details:

Job Name: 17Jul05D.JOB  
Version: 5.62  
Serial No: 2366  
Pump Time: 2124:54  
Flags:

## Job Code:

Site Name:  
Station Code:  
Operators:

User1: yyyyyyyyyyyyyyyyyyyyyyyyyyyyyyy

User2: yyyyyyyyyyyyyyyyyyyyyyyyyyyyyyy

	Max	Min	Avg	Units
BP	592	589	590	mmHg
TA	30.5	10.3	20.3	°C
Q	---	---	16.7	Lpm

## Timer Information:

Date Time  
dd-mmm hh:mm:ss  
Start: 17-30-jun 0:00:08  
Stop: 17-01-jul 0:00:05  
ET: 23:59

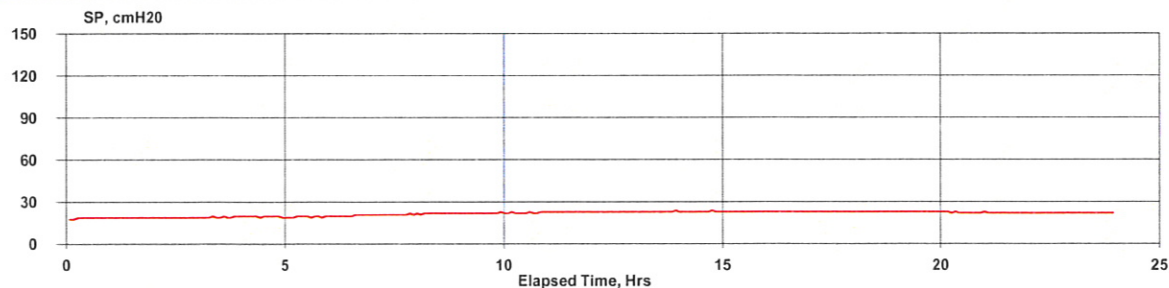
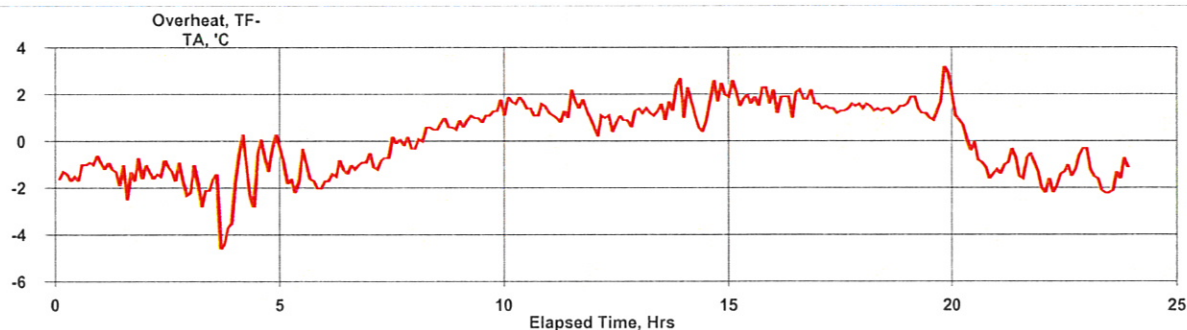
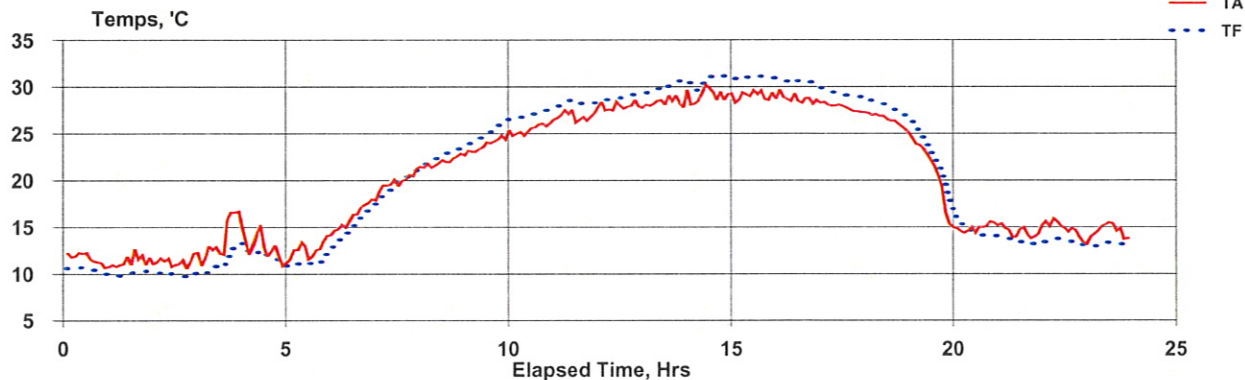
## Mass Concentration Data:

Filter ID: 33  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.034 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

QCV 0.46 %  
Max overheat 5.5 °C  
occured 01-jul 19:47:45

Notes 1:

Notes 2:



Hourly

17-30-jun	0:05:08	591	11.6	10.4	-1.2	19	16.71
17-30-jun	1:05:08	591	11.4	10.1	-1.4	19	16.70
17-30-jun	2:05:08	591	11.4	9.9	-1.5	19	16.71
17-30-jun	3:05:08	591	13.8	11.3	-2.6	19	16.72
17-30-jun	4:05:08	592	12.7	12.0	-0.8	20	16.71
17-30-jun	5:05:08	592	12.8	11.3	-1.5	20	16.70
17-30-jun	6:05:08	592	16.4	15.2	-1.1	21	16.71
17-30-jun	7:05:08	592	20.1	19.7	-0.4	21	16.72
17-30-jun	8:05:08	592	22.1	22.6	0.6	22	16.71
17-30-jun	9:05:08	592	24.0	25.1	1.1	22	16.71
17-30-jun	10:05:08	591	25.6	27.1	1.5	22	16.71
17-30-jun	11:05:08	591	27.0	28.2	1.3	23	16.70
17-30-jun	12:05:08	591	27.9	28.8	0.9	23	16.71
17-30-jun	13:05:08	590	28.5	30.0	1.5	23	16.71
17-30-jun	14:05:08	590	29.1	30.7	1.6	23	16.70
17-30-jun	15:05:08	590	29.0	31.0	2.0	23	16.69
17-30-jun	16:05:08	590	28.7	30.5	1.8	23	16.70
17-30-jun	17:05:08	590	27.8	29.2	1.4	23	16.71
17-30-jun	18:05:08	590	26.4	27.8	1.4	23	16.70
17-30-jun	19:05:08	590	20.7	22.4	1.7	23	16.71
17-30-jun	20:05:08	591	14.9	14.6	-0.4	22	16.71
17-30-jun	21:05:08	591	14.5	13.5	-1.1	22	16.71
17-30-jun	22:05:08	591	14.7	13.4	-1.3	22	16.70
17-30-jun	23:05:08	591	14.7	13.1	-1.6	22	16.70

## **Collocated Monitor 2398E**

**PM<sub>10</sub> Sampler Summary****April 1, 2017 - June 30, 2017****Network: Alton Coal Development****Site:** Coal Hollow**Sampler ID:** Coal Hollow-E**AQS ID:****Sampler Type:** BGI FRM Single

Date	Filter ID	Concentration (µg/m3) LTP	Concentration (µg/m3) STP	Sample Period (hr:min)	Sample Volume (m3)	Std Volume (m3)	Tare (mg)	Mass Gross (mg)	Net (mg)	Flag	Comments
04/01/17	P2938106	2.6	3.2	23:59	24.0	19.9	383.372	383.436	0.064		
04/07/17	P2938110	99.5	121.6	23:59	24.0	19.7	386.471	388.863	2.392		
04/13/17	P2938777	77.6	95.5	23:59	24.0	19.5	393.889	395.754	1.865		Smudged
04/19/17	P2938781	16.0	19.6	23:59	24.0	19.7	400.570	400.956	0.386	HT	
04/25/17	P2939182	30.6	37.2	23:59	24.0	19.7	383.094	383.830	0.736	HT	
05/01/17	P2939187	10.9	13.4	23:59	24.0	19.6	384.000	384.263	0.263		Fiber and speck
05/07/17	P2939727	15.1	18.5	23:59	24.0	19.6	385.244	385.608	0.364	HT	
05/13/17	P2939733	9.3	11.5	23:59	24.0	19.4	392.171	392.395	0.224		
05/19/17	P2939738	9.4	11.3	23:59	24.0	19.9	387.356	387.582	0.226	HT	
05/25/17	P2940170	52.8	66.3	23:59	24.0	19.1	388.293	389.562	1.269		
05/31/17	P2940176	24.0	30.0	23:59	24.0	19.2	394.566	395.145	0.579		
06/06/17	P2940669	19.8	25.0	23:59	24.0	19.1	381.770	382.248	0.478		
06/12/17	P2940674	33.2	40.9	23:59	24.0	19.5	378.054	378.853	0.799		Darker; discoloration
06/18/17	P2941058	5.2	6.6	23:59	24.0	18.8	388.068	388.193	0.125		
06/24/17	P2941063	43.2	55.0	23:59	24.0	18.9	390.307	391.346	1.039		
06/30/17	P2941067	13.4	17.0	23:59	24.0	19.0	385.273	385.596	0.323		
06/07/17	P2940675	Field Blank					383.452	383.464	0.012		
# Valid		Recovery	Average	St. Dev.	Max	Min					
16		100%	35.8	33.6	121.6	3.2					

Inter-Mountain Laboratories' (IML) data validation is limited by the provided information. Data have been validated based on laboratory QC, field observations and other information available to IML. Additional data validation based on information not provided to IML may be required. According to 40 CFR 58.15 final responsibilities for data review and validation lies with each agency submitting data to AQS.

# BGI PQ200 Air Sampling System Downloaded 2017 04 apr 09:41:21

## Job Details:

Job Name: 17Apr04E.JOB  
Version: 5.62  
Serial No: 2398  
Pump Time: 1747:30  
Flags:

Job Code:

Site Name:

Station Code:

Operators:

User1: yyyyyyyyyyyyyyyyyyyyyyyyyyy

User2: yyyyyyyyyyyyyyyyyyyyyyy

	Max	Min	Avg	Units
BP	590	583	587	mmHg
TA	12.5	-0.1	4.4	°C
Q	---	---	16.7	Lpm

QCV 0.46 %  
Max overheat 3.2 °C  
occured 01-apr 15:27:18

## Timer Information:

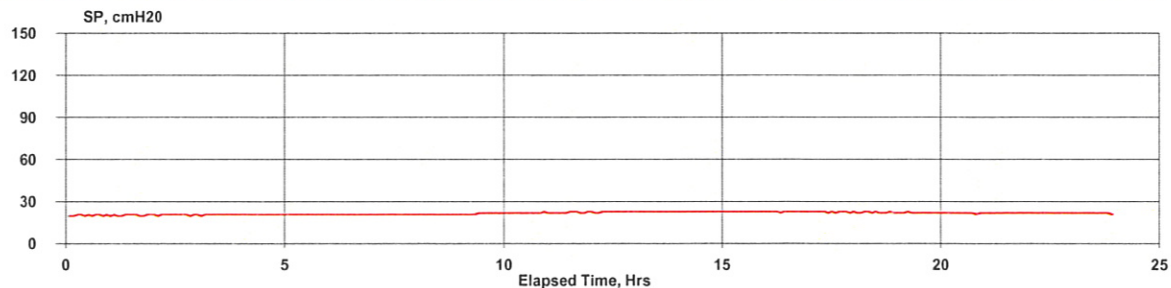
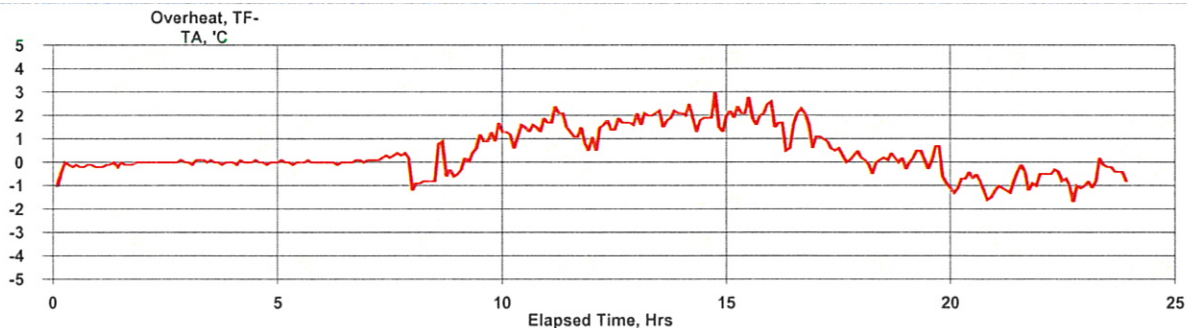
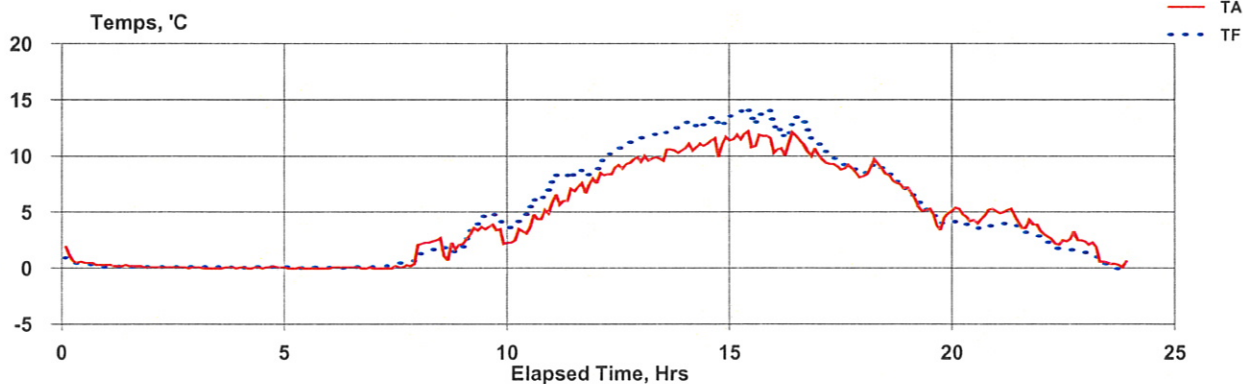
Date Time  
dd-mmm hh:mm:ss  
Start: 17-01-apr 0:00:08  
Stop: 17-02-apr 0:00:05  
ET: 23:59

## Mass Concentration Data:

Filter ID: 31  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.035 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

Notes 1:

Notes 2:



Hourly

17-01-apr	0:05:08	585	0.6	0.4	-0.2	21	16.71
17-01-apr	1:05:08	585	0.2	0.1	-0.1	21	16.71
17-01-apr	2:05:08	585	0.1	0.1	0.0	21	16.71
17-01-apr	3:05:08	586	0.0	0.1	0.0	21	16.71
17-01-apr	4:05:08	586	0.1	0.1	0.0	21	16.70
17-01-apr	5:05:08	586	0.0	0.0	0.0	21	16.71
17-01-apr	6:05:08	587	0.1	0.1	0.0	21	16.71
17-01-apr	7:05:08	587	0.3	0.4	0.1	21	16.70
17-01-apr	8:05:08	588	2.0	1.6	-0.4	21	16.71
17-01-apr	9:05:08	588	3.2	4.0	0.8	22	16.71
17-01-apr	10:05:08	589	4.0	5.4	1.4	22	16.71
17-01-apr	11:05:08	589	6.9	8.3	1.4	22	16.72
17-01-apr	12:05:08	589	9.0	10.6	1.6	23	16.70
17-01-apr	13:05:08	589	10.2	12.1	2.0	23	16.71
17-01-apr	14:05:08	588	11.1	13.0	1.9	23	16.71
17-01-apr	15:05:08	588	11.5	13.7	2.2	23	16.71
17-01-apr	16:05:08	588	10.8	12.3	1.5	23	16.71
17-01-apr	17:05:08	588	8.9	9.5	0.5	23	16.70
17-01-apr	18:05:08	589	8.3	8.3	0.0	22	16.70
17-01-apr	19:05:08	589	5.0	5.0	0.0	22	16.71
17-01-apr	20:05:08	589	4.8	3.8	-1.0	22	16.71
17-01-apr	21:05:08	590	4.3	3.5	-0.8	22	16.70
17-01-apr	22:05:08	590	2.6	1.8	-0.8	22	16.72
17-01-apr	23:05:08	590	0.9	0.4	-0.5	22	16.70



# BGI PQ200 Air Sampling System Downloaded 2017 10 apr 13:39:31

## Job Details:

Job Name: 17Apr10E.JOB  
Version: 5.62  
Serial No: 2398  
Pump Time: 1771:29  
Flags:

Job Code:

Site Name:

Station Code:

Operators:

User1: yyyyyyyyyyyyyyyyyyyyyyyyyyy

User2: yyyyyyyyyyyyyyyyyyyyyyy

	Max	Min	Avg	Units
BP	591	587	589	mmHg
TA	16.8	-1.1	9.2	°C
Q	---	---	16.7	Lpm

## Timer Information:

Date Time  
dd-mmm hh:mm:ss  
Start: 17-07-apr 0:00:08  
Stop: 17-08-apr 0:00:05  
ET: 23:59

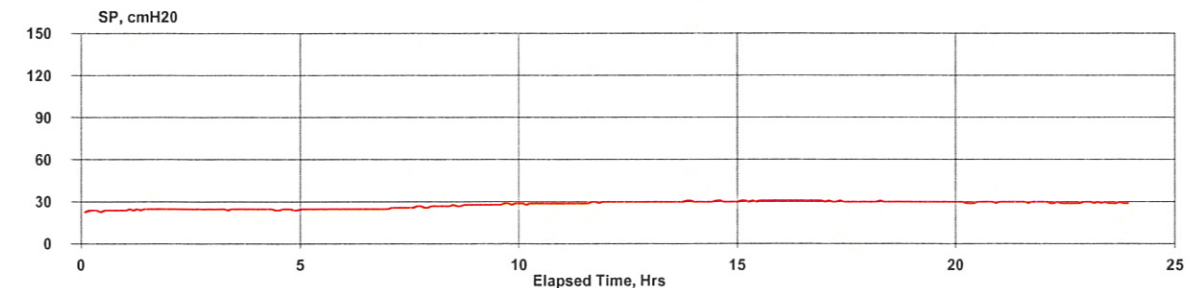
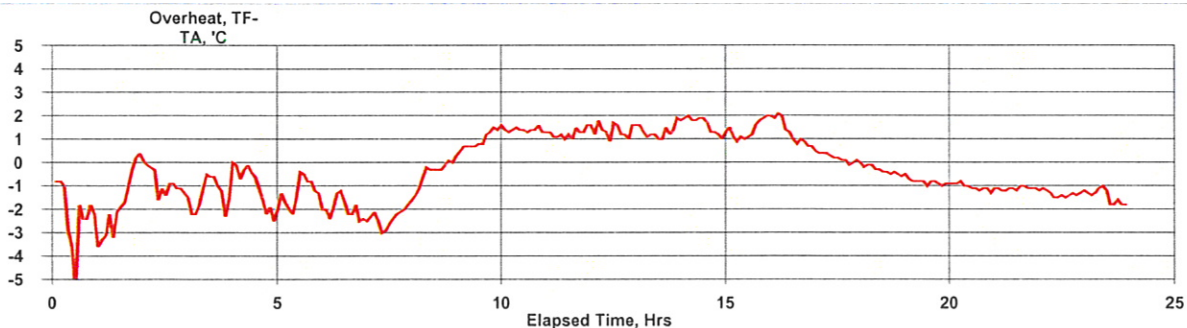
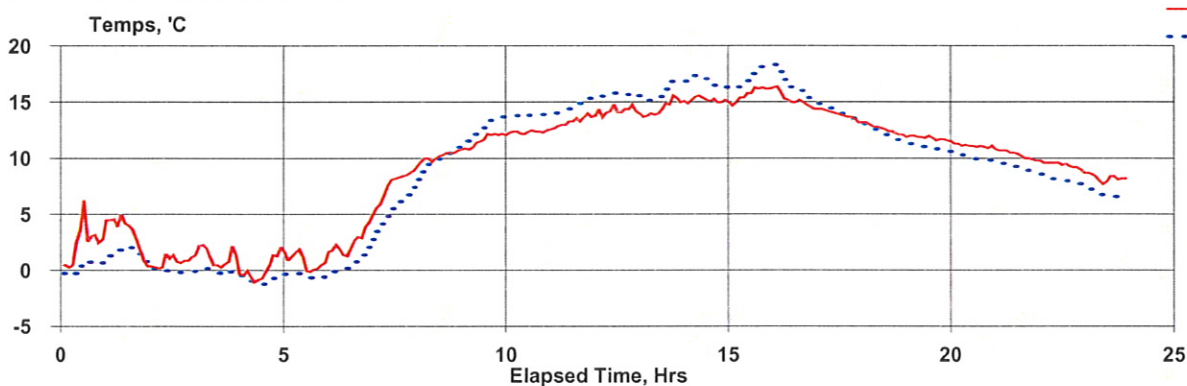
## Mass Concentration Data:

