

## Summary of AUN Site Visit

<b>To</b>	CMCU AUN Stanger Science & Environment	QA/QC Unit AEAT - NETCEN
<b>FAO</b>	Duncan Pritchard-Davies	Geoff Broughton
<b>Fax No.</b>	0207 261 1425	0870 190 6610
<b>From</b>		

AUN Site Name \_\_\_\_\_

Name of LSO/ESU \_\_\_\_\_

Date of visit \_\_\_\_\_

Reason For visit (please tick ✓)

LSO Routine Cal.	
LSO Call-Out	
ESU Call-Out	
Service	
Other	

Other (please specify)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Equipment Attended to: (please tick ✓)

	Fault on Arrival	Attended to	Fault on Leaving
All			
NOx Analyser			
O3 Analyser			
CO Analyser			
SO2 Analyser			
PM10 Monitor			
Air Con. Unit			
Other			

Other (please specify)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

<b>PRECALIBRATION CHECKLIST</b>		Page 1 of 9																																																									
Site _____ Date _____ Operator _____ Start time _____ GMT/BST      No Pollution Episode in progress <input type="checkbox"/> (see Section 10.6)																																																											
Tick boxes or note the test values obtained in the spaces provided. If any of the 'tick' checks are not correct, inform the MU after completing all of the Checklist and before proceeding with the calibration. Refer to section A.3 of Site Operator's Manual.																																																											
<p><u>(i) CO Analyser</u></p> Time _____ Ambient _____ Fault messages displayed? <input type="checkbox"/> If yes list: _____ _____ _____ _____	<p><u>(ii) NO<sub>x</sub> Analyser</u></p> Time _____ Ambient _____ Fault messages displayed? <input type="checkbox"/> If yes list: _____ _____ _____ _____																																																										
<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Analyser parameters:</th> <th style="text-align: center;">Typical/Range (mV)</th> </tr> </thead> <tbody> <tr><td>1 V&lt;MOTOR&gt; _____</td><td style="text-align: center;">3000-4500</td></tr> <tr><td>3 GROUND _____</td><td style="text-align: center;">0-10</td></tr> <tr><td>4 EXT1 _____</td><td style="text-align: center;">0000-9999</td></tr> <tr><td>5 EXT2 _____</td><td style="text-align: center;">0000-9999</td></tr> <tr><td>6 PRESSION _____</td><td style="text-align: center;">500-1050</td></tr> <tr><td>7 IR SUPPLY _____</td><td style="text-align: center;">3000-4000</td></tr> <tr><td>8 PBSE TEMP _____</td><td style="text-align: center;">1000-2500</td></tr> <tr><td>10 OPT TEMP _____</td><td style="text-align: center;">380-500</td></tr> <tr><td>12 FLOW RATE _____</td><td style="text-align: center;">500-2500</td></tr> <tr><td>13 TEMP INT _____</td><td style="text-align: center;">100-4500</td></tr> <tr><td>14 CO SIGNAL _____</td><td></td></tr> <tr><td>15 5V SUPPLY _____</td><td style="text-align: center;">4850-5150</td></tr> <tr><td>16 A/D TEST _____</td><td style="text-align: center;">990-1010</td></tr> </tbody> </table>	Analyser parameters:	Typical/Range (mV)	1 V<MOTOR> _____	3000-4500	3 GROUND _____	0-10	4 EXT1 _____	0000-9999	5 EXT2 _____	0000-9999	6 PRESSION _____	500-1050	7 IR SUPPLY _____	3000-4000	8 PBSE TEMP _____	1000-2500	10 OPT TEMP _____	380-500	12 FLOW RATE _____	500-2500	13 TEMP INT _____	100-4500	14 CO SIGNAL _____		15 5V SUPPLY _____	4850-5150	16 A/D TEST _____	990-1010	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Analyser parameters:</th> <th style="text-align: center;">Typical/Range (mV)</th> </tr> </thead> <tbody> <tr><td>1 CONV TEMP _____</td><td style="text-align: center;">13-22</td></tr> <tr><td>2 HV PM _____</td><td style="text-align: center;">300-900</td></tr> <tr><td>3 GROUND _____</td><td style="text-align: center;">0-10</td></tr> <tr><td>6 PRESSURE _____</td><td style="text-align: center;">0-300</td></tr> <tr><td>7 PELTIER _____</td><td style="text-align: center;">&lt;6500</td></tr> <tr><td>8 OPT TEMP _____</td><td style="text-align: center;">3000-4000</td></tr> <tr><td>9 PM SIGNAL _____</td><td style="text-align: center;">0000-9999</td></tr> <tr><td>10 PM TEMP _____</td><td style="text-align: center;">50-150</td></tr> <tr><td>11 OZ TEST _____</td><td style="text-align: center;">100-1000</td></tr> <tr><td>12 FLOW RATE _____</td><td style="text-align: center;">1000-2500</td></tr> <tr><td>13 INT TEMP _____</td><td style="text-align: center;">100-4500</td></tr> <tr><td>14 CAL TEMP _____</td><td style="text-align: center;">950-1050</td></tr> <tr><td>15 5V SUPPLY _____</td><td style="text-align: center;">4850-5150</td></tr> <tr><td>16 A/D TEST _____</td><td style="text-align: center;">990-1010</td></tr> </tbody> </table>	Analyser parameters:	Typical/Range (mV)	1 CONV TEMP _____	13-22	2 HV PM _____	300-900	3 GROUND _____	0-10	6 PRESSURE _____	0-300	7 PELTIER _____	<6500	8 OPT TEMP _____	3000-4000	9 PM SIGNAL _____	0000-9999	10 PM TEMP _____	50-150	11 OZ TEST _____	100-1000	12 FLOW RATE _____	1000-2500	13 INT TEMP _____	100-4500	14 CAL TEMP _____	950-1050	15 5V SUPPLY _____	4850-5150	16 A/D TEST _____	990-1010
Analyser parameters:	Typical/Range (mV)																																																										
1 V<MOTOR> _____	3000-4500																																																										
3 GROUND _____	0-10																																																										
4 EXT1 _____	0000-9999																																																										
5 EXT2 _____	0000-9999																																																										
6 PRESSION _____	500-1050																																																										
7 IR SUPPLY _____	3000-4000																																																										
8 PBSE TEMP _____	1000-2500																																																										
10 OPT TEMP _____	380-500																																																										
12 FLOW RATE _____	500-2500																																																										
13 TEMP INT _____	100-4500																																																										
14 CO SIGNAL _____																																																											
15 5V SUPPLY _____	4850-5150																																																										
16 A/D TEST _____	990-1010																																																										
Analyser parameters:	Typical/Range (mV)																																																										
1 CONV TEMP _____	13-22																																																										
2 HV PM _____	300-900																																																										
3 GROUND _____	0-10																																																										
6 PRESSURE _____	0-300																																																										
7 PELTIER _____	<6500																																																										
8 OPT TEMP _____	3000-4000																																																										
9 PM SIGNAL _____	0000-9999																																																										
10 PM TEMP _____	50-150																																																										
11 OZ TEST _____	100-1000																																																										
12 FLOW RATE _____	1000-2500																																																										
13 INT TEMP _____	100-4500																																																										
14 CAL TEMP _____	950-1050																																																										
15 5V SUPPLY _____	4850-5150																																																										
16 A/D TEST _____	990-1010																																																										

