



# AEROSOL MONITORING CERTIFICATE OF ANALYSIS



CLIENT CHRIS THOMPSON, TFL ENGINEERING, TEST DATE 31/01/19  
ADDRESS 7TH FLOOR, 5 ENDEAVOUR SQUARE, PAGE NO 1 OF 3  
WESTFIELD AVENUE, STRATFORD, JOB NO 183260  
LONDON E20 1JN  
SITE/LOCATION WEST RUISLIP (CRANSTON CLOSE) CERTIFICATE No. C183260/310119/01  
PROCESS BEING MONITORED DIESEL EXHAUST FUMES FROM LOCOMOTIVE  
SAMPLES STATIC/PERSONAL ANALYST (S) [REDACTED]  
ANALYSIS LOCATION BALANCE ROOM, MAIN LABORATORY NO. OF SAMPLES 3 + Blanks

## TEST PROCEDURES

TEST METHOD CARRIED OUT IN ACCORDANCE WITH MDHS 14/4 AND IN-HOUSE TEST PROCEDURE 4R-E206. SAMPLING STRATEGY CARRIED OUT IN GENERAL ACCORDANCE WITH HSG 173 MONITORING STRATEGIES FOR TOXIC SUBSTANCES.

TWA: 8-HOUR TIME WEIGHTED AVERAGE

FILTER NUMBER	SAMPLE TYPE *	SAMPLE LOCATION	START TIME	BREAKS IN SAMPLING (IF APPLICABLE)		FINISH TIME	FLOW RATE / (l/min)	VOLUME OF AIR / (litres)	CALC. DUST CONC <sup>N</sup> / (mg/m <sup>3</sup> )	TWA. / (mg/m <sup>3</sup> )
				TIME OFF	TIME ON					
183260/16	R	P1 – Car Park A	21:32	-	-	00:22	2.2	365.12	<0.02	-
183260/17	R	P2 – Car Park A	21:34	-	-	00:24	2.2	365.12	<0.02	-
183260/18	R	P3 – Car Park B	21:36	-	-	00:26	2.2	365.12	<0.02	-

\* RESPIRABLE: R, THORACIC: T, INHALABLE: I

TEMPERATURE: 1.0 °C

PRESSURE: 994 MILLIBARS

## UNCERTAINTY OF MEASUREMENT

THE LOWER LIMIT OF DETECTION IS CALCULATED TO BE 0.02MG. THE OVERALL ACCURACY OF MEASUREMENT IS DEPENDANT ON THE SAMPLING VOLUME: THE GREATER THE SAMPLING VOLUME, THE LOWER THE LIMIT OF ACCURATE MEASUREMENT.

**HSE WORKPLACE EXPOSURE LIMIT (EH40/05):** RESPIRABLE DUST : 4 MG/M<sup>3</sup> (8-HOUR TWA)  
INHALABLE DUST: 10 MG/M<sup>3</sup> (8-HOUR TWA)

SAMPLES TAKEN ARE HELD IN THE MAIN LABORATORY AND WILL DISPOSED OF AFTER A MINIMUM PERIOD OF SIX MONTHS.

CERTIFICATE PREPARED BY

GRAVIMETRIC ANALYSIS CARRIED OUT BY:

CERTIFIED BY

SIGNED

SIGNED

SIGNED

ISSUE DATE

13<sup>th</sup> February 2019

Head Office: Unit 3, Metro Centre, Britannia Way, London, NW10 7PA  
Laboratory: Unit 11, Ironbridge Close, Great Central Way, London, NW10 0UF  
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VAT Registration Number: 691 5975 82 Company Registration No.: 3256863

FILTER NUMBER	HEAD/ PUMP NO.	START FLOW RATE / (l/min)	START TIME	FINAL FLOW RATE / (l/min)	FINISH TIME	FLOW RATE CHECK / (l/min)	TIME	FLOW RATE CHECK / (l/min)	TIME	FLOW RATE CHECK / (l/min)	TIME	FLOW RATE CHECK / (l/min)	TIME
183260/16	4RS17 410819	2.2	21:32	2.2	00:22	2.2	21:47	2.2	22:47	-	-	-	-
183260/17	4RS62 410809	2.2	21:34	2.2	00:24	2.2	21:49	2.2	22:49	-	-	-	-
183260/18	4RS65 410809	2.2	21:36	2.2	00:26	2.2	21:51	2.2	22:51	-	-	-	-

