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THE TRUSTEE FOR MHA PBR ANNANDALE UNIT TRUST

Air Quality Assessment

122-128 & 130 Pyrmont Bridge Road and 206 Parramatta Road, Annandale NSW

E25196.E21_Rev1
25 June 2021

Document Control

Report Title: Air Quality Assessment

Report No: E25196.E21_Rev1

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Author	Technical Reviewer
	
Nikolce Aleksieski **Environmental Scientist** **Occupational Hygienist** **Licenced Asbestos Assessor (LAA001430)**	**Eric Gerges** **Principle Engineer**

Revision	Details	Date	Amended By
0	Original	24 June 2021	NA
1	Updated based on client comments	25 June 2021	

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1. Introduction

The Trustee for MHA PBR Annandale Unit Trust engaged EI Australia (EI) to prepare this Air Quality Assessment (AQA) for a development at 122-128 & 130 Pyrmont Bridge Road and 206 Parramatta Road, Annandale NSW (the site). The site covers a total area of approximately 2,623 m^2, and is located approximately 3.85 km south-west of the Sydney CBD (refer to **Appendix A, Figure 1**). This AQA should satisfy development consent in accordance with State Environmental Planning Policy (Infrastructure) 2007.

1.1 Proposed Development

The following documents, supplied by the Client, were used to assist with the preparation of this report:

- Architectural drawings prepared by BVN (2021) Camperdown Medical Facility – Urban Design Report, dated May 2021 (Drawing No. AR-D-XX-00, Issue B, BVN Project Number s1611019, dated 11 May 2021).

Based on the provided documents, EI understands that the proposed development involves the demolition of the existing site structures and the construction of an eight-storey medical facility building overlying two basement levels. The lowest basement level is proposed to have a Finished Floor Level (FFL) of RL +6.47m. A Bulk Excavation Level (BEL) of RL +6.17mAHD is assumed, which includes allowance for the construction of the basement slab. Locally deeper excavations may be required for footings, lift overrun pits, crane pads, and service trenches.

1.2 Property Identification, Location and Physical Setting

The site identification details and associated information are presented in **Table 1-1**, while the site locality is shown in **Figure 1**.

Table 1-1 Site Identification, Location and Zoning

Attribute	Description
Street Address	122-128 & 130 Pyrmont Bridge Road and 206 Parramatta Road, Annandale NSW
Location Description	The site is an irregular shaped block bounded by Pyrmont Bridge Road and Parramatta Road to the south followed by commercial properties, Commercial properties to the north, east and west Approximate coordinates for the south-western corner (datum GDA2020-MGA56): Easting: 331075.701 Northing: 6248842.427 (Source: http://maps.six.nsw.gov.au).
Site Area	Approximately 2,623 m^2
Lots and Deposited Plans (DPs)	Lot 1 in DP 539271, Lot 100 DP1101482, Lots 3/1, 4/1, 5/1, 6/1 and 12 in DP 976387.
Local Government Authority	Inner West Council
Current Zoning	IN2– Light Industrial (Leichhardt Local Environment Plan 2013)

Attribute	Description
Brief Site Description	The site is an irregular shape block of land, which is occupied by commercial / industrial warehouses. Hardstand concrete is expected to cover a vast majority of the site.

2. Scope of Work

Air monitoring was undertaken based on our own experience, including experience with contested applications, and address issued in the State Environmental Planning Policy (Infrastructure) 2007 and associated guidelines.

Monitors were installed at the site between 17 June 2021 and 19 June 2021. Dust Track II monitors and SKC VOC Chek 575 Passive Samplers were placed at two boundary locations. The MultiRAE was placed at one location. These locations are illustrated on **Figure 2.**

A summary of works undertaken at the site is provided in **Table 2-1.**

Table 2-1 Monitoring Undertaken

Parameter	Sampling Time	Method / Equipment Used
Dust PM_{10}	48 hrs (17 – 19 June 2021)	DustTrak II
Dust $PM_{2.5}$		
TVOCs	24 hrs (17 June 2021)	SKC VOC Chek 575 passive sampler
Lead	17 June 2021	Surface Swabs
Odour	17 – 19 June 2021	Olfactory assessment
CO_2	8 hr (17 June 2021)	Calibrated Portable MultiRAE Lite Pumped Photoionisation Detector (PID)
CO		

Results from the monitoring were compared against relevant assessment criteria and background levels for the area (based on NSW OEH air quality index values recorded at the Rozelle Monitoring Station).