<b>PRECALIBRATION CHECKLIST</b>		Page 2 of 9																																																																																									
Site _____ Date _____ Operator _____ Start time _____ GMT/BST      No Pollution Episode in progress <input type="checkbox"/> (see Section 10.6)																																																																																											
Tick boxes or note the test values obtained in the spaces provided. If any of the 'tick' checks are not correct, inform the MU after completing all of the Checklist and before proceeding with the calibration. Refer to section A.3 of Site Operator's Manual.																																																																																											
<p><u>(iii) SO<sub>2</sub> Analyser</u></p> <p>Time _____ Ambient _____</p> <p>Fault messages displayed? <input type="checkbox"/></p> <p>If yes list: _____                  _____                  _____                  _____</p> <p>Analyser parameters:      Typical/Range                  (mV)</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 5%;">2</td><td style="width: 20%;">HV PM _____</td><td style="width: 15%;">500-1000</td></tr> <tr><td>3</td><td>GROUND _____</td><td>0-10</td></tr> <tr><td>4</td><td>EXT1 _____</td><td>0000-9999</td></tr> <tr><td>5</td><td>EXT2 _____</td><td>0000-9999</td></tr> <tr><td>6</td><td>PRESSURE _____</td><td>500-1050</td></tr> <tr><td>7</td><td>UV SUPPLY _____</td><td>2500-4000</td></tr> <tr><td>8</td><td>LAMP ADJ _____</td><td>1000-3000</td></tr> <tr><td>9</td><td>PM SIGNAL _____</td><td>0000-9999</td></tr> <tr><td>10</td><td>OPT TEMP _____</td><td>380-480</td></tr> <tr><td>11</td><td>UV SIGNAL _____</td><td>500-5000</td></tr> <tr><td>12</td><td>FLOW RATE _____</td><td>500-2500</td></tr> <tr><td>13</td><td>INT TEMP _____</td><td>100-500</td></tr> <tr><td>14</td><td>CAL TEMP _____</td><td>950-1050</td></tr> <tr><td>15</td><td>5V SUPPLY _____</td><td>4850-5150</td></tr> <tr><td>16</td><td>A/D TEST _____</td><td>990-1010</td></tr> </table>	2	HV PM _____	500-1000	3	GROUND _____	0-10	4	EXT1 _____	0000-9999	5	EXT2 _____	0000-9999	6	PRESSURE _____	500-1050	7	UV SUPPLY _____	2500-4000	8	LAMP ADJ _____	1000-3000	9	PM SIGNAL _____	0000-9999	10	OPT TEMP _____	380-480	11	UV SIGNAL _____	500-5000	12	FLOW RATE _____	500-2500	13	INT TEMP _____	100-500	14	CAL TEMP _____	950-1050	15	5V SUPPLY _____	4850-5150	16	A/D TEST _____	990-1010	<p><u>(iv) O<sub>2</sub> Analyser</u></p> <p>Time _____ Ambient _____</p> <p>Fault messages displayed? <input type="checkbox"/></p> <p>If yes list: _____                  _____                  _____                  _____</p> <p>Analyser parameters:      Typical/Range                  (mV)</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 5%;">1</td><td style="width: 20%;">LAMP TEMP _____</td><td style="width: 15%;">3000-4000</td></tr> <tr><td>2</td><td>GEN TEMP _____</td><td>3000-4000</td></tr> <tr><td>3</td><td>GROUND _____</td><td>0-10</td></tr> <tr><td>4</td><td>EXT1 _____</td><td>0000-9999</td></tr> <tr><td>5</td><td>EXT2 _____</td><td>0000-9999</td></tr> <tr><td>6</td><td>PRESSURE _____</td><td>500-1050</td></tr> <tr><td>8</td><td>LAMP ADJ _____</td><td>400-1500</td></tr> <tr><td>9</td><td>MEASURE _____</td><td>4000-9000</td></tr> <tr><td>10</td><td>OPT TEMP _____</td><td>100-550</td></tr> <tr><td>11</td><td>UV REF _____</td><td>4000-9000</td></tr> <tr><td>12</td><td>FLOW RATE _____</td><td>1500-2500</td></tr> <tr><td>13</td><td>INT TEMP _____</td><td>100-4500</td></tr> <tr><td>14</td><td>O<sub>2</sub> LAMP _____</td><td>20-1500</td></tr> <tr><td>15</td><td>5V SUPPLY _____</td><td>4850-5150</td></tr> <tr><td>16</td><td>A/D TEST _____</td><td>990-1010</td></tr> </table>	1	LAMP TEMP _____	3000-4000	2	GEN TEMP _____	3000-4000	3	GROUND _____	0-10	4	EXT1 _____	0000-9999	5	EXT2 _____	0000-9999	6	PRESSURE _____	500-1050	8	LAMP ADJ _____	400-1500	9	MEASURE _____	4000-9000	10	OPT TEMP _____	100-550	11	UV REF _____	4000-9000	12	FLOW RATE _____	1500-2500	13	INT TEMP _____	100-4500	14	O <sub>2</sub> LAMP _____	20-1500	15	5V SUPPLY _____	4850-5150	16	A/D TEST _____	990-1010
2	HV PM _____	500-1000																																																																																									
3	GROUND _____	0-10																																																																																									
4	EXT1 _____	0000-9999																																																																																									
5	EXT2 _____	0000-9999																																																																																									
6	PRESSURE _____	500-1050																																																																																									
7	UV SUPPLY _____	2500-4000																																																																																									
8	LAMP ADJ _____	1000-3000																																																																																									
9	PM SIGNAL _____	0000-9999																																																																																									
10	OPT TEMP _____	380-480																																																																																									
11	UV SIGNAL _____	500-5000																																																																																									
12	FLOW RATE _____	500-2500																																																																																									
13	INT TEMP _____	100-500																																																																																									
14	CAL TEMP _____	950-1050																																																																																									
15	5V SUPPLY _____	4850-5150																																																																																									
16	A/D TEST _____	990-1010																																																																																									
1	LAMP TEMP _____	3000-4000																																																																																									
2	GEN TEMP _____	3000-4000																																																																																									
3	GROUND _____	0-10																																																																																									
4	EXT1 _____	0000-9999																																																																																									
5	EXT2 _____	0000-9999																																																																																									
6	PRESSURE _____	500-1050																																																																																									
8	LAMP ADJ _____	400-1500																																																																																									
9	MEASURE _____	4000-9000																																																																																									
10	OPT TEMP _____	100-550																																																																																									
11	UV REF _____	4000-9000																																																																																									
12	FLOW RATE _____	1500-2500																																																																																									
13	INT TEMP _____	100-4500																																																																																									
14	O <sub>2</sub> LAMP _____	20-1500																																																																																									
15	5V SUPPLY _____	4850-5150																																																																																									
16	A/D TEST _____	990-1010																																																																																									