Filter ID: 35  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.034 m<sup>3</sup>  
Mass Conc: 0 ug/m<sup>3</sup>

QCV 0.49 %  
Max overheat 2.8 °C  
occured 10-apr 13:39:27

Notes 1:

Notes 2:



# Hourly

17-07-apr	0:05:08	590	2.7	0.3	-2.4	24	16.71
17-07-apr	1:05:08	590	3.0	1.5	-1.5	25	16.70
17-07-apr	2:05:08	590	0.9	-0.1	-1.0	25	16.71
17-07-apr	3:05:08	590	1.1	-0.1	-1.3	25	16.69
17-07-apr	4:05:08	590	0.3	-0.8	-1.1	25	16.73
17-07-apr	5:05:08	590	0.8	-0.5	-1.3	25	16.72
17-07-apr	6:05:08	590	2.7	0.7	-2.0	25	16.70
17-07-apr	7:05:08	590	7.9	5.6	-2.3	26	16.71
17-07-apr	8:05:08	590	10.2	9.9	-0.4	27	16.71
17-07-apr	9:05:08	591	11.7	12.7	1.0	28	16.70
17-07-apr	10:05:08	591	12.4	13.8	1.4	29	16.71
17-07-apr	11:05:08	590	13.4	14.6	1.3	29	16.71
17-07-apr	12:05:08	590	14.3	15.6	1.4	30	16.71
17-07-apr	13:05:08	590	14.6	15.9	1.4	30	16.69
17-07-apr	14:05:08	589	15.2	16.8	1.6	30	16.71
17-07-apr	15:05:08	589	15.8	17.2	1.4	31	16.71
17-07-apr	16:05:08	588	15.1	16.3	1.2	31	16.70
17-07-apr	17:05:08	588	13.8	14.0	0.2	30	16.71
17-07-apr	18:05:08	588	12.5	12.2	-0.4	30	16.70
17-07-apr	19:05:08	588	11.8	10.9	-0.8	30	16.71
17-07-apr	20:05:08	588	11.1	10.0	-1.1	30	16.71
17-07-apr	21:05:08	588	10.3	9.2	-1.1	30	16.70
17-07-apr	22:05:08	588	9.4	8.0	-1.3	29	16.70
17-07-apr	23:05:08	588	8.2	6.8	-1.5	29	16.71

# BGI PQ200 Air Sampling System Downloaded 2017 14 apr 10:33:54

## Job Details:

Job Name: 17Apr14E.JOB  
Version: 5.62  
Serial No: 2398  
Pump Time: 1795:28  
Flags:

Job Code:

Site Name:

Station Code:

Operators:

User1: yyyyyyyyyyyyyyyyyyyyyyyyyyyyyyy

User2: yyyyyyyyyyyyyyyyyyyyyyyyyyyyyyy

	Max	Min	Avg	Units
BP	590	585	587	mmHg
TA	19.5	-1.8	10.2	°C
Q	---	---	16.7	Lpm

## Timer Information:

Date Time  
dd-mmm hh:mm:ss  
Start: 17-13-apr 0:00:08  
Stop: 17-14-apr 0:00:04  
ET: 23:59

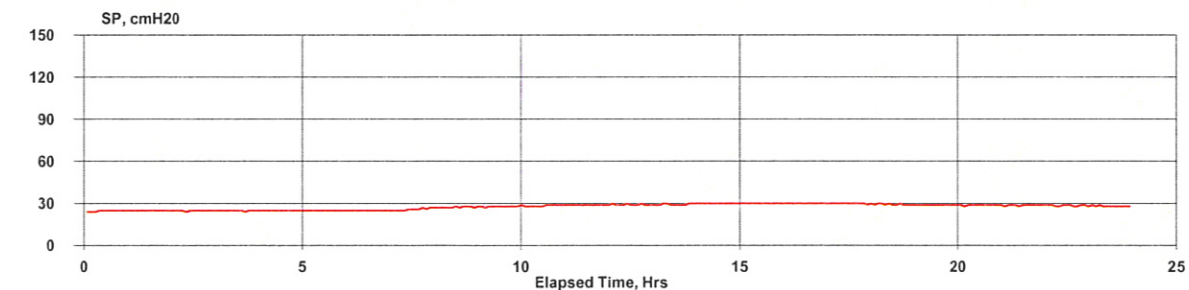
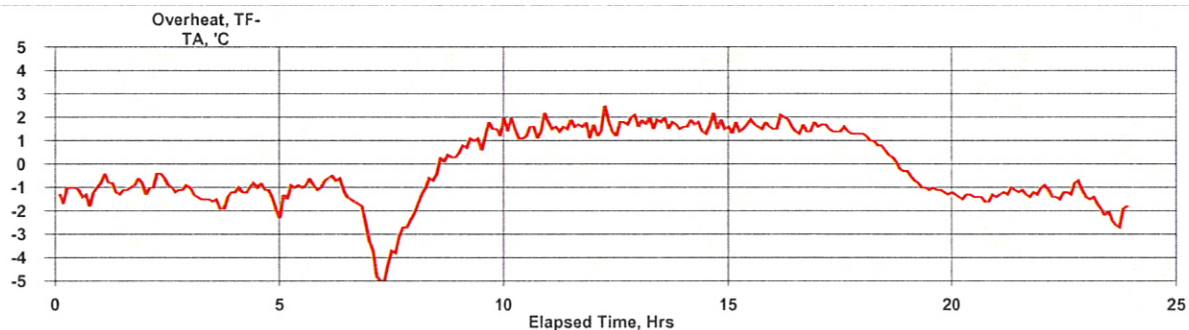
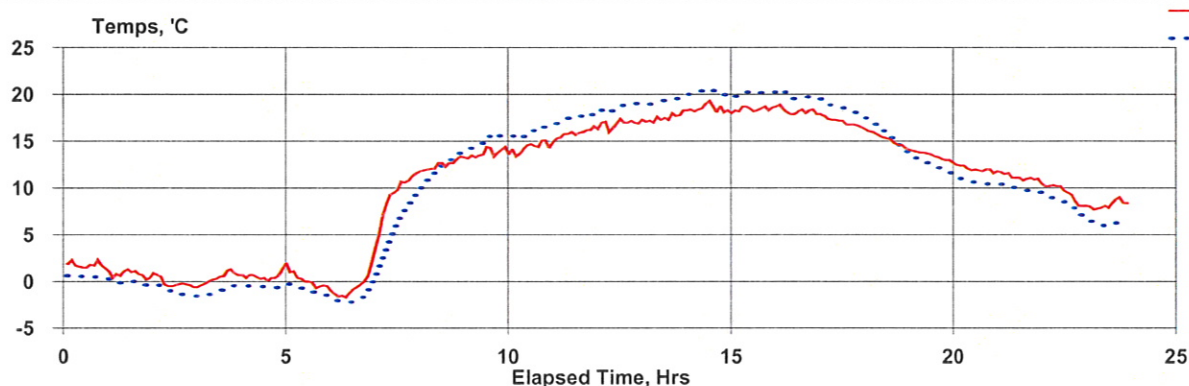
## Mass Concentration Data:

Filter ID: 9  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.027 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

QCV 0.41 %  
Max overheat 2.9 °C  
occured 13-apr 11:52:49

Notes 1:

Notes 2:



Hourly

17-13-apr	0:05:08	590	1.7	0.5	-1.2	25	16.72
17-13-apr	1:05:08	590	0.8	-0.2	-0.9	25	16.69
17-13-apr	2:05:08	589	-0.2	-1.1	-0.9	25	16.71
17-13-apr	3:05:08	589	0.5	-1.0	-1.5	25	16.71
17-13-apr	4:05:08	589	0.7	-0.6	-1.2	25	16.71
17-13-apr	5:05:08	589	0.0	-1.0	-1.0	25	16.71
17-13-apr	6:05:08	589	-0.2	-1.7	-1.4	25	16.71
17-13-apr	7:05:08	589	9.6	6.0	-3.6	26	16.71
17-13-apr	8:05:08	589	12.6	12.3	-0.3	27	16.71
17-13-apr	9:05:08	589	13.8	15.0	1.2	28	16.71
17-13-apr	10:05:08	588	14.4	15.9	1.5	29	16.71
17-13-apr	11:05:08	588	15.9	17.5	1.6	29	16.71
17-13-apr	12:05:08	587	16.9	18.6	1.7	29	16.71
17-13-apr	13:05:08	587	17.6	19.3	1.7	29	16.70
17-13-apr	14:05:08	586	18.5	20.2	1.7	30	16.70
17-13-apr	15:05:08	586	18.5	20.1	1.6	30	16.71
17-13-apr	16:05:08	586	18.2	19.8	1.6	30	16.68
17-13-apr	17:05:08	585	17.0	18.4	1.4	30	16.70
17-13-apr	18:05:08	585	15.2	15.6	0.4	29	16.70
17-13-apr	19:05:08	586	13.4	12.4	-1.0	29	16.72
17-13-apr	20:05:08	586	12.0	10.6	-1.4	29	16.71
17-13-apr	21:05:08	586	11.1	9.9	-1.2	29	16.71
17-13-apr	22:05:08	586	9.4	8.2	-1.2	29	16.71
17-13-apr	23:05:08	586	8.2	6.2	-2.0	28	16.69



# BGI PQ200 Air Sampling System Downloaded 2017 20 apr 10:59:49

## Job Details:

Job Name: 17Apr20E.JOB  
Version: 5.62  
Serial No: 2398  
Pump Time: 1819:27  
Flags:

## Job Code:

Site Name:  
Station Code:  
Operators:

User1: yyyyyyyyyyyyyyyyyyyyyyyyyyyyyyy

User2: yyyyyyyyyyyyyyyyyyyyyyyyyyyyyyy

	Max	Min	Avg	Units
BP	592	588	590	mmHg
TA	18.2	0.5	9.3	°C
Q	---	---	16.7	Lpm

QCV 0.54 %

Max overheat 4.1 °C  
occured 19-apr 19:24:54

## Timer Information:

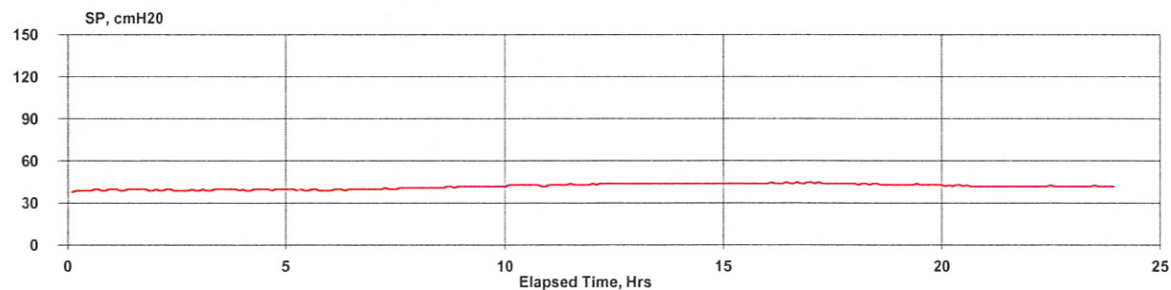
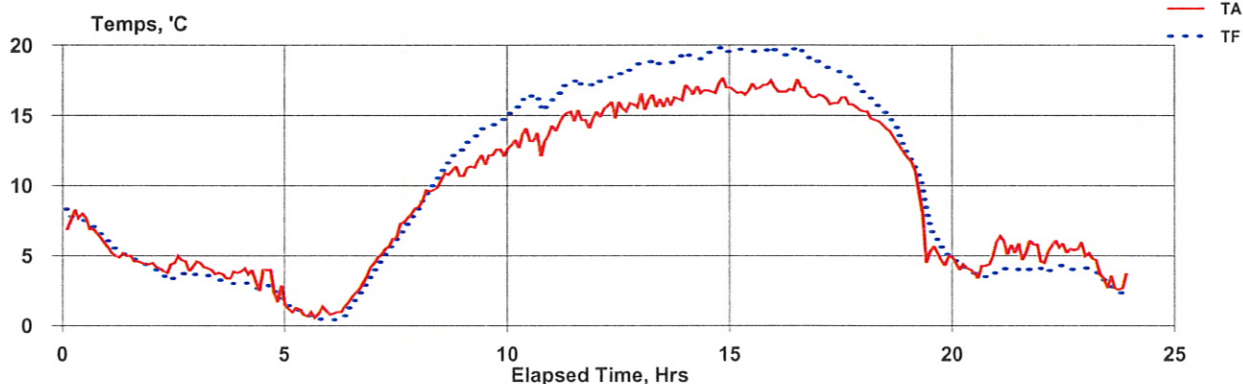
Date Time  
dd-mmm hh:mm:ss  
Start: 17-19-apr 0:00:08  
Stop: 17-20-apr 0:00:04  
ET: 23:59

## Mass Concentration Data:

Filter ID: 17  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.037 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

Notes 1:

Notes 2:



# Hourly

17-19-apr	0:05:08	590	7.0	7.2	0.2	39	16.71
17-19-apr	1:05:08	590	4.8	4.9	0.1	40	16.71
17-19-apr	2:05:08	590	4.3	3.6	-0.7	39	16.70
17-19-apr	3:05:08	590	3.9	3.3	-0.6	40	16.70
17-19-apr	4:05:08	590	3.2	2.6	-0.6	40	16.70
17-19-apr	5:05:08	590	1.0	0.8	-0.2	39	16.70
17-19-apr	6:05:08	591	2.4	1.8	-0.6	40	16.70
17-19-apr	7:05:08	591	6.8	6.3	-0.5	41	16.70
17-19-apr	8:05:08	591	10.3	10.9	0.6	41	16.72
17-19-apr	9:05:08	591	12.0	14.0	2.0	42	16.71
17-19-apr	10:05:08	591	13.3	15.9	2.6	43	16.70
17-19-apr	11:05:08	592	14.8	17.1	2.3	43	16.71
17-19-apr	12:05:08	592	15.6	18.0	2.4	44	16.70
17-19-apr	13:05:08	591	16.1	18.9	2.8	44	16.71
17-19-apr	14:05:08	591	16.9	19.4	2.5	44	16.71
17-19-apr	15:05:08	591	17.0	19.6	2.7	44	16.71
17-19-apr	16:05:08	591	16.8	19.3	2.6	44	16.71
17-19-apr	17:05:08	591	15.9	17.9	2.0	44	16.70
17-19-apr	18:05:08	591	13.8	14.8	1.0	43	16.71
17-19-apr	19:05:08	591	6.7	7.8	1.1	43	16.71
17-19-apr	20:05:08	591	4.4	3.9	-0.5	42	16.71
17-19-apr	21:05:08	592	5.6	4.0	-1.5	42	16.71
17-19-apr	22:05:08	592	5.5	4.0	-1.4	42	16.70
17-19-apr	23:05:08	592	3.6	3.1	-0.5	42	16.71



# BGI PQ200 Air Sampling System Downloaded 2017 26 apr 14:15:36

## Job Details:

Job Name: 17Apr26E.JOB  
Version: 5.62  
Serial No: 2398  
Pump Time: 1843:26  
Flags:

## Job Code:

Site Name:  
Station Code:  
Operators:

User1: yyyyyyyyyyyyyyyyyyyyyyyyyyy

User2: yyyyyyyyyyyyyyyyyyyyyyyyyyy

	Max	Min	Avg	Units
BP	587	581	583	mmHg
TA	9.7	0	5.3	°C
Q	---	---	16.7	Lpm

## Timer Information:

Date Time  
dd-mmm hh:mm:ss  
Start: 17-25-apr 0:00:08  
Stop: 17-26-apr 0:00:04  
ET: 23:59

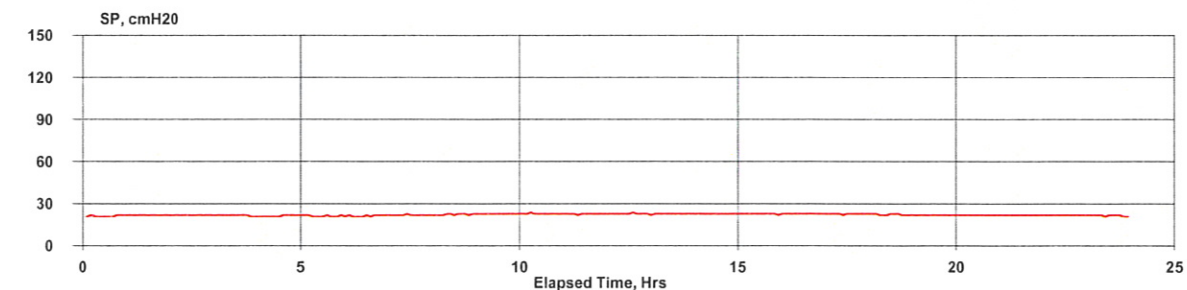
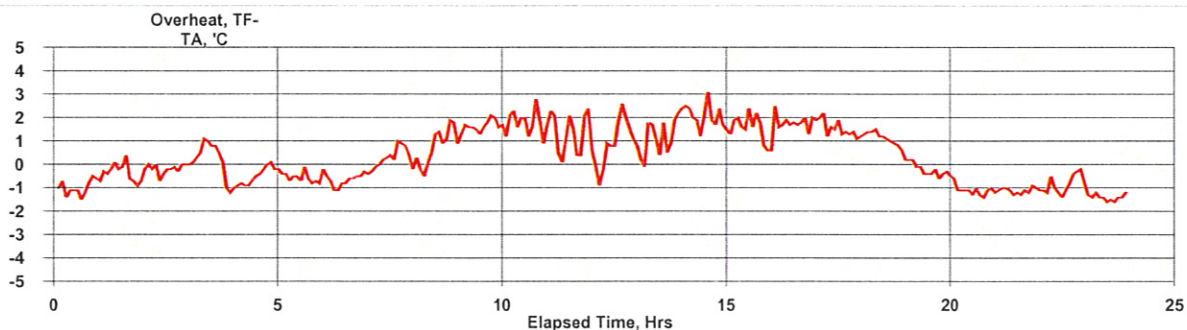
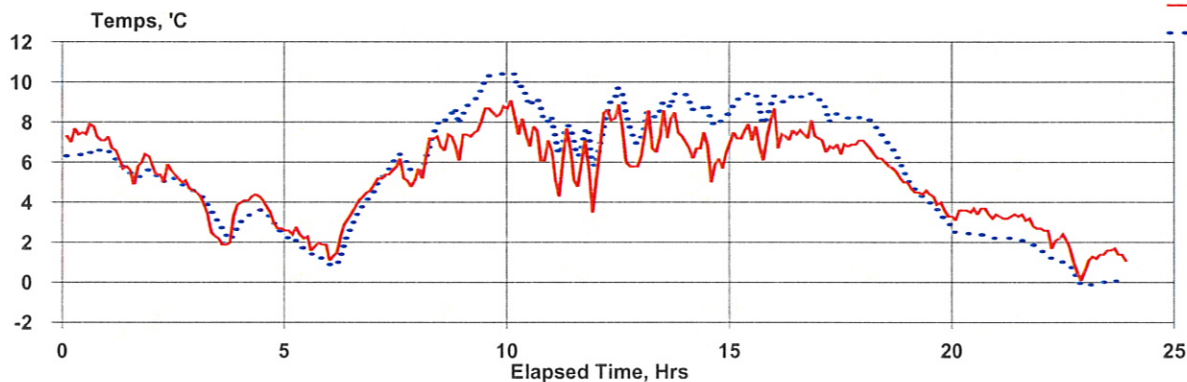
## Mass Concentration Data:

Filter ID: 18  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.036 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

QCV 0.49 %  
Max overheat 3.7 °C  
occured 25-apr 14:32:20

Notes 1:

Notes 2:



Hourly

17-25-apr	0:05:08	582	7.4	6.4	-1.0	21	16.71
17-25-apr	1:05:08	582	6.0	5.7	-0.3	22	16.71
17-25-apr	2:05:08	582	5.2	5.0	-0.2	22	16.72
17-25-apr	3:05:08	582	3.0	3.1	0.2	22	16.70
17-25-apr	4:05:08	582	3.6	3.2	-0.5	22	16.71
17-25-apr	5:05:08	582	2.1	1.6	-0.5	21	16.71
17-25-apr	6:05:08	582	3.4	2.8	-0.7	22	16.71
17-25-apr	7:05:08	583	5.4	5.7	0.3	22	16.71
17-25-apr	8:05:08	583	6.8	7.6	0.8	23	16.71
17-25-apr	9:05:08	583	8.2	9.8	1.7	23	16.71
17-25-apr	10:05:08	584	7.4	9.2	1.8	23	16.71
17-25-apr	11:05:08	584	5.6	6.9	1.3	23	16.70
17-25-apr	12:05:08	584	7.2	8.1	0.9	23	16.71
17-25-apr	13:05:08	584	7.6	8.8	1.2	23	16.71
17-25-apr	14:05:08	585	6.4	8.4	2.0	23	16.70
17-25-apr	15:05:08	585	7.4	9.0	1.5	23	16.72
17-25-apr	16:05:08	585	7.4	9.2	1.8	23	16.71
17-25-apr	17:05:08	585	6.8	8.3	1.5	23	16.70
17-25-apr	18:05:08	585	5.9	6.9	1.1	22	16.70
17-25-apr	19:05:08	586	4.1	3.9	-0.3	22	16.72
17-25-apr	20:05:08	586	3.5	2.4	-1.1	22	16.70
17-25-apr	21:05:08	587	3.1	2.0	-1.1	22	16.71
17-25-apr	22:05:08	587	1.6	0.8	-0.8	22	16.71
17-25-apr	23:05:08	587	1.4	0.0	-1.4	22	16.71

# BGI PQ200 Air Sampling System Downloaded 2017 02 may 13:04:47

## Job Details:

Job Name: 17May02E.JOB  
Version: 5.62  
Serial No: 2398  
Pump Time: 1867:25  
Flags:

Job Code:  
Site Name: 239E  
Station Code:  
Operators: KN

User1: yyyyyyyyyyyyyyyyyyyyyyyyyyyyyyy  
User2: yyyyyyyyyyyyyyyyyyyyyyyyyyyyyyy

	Max	Min	Avg	Units
BP	591	589	589	mmHg
TA	19.3	-0.1	10.3	°C
Q	---	---	16.7	Lpm

QCV 0.51 %  
Max overheat 3.9 °C  
occured 01-may 10:34:51

## Timer Information:

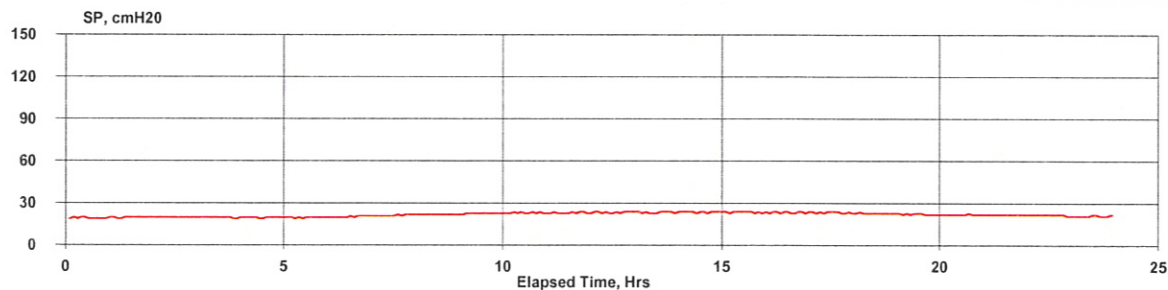
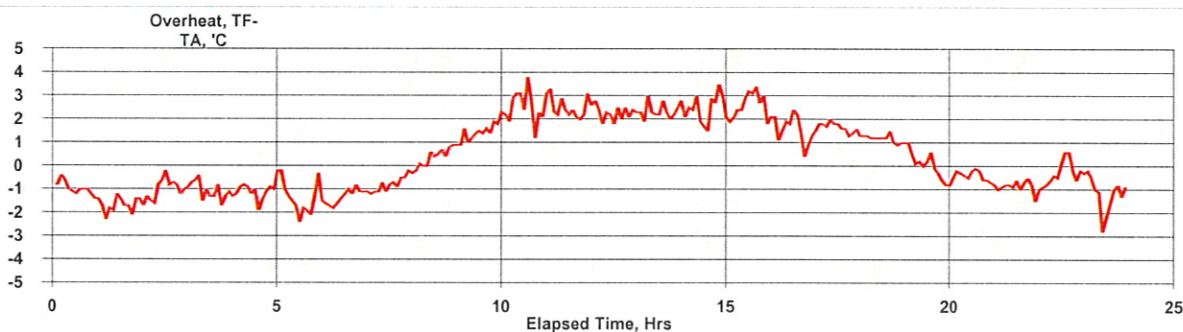
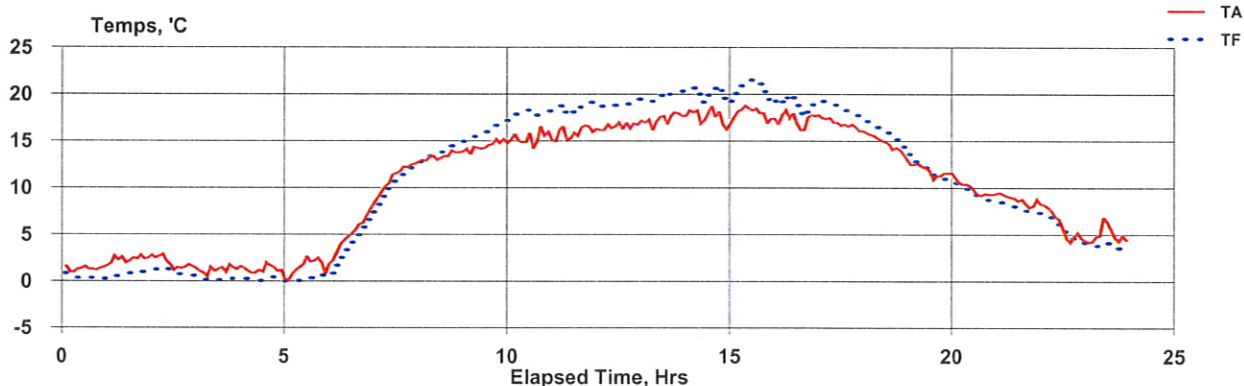
Date Time  
dd-mmm hh:mm:ss  
Start: 17-01-may 0:00:08  
Stop: 17-02-may 0:00:05  
ET: 23:59

## Mass Concentration Data:

Filter ID: 23  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.029 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

Notes 1:

Notes 2:



# Hourly

17-01-may	0:05:08	590	1.4	0.4	-1.0	19	16.71
17-01-may	1:05:08	590	2.4	0.7	-1.7	20	16.72
17-01-may	2:05:08	590	1.9	0.9	-1.0	20	16.72
17-01-may	3:05:08	590	1.3	0.2	-1.1	20	16.71
17-01-may	4:05:08	590	1.2	0.1	-1.0	20	16.70
17-01-may	5:05:08	590	1.6	0.2	-1.4	20	16.71
17-01-may	6:05:08	590	5.4	4.1	-1.3	21	16.71
17-01-may	7:05:08	590	11.4	10.6	-0.8	21	16.71
17-01-may	8:05:08	590	13.4	13.9	0.4	22	16.70
17-01-may	9:05:08	590	14.5	16.0	1.5	23	16.71
17-01-may	10:05:08	590	15.4	17.9	2.6	23	16.71
17-01-may	11:05:08	590	16.0	18.5	2.5	23	16.70
17-01-may	12:05:08	590	16.7	18.9	2.3	24	16.72
17-01-may	13:05:08	589	17.4	19.8	2.4	24	16.74
17-01-may	14:05:08	589	17.6	20.1	2.4	24	16.70
17-01-may	15:05:08	589	18.0	20.6	2.6	24	16.69
17-01-may	16:05:08	589	17.4	18.9	1.5	24	16.70
17-01-may	17:05:08	589	16.8	18.5	1.6	24	16.70
17-01-may	18:05:08	589	14.7	15.9	1.2	23	16.71
17-01-may	19:05:08	590	11.9	11.9	0.0	22	16.68
17-01-may	20:05:08	590	9.9	9.4	-0.4	22	16.72
17-01-may	21:05:08	590	8.7	7.8	-0.9	22	16.70
17-01-may	22:05:08	590	5.9	5.6	-0.3	22	16.72
17-01-may	23:05:08	590	5.0	3.8	-1.2	21	16.71



# BGI PQ200 Air Sampling System Downloaded 2017 08 may 13:40:37

## Job Details:

Job Name: 17May08E.JOB  
Version: 5.62  
Serial No: 2398  
Pump Time: 1891:24  
Flags:

Job Code:

Site Name:

Station Code:

Operators:

User1: yyyyyyyyyyyyyyyyyyyyyyyyyyyyyyy

User2: yyyyyyyyyyyyyyyyyyyyyyyyyyyyyyy

	Max	Min	Avg	Units
BP	588	583	585	mmHg
TA	17.2	-2.7	8.2	°C
Q	---	---	16.7	Lpm

QCV 0.5 %  
Max overheat 2.6 °C  
occured 07-may 00:00:12

## Timer Information:

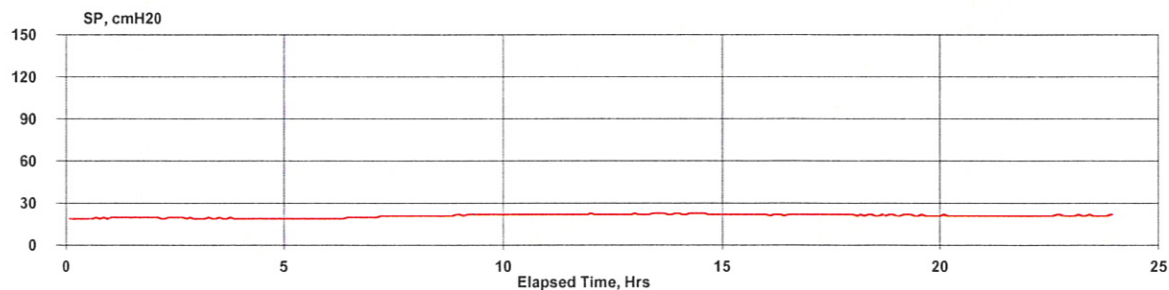
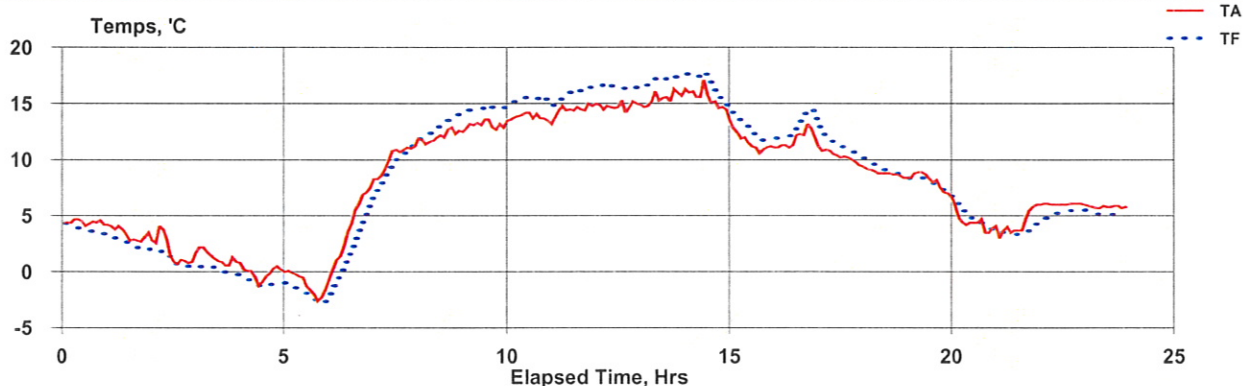
Date Time  
dd-mmm hh:mm:ss  
Start: 17-07-may 0:00:08  
Stop: 17-08-may 0:00:05  
ET: 23:59

## Mass Concentration Data:

Filter ID: 31  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.03 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

Notes 1:

Notes 2:



## Hourly

17-07-may	0:05:08	584	4.4	3.8	-0.7	19	16.72
17-07-may	1:05:08	585	3.3	2.5	-0.8	20	16.72
17-07-may	2:05:08	585	1.8	1.1	-0.8	20	16.70
17-07-may	3:05:08	585	1.3	0.2	-1.1	19	16.71
17-07-may	4:05:08	585	-0.1	-1.0	-0.9	19	16.71
17-07-may	5:05:08	585	-1.1	-2.0	-0.9	19	16.70
17-07-may	6:05:08	585	4.5	2.3	-2.3	20	16.71
17-07-may	7:05:08	585	10.4	9.7	-0.7	21	16.71
17-07-may	8:05:08	585	12.1	13.0	0.9	21	16.71
17-07-may	9:05:08	585	13.2	14.5	1.4	22	16.72
17-07-may	10:05:08	585	13.8	15.3	1.5	22	16.70
17-07-may	11:05:08	585	14.6	15.9	1.4	22	16.71
17-07-may	12:05:08	585	14.8	16.5	1.7	22	16.69
17-07-may	13:05:08	585	15.6	17.1	1.6	23	16.70
17-07-may	14:05:08	585	15.3	16.6	1.3	22	16.71
17-07-may	15:05:08	585	11.5	12.7	1.2	22	16.72
17-07-may	16:05:08	585	11.8	13.0	1.2	22	16.69
17-07-may	17:05:08	586	10.2	11.2	1.0	22	16.71
17-07-may	18:05:08	585	8.8	9.1	0.4	22	16.70
17-07-may	19:05:08	586	8.0	7.9	-0.2	21	16.71
17-07-may	20:05:08	586	4.4	4.8	0.5	21	16.71
17-07-may	21:05:08	587	4.4	3.6	-0.8	21	16.71
17-07-may	22:05:08	588	6.1	5.2	-0.8	21	16.71
17-07-may	23:05:08	588	5.8	5.1	-0.7	21	16.71



# BGI PQ200 Air Sampling System Downloaded 2017 16 may 13:51:39

## Job Details:

Job Name: 17May16E.JOB  
Version: 5.62  
Serial No: 2398  
Pump Time: 1915:23  
Flags:

## Job Code:

Site Name:  
Station Code:  
Operators:

User1: yyyyyyyyyyyyyyyyyyyyyyyyyyy

User2: yyyyyyyyyyyyyyyyyyyyyyyyyyy

	Max	Min	Avg	Units
BP	587	585	585	mmHg
TA	18.4	1.4	11.6	°C
Q	---	---	16.7	Lpm

## Timer Information:

Date Time  
dd-mmm hh:mm:ss  
Start: 17-13-may 0:00:08  
Stop: 17-14-may 0:00:04  
ET: 23:59

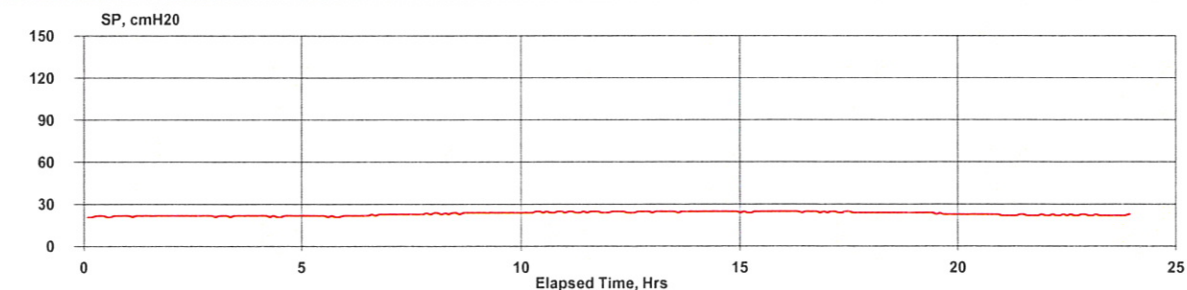
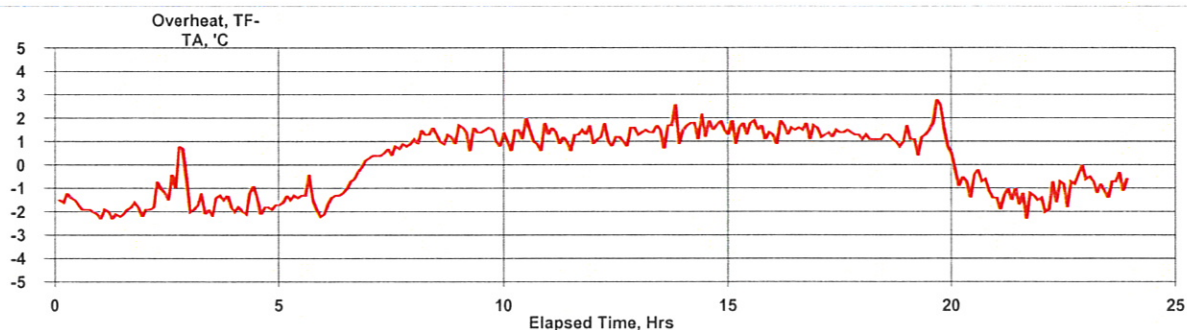
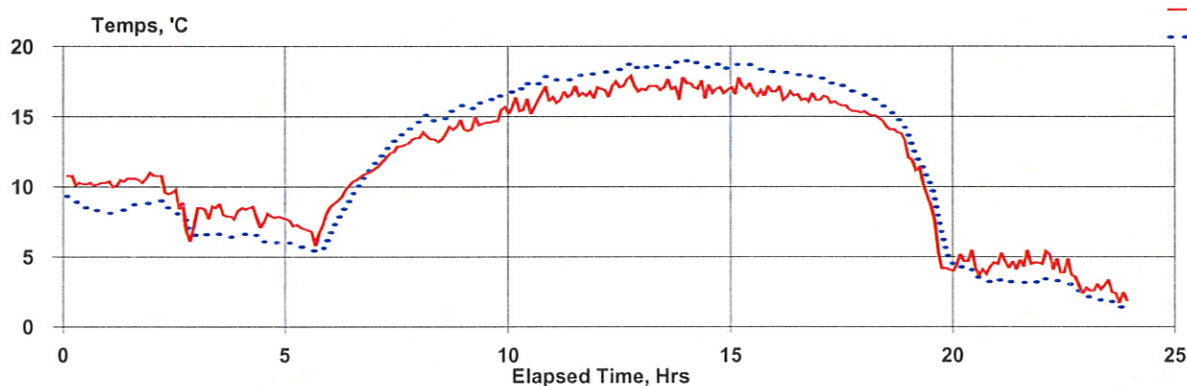
## Mass Concentration Data:

Filter ID: 37  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.028 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

QCV 0.43 %  
Max overheat 3.7 °C  
occured 14-may 23:28:57

Notes 1:

Notes 2:



Hourly

17-13-may	0:05:08	586	10.3	8.6	-1.8	22	16.71
17-13-may	1:05:08	586	10.5	8.5	-2.0	22	16.71
17-13-may	2:05:08	586	8.8	7.9	-0.9	22	16.72
17-13-may	3:05:08	585	8.2	6.5	-1.7	22	16.71
17-13-may	4:05:08	585	7.9	6.2	-1.7	22	16.71
17-13-may	5:05:08	585	7.2	5.7	-1.5	22	16.72
17-13-may	6:05:08	585	10.2	9.5	-0.8	22	16.71
17-13-may	7:05:08	585	12.7	13.4	0.7	23	16.69
17-13-may	8:05:08	586	13.9	15.1	1.2	24	16.72
17-13-may	9:05:08	586	14.8	16.1	1.3	24	16.70
17-13-may	10:05:08	586	16.1	17.3	1.2	24	16.70
17-13-may	11:05:08	586	16.6	17.8	1.2	25	16.70
17-13-may	12:05:08	586	17.2	18.4	1.2	25	16.69
17-13-may	13:05:08	586	17.1	18.6	1.5	25	16.70
17-13-may	14:05:08	586	17.0	18.7	1.6	25	16.70
17-13-may	15:05:08	586	17.0	18.5	1.5	25	16.71
17-13-may	16:05:08	586	16.5	18.0	1.5	25	16.71
17-13-may	17:05:08	586	15.8	17.1	1.3	24	16.68
17-13-may	18:05:08	585	14.2	15.4	1.2	24	16.72
17-13-may	19:05:08	586	7.7	9.1	1.4	24	16.71
17-13-may	20:05:08	586	4.5	3.7	-0.8	23	16.71
17-13-may	21:05:08	586	4.7	3.2	-1.4	22	16.71
17-13-may	22:05:08	586	4.0	3.0	-1.0	22	16.70
17-13-may	23:05:08	586	2.6	1.8	-0.8	22	16.71

# BGI PQ200 Air Sampling System Downloaded 2017 22 may 13:32:45

## Job Details:

Job Name: 17May22E.JOB  
Version: 5.62  
Serial No: 2398  
Pump Time: 1939:22  
Flags:

## Job Code:

Site Name: 2398E  
Station Code:  
Operators: KN

User1: yyyyyyyyyyyyyyyyyyyyyyyyyyyyyyy

User2: yyyyyyyyyyyyyyyyyyyyyyyyyyyyyyy

	Max	Min	Avg	Units
BP	592	588	589	mmHg
TA	15	-4.2	5.4	°C
Q	---	---	16.7	Lpm

QCV 0.51 %

Max overheat 5.1 °C  
occured 21-may 15:22:21

## Timer Information:

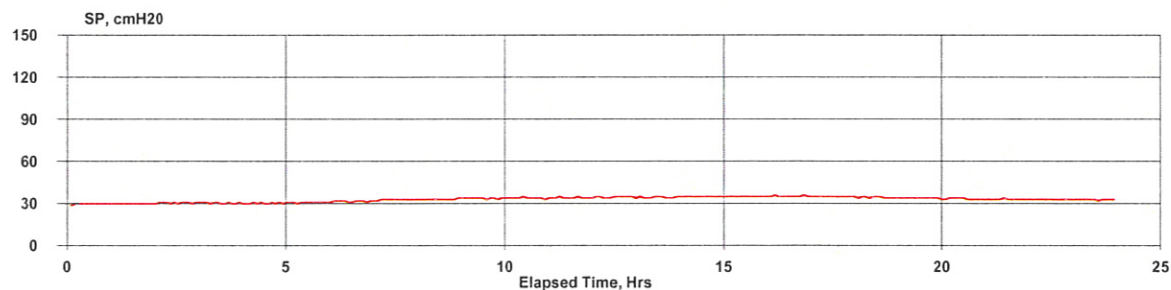
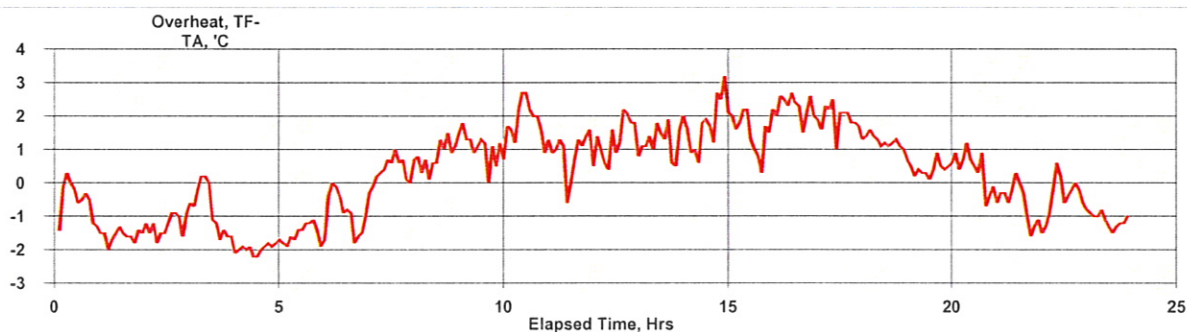
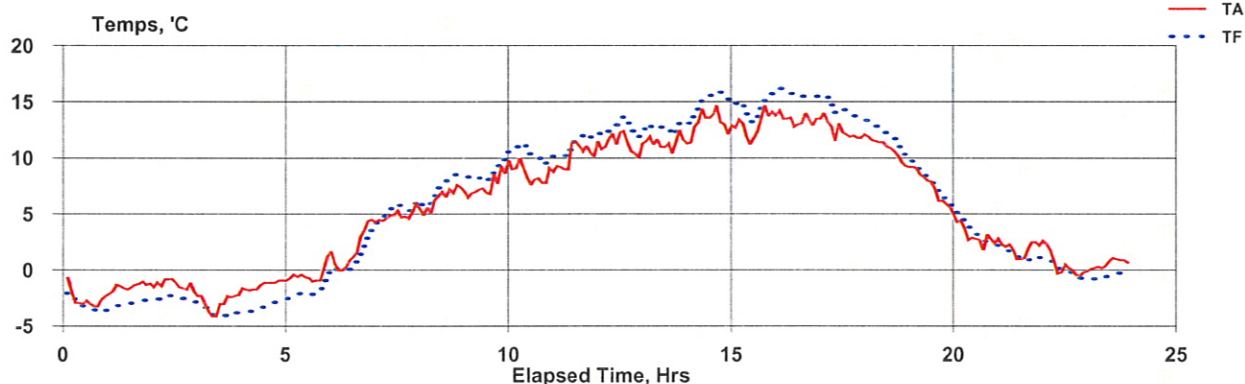
Date Time  
dd-mmm hh:mm:ss  
Start: 17-19-may 0:00:08  
Stop: 17-20-may 0:00:05  
ET: 23:59

## Mass Concentration Data:

Filter ID: 42  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.036 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

Notes 1:

Notes 2:



Hourly

17-19-may	0:05:08	589	-2.6	-3.2	-0.6	30	16.71
17-19-may	1:05:08	589	-1.4	-3.0	-1.6	30	16.71
17-19-may	2:05:08	589	-1.3	-2.6	-1.2	31	16.71
17-19-may	3:05:08	589	-2.8	-3.8	-0.9	31	16.70
17-19-may	4:05:08	589	-1.3	-3.2	-1.9	30	16.69
17-19-may	5:05:08	589	-0.3	-1.8	-1.5	31	16.70
17-19-may	6:05:08	589	2.0	1.2	-0.8	32	16.71
17-19-may	7:05:08	590	4.9	5.4	0.4	33	16.69
17-19-may	8:05:08	590	6.5	7.4	0.9	33	16.71
17-19-may	9:05:08	590	7.7	8.8	1.0	34	16.71
17-19-may	10:05:08	590	8.6	10.4	1.8	34	16.72
17-19-may	11:05:08	590	10.4	11.2	0.9	34	16.71
17-19-may	12:05:08	590	11.3	12.6	1.3	35	16.71
17-19-may	13:05:08	590	11.4	12.7	1.3	35	16.72
17-19-may	14:05:08	590	13.2	15.0	1.8	35	16.71
17-19-may	15:05:08	590	13.0	14.6	1.6	35	16.71
17-19-may	16:05:08	590	13.4	15.7	2.2	35	16.71
17-19-may	17:05:08	590	12.4	14.3	1.9	35	16.72
17-19-may	18:05:08	590	10.7	11.9	1.2	34	16.71
17-19-may	19:05:08	590	7.3	7.7	0.4	34	16.71
17-19-may	20:05:08	591	3.0	3.4	0.3	33	16.71
17-19-may	21:05:08	591	1.9	1.3	-0.7	33	16.71
17-19-may	22:05:08	591	0.3	0.0	-0.4	33	16.70
17-19-may	23:05:08	591	0.6	-0.5	-1.1	33	16.71



# BGI PQ200 Air Sampling System Downloaded 2017 26 may 09:49:14

## Job Details:

Job Name: 17May26E.JOB  
Version: 5.62  
Serial No: 2398  
Pump Time: 1963:21  
Flags:

## Job Code:

Site Name: 2398E  
Station Code:  
Operators: KN

User1: yyyyyyyyyyyyyyyyyyyyyyyyyyyyyyy

User2: yyyyyyyyyyyyyyyyyyyyyyyyyyyyyyy

	Max	Min	Avg	Units
BP	586	583	583	mmHg
TA	23.5	3.6	14.4	°C
Q	---	---	16.7	Lpm

QCV 0.51 %

Max overheat 3.5 °C  
occured 25-may 00:42:26

## Timer Information:

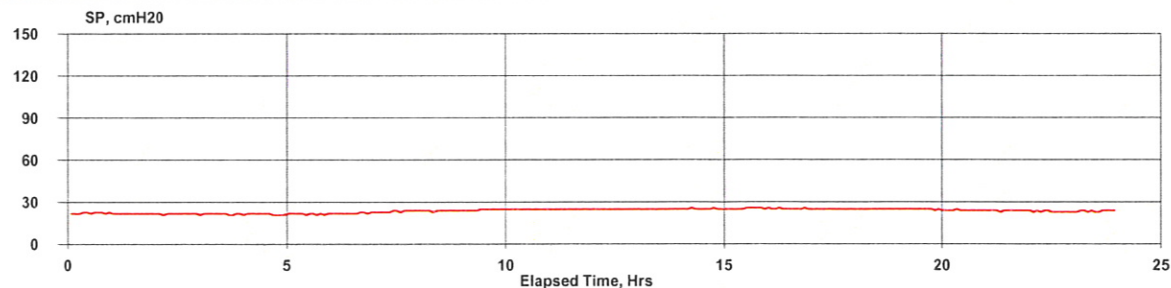
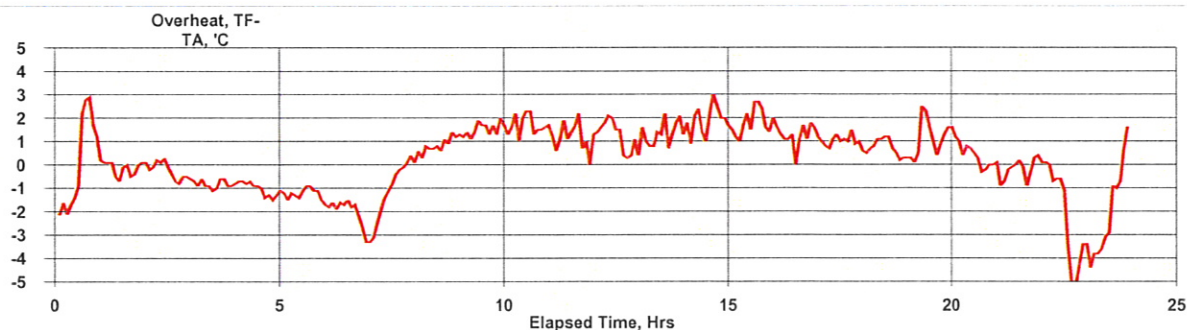
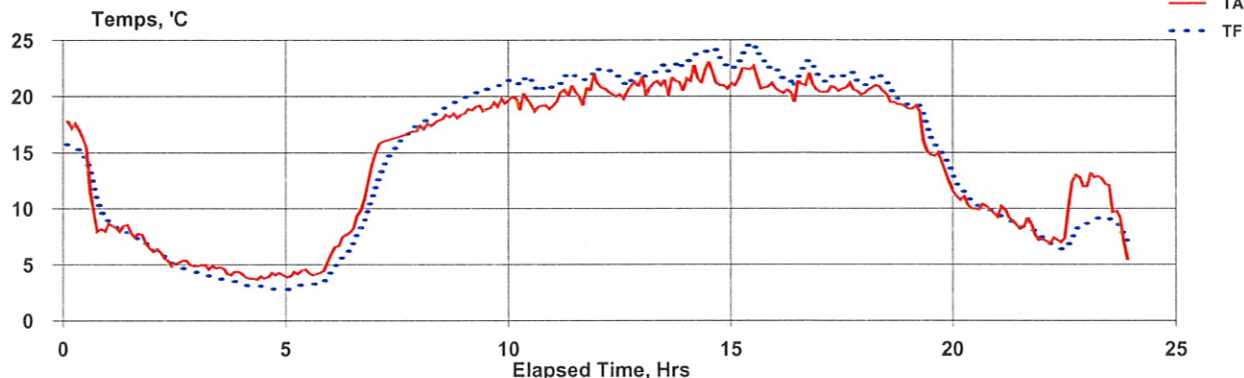
Date Time  
dd-mmm hh:mm:ss  
Start: 17-25-may 0:00:08  
Stop: 17-26-may 0:00:05  
ET: 23:59

## Mass Concentration Data:

Filter ID: 9  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.036 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

Notes 1:

Notes 2:



# Hourly

17-25-may	0:05:08	584	12.9	13.0	0.1	23	16.71
17-25-may	1:05:08	584	7.7	7.6	-0.1	22	16.71
17-25-may	2:05:08	583	5.4	5.1	-0.3	22	16.71
17-25-may	3:05:08	583	4.6	3.8	-0.8	22	16.71
17-25-may	4:05:08	583	4.0	2.9	-1.0	22	16.71
17-25-may	5:05:08	583	4.5	3.3	-1.2	22	16.70
17-25-may	6:05:08	583	9.7	7.6	-2.1	22	16.71
17-25-may	7:05:08	583	16.5	15.6	-0.9	24	16.70
17-25-may	8:05:08	584	18.0	18.9	0.9	24	16.70
17-25-may	9:05:08	584	19.2	20.7	1.5	25	16.71
17-25-may	10:05:08	584	19.4	21.1	1.7	25	16.71
17-25-may	11:05:08	584	20.5	21.7	1.2	25	16.70
17-25-may	12:05:08	584	20.6	21.8	1.2	25	16.70
17-25-may	13:05:08	584	21.0	22.4	1.4	25	16.70
17-25-may	14:05:08	584	21.6	23.6	1.9	25	16.71
17-25-may	15:05:08	583	21.6	23.4	1.8	26	16.71
17-25-may	16:05:08	583	20.8	22.0	1.2	25	16.70
17-25-may	17:05:08	583	20.6	21.6	1.0	25	16.70
17-25-may	18:05:08	584	20.0	20.7	0.7	25	16.71
17-25-may	19:05:08	584	15.3	16.5	1.2	25	16.72
17-25-may	20:05:08	584	10.2	10.6	0.4	24	16.71
17-25-may	21:05:08	585	8.6	8.4	-0.2	24	16.71
17-25-may	22:05:08	585	9.6	7.3	-2.3	23	16.71
17-25-may	23:05:08	585	10.7	8.7	-2.0	24	16.71



# BGI PQ200 Air Sampling System Downloaded 2017 01 jun 10:26:40

## Job Details:

Job Name: 17Jun01E.JOB  
Version: 5.62  
Serial No: 2398  
Pump Time: 1987:20  
Flags:

## Job Code:

Site Name: 2398E  
Station Code:  
Operators: KN

User1: yyyyyyyyyyyyyyyyyyyyyyyyyyyyyyy

User2: yyyyyyyyyyyyyyyyyyyyyyyyyyyyyyy

	Max	Min	Avg	Units
BP	591	588	589	mmHg
TA	25.8	6	15.5	°C
Q	---	---	16.7	Lpm

## Timer Information:

Date Time  
dd-mmm hh:mm:ss  
Start: 17-31-may 0:00:08  
Stop: 17-01-jun 0:00:05  
ET: 23:59

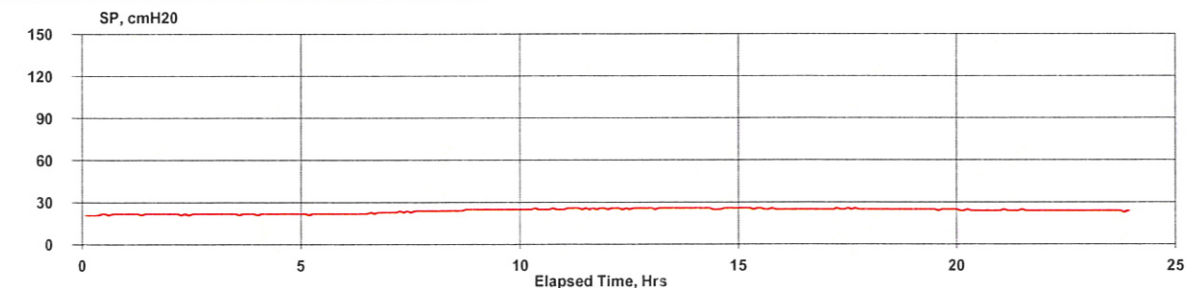
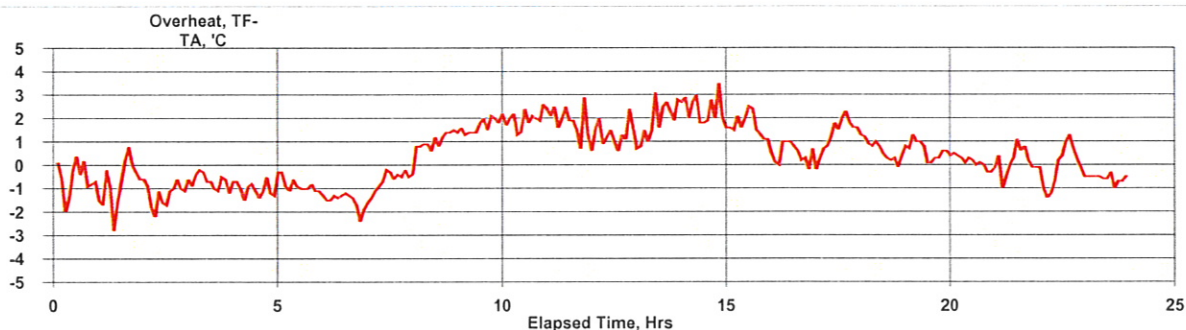
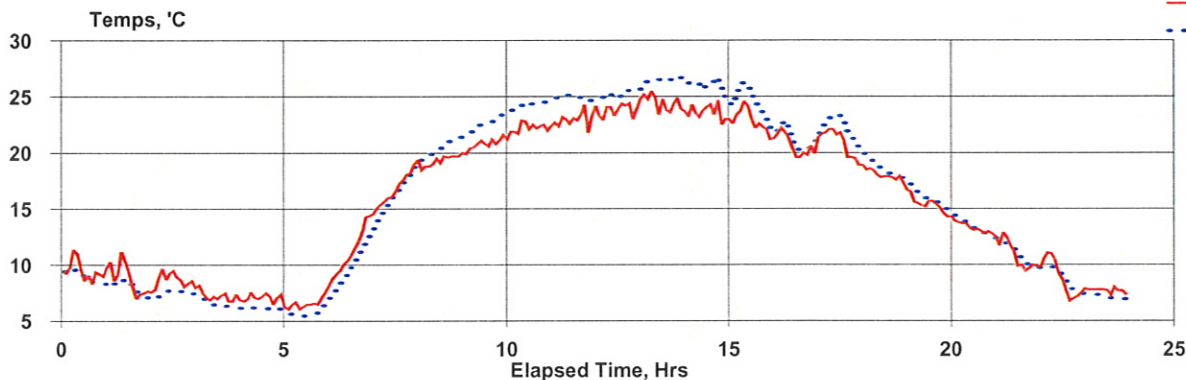
## Mass Concentration Data:

Filter ID: 14  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.031 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

QCV 0.4 %  
Max overheat 3.6 °C  
occured 31-may 13:57:18

Notes 1:

Notes 2:



Hourly

17-31-may	0:05:08	590	9.5	8.9	-0.7	22	16.70
17-31-may	1:05:08	590	8.7	8.0	-0.7	22	16.71
17-31-may	2:05:08	590	8.7	7.5	-1.2	22	16.71
17-31-may	3:05:08	590	7.2	6.5	-0.7	22	16.71
17-31-may	4:05:08	590	7.1	6.1	-1.0	22	16.71
17-31-may	5:05:08	590	6.7	5.8	-0.9	22	16.70
17-31-may	6:05:08	590	11.6	10.0	-1.5	22	16.71
17-31-may	7:05:08	591	17.0	16.4	-0.6	24	16.70
17-31-may	8:05:08	591	19.3	20.4	1.1	24	16.71
17-31-may	9:05:08	591	20.8	22.5	1.7	25	16.71
17-31-may	10:05:08	590	22.3	24.3	2.0	25	16.71
17-31-may	11:05:08	590	23.1	24.9	1.8	26	16.71
17-31-may	12:05:08	590	23.9	25.2	1.3	26	16.70
17-31-may	13:05:08	589	24.4	26.5	2.0	26	16.72
17-31-may	14:05:08	589	23.6	25.9	2.3	26	16.70
17-31-may	15:05:08	589	22.8	24.4	1.6	26	16.71
17-31-may	16:05:08	589	20.7	21.1	0.4	25	16.71
17-31-may	17:05:08	589	20.7	22.1	1.4	25	16.70
17-31-may	18:05:08	589	17.9	18.5	0.6	25	16.71
17-31-may	19:05:08	589	15.3	15.9	0.6	25	16.71
17-31-may	20:05:08	589	13.2	13.3	0.1	24	16.70
17-31-may	21:05:08	590	10.7	10.9	0.1	24	16.72
17-31-may	22:05:08	590	8.8	8.7	-0.1	24	16.69
17-31-may	23:05:08	590	7.7	7.1	-0.6	24	16.73

# BGI PQ200 Air Sampling System

Downloaded 2017 07 jun 09:58:16

## Job Details:

Job Name: 17Jun07E.JOB  
Version: 5.62  
Serial No: 2398  
Pump Time: 2011:19  
Flags:

## Job Code:

Site Name:  
Station Code:  
Operators:

User1: yyyyyyyyyyyyyyyyyyyyyyyyyyyyyyy

User2: yyyyyyyyyyyyyyyyyyyyyyyyyyyyyyy

	Max	Min	Avg	Units
BP	594	590	592	mmHg
TA	28.6	9.4	18.8	°C
Q	---	---	16.7	Lpm

QCV 0.49 %

Max overheat 3.2 °C  
occured 06-jun 13:41:04

## Timer Information:

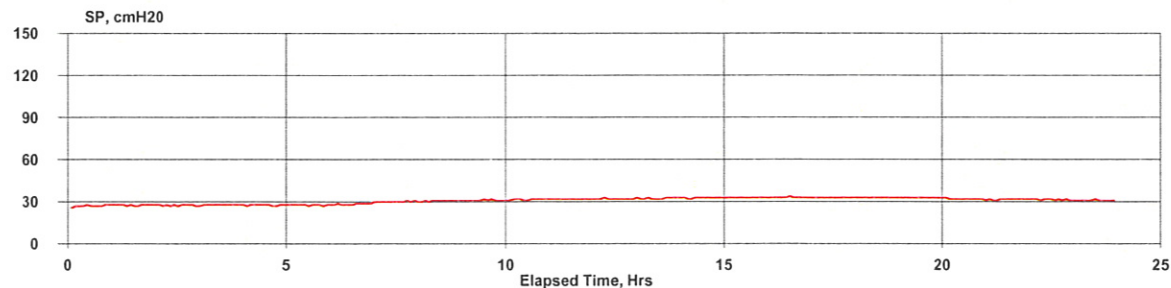
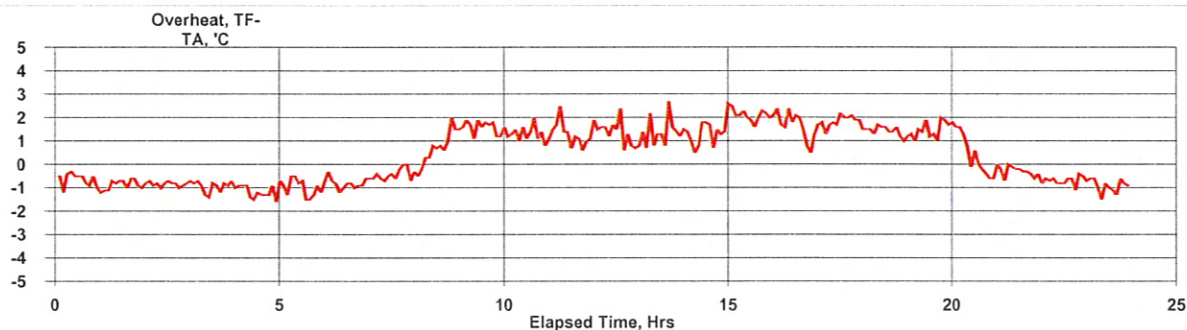
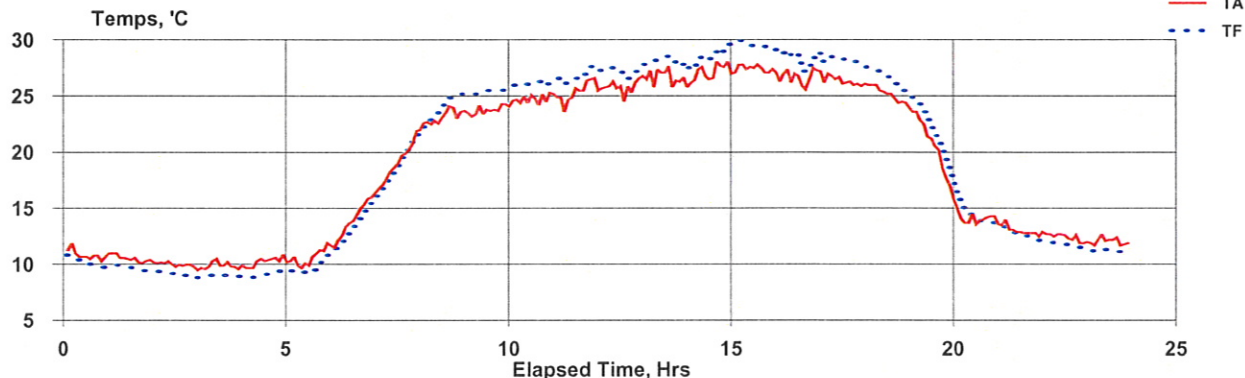
	Date	Time
	dd-mmm	hh:mm:ss
Start:	17-06-jun	0:00:08
Stop:	17-07-jun	0:00:04
ET:	23:59	

## Mass Concentration Data:

Filter ID:	21
Final Wt:	mg
Initial Wt:	mg
Delta Wt:	0.000 mg
Total Vol:	24.037 m <sup>3</sup>
Mass Conc:	0 µg/m <sup>3</sup>

Notes 1:

Notes 2:



# Hourly

17-06-jun	0:05:08	592	10.9	10.2	-0.7	27	16.71
17-06-jun	1:05:08	592	10.5	9.7	-0.8	28	16.70
17-06-jun	2:05:08	592	10.0	9.2	-0.8	28	16.71
17-06-jun	3:05:08	592	9.9	9.0	-1.0	28	16.71
17-06-jun	4:05:08	592	10.3	9.1	-1.2	28	16.71
17-06-jun	5:05:08	592	10.7	9.7	-1.0	28	16.70
17-06-jun	6:05:08	593	14.2	13.4	-0.8	29	16.70
17-06-jun	7:05:08	593	19.3	18.9	-0.4	30	16.71
17-06-jun	8:05:08	593	23.2	23.9	0.7	31	16.71
17-06-jun	9:05:08	593	23.8	25.4	1.6	31	16.71
17-06-jun	10:05:08	593	24.8	26.1	1.3	32	16.71
17-06-jun	11:05:08	593	25.4	26.7	1.3	32	16.71
17-06-jun	12:05:08	593	25.9	27.2	1.3	32	16.70
17-06-jun	13:05:08	592	26.7	28.1	1.4	33	16.71
17-06-jun	14:05:08	592	27.2	28.5	1.4	33	16.71
17-06-jun	15:05:08	592	27.4	29.5	2.1	33	16.70
17-06-jun	16:05:08	591	26.7	28.4	1.7	33	16.71
17-06-jun	17:05:08	591	26.3	28.2	1.8	33	16.70
17-06-jun	18:05:08	591	25.1	26.5	1.4	33	16.71
17-06-jun	19:05:08	592	20.4	21.9	1.5	33	16.71
17-06-jun	20:05:08	592	14.1	14.4	0.3	32	16.70
17-06-jun	21:05:08	592	13.0	12.7	-0.4	32	16.71
17-06-jun	22:05:08	592	12.4	11.7	-0.7	32	16.71
17-06-jun	23:05:08	592	12.1	11.1	-0.9	31	16.70



# BGI PQ200 Air Sampling System Downloaded 2017 13 jun 10:23:15

## Job Details:

Job Name: 17Jun13E.JOB  
Version: 5.62  
Serial No: 2398  
Pump Time: 2035:18  
Flags:

## Job Code:

Site Name:  
Station Code:  
Operators:

User1: yyyyyyyyyyyyyyyyyyyyyyyyyyyyyyy

User2: yyyyyyyyyyyyyyyyyyyyyyyyyyyyyyy

	Max	Min	Avg	Units
BP	589	584	586	mmHg
TA	15.3	0	9.9	°C
Q	---	---	16.7	Lpm

QCV 0.54 %

Max overheat 3.3 °C  
occured 12-jun 14:49:23

## Timer Information:

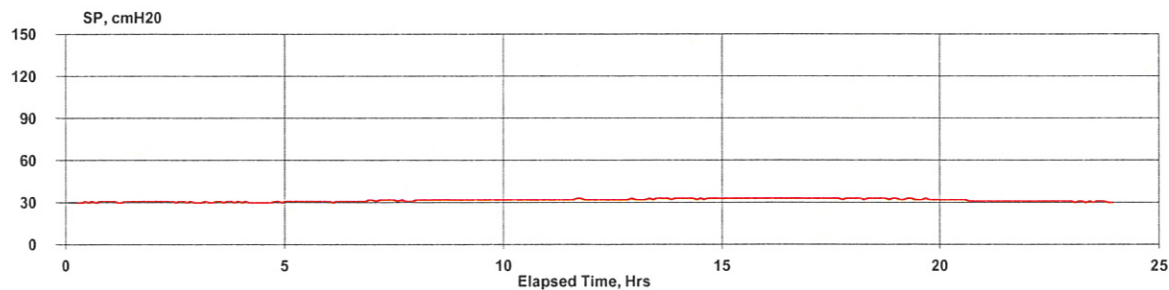
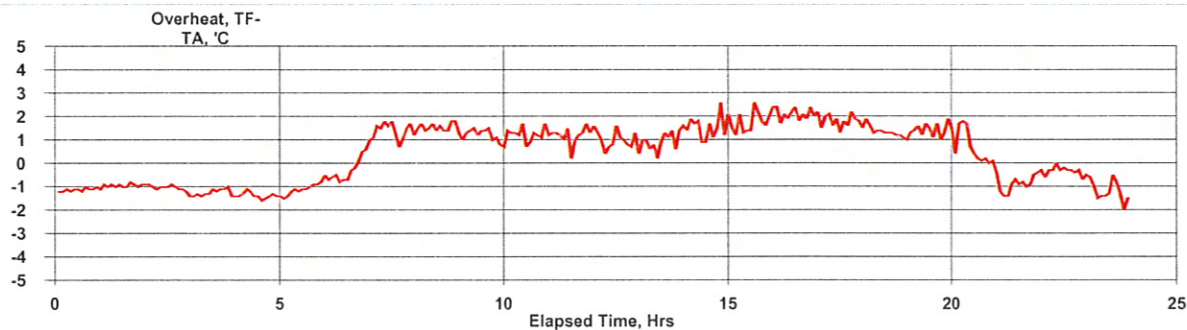
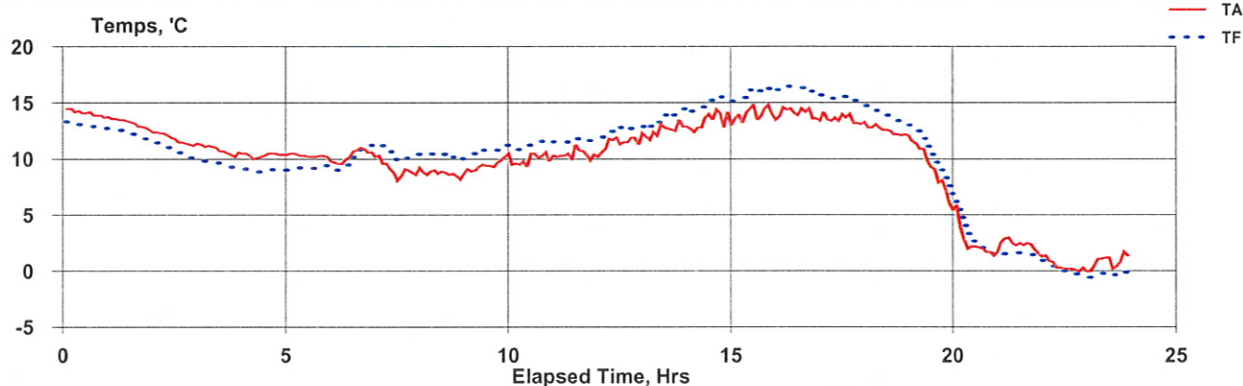
Date Time  
dd-mmm hh:mm:ss  
Start: 17-12-jun 0:00:08  
Stop: 17-13-jun 0:00:05  
ET: 23:59

## Mass Concentration Data:

Filter ID: 26  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.036 m<sup>3</sup>  
Mass Conc: 0 µg/m<sup>3</sup>

Notes 1:

Notes 2:



# Hourly

17-12-jun	0:05:08	586	14.1	13.0	-1.1	31	16.70
17-12-jun	1:05:08	585	13.1	12.2	-0.9	31	16.71
17-12-jun	2:05:08	585	11.8	10.7	-1.1	31	16.70
17-12-jun	3:05:08	585	10.8	9.5	-1.3	31	16.71
17-12-jun	4:05:08	585	10.3	9.0	-1.4	30	16.71
17-12-jun	5:05:08	585	10.3	9.2	-1.1	31	16.71
17-12-jun	6:05:08	585	10.3	10.1	-0.2	31	16.70
17-12-jun	7:05:08	585	9.1	10.5	1.4	32	16.72
17-12-jun	8:05:08	586	8.7	10.2	1.5	32	16.71
17-12-jun	9:05:08	587	9.5	10.7	1.2	32	16.71
17-12-jun	10:05:08	587	10.0	11.2	1.3	32	16.70
17-12-jun	11:05:08	588	10.4	11.6	1.2	32	16.71
17-12-jun	12:05:08	588	11.6	12.5	0.9	32	16.71
17-12-jun	13:05:08	588	12.6	13.6	1.0	33	16.71
17-12-jun	14:05:08	588	13.4	14.9	1.6	33	16.71
17-12-jun	15:05:08	588	14.0	15.8	1.8	33	16.71
17-12-jun	16:05:08	588	14.1	16.2	2.1	33	16.70
17-12-jun	17:05:08	588	13.6	15.3	1.8	33	16.70
17-12-jun	18:05:08	588	12.5	13.8	1.3	33	16.71
17-12-jun	19:05:08	588	9.0	10.4	1.4	32	16.71
17-12-jun	20:05:08	588	2.5	3.0	0.6	32	16.71
17-12-jun	21:05:08	588	2.3	1.5	-0.9	31	16.71
17-12-jun	22:05:08	589	0.4	0.0	-0.4	31	16.71
17-12-jun	23:05:08	588	0.9	-0.3	-1.2	31	16.72



# BGI PQ200 Air Sampling System Downloaded 2017 21 jun 13:11:47

## Job Details:

Job Name: 17Jun21E.JOB  
Version: 5.62  
Serial No: 2398  
Pump Time: 2059:17  
Flags:

## Job Code:

Site Name:  
Station Code:  
Operators:

User1: yyyyyyyyyyyyyyyyyyyyyyyyyyy

User2: yyyyyyyyyyyyyyyyyyyyyyyyyyy

	Max	Min	Avg	Units
BP	593	590	592	mmHg
TA	32	14.6	23.6	°C
Q	---	---	16.7	Lpm

QCV 0.48 %

Max overheat 5.6 °C  
occured 20-jun 19:55:01

## Timer Information:

Date Time  
dd-mmm hh:mm:ss  
Start: 17-18-jun 0:00:08  
Stop: 17-19-jun 0:00:05  
ET: 23:59

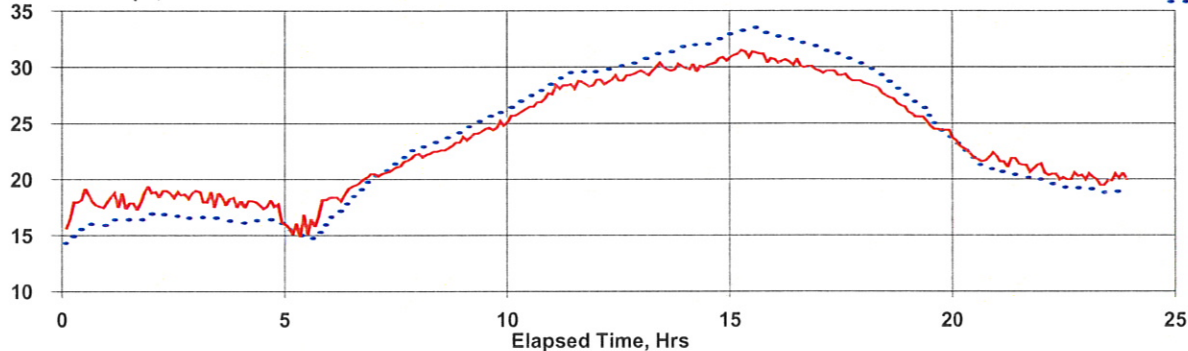
## Mass Concentration Data:

Filter ID: 8  
Final Wt: mg  
Initial Wt: mg  
Delta Wt: 0.000 mg  
Total Vol: 24.038 m<sup>3</sup>  
Mass Conc: 0 ug/m<sup>3</sup>

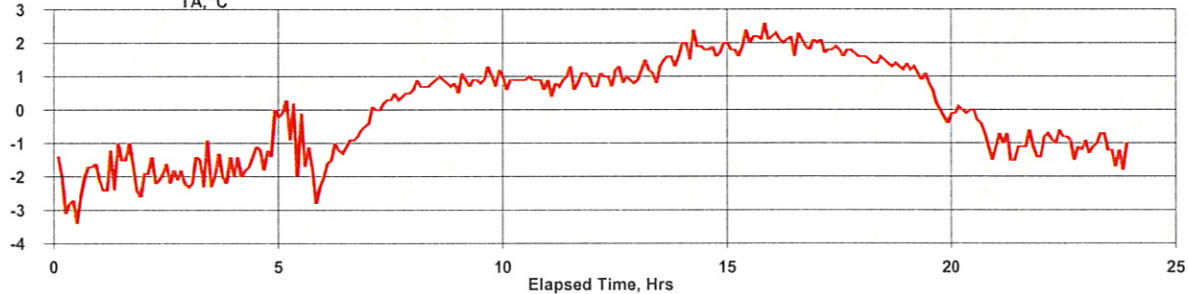
Notes 1:

Notes 2:

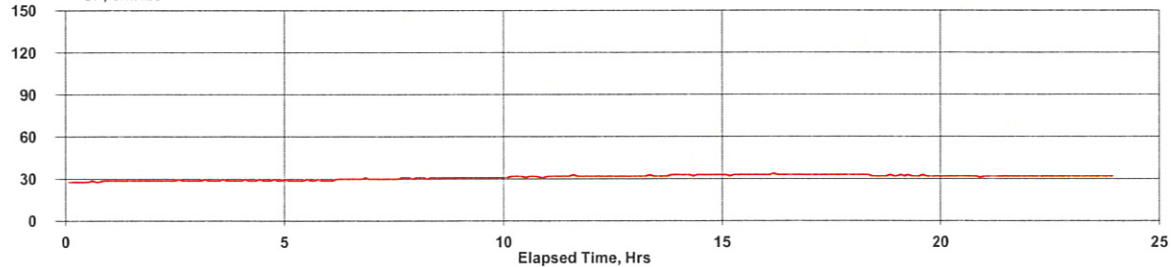
Temps, °C



Overheat, TF-  
TA, °C



SP, cmH2O



## Hourly

17-18-jun	0:05:08	592	17.8	15.5	-2.3	28	16.70
17-18-jun	1:05:08	592	18.3	16.4	-1.8	29	16.70
17-18-jun	2:05:08	592	18.7	16.8	-2.0	29	16.70
17-18-jun	3:05:08	592	18.2	16.4	-1.8	29	16.70
17-18-jun	4:05:08	592	17.5	16.3	-1.3	29	16.70
17-18-jun	5:05:08	593	16.5	15.3	-1.2	29	16.70
17-18-jun	6:05:08	593	19.4	18.4	-1.0	30	16.71
17-18-jun	7:05:08	593	21.3	21.6	0.3	30	16.70
17-18-jun	8:05:08	593	22.7	23.5	0.8	31	16.71
17-18-jun	9:05:08	593	24.4	25.4	1.0	31	16.71
17-18-jun	10:05:08	593	26.6	27.4	0.9	32	16.70
17-18-jun	11:05:08	593	28.5	29.3	0.9	32	16.71
17-18-jun	12:05:08	593	29.1	30.1	1.0	32	16.71
17-18-jun	13:05:08	592	29.9	31.3	1.4	32	16.70
17-18-jun	14:05:08	592	30.3	32.2	1.9	33	16.71
17-18-jun	15:05:08	592	31.1	33.2	2.1	33	16.70
17-18-jun	16:05:08	592	30.3	32.3	2.0	33	16.71
17-18-jun	17:05:08	592	29.2	31.0	1.8	33	16.71
17-18-jun	18:05:08	592	27.4	28.8	1.4	32	16.71
17-18-jun	19:05:08	592	24.9	25.4	0.5	32	16.71
17-18-jun	20:05:08	592	22.3	21.9	-0.4	32	16.71
17-18-jun	21:05:08	593	21.4	20.3	-1.1	32	16.71
17-18-jun	22:05:08	593	20.3	19.4	-0.9	32	16.71
17-18-jun	23:05:08	593	20.1	18.9	-1.2	32	16.70

# BGI PQ200 Air Sampling System

Downloaded 2017 27 jun 11:45:58

## Job Details:

Job Name: 17Jun27E.JOB  
Version: 5.62  
Serial No: 2398  
Pump Time: 2083:16  
Flags:

## Job Code:

Site Name:  
Station Code:  
Operators:

User1: yyyyyyyyyyyyyyyyyyyyyyyyyyyyyyy

User2: yyyyyyyyyyyyyyyyyyyyyyyyyyyyyyy

	Max	Min	Avg	Units
BP	594	592	593	mmHg
TA	32.8	13.4	23	°C
Q	---	---	16.7	Lpm

## Timer Information:

	Date	Time
	dd-mmm	hh:mm:ss
Start:	17-24-jun	0:00:08
Stop:	17-25-jun	0:00:05
ET:	23:59	

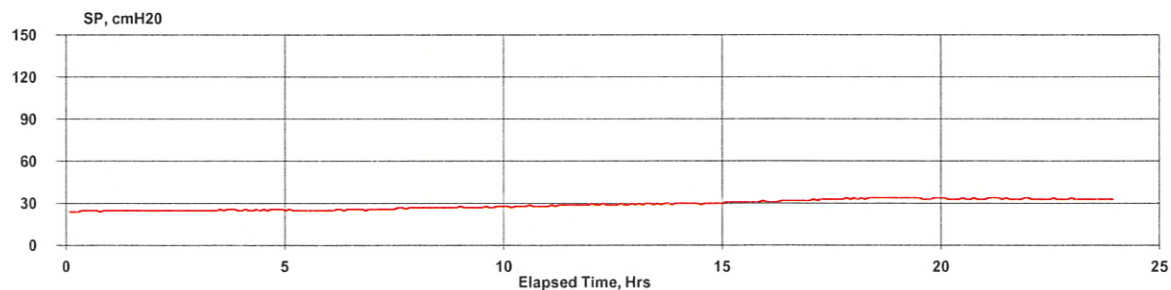
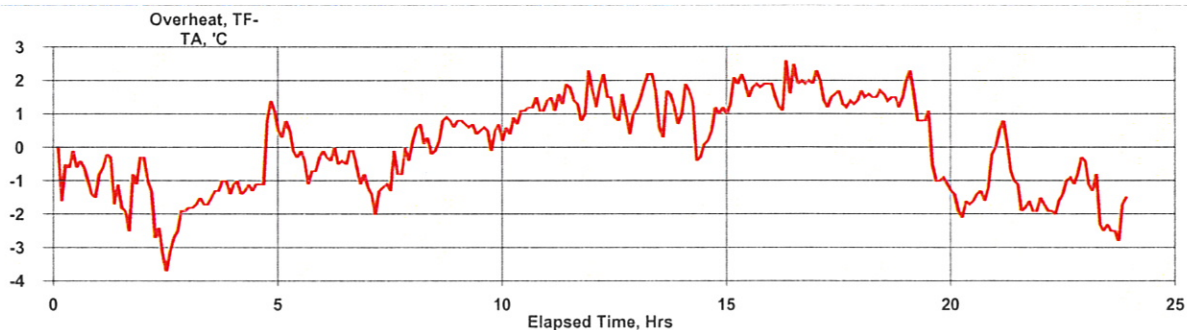
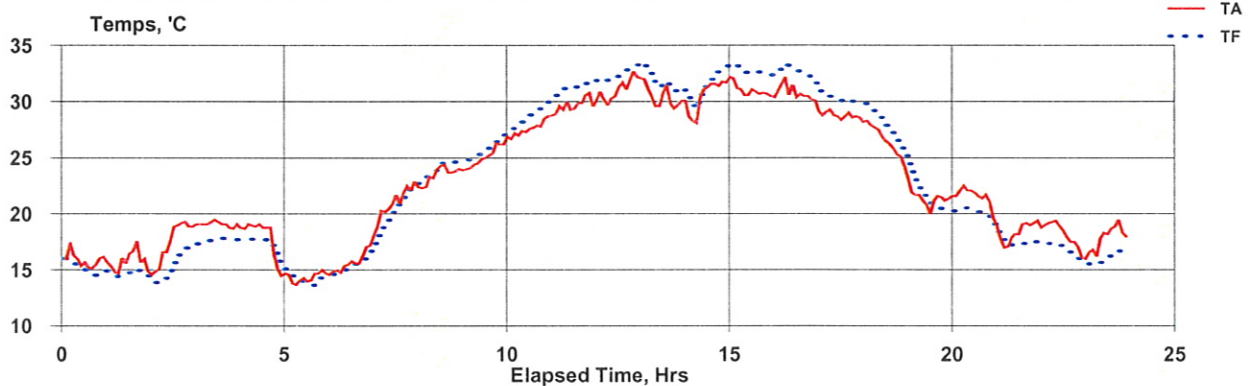
## Mass Concentration Data:

Filter ID:	30
Final Wt:	mg
Initial Wt:	mg
Delta Wt:	0.000 mg
Total Vol:	24.035 m <sup>3</sup>
Mass Conc:	0 µg/m <sup>3</sup>

QCV 0.48 %  
Max overheat 7.2 °C  
occured 26-jun 20:37:21

Notes 1:

Notes 2:



Hourly

17-24-jun	0:05:08	593	15.9	15.1	-0.8	25	16.70
17-24-jun	1:05:08	593	15.7	14.7	-1.1	25	16.71
17-24-jun	2:05:08	593	17.8	15.5	-2.4	25	16.71
17-24-jun	3:05:08	593	19.1	17.7	-1.4	25	16.71
17-24-jun	4:05:08	593	17.7	17.2	-0.5	26	16.71
17-24-jun	5:05:08	594	14.4	14.2	-0.2	25	16.70
17-24-jun	6:05:08	594	15.9	15.4	-0.5	26	16.71
17-24-jun	7:05:08	594	21.3	20.4	-0.9	26	16.69
17-24-jun	8:05:08	594	23.6	24.0	0.5	27	16.71
17-24-jun	9:05:08	594	25.3	25.8	0.5	27	16.71
17-24-jun	10:05:08	594	27.7	28.7	1.0	28	16.70
17-24-jun	11:05:08	594	29.8	31.3	1.5	29	16.71
17-24-jun	12:05:08	593	31.2	32.5	1.3	29	16.70
17-24-jun	13:05:08	593	30.3	31.7	1.4	30	16.71
17-24-jun	14:05:08	593	30.7	31.5	0.8	30	16.71
17-24-jun	15:05:08	593	30.9	32.7	1.8	31	16.70
17-24-jun	16:05:08	592	30.7	32.6	1.9	32	16.71
17-24-jun	17:05:08	592	28.7	30.2	1.5	33	16.71
17-24-jun	18:05:08	593	26.2	27.8	1.5	34	16.70
17-24-jun	19:05:08	593	21.3	21.5	0.1	34	16.69
17-24-jun	20:05:08	593	21.4	20.1	-1.3	33	16.71
17-24-jun	21:05:08	593	18.4	17.4	-1.0	34	16.71
17-24-jun	22:05:08	593	18.0	16.8	-1.3	33	16.70
17-24-jun	23:05:08	593	17.9	16.0	-1.9	33	16.70



# BGI PQ200 Air Sampling System Downloaded 2017 05 jul 09:54:25

## Job Details:

Job Name: 17Jul05E.JOB  
Version: 5.62  
Serial No: 2398  
Pump Time: 2107:15  
Flags:

Job Code:

Site Name:

Station Code:

Operators:

User1: yyyyyyyyyyyyyyyyyyyyyyyyyyy

User2: yyyyyyyyyyyyyyyyyyyyyyy

	Max	Min	Avg	Units
BP	593	590	591	mmHg
TA	30.4	10.5	20.4	°C
Q	---	---	16.7	Lpm

## Timer Information:

Date	Time
dd-mmm	hh:mm:ss
Start: 17-30-jun	0:00:08
Stop: 17-01-jul	0:00:05
ET: 23:59	

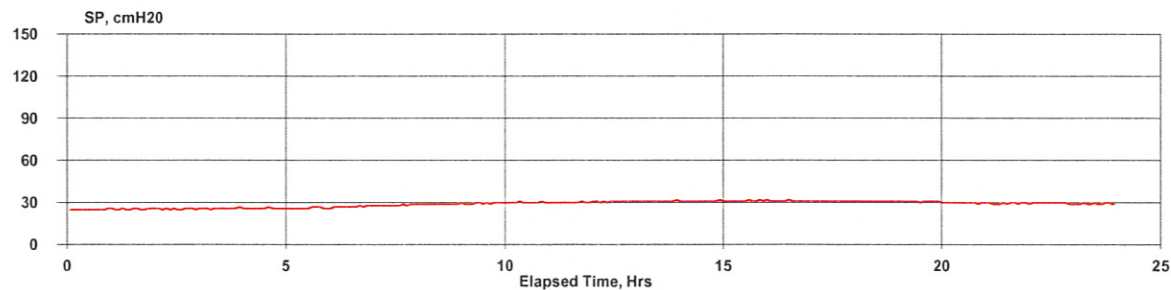
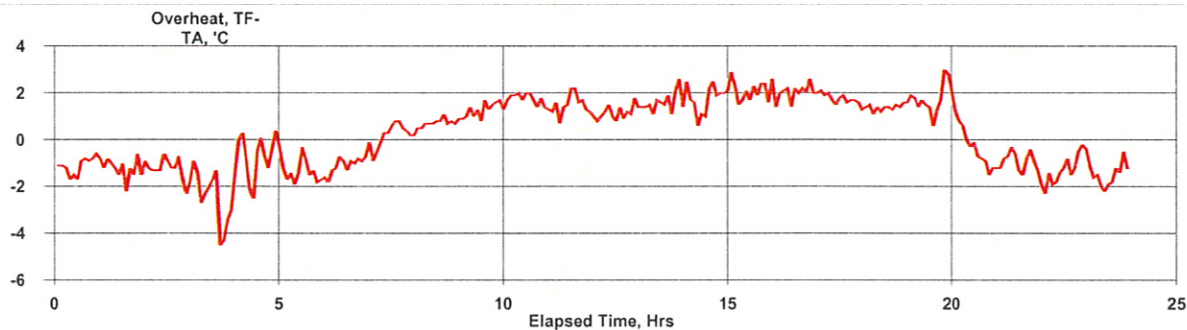
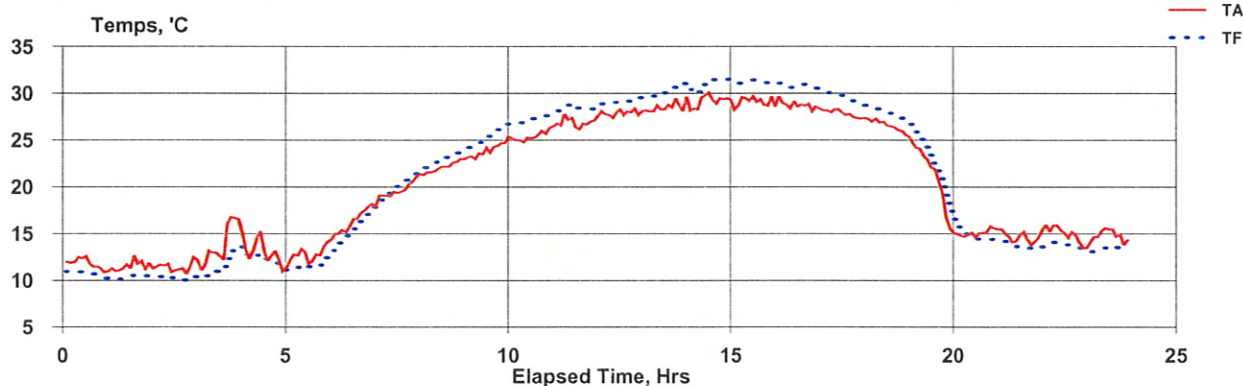
## Mass Concentration Data:

Filter ID:	34
Final Wt:	mg
Initial Wt:	mg
Delta Wt:	0.000 mg
Total Vol:	24.035 m <sup>3</sup>
Mass Conc:	0 µg/m <sup>3</sup>

QCV 0.44 %  
Max overheat 5.7 °C  
occured 01-jul 19:47:17

Notes 1:

Notes 2:



# Hourly

17-30-jun	0:05:08	591	11.8	10.7	-1.1	25	16.71
17-30-jun	1:05:08	591	11.6	10.3	-1.2	26	16.71
17-30-jun	2:05:08	591	11.5	10.2	-1.3	26	16.70
17-30-jun	3:05:08	592	14.0	11.6	-2.4	26	16.72
17-30-jun	4:05:08	592	12.9	12.2	-0.6	26	16.70
17-30-jun	5:05:08	592	13.0	11.6	-1.4	26	16.71
17-30-jun	6:05:08	593	16.5	15.6	-1.0	27	16.70
17-30-jun	7:05:08	593	19.8	20.0	0.2	28	16.70
17-30-jun	8:05:08	593	22.2	22.9	0.7	29	16.71
17-30-jun	9:05:08	593	24.0	25.3	1.3	30	16.71
17-30-jun	10:05:08	593	25.5	27.2	1.7	30	16.72
17-30-jun	11:05:08	592	27.0	28.4	1.5	30	16.70
17-30-jun	12:05:08	592	27.9	29.1	1.2	31	16.70
17-30-jun	13:05:08	592	28.6	30.2	1.6	31	16.70
17-30-jun	14:05:08	591	29.2	31.0	1.8	31	16.71
17-30-jun	15:05:08	591	29.1	31.2	2.1	31	16.70
17-30-jun	16:05:08	591	28.8	30.8	2.0	31	16.70
17-30-jun	17:05:08	591	27.8	29.6	1.7	31	16.70
17-30-jun	18:05:08	591	26.5	27.9	1.4	31	16.71
17-30-jun	19:05:08	591	20.9	22.6	1.8	31	16.70
17-30-jun	20:05:08	591	15.1	14.8	-0.3	30	16.69
17-30-jun	21:05:08	592	14.7	13.7	-1.0	30	16.70
17-30-jun	22:05:08	592	14.9	13.7	-1.2	30	16.71
17-30-jun	23:05:08	592	14.8	13.3	-1.5	29	16.70