3. Guidelines & Assessment Levels

Assessment criteria adopted as part of the assessment are outlined in **Table 3-1.**

Table 3-1 Assessment Criteria

Parameters	Assessment Criteria	Guideline
Dust PM_{10}	50 µg/m^3 (24h)	National Environmental Protection (Ambient Air Quality) Measure
Dust $PM_{2.5}$	25 µg/m^3 (24h)	
TVOC	500 mg/m^3	Australian Building Codes Board
Benzene	3 mg/m^3	National Environmental Protection (Air Toxics) Measure
Toluene	1000 mg/m^3 (24h)	
	100 mg/m^3 (24h, annual average)	
Xylenes	250 mg/m^3 (24h)	
	200 mg/m^3 (24h, annual average)	
Lead	1 mg/m^2 (interior floor)	AS/NZS 4361.2:2017 Guide to Hazardous Paint Management Part 2: Lead Paint in Residential, Public and Commercial Buildings
	5 mg/m^2 (interior window sills)	
	8 mg/m^2 (Exterior surfaces)	
CO^2	<850 ppm	Australian Building Codes Board
CO	9 ppm	

4. Results

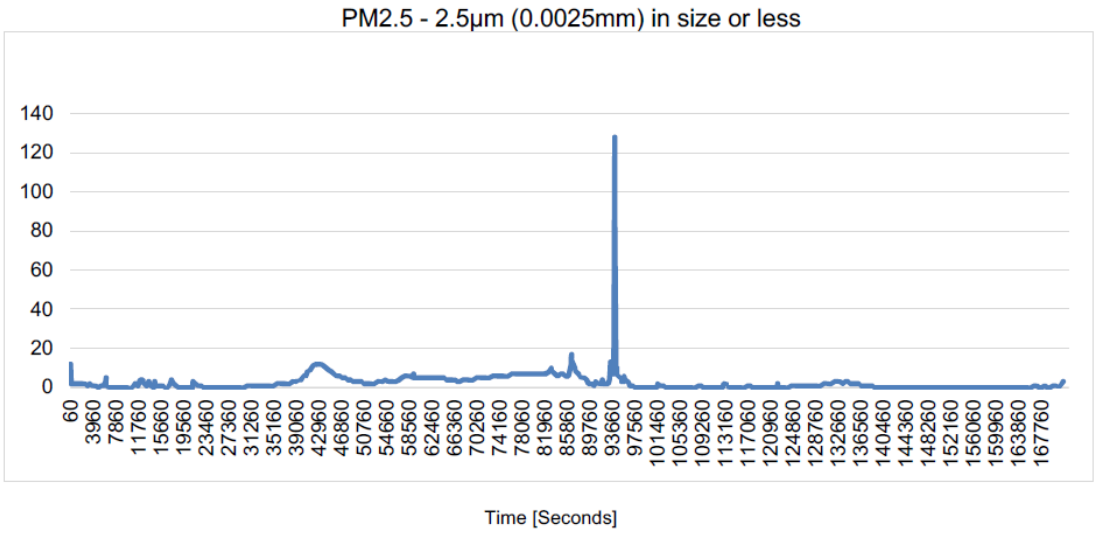
Results from the testing are included in **Appendix B.**