<b>PRECALIBRATION CHECKLIST</b>		Page 3 of 9
<p><u>(v) TEOM Particulate Monitor</u></p> <p>POWER on <input type="checkbox"/></p> <p>STATUS light off <input type="checkbox"/></p> <p>Current status code _____</p> <p>Current operating mode _____</p> <p>Percentage of filter lifetime used _____</p> <p>Current RS-232 mode _____</p> <p>Current time _____</p> <p>Mass conc _____</p> <p>30-Min MC _____</p> <p>01-Hr MC _____</p> <p>08-HR MC _____</p> <p>24-HR MC _____</p> <p>Total mass _____</p> <p>Case temp _____</p> <p>Air Temp _____</p> <p>Cap temp _____</p> <p>Encl temp _____</p> <p>Main flow _____</p> <p>Aux flow _____</p> <p>Ave temp* _____</p> <p>Ave pres* _____</p> <p>Noise _____</p> <p>Frequency _____</p> <p>* Model 1400 E only</p>	<p><u>(vii) Modem</u></p> <p>Modem lights on <input type="checkbox"/></p> <hr/> <p><u>(viii) Data Logger (if present)</u></p> <p>Logger cables secure <input type="checkbox"/></p> <p>Logger display operational <input type="checkbox"/></p> <hr/> <p><u>(ix) Chart Recorder</u></p> <p>RCD light on <input type="checkbox"/></p> <p>All traces clear on chart <input type="checkbox"/></p> <p>Chart paper not jammed <input type="checkbox"/></p> <p>'BAT' indicator not illuminated <input type="checkbox"/></p>	
<p><u>(vi) Air Sampling Manifold</u></p> <p>Manifold intact <input type="checkbox"/></p> <p>Manifold fan running <input type="checkbox"/></p> <p>Instrument sample inlets secure and tight <input type="checkbox"/></p>	<p><u>(x) Zero Air Generation</u></p> <p>Silica gel OK <input type="checkbox"/></p> <p>Purafil OK <input type="checkbox"/></p> <p>Tubing connections secure <input type="checkbox"/></p>	
<p><u>(xi) Completion of Precalibration Check</u></p> <p>If any tick check is not correct, inform the MU before proceeding with the instrument calibration.</p> <p>If all are correct, proceed to change the TEOM filter (if required) and the analyser calibration.</p>		
<p>LSO Comments:</p>   		

