



AEROSOL MONITORING CERTIFICATE OF ANALYSIS



CLIENT CHRIS THOMPSON - HMPS TEST DATE 13/12/18

ADDRESS 7TH FLOOR, 5 ENDEAVOUR SQUARE, PAGE No 1 OF 3
WESTFIELD AVENUE, LONDON E20 1JN JOB No 183215
WEST RUISLIP STATION/
SITE/LOCATION CRANSTON CLOSE CAR PARK – BLOCK CERTIFICATE No. C183215/131218/01
B

PROCESS BEING MONITORED DIESEL FUMES FROM IDLING LOCOMOTIVE

SAMPLES STATIC ANALYST (S) JK

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					
183215/10	R	P1 – Within train crew office, on corridor	07:30	-	-	11:20	2.2	490.38	< 0.02	
183215/11	R	P2 – Footbridge leading to train crew depot	07:30	-	-	11:20	2.2	490.38	0.04	
183215/12	R	P 3 – Cranston close car park block B	07:41	-	-	11:20	2.2	466.93	0.02	

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

TEMPERATURE: 3.0 °C

PRESSURE: 1016 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

21/12/18

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
183215/10	4RS42/441148	2.2	07:30	2.2	11:20	-	-	-	-	-	-	-	-
183215/11	4RS63/441154	2.2	07:30	2.2	11:20	-	-	-	-	-	-	-	-
183215/12	4RS45/441162	2.2	07:41	2.2	11:20	-	-	-	-	-	-	-	-

ENVIRONMENTAL CONDITIONS

START TEMPERATURE 2.0 °C

START PRESSURE 1016.0 MILLIBARS

FINAL TEMPERATURE 4.0 °C

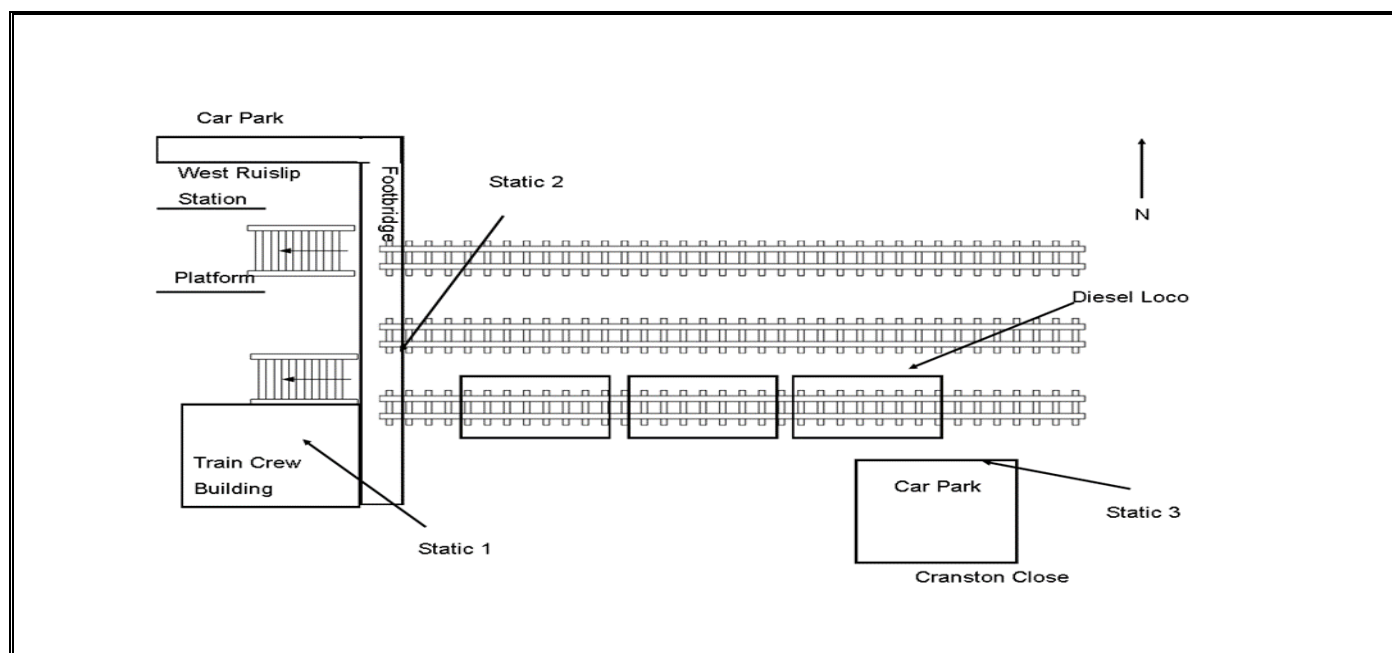
FINAL PRESSURE 1016.0 MILLIBARS

BALANCE SERIAL NO. L40355 CALIBRATION DUE DATE JUNE 2019

TIME KEEPING EQUIPMENT 460047 CALIBRATION DUE DATE 12/03/19

FLOWMETER REF. NO. 402819 CALIBRATION DUE DATE 05/03/19

TEMPERATURE GAUGE. NO. 410336 CALIBRATION DUE DATE 23/02/19

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

07:10	4RS STAFF AT WEST RUISLIP STATION. SIGNS IN WITH STATION SUPERVISOR AND PROCEEDS TO TRAIN CREW BUILDING AND SIGNS IN AT THE RECEPTION.
07:30	1 x AM RESPIRABLE PUMP (STATIC 1) + GAS MONITOR KAMIL COMMENCED WITHIN BUILDING CORRIDOR (WINDOW OPENED).
07:30	1 x AM RESPIRABLE PUMP (STATIC 2) + GAS MONITOR PENELOPE COMMENCED ON FOOTBRIDGE LEADING TO TRAIN CREW BUILDING BY ENTRANCE/ ACCESS DOOR.
07:40	1 x AM RESPIRABLE PUMP (STATIC 3) + GAS MONITOR ABIGAIL COMMENCED IN CAR PARK BLOCK B – CRANSTON CLOSE ON TRACKSIDE FENCE/ BOUNDARY.
	WEATHER CONDITIONS: COLD AND A BIT FOGGY. SOME SUNSHINE
11:20	TRAIN MOVEMENT FOR TODAY HAS BEEN CANCELLED
11:20	ALL GAS MONITORS AND PUMPS STOPPED
11:30	4RS SIGNS OUT AND IS OFF SITE

DURING GRAVIMETRIC ANALYSIS

NONE NOTED