## **APPENDIX C**

### **Precision and Single-Point Flow Rate Checks**

## Alton Coal Development Coal Hollow

### Precision Report For Collocated Samplers

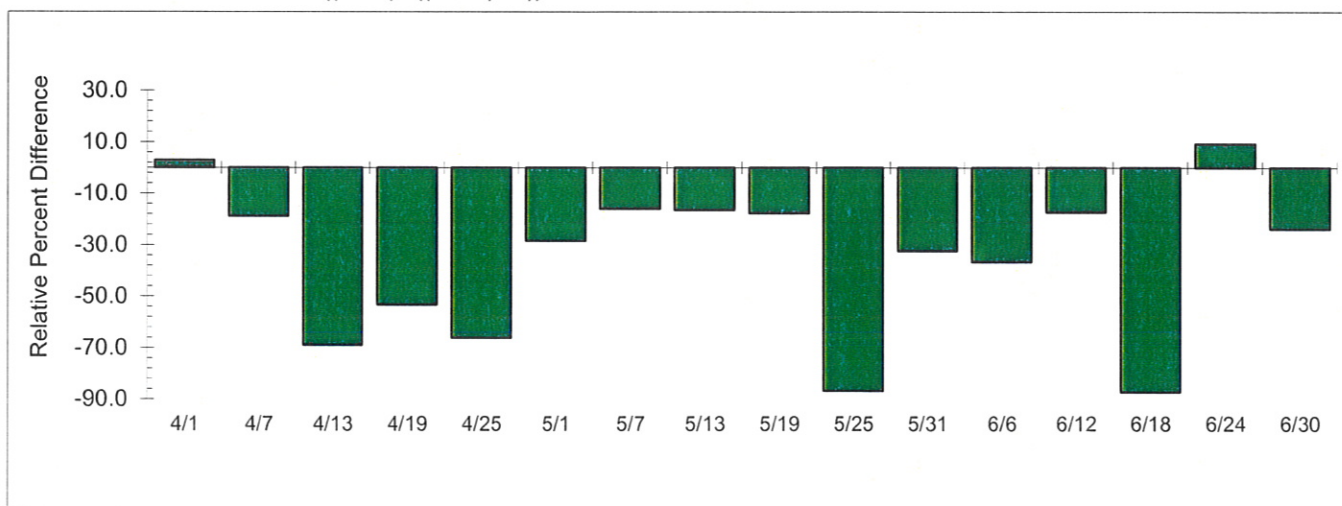
STP PM10 Concentrations( $\mu\text{g}/\text{m}^3$ )  
April 1, 2017 - June 30, 2017

Date	4/1	4/7	4/13	4/19	4/25	5/1	5/7	5/13	5/19	5/25	5/31	6/6	6/12	6/18	6/24	6/30
Coal Hollow-B	3.4	5.8	21.3	9.8	26.2	27.5	15.0	10.1	26.4	27.0	65.1	153.6	35.5	6.8	60.0	36.3
Coal Hollow-C	3.3	7.0	43.7	16.9	52.1	36.6	17.6	11.9	31.5	68.3	90.2	222.3	42.2	17.3	54.7	46.1
<b>Rel. %Diff.</b>	3.0	-18.8	-68.9	-53.2	-66.2	-28.4	-16.0	-16.4	-17.6	-86.7	-32.3	-36.6	-17.2	-87.1	9.2	-23.8

Relative Percent Difference =  $((X - Y) / ((X + Y) / 2)) * 100$

X=Coal Hollow-B

Y =Coal Hollow-C



#### Statistical Calculations:

n= 16.0	S Dev= 29.5 %
Mean= -34.8	** CV= 27.6 %

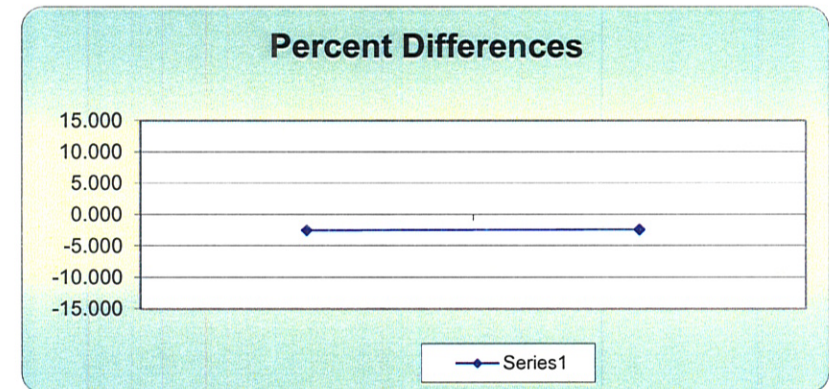
\* Both sample concentrations must be greater than or equal to  $3 \mu\text{g}/\text{m}^3$  to be used for these precision calculations.

For a detailed discussion of these precision calculations, refer to 40 CFR 58, Appendix A.

\*\* CV - Upper 90% Confidence bound for Coefficient of Variation

# Alton Coal Development, LLC - Coal Hollow Mine One-Point Flow Rate Bias Estimate

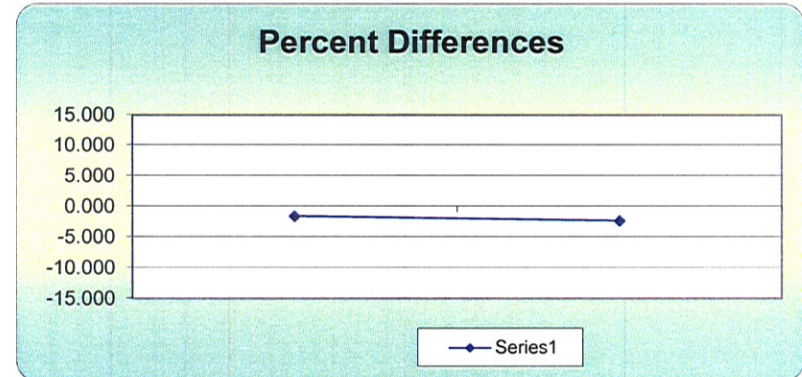
Site ID: Monitor 962A		Pollutant type:			Bias (%)		
Meas Val (Y)	Audit Val (X)	d (Eqn. 1)	25th Percentile	d <sup>2</sup>	d	d  <sup>2</sup>	
16.7	17.12	-2.453	-2.425	6.019	2.453	6.019	
16.7	17.1	-2.339	75th Percentile	5.472	2.339	5.472	
			-2.368				
		n	Σ d	"AB" (Eqn 4)			
		2	4.792	2.396			
		n-1	Σ d  <sup>2</sup>	"AS" (Eqn 5)			
		1	11.490	0.081			
		Bias (%) (Eqn 3)		Both Signs Positive			
		2.76		FALSE			
		Signed Bias (%)		Both Signs Negative			
		-2.76		TRUE			



# Alton Coal Development, LLC - Coal Hollow Mine

## One-Point Flow Rate Bias Estimate

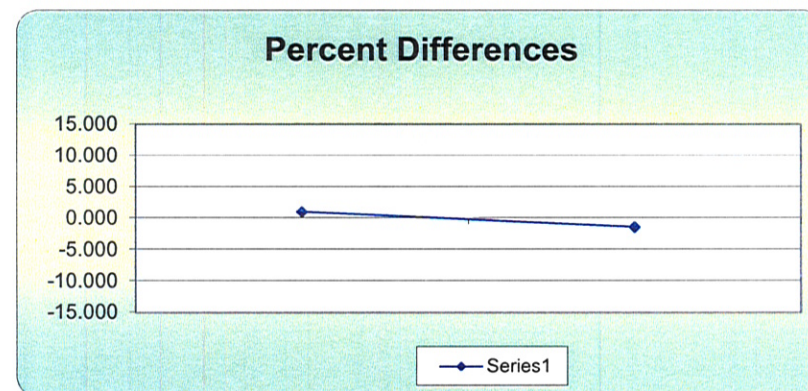
Site ID: Monitor 963B		Pollutant type:		Bias (%)				
Meas Val (Y)	Audit Val (X)	d (Eqn. 1)	25th Percentile	d <sup>2</sup>	d	d  <sup>2</sup>	n	Σ d
16.7	16.96	-1.533	-2.095	2.350	1.533	2.350	2	3.815
16.7	17.09	-2.282	75th Percentile	5.208	2.282	5.208	n-1	Σ d  <sup>2</sup>
			-1.720				1	7.558
						"AB" (Eqn 4)		
						1.908		
						"AS" (Eqn 5)		
						0.530		
				Bias (%) (Eqn 3)		Both Signs Positive		
				4.27		FALSE		
				Signed Bias (%)		Both Signs Negative		
				-4.27		TRUE		



# Alton Coal Development, LLC - Coal Hollow Mine

## One-Point Flow Rate Bias Estimate

Site ID: Monitor 964C		Pollutant type:		Bias (%)			
Meas Val (Y)	Audit Val (X)	d (Eqn. 1)	25th Percentile	d <sup>2</sup>	d	d  <sup>2</sup>	
16.7	16.52	1.090	-0.747	1.187	1.090	1.187	
16.7	16.93	-1.359	75th Percentile	1.846	1.359	1.846	
			0.478				
		n	Σ d	"AB" (Eqn 4)			
		2	2.448	1.224			
		n-1	Σ d  <sup>2</sup>	"AS" (Eqn 5)			
		1	3.033	0.190			
		Bias (%) (Eqn 3)		Both Signs Positive			
		2.07		FALSE			
		Signed Bias (%)		Both Signs Negative			
		+/-2.07		FALSE			



## Alton Coal Development Coal Hollow

### Precision Report For Collocated Samplers

STP PM10 Concentrations( $\mu\text{g}/\text{m}^3$ )

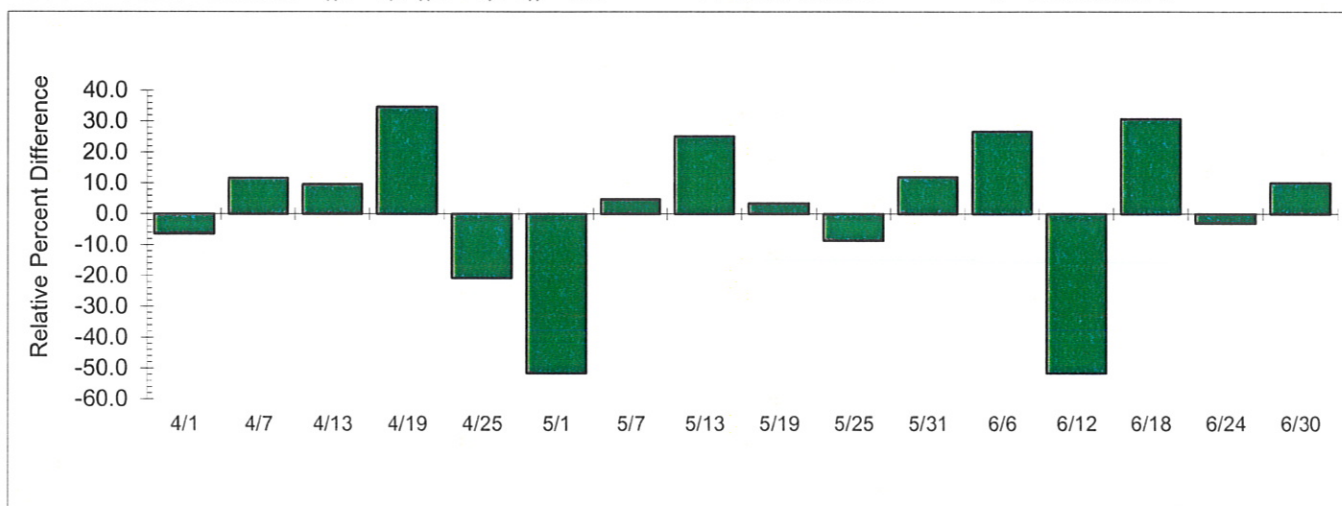
April 1, 2017 - June 30, 2017

Date	4/1	4/7	4/13	4/19	4/25	5/1	5/7	5/13	5/19	5/25	5/31	6/6	6/12	6/18	6/24	6/30
Coal Hollow-D	3.0	136.5	105.1	27.8	30.2	7.9	19.4	14.8	11.7	60.8	33.8	32.7	24.1	9.0	53.4	18.8
Coal Hollow-E	3.2	121.6	95.5	19.6	37.2	13.4	18.5	11.5	11.3	66.3	30.0	25.0	40.9	6.6	55.0	17.0
Rel. %Diff.	-6.5	11.5	9.6	34.6	-20.8	-51.6	4.7	25.1	3.5	-8.7	11.9	26.7	-51.7	30.8	-3.0	10.1

Relative Percent Difference =  $((X - Y) / ((X + Y) / 2)) * 100$

X=Coal Hollow-D

Y =Coal Hollow-E



#### Statistical Calculations:

n= 16.0	S Dev= 25.6 %
Mean= 1.6	** CV= 24.0 %

\* Both sample concentrations must be greater than or equal to  $3 \mu\text{g}/\text{m}^3$  to be used for these precision calculations.

For a detailed discussion of these precision calculations, refer to 40 CFR 58, Appendix A.

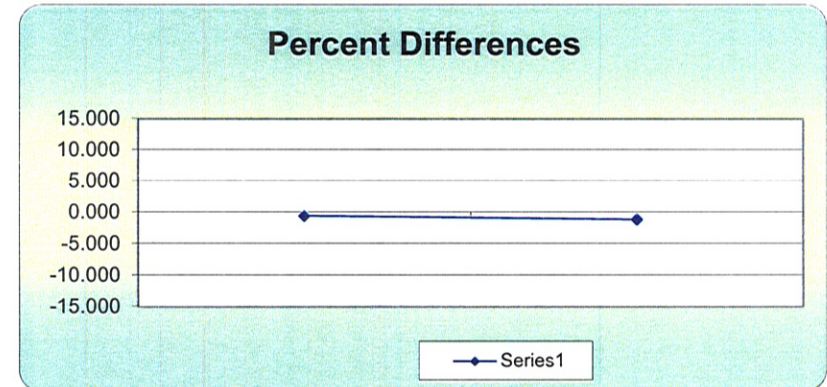
\*\* CV - Upper 90% Confidence bound for Coefficient of Variation



# Alton Coal Development, LLC - Coal Hollow Mine

## One-Point Flow Rate Bias Estimate

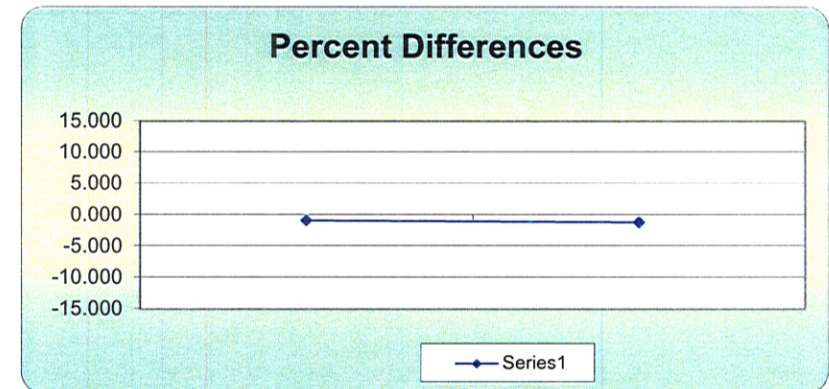
Site ID: Monitor 2366D		Pollutant type:		Bias (%)			
Meas Val (Y)	Audit Val (X)	d (Eqn. 1)	25th Percentile	d <sup>2</sup>	d	d  <sup>2</sup>	
16.7	16.78	-0.477	-0.919	0.227	0.477	0.227	
16.7	16.88	-1.066	75th Percentile	1.137	1.066	1.137	
			-0.624				
		n	Σ d	"AB" (Eqn 4)			
		2	1.543	0.772			
		n-1	Σ d  <sup>2</sup>	"AS" (Eqn 5)			
		1	1.364	0.417			
		Bias (%) (Eqn 3)		Both Signs Positive			
		2.63		FALSE			
		Signed Bias (%)		Both Signs Negative			
		-2.63		TRUE			



# Alton Coal Development, LLC - Coal Hollow Mine

## One-Point Flow Rate Bias Estimate

Site ID: Monitor 2398E		Pollutant type:			Bias (%)		
Meas Val (Y)	Audit Val (X)	d (Eqn. 1)	25th Percentile	d <sup>2</sup>	d	d  <sup>2</sup>	
16.7	16.84	-0.831	-1.052	0.691	0.831	0.691	
16.7	16.89	-1.125	75th Percentile	1.265	1.125	1.265	
			-0.905				
		n	Σ d	"AB" (Eqn 4)			
		2	1.956	0.978			
		n-1	Σ d  <sup>2</sup>	"AS" (Eqn 5)			
		1	1.957	0.208			
		Bias (%) (Eqn 3)		Both Signs Positive			
		1.9		FALSE			
		Signed Bias (%)		Both Signs Negative			
		-1.9		TRUE			



## **APPENDIX D**

### **Field Data Sheets**



## Background Monitor 962A

### Table I - Every 6th Day Sampling

[illegible]

Field Blank

QFT  
QT  
QFT  
Being repaired

### Table II - Monthly Leak Test

Date	Time	Initial SP Value	Final SP Value	Pass/Fail	Initials	Maintenance
05-02-17	12:29	97	96	Pass	KN	Clamp Manifold, four tubes
<del>05-16-17</del>						

### Table III - Monthly Flow Rate Verification

[illegible]

## Compliance Monitor 963B

### Table 1 - Every 6th Day Sampling

[illegible]

### Table II - Monthly Leak Test

Date	Time	Initial SP Value	Final SP Value	Pass/Fail	Initials	Maintenance
05-02-17	1313	111	108	PASS	KN	Cleaned Manifold

### Table III - Monthly Flow Rate Verification

[illegible]



### Co-located Monitor 964C

### Table 1 - Every 6th Day Sampling

[illegible]

Field Blank

### Table II - Monthly Leak Test

Date	Time	Initial SP Value	Final SP Value	Pass/Fail	Initials	Maintenance
05-03-17	1322	116	115	Pass	KAI	Change manifold

### Table III - Monthly Flow Rate Verification

[illegible]



## Compliance Monitor 2366D

### Table 1 - Every 6th Day Sampling

[illegible]

### Table II - Monthly Leak Test

Date	Time	Initial SP Value	Final SP Value	Pass/Fail	Initials	Maintenance
05-02-17	1412	102	101	Pass	KN	Cleaned Manifold

### Table III - Monthly Flow Rate Verification

[illegible]

## Co-located Monitor 2398E

### Table I - Every 6th Day Sampling

[illegible]

### Table 11 - Monthly Leak Test

Date	Time	Initial SP Value	Final SP Value	Pass/Fail	Initials	Maintenance
05-02-17	1423	101	99	Pass	KN	Cleaned Manifold

### Table III - Monthly Flow Rate Verification

[illegible]

## **APPENDIX E**

### **Independent PM<sub>10</sub> Sampler Performance Audit Report**

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**AUDIT REPORT  
FOR  
ALTON COAL DEVELOPMENT, LLC  
COAL HOLLOW MINE  
ALTON, UTAH  
SECOND QUARTER 2017**

Prepared for

Kirk Nicholes  
Alton Coal Development, LLC  
463 N 100 W  
Cedar City, Utah, 84721

Prepared by



1901 Sharp Point Drive, Suite F  
Fort Collins, CO 80525  
970-484-7941

Site Audited: May 18, 2017

---

A decorative graphic in the bottom left corner consisting of three stylized mountain peaks in shades of green and blue.

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<b>3.0 AUDIT RESULTS</b>	<b>3-1</b>
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## 1.0 INTRODUCTION

Air Resource Specialists, Inc. (ARS) conducted a performance audit of Alton Coal Development, LLC ambient air quality monitoring systems on May 18, 2017. The monitoring sites are located at the Coal Hollow Mine near Alton, Utah.