<b>TEOM PARTICULATE MONITOR FILTER CARTRIDGE CHANGE RECORD SHEET</b>	Page 4 of 9
Site _____ Date _____ Operator _____	
Filter changed? <span style="float: right;"><input type="checkbox"/></span> Reason for change:            2/4 weeks since last change <span style="float: right;"><input type="checkbox"/></span>  Percentage of filter lifetime used >80% <span style="float: right;"><input type="checkbox"/></span>  PM10 head removed and cleaned <span style="float: right;"><input type="checkbox"/></span>	
Wait at least 1 hour until the status light goes out and the 'current operating mode' is 4. Then complete part (v) of the postcalibration sheet.  If the status light has not gone out or the 'current operating mode' has not reached 4 within 2 hours, contact the MU.	
LSO Comments:	

<b>CALIBRATION RECORD SHEET</b>					Page 5 of 9	
Site _____ Date _____ Operator _____						
Chart recorder set to 60 mm/hour <span style="float: right;"><input type="checkbox"/></span>						
<b>(i) CO Analyser</b> Analyser out of service switch set to on <span style="float: right;"><input type="checkbox"/></span>						
			Logger mV	Instr ppm	Cyl No	Cyl pres
Instr No	ZERO CAL	CO	_____	_____	<u>Daily</u>	<u>Daily</u>
	CO CAL	CO	_____	_____	<u>Weekly</u>	<u>Weekly</u>
CO Analyser sample inlet filter change <span style="float: right;"><input type="checkbox"/></span>						
<b>(ii) NO<sub>x</sub> Analyser</b> Analyser out of service switch set to on <span style="float: right;"><input type="checkbox"/></span>						
			Logger mV	Instr ppm	Cyl No	Cyl pres
Instr No	ZERO CAL	NO <sub>x</sub>	_____	_____		
		NO	_____	_____		
		NO <sub>2</sub>	_____	_____		
Range	NO CAL	NO <sub>x</sub>	_____	_____	NO	
		NO	_____	_____		
		NO <sub>2</sub>	_____	_____		
	NO <sub>2</sub> CAL	NO <sub>x</sub>	_____	_____	NO <sub>2</sub>	
		NO	_____	_____		
		NO <sub>2</sub>	_____	_____		
NO <sub>x</sub> Analyser sample inlet filter changed <span style="float: right;"><input type="checkbox"/></span>						