**ENVIRONMENTAL CONDITIONS**

START TEMPERATURE 1.0 °C

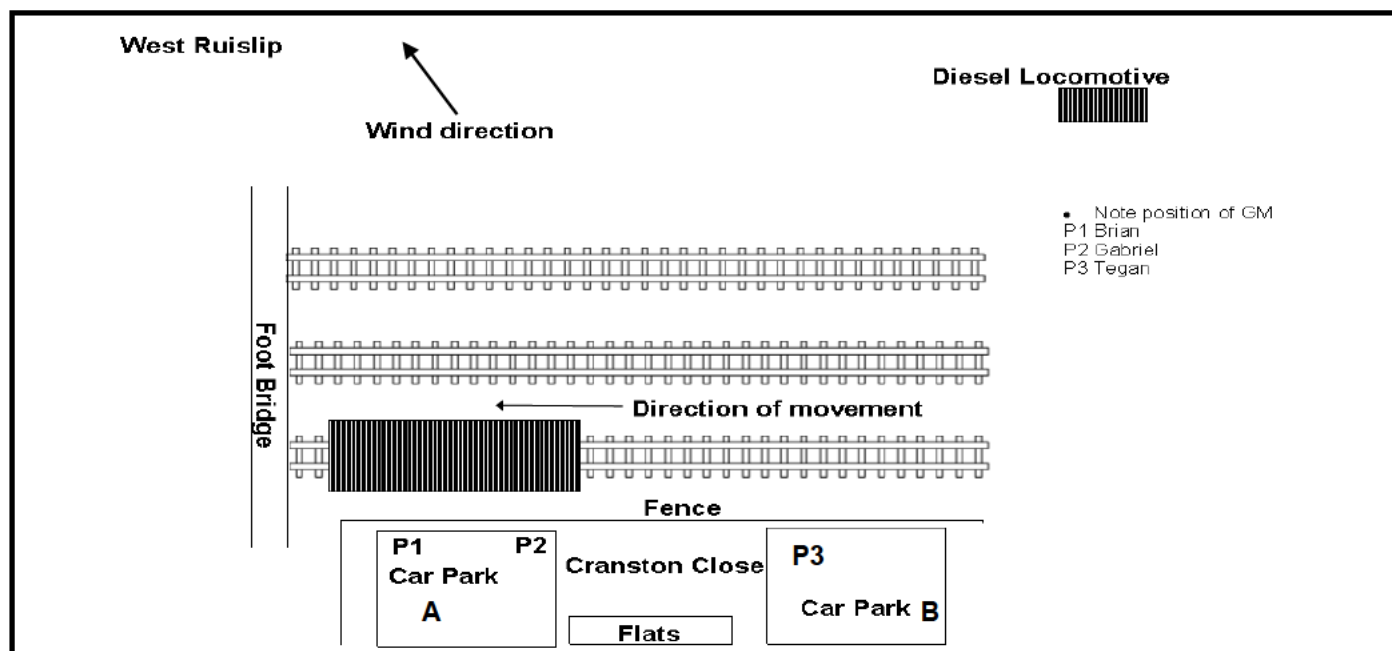
START PRESSURE 994 MILLIBARS

FINAL TEMPERATURE 1.0 °C

FINAL PRESSURE 994 MILLIBARS

BALANCE SERIAL No.	<u>L40355</u>	CALIBRATION DUE DATE	<u>JUNE 2019</u>	TIME KEEPING EQUIPMENT	<u>460046</u>	CALIBRATION DUE DATE	<u>02/07/19</u>
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FLOWMETER REF. No.	<u>401131</u>	CALIBRATION DUE DATE	<u>02/02/19</u>	TEMPERATURE GAUGE. No.	<u>410783</u>	CALIBRATION DUE DATE	<u>10/08/19</u>
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**SITE DIAGRAM**

**THE OPINIONS AND INTERPRETATIONS EXPRESSED HEREIN ARE OUTSIDE THE SCOPE OF THE UKAS ACCREDITATION**

AIR VELOCITY, IF REQUIRED : METRES PER SECOND

AIR DIRECTION, IF REQUIRED :

21:00 COLLECTED EQUIPMENT FROM 4RS, SITE SHEETS AND READ BRIEFING EMAILS

LEAVE FOR SITE

4RS ON SITE AT WEST RUISLIP (CRANSTON CLOSE CAR PARK)

21:32 AM AND GM MONITORING START

00:10 DIESEL LOCOMOTIVE ARRIVES ON SITE

DIESEL LOCOMOTIVE STARTS IDLING

MODERATE LEVEL OF DIESEL FUMES BLOWING AWAY FROM CAR PARK.

WEATHER CONDITIONS: WET & ICY. SNOW FALL.

00:26 AM AND GM MONITOR NG COMPLETE SAMPL NG

SAMPLES BOOKED N LAB WITH SITE SHEETS.

### POSITION OF GM MONITORS

NOTE: P1 - BRIAN P2 - GABRIEL P3 - TEGAN

### DURING GRAVIMETRIC ANALYSIS

### VOLUME CORRECTION FOR TEMPERATURE CHANGE

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