4.1 Particulate Matter

Table 4-1 PM 2.5 and 10 Monitoring Calculations

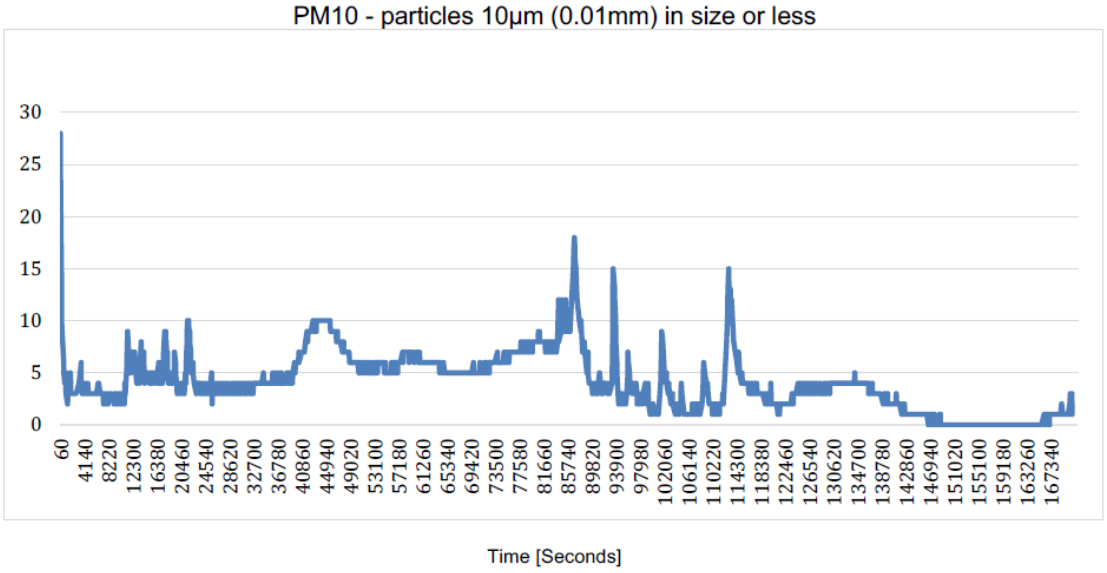
Fraction	Criteria	Time On	Time Off	Total Time (min)	Flow On (L/min)	Flow Off (L/min)	Log Intervals (sec)	Average Dust (mg/m^3)	Maximum Dust (mg/m^3)
$PM_{2.5}$	25 µg/m^3 (24h)	10:00	09:30	2850	3.0	3.0	5	1	128
PM_{10}	50 µg/m^3 (24h)	09:30	09:00	2850	3.0	3.0	5	4	28

Table 4-2 PM 2.5 Results



The maximum $PM_{2.5}$ exceeded (128 µg/m^3) the adopted criteria (25 µg/m^3) and the average results was below (1 µg/m^3) the adopted criteria (25 µg/m^3).

Table 4-3 PM 10 Results



The PM_{10} average and maximum concentration was below the adopted criteria (50 µg/m^3).

4.2 Air Toxics

Results for air toxics are summarised in **Table 4-3.**

Table 4-4 Air Toxics Results

Analyte	Assessment Criteria	Results
Benzene	3 mg/m^3	<0.05 mg/m^3
Toluene	1000 mg/m^3 (24h)	<0.25 mg/m^3
Xylenes	250 mg/m^3 (24h)	<0.33 mg/m^3
TVOC	<850 ppm	< LOR

Analyte	Assessment Criteria	Results
CO_2	<850 ppm	< LOR
CO	9 ppm	<LOR

Recorded concentrations of benzene, toluene, and xylene were below the adopted assessment criteria. In addition, all TVOC results were below the Limit of Reporting (LOR). CO^2 and CO were below the adopted assessment criteria. The analytical results are attached in **Appendix B.**

4.3 Lead

A total of three surface swab samples collected from site surfaces. The analytical results for lead swab samples collected from site surfaces are summarised in **Table 4-6**

Table 4-5 Lead in Soil Results

Sample Identification	Sample Location	Assessment Criteria	Swab Area (m^2)	Lead in Swab Sample (ug/swab)	Lead Loading (mg/m^2)
57593-1	Internal, middle of retail store, floor	1 mg/m^2 (interior floor)	0.09	42	0.46
57593-2	Internal, warehouse, middle floor			18	0.2
57593-3	Internal, warehouse, shelving rails	5 mg/m^2 (interior window sills)		2	0.02

No exceedances above the adopted assessment criteria was detected within the three samples collected. The analytical results are attached in **Appendix C**.

4.4 Olfactory Observations

During site visits on 17 to 19 June 2021, malodour was not identified by the field engineer.