<b>CALIBRATION RECORD SHEET</b>					Page 6 of 9	
<b>(iii) SO<sub>2</sub> Analyser</b> Analyser out of service switch set to on <input type="checkbox"/>						
			Logger mV	Instr ppm	Cyl No	Cyl pres
Instr No	ZERO CAL	SO <sub>2</sub>	_____	_____		
			_____	_____		
			_____	_____		
Range	SO <sub>2</sub> CAL	SO <sub>2</sub>	_____	_____		
			_____	_____		
			_____	_____		
SO <sub>2</sub> Analyser sample inlet filter changed <input type="checkbox"/>						
<b>(iv) Ozone Analyser</b> Analyser out of service switch set to on <input type="checkbox"/>						
			Logger mV	Instr ppm		
Instr No	ZERO CAL	O <sub>3</sub>	_____	_____		
			_____	_____		
	SPAN CAL	O <sub>3</sub>	_____	_____		
			_____	_____		
Ozone Analyser sample inlet filter changed <input type="checkbox"/>						
<b>(vi) Chart recorder</b>						
Chart speed reset to 10 mm/hour <input type="checkbox"/>						
Chart paper checked and replaced, if necessary <input type="checkbox"/>						
Chart date/time checked and reset, if necessary <input type="checkbox"/>						
LSO Comments:						

