



AEROSOL MONITORING CERTIFICATE OF ANALYSIS



CLIENT CHRIS THOMPSON - HMPS TEST DATE 14/12/18

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. C183215/141218/01
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					
183215/13	R	P1 – Within train crew office, on corridor	06:45	-	-	10:55	2.2	528.29	0.02	
183215/14	R	P2 – Footbridge leading to train crew depot	06:45	-	-	10:30	2.2	475.46	0.06	
183215/15	R	P 3 – Cranston close car park block B	06:45	-	-	10:55	2.2	528.29	0.05	

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

TEMPERATURE: - 0.5 °C

PRESSURE: 1021.2 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

20/12/18

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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
183215/13	4RS63/441154	2.2	06:45	2.2	10:55	-	-	-	-	-	-	-	-
183215/14	4RS42/441148	2.2	06:45	2.2	10:30	-	-	-	-	-	-	-	-
183215/15	4RS45/441162	2.2	06:45	2.2	10:55	-	-	-	-	-	-	-	-

ENVIRONMENTAL CONDITIONS

START TEMPERATURE 0 °C

START PRESSURE 1021.0 MILLIBARS

FINAL TEMPERATURE -1 °C

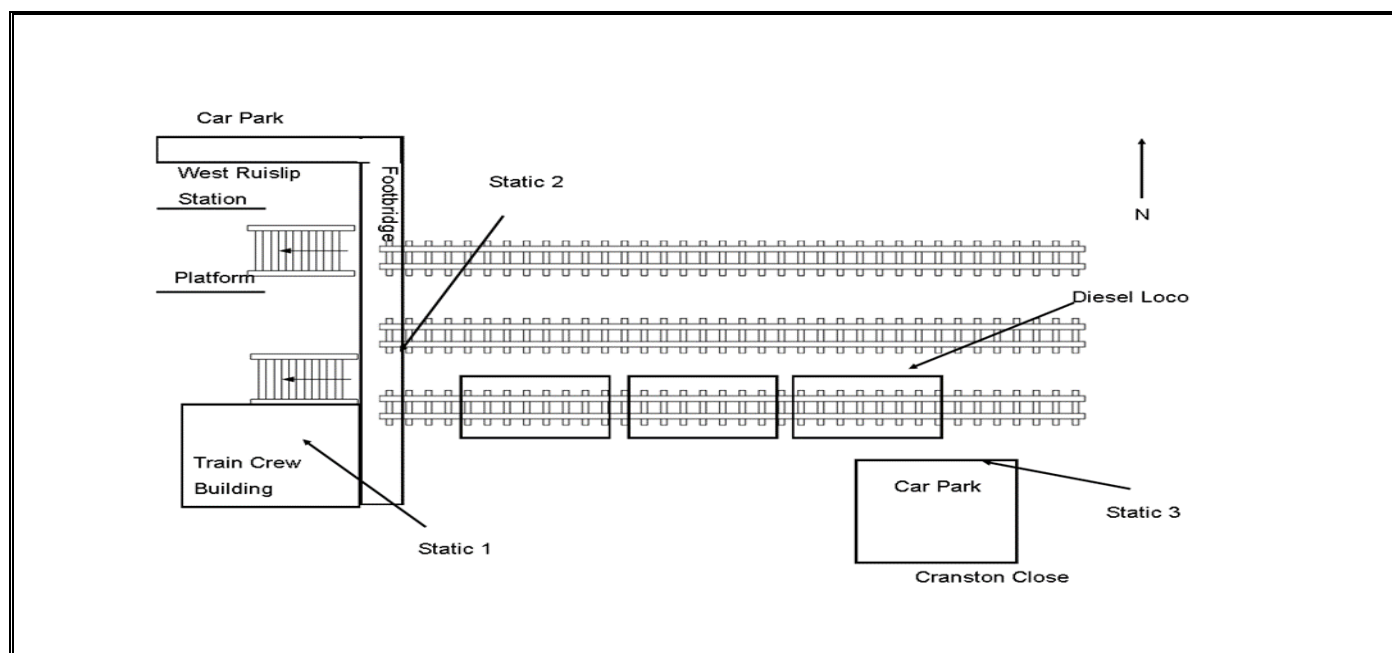
FINAL PRESSURE 1021.3 MILLIBARS

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

06:45	4RS STAFF AT WEST RUISLIP STATION. SIGNS IN WITH STATION SUPERVISOR AND PROCEEDS TO TRAIN CREW BUILDING AND SIGNS IN AT THE RECEPTION.
	THREE AIR SAMPLERS AND GAS MONITORS ARE POSITIONED AT THE THREE LOCATIONS (SEE PAGE 1) REQUESTED FOR MONITORING
7:00	4RS ARRIVED AT CRANSTON CLOSE GARAGES . LOCOMOTIVE STABLED ON THE ROAD ADJACENT TO THE GARAGES (SWITCHED OFF)
09:24	LOCOMOTIVE STARTED ITS ENGINES (2 NO.). EXHAUST NOTED AS DARK SMOKE.
10:29	LOCOMOTIVE MOVED INTO DEPOT.
10:30	MONITORING COMPLETE AT CRANSTON CLOSE GARAGES
10:55	MONITORING COMPLETE AT TRAIN CREW BUILDING.
11:20	4RS SIGNS OUT AND LEAVES SITE

DURING GRAVIMETRIC ANALYSIS

NONE NOTED