5. Conclusions

The majority of measured analytes were within the adopted criteria for the site, with the exception of maximum dust ($PM_{2.5,}$ at 93660 seconds, refer to **Table 4-2**). Based on the above results, the site can be made suitable for the proposed development in regards to air quality.

6. STATEMENT OF LIMITATIONS

This report has been prepared for the exclusive use of The Trustee for MHA PBR Annandale Unit Trust ('the client'), who are the only intended beneficiaries of EI's work. The scope of the works carried out for the purpose of this report is limited to that agreed with the client.

No other party should rely on this document without the prior written consent of EI, and EI undertakes no duty, or accepts any responsibility or liability, to any third party who purports to rely upon this document without EI's approval.

EI has used a degree of care and skill ordinarily exercised in similar investigations by reputable members of the environmental industry in Australia as at the date of this document. No other warranty, expressed or implied, is made or intended. Each section of this report must be read in conjunction with the whole of this report, including its appendices and attachments.

The conclusions presented in this report are based on a limited investigation of conditions, with specific sampling locations chosen to be as representative as possible under the given circumstances.

EI's professional opinions are reasonable and based on its professional judgment, experience, training and results from analytical data. EI may also have relied upon information provided by the Client and other third parties to prepare this document, some of which may not have been verified by EI.

EI's professional opinions contained in this document are subject to modification if additional information is obtained through further investigation, observations, or validation testing and analysis during remedial activities. In some cases, further testing and analysis may be required, which may result in a further report with different conclusions. This report was prepared for the above named client and no responsibility is accepted for use of any part of this report in any other context or for any other purpose or by other third parties.

This report does not purport to provide legal advice.

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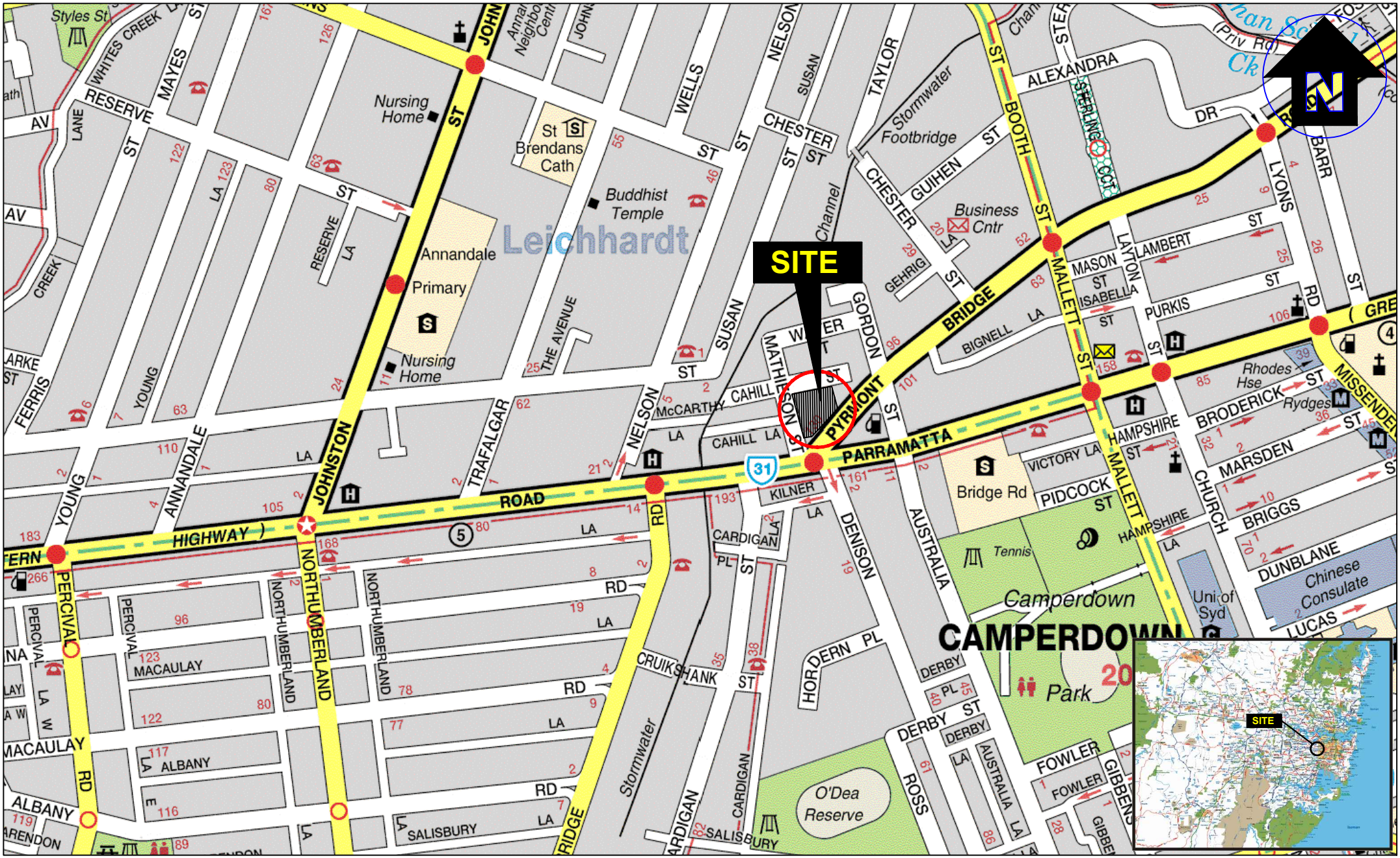
Appendix A - Figures