<b>POSTCALIBRATION CHECKS, SAFETY AND SECURITY INSPECTION</b>		Page 7 of 9																																																																																
Site _____ Date _____ Operator _____																																																																																		
Tick boxes or note the test values obtained in the spaces provided. If any of the 'tick' checks are not correct, inform the MU after completing all of the Checklist.  Refer to section A.6 of Site Operator's Manual.																																																																																		
<p><u>(i) CO Analyser</u></p> <p>Time _____ Ambient _____</p> <p>Fault messages displayed? <input type="checkbox"/></p> <p>If yes list: _____                  _____                  _____                  _____</p> <p>Analyser parameters:      Typical/Range                  (mV)</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 10%;">1</td><td style="width: 70%;">V&lt;MOTOR&gt; _____</td><td style="width: 20%;">3000-4500</td></tr> <tr><td>3</td><td>GROUND _____</td><td>0-10</td></tr> <tr><td>4</td><td>EXT1 _____</td><td>0000-9999</td></tr> <tr><td>5</td><td>EXT2 _____</td><td>0000-9999</td></tr> <tr><td>6</td><td>PRESSION _____</td><td>500-1050</td></tr> <tr><td>7</td><td>IR SUPPLY _____</td><td>3000-4000</td></tr> <tr><td>8</td><td>PBSE TEMP _____</td><td>1000-2500</td></tr> <tr><td>10</td><td>OPT TEMP _____</td><td>380-500</td></tr> <tr><td>12</td><td>FLOW RATE _____</td><td>500-2500</td></tr> <tr><td>13</td><td>TEMP INT _____</td><td>100-4500</td></tr> <tr><td>14</td><td>CO SIGNAL _____</td><td></td></tr> <tr><td>15</td><td>5V SUPPLY _____</td><td>4850-5150</td></tr> <tr><td>16</td><td>A/D TEST _____</td><td>990-1010</td></tr> </table>	1	V<MOTOR> _____	3000-4500	3	GROUND _____	0-10	4	EXT1 _____	0000-9999	5	EXT2 _____	0000-9999	6	PRESSION _____	500-1050	7	IR SUPPLY _____	3000-4000	8	PBSE TEMP _____	1000-2500	10	OPT TEMP _____	380-500	12	FLOW RATE _____	500-2500	13	TEMP INT _____	100-4500	14	CO SIGNAL _____		15	5V SUPPLY _____	4850-5150	16	A/D TEST _____	990-1010	<p><u>(ii) NO<sub>x</sub> Analyser</u></p> <p>Time _____ Ambient _____</p> <p>Fault messages displayed? <input type="checkbox"/></p> <p>If yes list: _____                  _____                  _____                  _____</p> <p>Analyser parameters:      Typical/Range                  (mV)</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 10%;">1</td><td style="width: 70%;">CONV TEMP _____</td><td style="width: 20%;">13-22</td></tr> <tr><td>2</td><td>HV PM _____</td><td>300-900</td></tr> <tr><td>3</td><td>GROUND _____</td><td>0-10</td></tr> <tr><td>6</td><td>PRESSURE _____</td><td>0-300</td></tr> <tr><td>7</td><td>PELTIER _____</td><td>&lt;6500</td></tr> <tr><td>8</td><td>OPT TEMP _____</td><td>3000-4000</td></tr> <tr><td>9</td><td>PM SIGNAL _____</td><td>0000-9999</td></tr> <tr><td>10</td><td>PM TEMP _____</td><td>50-150</td></tr> <tr><td>11</td><td>OZ TEST _____</td><td>100-1000</td></tr> <tr><td>12</td><td>FLOW RATE _____</td><td>1000-2500</td></tr> <tr><td>13</td><td>INT TEMP _____</td><td>100-4500</td></tr> <tr><td>14</td><td>CAL TEMP _____</td><td>950-1050</td></tr> <tr><td>15</td><td>5V SUPPLY _____</td><td>4850-5150</td></tr> <tr><td>16</td><td>A/D TEST _____</td><td>990-1010</td></tr> </table>	1	CONV TEMP _____	13-22	2	HV PM _____	300-900	3	GROUND _____	0-10	6	PRESSURE _____	0-300	7	PELTIER _____	<6500	8	OPT TEMP _____	3000-4000	9	PM SIGNAL _____	0000-9999	10	PM TEMP _____	50-150	11	OZ TEST _____	100-1000	12	FLOW RATE _____	1000-2500	13	INT TEMP _____	100-4500	14	CAL TEMP _____	950-1050	15	5V SUPPLY _____	4850-5150	16	A/D TEST _____	990-1010
1	V<MOTOR> _____	3000-4500																																																																																
3	GROUND _____	0-10																																																																																
4	EXT1 _____	0000-9999																																																																																
5	EXT2 _____	0000-9999																																																																																
6	PRESSION _____	500-1050																																																																																
7	IR SUPPLY _____	3000-4000																																																																																
8	PBSE TEMP _____	1000-2500																																																																																
10	OPT TEMP _____	380-500																																																																																
12	FLOW RATE _____	500-2500																																																																																
13	TEMP INT _____	100-4500																																																																																
14	CO SIGNAL _____																																																																																	
15	5V SUPPLY _____	4850-5150																																																																																
16	A/D TEST _____	990-1010																																																																																
1	CONV TEMP _____	13-22																																																																																
2	HV PM _____	300-900																																																																																
3	GROUND _____	0-10																																																																																
6	PRESSURE _____	0-300																																																																																
7	PELTIER _____	<6500																																																																																
8	OPT TEMP _____	3000-4000																																																																																
9	PM SIGNAL _____	0000-9999																																																																																
10	PM TEMP _____	50-150																																																																																
11	OZ TEST _____	100-1000																																																																																
12	FLOW RATE _____	1000-2500																																																																																
13	INT TEMP _____	100-4500																																																																																
14	CAL TEMP _____	950-1050																																																																																
15	5V SUPPLY _____	4850-5150																																																																																
16	A/D TEST _____	990-1010																																																																																

