

## Summary of AURN Site Visit

<b>To</b>	CMCU Casella Stanger	QA/QC Unit <b>netcen</b>
<b>FAO</b>	Duncan Pritchard-Davies	Geoff Broughton
<b>Fax No.</b>	0207 261 1425	0870 190 6610
<b>From</b>		

AURN 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 7
Site _____	Date _____	Operator _____
Start time _____	GMT/BST _____	Pollution Episode <input type="checkbox"/> (see Section 10.6)
<p>Tick boxes or note the test values obtained in the spaces provided. If any of the checks are not correct, inform the CMCU after completing all of the Checklist and before proceeding with the calibration.</p> <p>Refer to section A.3 of Site Operator's Manual.</p>		
<p><u>i) CO Analyser</u></p> <p>Time _____ Date _____</p> <p>CO Ambient Concentration _____</p> <p>Mode: (Local/EXT) _____</p> <p>ALARM indicator present? YES/NO If YES list Alarm messages: _____ _____ _____ _____</p> <p>CELL: (Kpa) _____ SAMPLE: (l/min) _____</p>	<p><u>(ii) NO<sub>x</sub> Analyser</u></p> <p>Time _____ Date _____</p> <p>NO Ambient Concentration _____ NO<sub>2</sub> Ambient Concentration _____ NO<sub>x</sub> Ambient Concentration _____</p> <p>Mode: (Local/EXT) _____</p> <p>ALARM indicator present? YES/NO If YES list Alarm messages: _____ _____ _____ _____</p> <p>DETECTOR: (Kpa) _____ SAMPLE: (l/min) _____</p>	
<p><u>(iii) SO<sub>2</sub> Analyser</u></p> <p>Time _____ Date _____</p> <p>SO<sub>2</sub> Ambient Concentration _____</p> <p>Mode: (Local/EXT) _____</p> <p>ALARM indicator present? YES/NO If YES list Alarm messages: _____ _____ _____ _____</p> <p>CELL: (Kpa) _____ CELL: (TEMP C) _____ SAMPLE: (l/min) _____</p>	<p><u>(iv) Ozone Analyser</u></p> <p>Time _____ Date _____</p> <p>O<sub>3</sub> Ambient Concentration _____</p> <p>Mode: (Local/EXT) _____</p> <p>ALARM indicator present? YES/NO If YES list Alarm messages: _____ _____ _____ _____</p> <p>CELL: (Kpa) _____ CELL: (TEMP C) _____ SAMPLE: (l/min) _____</p>	



TEOM PARTICULATE MONITOR FILTER CARTRIDGE CHANGE RECORD SHEET		Page 3 of 7
Site	Date	Operator
Filter changed?		<input type="checkbox"/>
Reason for change:	4 weeks since last change	<input type="checkbox"/>
	Percentage of filter lifetime used >80%	<input type="checkbox"/>
	PM10 head removed and cleaned	<input type="checkbox"/>
<p>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.</p> <p>If the status light has not gone out or the "current operating mode" has not reached 4 within 2 hours, contact the CMCU.</p>		
<p>Comments:</p>		

<b>CALIBRATION RECORD SHEET</b>				Page 4 of 7	
Site		Date		Operator	
Chart recorder set to 60 mm/hour(where present) <input type="checkbox"/>					
<b>(i) CO Analyser</b>					
			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 changed <input type="checkbox"/>					
<b>(ii) NO<sub>x</sub> Analyser</b>					
			Instr ppb	Cyl No	Cyl pres
Instr No	ZERO CAL	NO	----- ----- -----		
		NO <sub>2</sub>	----- ----- -----		
		NO <sub>x</sub>	----- ----- -----		
	NO CAL	NO	----- ----- -----	NO	
		NO <sub>2</sub>	----- ----- -----		
		NO <sub>x</sub>	----- ----- -----		
	NO <sub>2</sub> CAL	NO	----- ----- -----	NO <sub>2</sub>	
		NO <sub>2</sub>	----- ----- -----		
		NO <sub>x</sub>	----- ----- -----		
NO <sub>x</sub> Analyser sample inlet filter changed <input type="checkbox"/>					