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Suite 6.01, 55 Miller Street, PYRMONT 2009
Ph (02) 9516 0722 Fax (02) 9518 5088

Drawn:	L.C.
Approved:	E.W.
Date:	24-06-21
Scale:	Not To Scale

The Trustee for MHA PBR Annandale Unit Trust
Air Quality Assessment
122-128 & 130 Pyrmont Bridge Road & 206 Parramatta Road, Annandale, NSW

Site Locality Plan

Figure: 1

Project: E25196 E21_Rev0

LEGEND

- Approximate site boundary
- Approximate location of MultiRAE Lite Pumped Photoionization Detector
- Approximate location of TSI8530/Dust Track II Desktop Monitors
- Approximate location of SKC VOC Chek 575 passive samplers

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The Trustee for MHA PBR Annandale Unit Trust

Air Quality Assessment

122-128 & 130 Pyrmont Bridge Road & 206 Parramatta Road, Annandale, NSW

Site Layout Plan

Figure: 2

Project: E25196 E21_Rev0

Appendix B – Air Toxics Laboratory Results

Envirolab Services (WA) Pty Ltd trading as MPL Laboratories
ABN 53 140 099 207
16-18 Hayden Court Myaree WA 6154
ph 08 9317 2505 fax 08 9317 4163
lab@mpl.com.au
www.mpl.com.au

CERTIFICATE OF ANALYSIS 264002

Client Details

Client	Airsafe Laboratories
Attention	Simon Gorham
Address	93 Beattie St, Balmain, NSW, 2041

Sample Details

Your Reference	**57596 - 122 Pyrmont Bridge Road**
Number of Samples	2 Badges
Date samples received	21/06/2021
Date completed instructions received	21/06/2021
Location	Camperdown
Sampler Name	Not applicable for this job

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Please refer to the last page of this report for any comments relating to the results.

Report Details

Date results requested by	22/06/2021
Date of Issue	22/06/2021

NATA Accreditation Number 2901. This document shall not be reproduced except in full.

Accredited for compliance with ISO/IEC 17025 - Testing. **Tests not covered by NATA are denoted with ***