<b>POSTCALIBRATION CHECKS, SAFETY AND SECURITY INSPECTION</b>		Page 8 of 9																																																																																																																							
Site _____ Date _____ Operator _____																																																																																																																									
Tick boxes or note the test values obtained in the spaces provided. If any of the 'tick' checks are not correct, inform the MU after completing all of the Checklist.  Refer to section A.6 of Site Operator's Manual.																																																																																																																									
<p><u>(iii) SO<sub>2</sub> Analyser</u></p> <p>Time _____ Ambient _____</p> <p>Fault messages displayed? <input type="checkbox"/></p> <p>If yes list: _____                  _____                  _____                  _____</p> <p>Analyser parameters:      Typical/Range                  (mV)</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 5%;">2</td><td style="width: 20%;">HV PM</td><td style="width: 15%;">_____</td><td style="width: 20%;">500-1000</td></tr> <tr><td>3</td><td>GROUND</td><td>_____</td><td>0-10</td></tr> <tr><td>4</td><td>EXT1</td><td>_____</td><td>0000-9999</td></tr> <tr><td>5</td><td>EXT2</td><td>_____</td><td>0000-9999</td></tr> <tr><td>6</td><td>PRESSURE</td><td>_____</td><td>500-1050</td></tr> <tr><td>7</td><td>UV SUPPLY</td><td>_____</td><td>2500-4000</td></tr> <tr><td>8</td><td>LAMP ADJ</td><td>_____</td><td>1000-3000</td></tr> <tr><td>9</td><td>PM SIGNAL</td><td>_____</td><td>0000-9999</td></tr> <tr><td>10</td><td>OPT TEMP</td><td>_____</td><td>380-480</td></tr> <tr><td>11</td><td>UV SIGNAL</td><td>_____</td><td>500-5000</td></tr> <tr><td>12</td><td>FLOW RATE</td><td>_____</td><td>500-2500</td></tr> <tr><td>13</td><td>INT TEMP</td><td>_____</td><td>100-500</td></tr> <tr><td>14</td><td>CAL TEMP</td><td>_____</td><td>950-1050</td></tr> <tr><td>15</td><td>5V SUPPLY</td><td>_____</td><td>4850-5150</td></tr> <tr><td>16</td><td>A/D TEST</td><td>_____</td><td>990-1010</td></tr> </table>	2	HV PM	_____	500-1000	3	GROUND	_____	0-10	4	EXT1	_____	0000-9999	5	EXT2	_____	0000-9999	6	PRESSURE	_____	500-1050	7	UV SUPPLY	_____	2500-4000	8	LAMP ADJ	_____	1000-3000	9	PM SIGNAL	_____	0000-9999	10	OPT TEMP	_____	380-480	11	UV SIGNAL	_____	500-5000	12	FLOW RATE	_____	500-2500	13	INT TEMP	_____	100-500	14	CAL TEMP	_____	950-1050	15	5V SUPPLY	_____	4850-5150	16	A/D TEST	_____	990-1010	<p><u>(iv) O<sub>2</sub> Analyser</u></p> <p>Time _____ Ambient _____</p> <p>Fault messages displayed? <input type="checkbox"/></p> <p>If yes list: _____                  _____                  _____                  _____</p> <p>Analyser parameters:      Typical/Range                  (mV)</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 5%;">1</td><td style="width: 20%;">LAMP TEMP</td><td style="width: 15%;">_____</td><td style="width: 20%;">3000-4000</td></tr> <tr><td>2</td><td>GEN TEMP</td><td>_____</td><td>3000-4000</td></tr> <tr><td>3</td><td>GROUND</td><td>_____</td><td>0-10</td></tr> <tr><td>4</td><td>EXT1</td><td>_____</td><td>0000-9999</td></tr> <tr><td>5</td><td>EXT2</td><td>_____</td><td>0000-9999</td></tr> <tr><td>6</td><td>PRESSURE</td><td>_____</td><td>500-1050</td></tr> <tr><td>8</td><td>LAMP ADJ</td><td>_____</td><td>400-1500</td></tr> <tr><td>9</td><td>MEASURE</td><td>_____</td><td>4000-9000</td></tr> <tr><td>10</td><td>OPT TEMP</td><td>_____</td><td>100-550</td></tr> <tr><td>11</td><td>UV REF</td><td>_____</td><td>4000-9000</td></tr> <tr><td>12</td><td>FLOW RATE</td><td>_____</td><td>1500-2500</td></tr> <tr><td>13</td><td>INT TEMP</td><td>_____</td><td>100-4500</td></tr> <tr><td>14</td><td>O<sub>3</sub> LAMP</td><td>_____</td><td>20-1500</td></tr> <tr><td>15</td><td>5V SUPPLY</td><td>_____</td><td>4850-5150</td></tr> <tr><td>16</td><td>A/D TEST</td><td>_____</td><td>990-1010</td></tr> </table>	1	LAMP TEMP	_____	3000-4000	2	GEN TEMP	_____	3000-4000	3	GROUND	_____	0-10	4	EXT1	_____	0000-9999	5	EXT2	_____	0000-9999	6	PRESSURE	_____	500-1050	8	LAMP ADJ	_____	400-1500	9	MEASURE	_____	4000-9000	10	OPT TEMP	_____	100-550	11	UV REF	_____	4000-9000	12	FLOW RATE	_____	1500-2500	13	INT TEMP	_____	100-4500	14	O <sub>3</sub> LAMP	_____	20-1500	15	5V SUPPLY	_____	4850-5150	16	A/D TEST	_____	990-1010
2	HV PM	_____	500-1000																																																																																																																						
3	GROUND	_____	0-10																																																																																																																						
4	EXT1	_____	0000-9999																																																																																																																						
5	EXT2	_____	0000-9999																																																																																																																						
6	PRESSURE	_____	500-1050																																																																																																																						
7	UV SUPPLY	_____	2500-4000																																																																																																																						
8	LAMP ADJ	_____	1000-3000																																																																																																																						
9	PM SIGNAL	_____	0000-9999																																																																																																																						
10	OPT TEMP	_____	380-480																																																																																																																						
11	UV SIGNAL	_____	500-5000																																																																																																																						
12	FLOW RATE	_____	500-2500																																																																																																																						
13	INT TEMP	_____	100-500																																																																																																																						
14	CAL TEMP	_____	950-1050																																																																																																																						
15	5V SUPPLY	_____	4850-5150																																																																																																																						
16	A/D TEST	_____	990-1010																																																																																																																						
1	LAMP TEMP	_____	3000-4000																																																																																																																						
2	GEN TEMP	_____	3000-4000																																																																																																																						
3	GROUND	_____	0-10																																																																																																																						
4	EXT1	_____	0000-9999																																																																																																																						
5	EXT2	_____	0000-9999																																																																																																																						
6	PRESSURE	_____	500-1050																																																																																																																						
8	LAMP ADJ	_____	400-1500																																																																																																																						
9	MEASURE	_____	4000-9000																																																																																																																						
10	OPT TEMP	_____	100-550																																																																																																																						
11	UV REF	_____	4000-9000																																																																																																																						
12	FLOW RATE	_____	1500-2500																																																																																																																						
13	INT TEMP	_____	100-4500																																																																																																																						
14	O <sub>3</sub> LAMP	_____	20-1500																																																																																																																						
15	5V SUPPLY	_____	4850-5150																																																																																																																						
16	A/D TEST	_____	990-1010																																																																																																																						