Table 1-1

Site Location Information

	Primary CHM	Background	Primary NPL
Latitude	37° 24' 5.0" N	37° 24' 20.9" N	37° 24' 43" N
Longitude	112° 27' 21.0" W	112° 26' 1.1" W	112° 27' 30.6" W
UTM	12S 371147 4140396	12S 373119 4140856	12S 370928 4141570
Elevation	6,890 feet MSL	7,158 feet MSL	6,959 feet MSL

Audit results for the particulate samplers are summarized in Table 1-2. Detailed discussions of performance audit findings and other findings can be found in Section 3.0.

Table 1-2

Summary of Particulate Sampler Audit Results

Parameter		Instrument	Within Accuracy Goal
Primary CHM	PM <sub>10</sub>	BGI PQ200S	Yes
	PM <sub>10</sub> (collocated)	BGI PQ200S	Yes
Background #1	PM <sub>10</sub>	BGI PQ200S	Yes
Primary NPL	PM <sub>10</sub>	BGI PQ200	Yes
	PM <sub>10</sub> (collocated)	BGI PQ200	Yes



Details of the audit are presented in the following sections:

Section 2.0	Audit Methods and Equipment
Section 3.0	Audit Results
Appendix A	Audit Data Forms
Appendix B	Audit Standards Certifications

Any questions related to this audit or audit report should be addressed to:

Christian A. Kirk  
Quality Assurance Officer / Lead Auditor  
**Air Resource Specialists, Inc.**  
1901 Sharp Point Drive, Suite F  
Fort Collins, Colorado 80525  
Telephone: 970-484-7941  
Fax: 970-484-3423  
E-mail: [ckirk@air-resource.com](mailto:ckirk@air-resource.com)

## 2.0 AUDIT METHODS

Audit procedures, audit challenge ranges, and acceptance criteria are described below. These ranges and limits conform to EPA's PSD guidelines. Audit results were verbally communicated to the site operator prior to departure from the site. A follow-up e-mail summarizing audit findings was also sent to Alton Coal Development, LLC personnel. Audit details are provided in Appendix A.

Guidance from the following EPA documents was used to establish the audit procedures:

- 40 CFR Part 58, Appendix A. *Quality Assurance Requirements for Monitors Used In Evaluations of National Ambient Air Quality Standards*
- EPA *Quality Assurance Handbook for Air Pollution Measurement Systems*:
  - *Volume I. A Field Guide to Environmental Quality Assurance*
  - *Volume II. Ambient Air Quality Monitoring Program*

### 2.1 PARTICULATE SAMPLERS (FRM PM<sub>10</sub>)

The filter-based FRM PM<sub>10</sub> particulate samplers are audited in their normal operating mode. ARS audits the samplers with a BGI deltaCal audit standard which measures flow, temperature, and barometric pressure. Prior to conducting the flow audit, a system leak check is performed in accordance with the manufacturer's specifications. The observed volumetric operational flow and design flow of the sampler are compared to the audit flows measured by the audit standard. Differences between the operational sampler flow and audit flow that are greater than  $\pm 10\%$  are considered out of tolerance. Differences between the designated design flow and the audit flow greater than  $\pm 10\%$  are considered out of tolerance. In addition to the flow audits, observed ambient temperature, filter temperature, and barometric pressure measurements of the particulate samplers are also audited by comparison to the audit standard. A temperature difference greater than  $\pm 2^\circ\text{C}$  and a barometric pressure difference greater than  $\pm 10\text{mm Hg}$  are considered out of tolerance. Audit methods and acceptable criteria for the particulate samplers are summarized in Table 2-1.

Table 2-1

#### Particulate Samplers Audit Acceptance Criteria

Parameter	Audit Method	Acceptance Criteria
FRM PM <sub>10</sub>	Leak Check	Manufacturer specs
	Audit flow to actual sampler flow	$\leq \pm 4\%$
	Design criteria flow to audit flow	$\leq \pm 5\%$
	Audit temperature to sampler temperature	$\leq \pm 2^\circ\text{C}$
	Audit temperature to sampler filter temperature	$\leq \pm 2^\circ\text{C}$
	Audit barometric pressure to sampler pressure	$\leq \pm 10\text{mm Hg}$

Table 2-2  
Particulate Samplers  
Audit Equipment

References	Manufacturer	Model Number	Serial Number	Expiration Date
FRM Flow	BGI	DeltaCal	1237	1/3/2018

### **3.0    AUDIT RESULTS**

Audit findings and recommendations are discussed below. Detailed audit results are provided in Appendix A.

#### Performance Audit Results

- There were no performance audit findings.

## **APPENDIX A**

### **AUDIT DATA FORMS**





# FRM AUDIT (PM<sub>10</sub>)

ABBR.	n/a	CLIENT	Alton	AUDITOR	C.Kirk	DATE	5/18/2017
SITE NAME		Coal Hollow Mine					
Network type		Alton Coal- Coal Hollow					

	MANUFACTURER	MODEL	SERIAL NUMBER	EXPIRATION DATE
PM Flow Standard #1	BGI	deltaCal	1237	1/3/2018
PM Temperature Standard #1	BGI	deltaCal	1237	1/3/2018
PM Barometric Pressure Standard #1	BGI	deltaCal	1237	1/3/2018

MANUFACTURER	BGI
MODEL	PQ200S
SERIAL NUMBER	963B

<b>Date and Time correct?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>If no, time off by:</b>
-4 min

SETTINGS	
Total Flow	16.70

Automated LEAK CHECK		
Vacuum Loss Rate	Pass/Fail	
3 cmH <sub>2</sub> O	PASS	

FLOW VERIFICATION					
	Reference	Instrument	Actual Diff	Design Diff	
Total Flow	17.09	16.70	-2.3%	2.3%	PASS

AUDIT CRITERIA (<=)	
Actual Flow % Diff	10%
Design Flow % Diff	10%

AMBIENT TEMPERATURE SENSOR (°C)			
Reference	Instrument	Difference	
3.2	3.0	-0.2	
			PASS

AUDIT CRITERIA (<=)	
Temperature Difference (°C)	2

FILTER TEMPERATURE SENSOR (°C)			
Reference	Instrument	Difference	
3.1	1.6	-1.5	
			PASS

AUDIT CRITERIA (<=)	
Temperature Difference (°C)	2

PRESSURE SENSOR (mmHg)			
Reference	Instrument	Difference	
587.0	587.0	0.0	
			PASS

AUDIT CRITERIA (<=)	
Pressure Difference (mmHg)	10

NOTES:	
--------	--



# FRM AUDIT (PM<sub>10</sub>)

ABBR.	n/a	CLIENT	Alton	AUDITOR	C.Kirk	DATE	5/18/2017
SITE NAME		Coal Hollow Mine					
Network type		Alton Coal- Coal Hollow					

	MANUFACTURER	MODEL	SERIAL NUMBER	EXPIRATION DATE
PM Flow Standard #1	BGI	deltaCal	1237	1/3/2018
PM Temperature Standard #1	BGI	deltaCal	1237	1/3/2018
PM Barometric Pressure Standard #1	BGI	deltaCal	1237	1/3/2018

MANUFACTURER	BGI
MODEL	PQ200S
SERIAL NUMBER	964C

<b>Date and Time correct?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>If no, time off by:</b>
-3 min

SETTINGS	
Total Flow	16.70

Automated LEAK CHECK		
Vacuum Loss Rate	Pass/Fail	
4 cmH <sub>2</sub> O	PASS	

FLOW VERIFICATION					
	Reference	Instrument	Actual Diff	Design Diff	
Total Flow	16.93	16.70	-1.4%	1.4%	PASS

AUDIT CRITERIA (<=)	
Actual Flow % Diff	10%
Design Flow % Diff	10%

AMBIENT TEMPERATURE SENSOR (°C)			
Reference	Instrument	Difference	
3.6	3.0	-0.6	PASS

AUDIT CRITERIA (<=)	
Temperature Difference (°C)	2

FILTER TEMPERATURE SENSOR (°C)			
Reference	Instrument	Difference	
2.3	1.2	-1.1	PASS

AUDIT CRITERIA (<=)	
Temperature Difference (°C)	2

PRESSURE SENSOR (mmHg)			
Reference	Instrument	Difference	
587.0	589.0	2.0	PASS

AUDIT CRITERIA (<=)	
Pressure Difference (mmHg)	10

NOTES:	
--------	--



# FRM AUDIT (PM<sub>10</sub>)

ABBR.	n/a	CLIENT	Alton	AUDITOR	C.Kirk	DATE	5/18/2017
SITE NAME		Coal Hollow Mine					
Network type		Alton Coal- Coal Hollow					

	MANUFACTURER	MODEL	SERIAL NUMBER	EXPIRATION DATE
PM Flow Standard #1	BGI	deltaCal	1237	1/3/2018
PM Temperature Standard #1	BGI	deltaCal	1237	1/3/2018
PM Barometric Pressure Standard #1	BGI	deltaCal	1237	1/3/2018

MANUFACTURER	BGI
MODEL	PQ200S
SERIAL NUMBER	962A

<b>Date and Time correct?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>If no, time off by:</b>
-3 min

SETTINGS	
Total Flow	16.70

Automated LEAK CHECK		
Vacuum Loss Rate	Pass/Fail	
3 cmH2O	PASS	

FLOW VERIFICATION					
	Reference	Instrument	Actual Diff	Design Diff	
Total Flow	17.10	16.70	-2.3%	2.4%	PASS

AUDIT CRITERIA (<=)	
Actual Flow % Diff	10%
Design Flow % Diff	10%

AMBIENT TEMPERATURE SENSOR (°C)			
Reference	Instrument	Difference	
1.9	1.3	-0.6	PASS

AUDIT CRITERIA (<=)	
Temperature Difference (°C)	2

FILTER TEMPERATURE SENSOR (°C)			
Reference	Instrument	Difference	
1.5	-0.2	-1.7	PASS

AUDIT CRITERIA (<=)	
Temperature Difference (°C)	2

PRESSURE SENSOR (mmHg)			
Reference	Instrument	Difference	
581.0	580.0	-1.0	PASS

AUDIT CRITERIA (<=)	
Pressure Difference (mmHg)	10

NOTES:	
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# FRM AUDIT (PM<sub>10</sub>)

ABBR.	n/a	CLIENT	Alton	AUDITOR	C.Kirk	DATE	5/18/2017
SITE NAME		Coal Hollow Mine					
Network type		Alton Coal- Coal Hollow					

	MANUFACTURER	MODEL	SERIAL NUMBER	EXPIRATION DATE
PM Flow Standard #1	BGI	deltaCal	1237	1/3/2018
PM Temperature Standard #1	BGI	deltaCal	1237	1/3/2018
PM Barometric Pressure Standard #1	BGI	deltaCal	1237	1/3/2018

MANUFACTURER	BGI
MODEL	PQ200
SERIAL NUMBER	2366D

<b>Date and Time correct?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>If no, time off by:</b>
-6 min

SETTINGS	
Total Flow	16.70

Automated LEAK CHECK		
Vacuum Loss Rate	Pass/Fail	
3 cmH2O	PASS	

FLOW VERIFICATION					
	Reference	Instrument	Actual Diff	Design Diff	
Total Flow	16.88	16.70	-1.1%	1.1%	PASS

AUDIT CRITERIA (<=)	
Actual Flow % Diff	10%
Design Flow % Diff	10%

AMBIENT TEMPERATURE SENSOR (°C)			
Reference	Instrument	Difference	
4.0	3.4	-0.6	PASS

AUDIT CRITERIA (<=)	
Temperature Difference (°C)	2

FILTER TEMPERATURE SENSOR (°C)			
Reference	Instrument	Difference	
3.2	2.3	-0.9	PASS

AUDIT CRITERIA (<=)	
Temperature Difference (°C)	2

PRESSURE SENSOR (mmHg)			
Reference	Instrument	Difference	
586.5	587.0	0.5	PASS

AUDIT CRITERIA (<=)	
Pressure Difference (mmHg)	10

NOTES:	
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# FRM AUDIT (PM<sub>10</sub>)

ABBR.	n/a	CLIENT	Alton	AUDITOR	C.Kirk	DATE	5/18/2017
SITE NAME		Coal Hollow Mine					
Network type		Alton Coal- Coal Hollow					

	MANUFACTURER	MODEL	SERIAL NUMBER	EXPIRATION DATE
PM Flow Standard #1	BGI	deltaCal	1237	1/3/2018
PM Temperature Standard #1	BGI	deltaCal	1237	1/3/2018
PM Barometric Pressure Standard #1	BGI	deltaCal	1237	1/3/2018

MANUFACTURER	BGI
MODEL	PQ200
SERIAL NUMBER	2398E

<b>Date and Time correct?</b>
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>If no, time off by:</b>
-8 min

SETTINGS	
Total Flow	16.70

Automated LEAK CHECK		
Vacuum Loss Rate	Pass/Fail	
3 cmH2O	PASS	

FLOW VERIFICATION					
	Reference	Instrument	Actual Diff	Design Diff	
Total Flow	16.89	16.70	-1.1%	1.1%	PASS

AUDIT CRITERIA (<=)	
Actual Flow % Diff	10%
Design Flow % Diff	10%

AMBIENT TEMPERATURE SENSOR (°C)			
Reference	Instrument	Difference	
2.5	2.4	-0.1	PASS

AUDIT CRITERIA (<=)	
Temperature Difference (°C)	2

FILTER TEMPERATURE SENSOR (°C)			
Reference	Instrument	Difference	
3.8	3.0	-0.8	PASS

AUDIT CRITERIA (<=)	
Temperature Difference (°C)	2

PRESSURE SENSOR (mmHg)			
Reference	Instrument	Difference	
586.5	587.0	0.5	PASS

AUDIT CRITERIA (<=)	
Pressure Difference (mmHg)	10

NOTES:	
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## SITE INFORMATION

ABBR.	n/a	CLIENT	Alton	AUDITOR	C.Kirk	DATE	5/18/2017
SITE NAME		Coal Hollow Mine					
NETWORK TYPE		Alton Coal- Coal Hollow					

		Deg	Min	Sec		Decimal
LATITUDE	North				--CALCULATE-->	
LONGITUDE	West					

Decimal		--CALCULATE-->	Deg	Min	Sec

	Meters	--CALCULATE-->	Feet
ELEVATION			

Feet	--CALCULATE-->	Meters

Please verify site standards used by the site operator

SITE STANDARDS	MANUFACTURER	MODEL	SERIAL #	Calibration Expiration Date
PM Flow Reference				

NOTES:



ABBR.	n/a	CLIENT	Alton	AUDITOR	C.Kirk	DATE	5/18/2017
SITE NAME		Coal Hollow Mine					
Network type		Alton Coal- Coal Hollow					

	MANUFACTURER	MODEL	SERIAL #	Calibration Expiration Date
Ozone Transfer Standard				
Gas Dilution Transfer Standard				
MFC High Flow Reference				
MFC Low Flow Reference				
Temperature Reference				
AT/RH Sensor Reference				
Barometric Pressure Reference				
Wind Speed Reference (high rpm)				
Wind Speed Reference (low rpm)				
Wind Speed Torque Gauge				
Wind Direction Alignment Reference				
Wind Direction Linearity Reference				
Wind Direction Torque Gauge				
Solar Radiation Reference				
Multiplier		W/m2 / mV		
UV Radiation Reference				
Multiplier		W/m2 / mV		
Precipitation Reference				
Volume		mL		

PM Flow Standard #1	BGI	deltaCal	1237	1/3/2018
PM Flow Standard #2				
PM Flow Standard #3				
PM Flow Standard #4				

PM Temperature Standard #1	BGI	deltaCal	1237	1/3/2018
PM Temperature Standard #2				
PM Temperature Standard #3				
PM Temperature Standard #4				

PM Barometric Pressure Standard #1	BGI	deltaCal	1237	1/3/2018
PM Barometric Pressure Standard #2				
PM Barometric Pressure Standard #3				
PM Barometric Pressure Standard #4				

TEOM MTV Standard				
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HiVol Direct Flow Reference				
Orifice				
ΔP orifice manometer				

## **APPENDIX B**

### **AUDIT STANDARDS CERTIFICATIONS**



## CERTIFICATE OF CALIBRATION - NIST TRACEABILITY

(Refer to instruction manual for further details of calibration)

deltaCal Serial Number: **1237**

DATE: 19-Dec-2016

Calibration Operator: P.Pitty

**Critical Venturi Flow Meter:** Max Uncertainty = 0.346%

Serial Number: 1A CEESI NVLAP NIST Data File 07BGI-0001

Serial Number: 2A CEESI NVLAP NIST Data File 07BGI-0003

Serial Number: 5C COX Nist Data File CCAL33222 - 5 C

Serial Number: 4A CEESI NVLAP NIST Data File 07BGI-0002

Serial Number: 3A CEESI NVLAP NIST Data File 07BGI-0004

**Room Temperature:** +/- 0.03°C from -5°C - 70°C Room Temperature: 24.4 °C

Brand: Telatemp

Serial Number:

300907

Std Cal Date

18-May-16

Std Cal Due Date

18-May-17

deltaCal:

Ambient Temperature (set): 24.4 °C

Aux (filter) Temperature (set): 24.4 °C

### Barometric Pressure and Absolute Pressure

Vaisala Model PTB330(50-1100) Digital Accuracy: 0.03371%

Serial Number:

H0850001

Std Cal Date

28-Mar-16

Std Cal Due Date

28-Mar-17

deltaCal:

Barometric pressure (set): 768 mm of Hg

### Results of Venturi Calibration

Flow Rate (Q) vs. Pressure Drop ( $\Delta P$ ).

Where: Q=Lpm,  $\Delta P$ = Cm of H<sub>2</sub>O

Q= 3.94692  $\Delta P$  ^ 0.51599

Overall Uncertainty: 0.35%

Q= 3.90838  $\Delta P$  ^ 0.50726

Overall Uncertainty: 0.35%

Date Placed In Service 1/3/17

(To be filled in by operator upon receipt)

Recommended Recalibration Date 1/3/18

(12 months from date placed in service)

**To Check a deltaCal**

**1.5-19.5**

**VER 4.00P**

**19-Dec-16** P.Pitty

BP= **768** mm of Hg

Maximum allowable error at any flow rate is .75%.

**Serial No. 1237**

	Reading		CV		
	Abs. P		Qa	Qa	
	Crit. Vent.	Room	Flow	deltaCal	
	mm of Hg	Temp	Lpm	Indicated	% Error
# 2	151.16	24.40	1.677	1.672	-0.29
	189.08	24.40	2.109	2.103	-0.31
	283.21	24.40	3.183	3.189	0.18
	358.20	24.40	4.039	4.040	0.03
	591.14	24.40	6.696	6.671	-0.37
#1	187.57	24.80	7.332	7.344	0.16
	264.48	24.80	10.400	10.388	-0.12
	341.77	24.80	13.484	13.487	0.03
	408.28	24.80	16.137	16.140	0.02
	492.21	24.80	19.485	19.520	0.18
Average %					-0.05

**To Check a deltaCal****1.5-19.5****VER 4.00P****19-Dec-16 P.Pitty**BP= **768.5** mm of Hg

Maximum allowable error at any flow rate is .75%.

**Serial No. 1237**

	Reading Abs. P Crit. Vent. mm of Hg	Room Temp	CV Qa Flow Lpm	Qa deltaCal Indicated	% Error
# 2	123.22	23.30	1.352	1.510	11.66
	278.42	23.30	3.115	3.160	1.44
	552.00	23.30	6.222	6.310	1.41
#1	192.05	24.70	7.504	7.590	1.15
	346.77	24.70	13.670	13.790	0.88
	480.81	24.70	19.011	19.030	0.10
Average %					2.77