Results Approved By
Travis Carey, Organics - Team Leader

Authorised By

Michael Kubiak, Laboratory Manager

VOC Suite 3 in Badges				
Our Reference			264002-1	264002-2
Your Reference	UNITS	PQL	57596-1	57596-2
Date Sampled			18/06/2021	18/06/2021
Type of sample			Passive Sampler	Passive Sampler
Sampling Time	minutes		1,390	1,390
Date extracted	-		21/06/2021	21/06/2021
Date analysed	-		22/06/2021	22/06/2021
Acetone	µg/badge	20	<20	<20
Acetone	mg/m³		<0.74^	<0.74^
Acetone	ppm		<0.311^	<0.311^
Diisobutylketone (DIBK)	µg/badge	5	<5	<5
Diisobutylketone (DIBK)	mg/m³		<0.35^	<0.35^
Diisobutylketone (DIBK)	ppm		<0.059^	<0.059^
Methyl Ethyl Ketone (MEK)	µg/badge	10	<10	<10
Methyl Ethyl Ketone (MEK)	mg/m³		<0.47^	<0.47^
Methyl Ethyl Ketone (MEK)	ppm		<0.158^	<0.158^
4-Methyl-2-Pentanone (MIBK)	µg/badge	5	<5	<5
4-Methyl-2-Pentanone (MIBK)	mg/m³		<0.25^	<0.25^
4-Methyl-2-Pentanone (MIBK)	ppm		<0.06^	<0.06^
3-Methyl-2-butanone (MIPK)	µg/badge	5	<5	<5
3-Methyl-2-butanone (MIPK)	mg/m³		<0.25^	<0.25^
3-Methyl-2-butanone (MIPK)	ppm		<0.072^	<0.072^
Cyclohexanone	µg/badge	5	<5	<5
Cyclohexanone	mg/m3		<0.24^	<0.24^
Cyclohexanone	ppm		<0.06^	<0.06^
Benzene	µg/badge	1	<1	<1
Benzene	mg/m³		<0.05	<0.05
Benzene	ppm		<0.015	<0.015
Toluene	µg/badge	5	<5	<5
Toluene	mg/m³		<0.25	<0.25
Toluene	ppm		<0.067	<0.067
Ethylbenzene	µg/badge	5	<5	<5
Ethylbenzene	mg/m³		<0.28	<0.28
Ethylbenzene	ppm		<0.064	<0.064
m+p Xylene	µg/badge	10	<10	<10
m+p Xylene	mg/m³		<0.59	<0.59
m+p Xylene	ppm		<0.136	<0.136
o Xylene	µg/badge	5	<5	<5
o Xylene	mg/m³		<0.33	<0.33

VOC Suite 3 in Badges				
Our Reference			264002-1	264002-2
Your Reference	UNITS	PQL	57596-1	57596-2
Date Sampled			18/06/2021	18/06/2021
Type of sample			Passive Sampler	Passive Sampler
o Xylene	ppm		<0.077	<0.077
Total Xylene	µg/badge	15	<15	<15
Total Xylene	mg/m3		<0.9	<0.9
Total Xylene	ppm		<0.2	<0.2
MtBE	µg/badge	10	<10	<10
MtBE	mg/m3		<0.54	<0.54
MtBE	ppm		<0.151	<0.151
1,2,4-Trimethylbenzene	µg/badge	5	<5	<5
1,2,4-Trimethylbenzene	mg/m³		<0.34	<0.34
1,2,4-Trimethylbenzene	ppm		<0.068	<0.068
1,3,5-Trimethylbenzene	µg/badge	5	<5	<5
1,3,5-Trimethylbenzene	mg/m³		<0.32	<0.32
1,3,5-Trimethylbenzene	ppm		<0.065	<0.065
4-Isopropyltoluene	µg/badge	5	<5	<5
4-Isopropyltoluene	mg/m³		<0.3^	<0.3^
4-Isopropyltoluene	ppm		<0.054^	<0.054^
a-methyl styrene	µg/badge	5	<5	<5
a-methylstyrene	mg/m3		<0.32^	<0.32^
a-methylstyrene	ppm		<0.067^	<0.067^
Isopropylbenzene (Cumene)	µg/badge	5	<5	<5
Isopropylbenzene (Cumene)	mg/m³		<0.28	<0.28
Isopropylbenzene (Cumene)	ppm		<0.058	<0.058
Naphthalene	µg/badge	5	<5	<5
Naphthalene	mg/m³		<0.3^	<0.3^
Naphthalene	ppm		<0.057^	<0.057^
n-butylbenzene	µg/badge	5	<5	<5
n-butylbenzene	mg/m³		<0.3^	<0.3^
n-butylbenzene	ppm		<0.054^	<0.054^
n-propylbenzene	µg/badge	5	<5	<5
n-propylbenzene	mg/m³		<0.28^	<0.28^
n-propylbenzene	ppm		<0.058^	<0.058^
s-butylbenzene	µg/badge	5	<5	<5
s-butylbenzene	mg/m³		<0.3^	<0.3^
s-butylbenzene	ppm		<0.054^	<0.054^
Styrene	µg/badge	5	<5	<5
Styrene	mg/m³		<0.28^	<0.28^

