



AEROSOL MONITORING CERTIFICATE OF ANALYSIS



CLIENT CHRIS THOMPSON, TFL ENGINEERING, TEST DATE 01-02/02/19
ADDRESS 7TH FLOOR, 5 ENDEAVOUR SQUARE, PAGE No 1 OF 3
WESTFIELD AVENUE, STRATFORD,
LONDON E20 1JN JOB No 183260
SITE/LOCATION RUISLIP (CRANSTON EL. CAR PARK) CERTIFICATE No. C183260/010219/02
PROCESS BEING MONITORED DIESEL LOCOMOTIVE IDLING AND DEPARTURE
SAMPLES STATIC/~~PERSONAL~~ ANALYST (S) DP
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 ⁿ / (mg/m ³)	TWA. / (mg/m ³)
				TIME OFF	TIME ON					
183260/22	R	P1 – Left hand side of car park A	22:15	-	-	00:15	2.2	258.07	<0.02	-
183260/23	R	P2 – Right hand side of car park A	22:16	-	-	00:17	2.2	260.22	<0.02	-
183260/24	R	P3 – car park B	22:19	-	-	00:19	2.2	258.07	<0.02	-

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

TEMPERATURE: 2 °C

PRESSURE: 995 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/M³ (8-HOUR TWA)
INHALABLE DUST: 10 MG/M³ (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

SIGNED

GRAVIMETRIC ANALYSIS CARRIED OUT BY:

SIGNED

CERTIFIED BY

SIGNED

ISSUE DATE

12th February 2019

Head Office: Unit 3, Metro Centre, Britannia Way, London, NW10 7PA
Laboratory: Unit 11, Ironbridge Close, Great Central Way, London, NW10 0UF
T: +44(0)20 8955 9680 F: +44(0)20 8955 9689 E-mail: enquiries@4-rail.com
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
183260/22	4RS8/4411 58	2.2	22:15	2.2	00:15	2.2	22:30	2.2	23:30	-	-	-	-
183260/23	4RS12/441 148	2.2	22:16	2.2	00:17	2.2	22:31	2.2	23:31	-	-	-	-
183260/24	4RS42/441 154	2.2	22:19	2.2	00:19	2.2	22:34	2.2	23:33	-	-	-	-

ENVIRONMENTAL CONDITIONS

START TEMPERATURE 2 °C

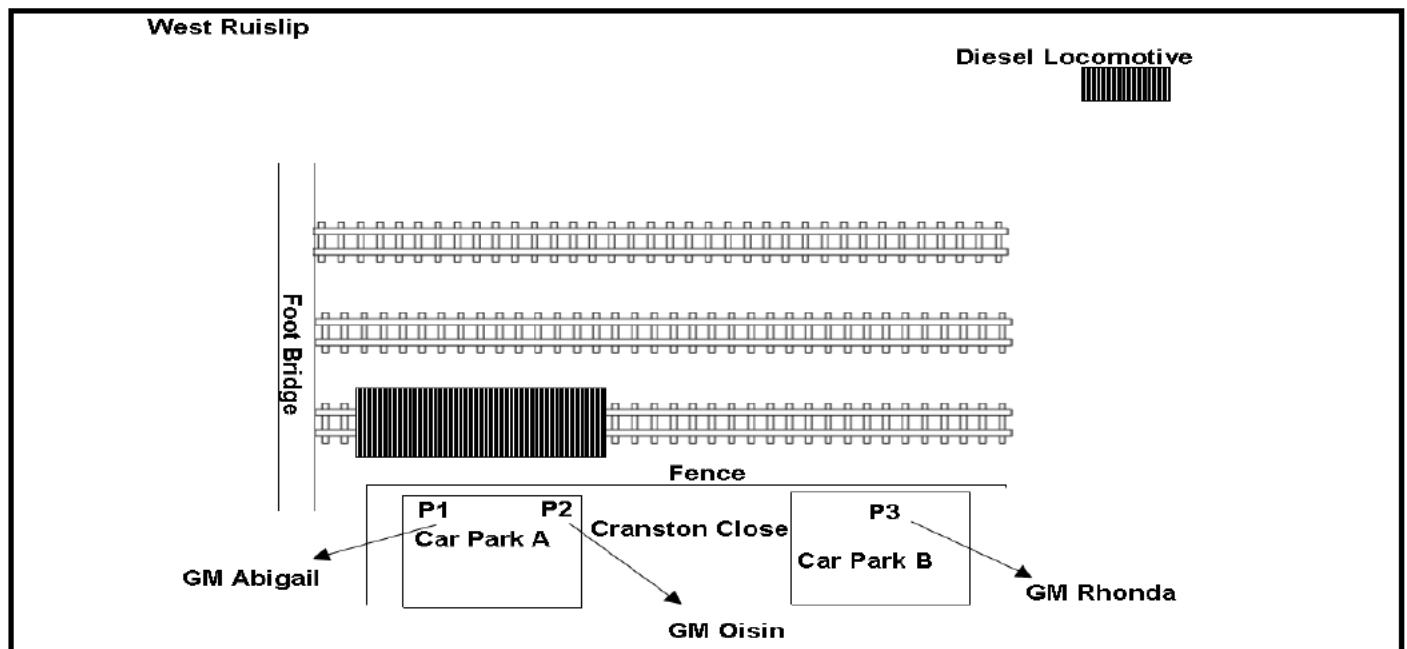
START PRESSURE 995 MILLIBARS

FINAL TEMPERATURE 2 °C

FINAL PRESSURE 995 MILLIBARS

BALANCE SERIAL No.	L40355	CALIBRATION DUE DATE	JUNE 2019	TIME KEEPING EQUIPMENT	460056	CALIBRATION DUE DATE	15/06/19
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FLOWMETER REF. No.	410509	CALIBRATION DUE DATE	02/05/19	TEMPERATURE GAUGE. No.	410737	CALIBRATION DUE DATE	30/07/19
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SITE DIAGRAM

REMARKS/OBSERVATIONS

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 :

DURING SAMPLING

22:10	ARRIVED AT MONITORING LOCATION – CRANSTON CLOSE CAR PARK. DIESEL LOCOMOTIVE IS STABLED NEXT TO CAR PARK.
22:15	MONITORING COMMENCED IN CAR PARK A (X2 AM AND X2 GM : ABIGAIL AND OISIN)
22:19	MONITORING COMMENCED IN CAR PARK B (X1 AM AND X2 GM : RHONDA)
22:50	DIESEL LOCOMOTIVE STARTED UP
	VISIBLE SMOKE PRODUCED WITHIN THE FIRST 10 MINUTE
	I COULD ALSO SMELL A BIT OF DIESEL IN THE LEFT HAND SIDE OF CAR PARK A DURING THAT TIME
	AFTER THAT LOCOMOTIVE CONTINUED IDLING BUT LESS VISIBLE SMOKE
00:19	AM AND GM CEASED IN BOTH CAR PARKS, LEAVE AND RETURN SAMPLES TO 4-RAIL LAB

DURING GRAVIMETRIC ANALYSIS