POSTCALIBRATION CHECKS, SAFETY AND SECURITY INSPECTION		Page 9 of 9
<p><u>(v) TEOM Particulate Monitor</u></p> <p>Filter changed <input type="checkbox"/></p> <p>POWER light on _____</p> <p>STATUS light off _____</p> <p>Current status code _____</p> <p>Current operating mode _____</p> <p>Percentage of filter lifetime used _____</p> <p>Current RS-232 mode _____</p> <p>Current time _____</p> <p>Mass conc _____</p> <p>30-Min MC _____</p> <p>01-Hr MC _____</p> <p>08-HR MC _____</p> <p>24-HR MC _____</p> <p>Total mass _____</p> <p>Case temp _____</p> <p>Air Temp _____</p> <p>Cap temp _____</p> <p>Encl temp _____</p> <p>Main flow _____</p> <p>Aux flow _____</p> <p>Ave temp _____</p> <p>Ave pres _____</p> <p>Noise _____</p> <p>Frequency _____</p>	<p><u>(vi) Air Sampling Manifold</u></p> <p>Manifold intact <input type="checkbox"/></p> <p>Manifold fan running <input type="checkbox"/></p> <p>Instrument sample inlets secure and tight <input type="checkbox"/></p>	
	<p><u>(vii) Modem</u></p> <p>Modem lights on <input type="checkbox"/></p>	
	<p><u>(viii) Data Logger (if present)</u></p> <p>Logger cables secure <input type="checkbox"/></p> <p>Logger display operational <input type="checkbox"/></p>	
<p><u>TEOM Noise on Chart</u></p> <p>Peak-to-peak noise in vertical divisions on chart trace:</p> <p>If greater than 7 divisions (60 µgm<sup>3</sup>) refer to Section A.4</p>	<p><u>(ix) Chart Recorder</u></p> <p>RCD light on <input type="checkbox"/></p> <p>'BAT' indication not illuminated <input type="checkbox"/></p> <p>All traces clear on chart <input type="checkbox"/></p> <p>Chart paper not jammed <input type="checkbox"/></p> <p>All traces normal(section A.6) <input type="checkbox"/></p> <p>Auto Cal traces OK <input type="checkbox"/></p>	
<p><u>(x) Final Checks</u></p> <p>Check all sample inlet filters changed <input type="checkbox"/></p> <p><b>All status switches reset to off</b> <input type="checkbox"/></p> <p><b>Calibration end time _____ GMT/BST</b></p> <p>Safety and security check of site:</p> <p>Manifold inlet /TEOM headclear and ladder stowed <input type="checkbox"/></p> <p>Calibration cylinders turned off and secure <input type="checkbox"/></p> <p>Note: Do not close valves on CO daily span cylinder</p> <p>Site clean and tidy <input type="checkbox"/></p> <p><b>Fax all check and calibration sheets <u>TODAY</u> to MU : 0207 261 1425</b></p> <p style="text-align: right;"><b>and QA/QC Unit : 0870 190 6610</b></p>		