VOC Suite 3 in Badges				
Our Reference	UNITS	PQL	264002-1	264002-2
Your Reference			57596-1	57596-2
Date Sampled			18/06/2021	18/06/2021
Type of sample			Passive Sampler	Passive Sampler
Styrene	ppm		<0.065^	<0.065^
t-butylbenzene	µg/badge	5	<5	<5
t-butylbenzene	mg/m³		<0.3^	<0.3^
t-butylbenzene	ppm		<0.054^	<0.054^
1,1,1,2-Tetrachloroethane	µg/badge	5	<5	<5
1,1,1,2-Tetrachloroethane	mg/m³		<0.27^	<0.27^
1,1,1,2-Tetrachloroethane	ppm		<0.04^	<0.04^
1,1,1,-Trichloroethane	µg/badge	5	<5	<5
1,1,1,-Trichloroethane	mg/m³		<0.26	<0.26
1,1,1,-Trichloroethane	ppm		<0.047	<0.047
1,1,2,2-Tetrachloroethane	µg/badge	5	<5	<5
1,1,2,2-Tetrachloroethane	mg/m³		<0.47	<0.47
1,1,2,2-Tetrachloroethane	ppm		<0.069	<0.069
1,1,2,-Trichloroethane	µg/badge	5	<5	<5
1,1,2,-Trichloroethane	mg/m³		<0.3	<0.3
1,1,2,-Trichloroethane	ppm		<0.055	<0.055
1,1-Dichloroethane	µg/badge	5	<5	<5
1,1-Dichloroethane	mg/m³		<0.26	<0.26
1,1-Dichloroethane	ppm		<0.065	<0.065
1,1-dichloroethene	µg/badge	5	<5	<5
1,1-Dichloroethene	mg/m³		<0.31	<0.31
1,1-Dichloroethene	ppm		<0.078	<0.078
1,1-Dichloropropene	µg/badge	5	<5	<5
1,1-Dichloropropene	mg/m³		<0.33^	<0.33^
1,1-Dichloropropene	ppm		<0.073^	<0.073^
1,2,3-Trichlorobenzene	µg/badge	5	<5	<5
1,2,3-Trichlorobenzene	mg/m³		<0.27^	<0.27^
1,2,3-Trichlorobenzene	ppm		<0.036^	<0.036^
1,2,3-Trichloropropane	µg/badge	5	<5	<5
1,2,3-Trichloropropane	mg/m³		<0.31	<0.31
1,2,3-Trichloropropane	ppm		<0.051	<0.051
1,2,4-Trichlorobenzene	µg/badge	5	<5	<5
1,2,4-Trichlorobenzene	mg/m³		<0.27^	<0.27^
1,2,4-Trichlorobenzene	ppm		<0.036^	<0.036^
1,2-Dibromo-3-chloropropane	µg/badge	5	<5	<5
1,2-Dibromo-3-chloropropane	mg/m³		<0.18^	<0.18^