<b>CALIBRATION RECORD SHEET</b>				Page 5 of 7	
<b>(iii) SO<sub>2</sub> Analyser</b>					
			Instr ppb	Cyl No	Cyl pres
Instr No	ZERO CAL	SO <sub>2</sub>	----- ----- -----		
	SO <sub>2</sub> CAL	SO <sub>2</sub>	----- ----- -----	SO <sub>2</sub>	
SO <sub>2</sub> Analyser sample inlet filter changed				<input type="checkbox"/>	
<b>(iv) Ozone Analyser</b>					
			Instr ppb		
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(where present)</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"/>	
Comments:					

<b>POSTCALIBRATION CHECKS, SAFETY AND SECURITY INSPECTION</b>		Page 6 of 7
Site _____	Date _____	Operator _____
<p>Tick boxes or note the test values obtained in the spaces provided. If any of the 'tick' checks are not correct, inform the CMCU after completing all of the Checklist.</p> <p>Refer to section A.6 of Site Operator's Manual.</p>		
<p><u>i) CO Analyser</u></p> <p>Time _____ Date _____</p> <p>CO Ambient Concentration _____</p> <p>Mode: (Local/EXT) _____</p> <p>ALARM indicator present? YES/NO If YES list Alarm messages: _____ _____ _____ _____</p> <p>CELL: (Kpa) _____ SAMPLE: (l/min) _____</p>	<p><u>(ii) NO<sub>2</sub> Analyser</u></p> <p>Time _____ Date _____</p> <p>NO Ambient Concentration _____ NO<sub>2</sub> Ambient Concentration _____ NO<sub>x</sub> Ambient Concentration _____</p> <p>Mode: (Local/EXT) _____</p> <p>ALARM indicator present? YES/NO If YES list Alarm messages: _____ _____ _____ _____</p> <p>DETECTOR: (Kpa) _____ SAMPLE: (l/min) _____</p>	
<p><u>(iii) SO<sub>2</sub> Analyser</u></p> <p>Time _____ Date _____</p> <p>SO<sub>2</sub> Ambient Concentration _____</p> <p>Mode: (Local/EXT) _____</p> <p>ALARM indicator present? YES/NO If YES list Alarm messages: _____ _____ _____ _____</p> <p>CELL: (Kpa) _____ CELL: (TEMP C) _____ SAMPLE: (l/min) _____</p>	<p><u>(iv) Ozone Analyser</u></p> <p>Time _____ Date _____</p> <p>O<sub>3</sub> Ambient Concentration _____</p> <p>Mode: (Local/EXT) _____</p> <p>ALARM indicator present? YES/NO If YES list Alarm messages: _____ _____ _____ _____</p> <p>CELL: (Kpa) _____ CELL: (TEMP C) _____ SAMPLE: (l/min) _____</p>	

<b>POSTCALIBRATION CHECKS, SAFETY AND SECURITY INSPECTION</b>		Page 7 of 7
<p><u>(v) TEOM Particulate Monitor</u></p> <p>POWER light 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 style="margin-left: 40px;">Model 1400 E only</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 powered <input type="checkbox"/></p>	
<p><u>TEOM Noise (where chart available)</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>Recording 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><u>(x) Final Checks</u></p> <p>Check all sample inlet filters changed <input type="checkbox"/></p> <p>All status switches reset to off <input type="checkbox"/></p> <p>Zero air generator turned off <input type="checkbox"/></p> <p>Zero inlets capped <input type="checkbox"/></p> <p><b>Calibration end time</b> _____ <b>GMT/BST</b></p> <p>Safety and security check of cabinet:</p> <p>Roof clear and ladder stowed <input type="checkbox"/></p> <p>Calibration cylinders turned off (if appropriate) <input type="checkbox"/></p> <p>Note: do not close valves if cylinders used for daily autocalibrations</p> <p>Cabinet clean and tidy <input type="checkbox"/></p>		
<p><b>Fax all check and calibration sheets <u>TODAY</u> to</b></p> <p style="text-align: right;"><b>network CMCU:</b> 0207 261 1425 <b>network QA/QC Unit:</b> 0870 190 6610</p>		
<p>Comments:</p>		