VOC Suite 3 in Badges				
Our Reference	UNITS	PQL	264002-1	264002-2
Your Reference			57596-1	57596-2
Date Sampled			18/06/2021	18/06/2021
Type of sample			Passive Sampler	Passive Sampler
1,2-Dibromo-3-chloropropane	ppm		<0.019^	<0.019^
1,2-dibromoethane	µg/badge	5	<5	<5
1,2-dibromoethane	mg/m³		<0.27	<0.27
1,2-dibromoethane	ppm		<0.035	<0.035
1,2-Dichlorobenzene	µg/badge	5	<5	<5
1,2-Dichlorobenzene	mg/m³		<0.36	<0.36
1,2-Dichlorobenzene	ppm		<0.06	<0.06
1,2-Dichloroethane	µg/badge	5	<5	<5
1,2-Dichloroethane	mg/m³		<0.26	<0.26
1,2-Dichloroethane	ppm		<0.065	<0.065
1,2-Dichloropropane	µg/badge	5	<5	<5
1,2-Dichloropropane	mg/m³		<0.26	<0.26
1,2-Dichloropropane	ppm		<0.056	<0.056
1,3-Dichlorobenzene	µg/badge	5	<5	<5
1,3-Dichlorobenzene	mg/m³		<0.31	<0.31
1,3-Dichlorobenzene	ppm		<0.051	<0.051
1,3-Dichloropropane	µg/badge	5	<5	<5
1,3-Dichloropropane	mg/m³		<0.26^	<0.26^
1,3-Dichloropropane	ppm		<0.056^	<0.056^
1,4-Dichlorobenzene	µg/badge	5	<5	<5
1,4-Dichlorobenzene	mg/m³		<0.31	<0.31
1,4-Dichlorobenzene	ppm		<0.052	<0.052
2,2-Dichloropropane	µg/badge	5	<5	<5
2,2-Dichloropropane	mg/m³		<0.27^	<0.27^
2,2-Dichloropropane	ppm		<0.059^	<0.059^
2-Chlorotoluene	µg/badge	5	<5	<5
2-Chlorotoluene	mg/m³		<0.3^	<0.3^
2-Chlorotoluene	ppm		<0.057^	<0.057^
4-Chlorotoluene	µg/badge	5	<5	<5
4-Chlorotoluene	mg/m³		<0.3^	<0.3^
4-Chlorotoluene	ppm		<0.057^	<0.057^
Bromobenzene	µg/badge	5	<5	<5
Bromobenzene	mg/m³		<0.26^	<0.26^
Bromobenzene	ppm		<0.04^	<0.04^
Bromochloromethane	µg/badge	5	<5	<5
Bromochloromethane	mg/m³		<0.23^	<0.23^

VOC Suite 3 in Badges				
Our Reference	UNITS	PQL	264002-1	264002-2
Your Reference			57596-1	57596-2
Date Sampled			18/06/2021	18/06/2021
Type of sample			Passive Sampler	Passive Sampler
Bromochloromethane	ppm		<0.043^	<0.043^
Bromodichloromethane	µg/badge	5	<5	<5
Bromodichloromethane	mg/m³		<0.27^	<0.27^
Bromodichloromethane	ppm		<0.041^	<0.041^
Tribromomethane (Bromoform)	µg/badge	5	<5	<5
Tribromomethane (Bromoform)	mg/m³		<0.18^	<0.18^
Tribromomethane (Bromoform)	ppm		<0.018^	<0.018^
Carbon Tetrachloride	µg/badge	5	<5	<5
Carbon Tetrachloride	mg/m³		<0.26	<0.26
Carbon Tetrachloride	ppm		<0.041	<0.041
Chlorobenzene	µg/badge	5	<5	<5
Chlorobenzene	mg/m³		<0.27	<0.27
Chlorobenzene	ppm		<0.059	<0.059
Trichloromethane (Chloroform)	µg/badge	5	<5	<5
Trichloromethane (Chloroform)	mg/m³		<0.28	<0.28
Trichloromethane (Chloroform)	ppm		<0.058	<0.058
cis-1,2-Dichloroethene	µg/badge	5	<5	<5
cis-1,2-dichloroethene	mg/m³		<0.25	<0.25
cis-1,2-dichloroethene	ppm		<0.063	<0.063
cis-13-dichloropropene	µg/badge	5	<5	<5
cis-13-dichloropropene	mg/m³		<0.26	<0.26
cis-13-dichloropropene	ppm		<0.057	<0.057
Chlorodibromomethane	µg/badge	5	<5	<5
Chlorodibromomethane	mg/m³		<0.27^	<0.27^
Chlorodibromomethane	ppm		<0.031^	<0.031^
Dibromomethane	µg/badge	5	<5	<5
Dibromomethane	mg/m³		<0.47^	<0.47^
Dibromomethane	ppm		<0.067^	<0.067^
Hexachlorobutadiene	µg/badge	5	<5	<5
Hexachlorobutadiene	mg/m³		<0.18^	<0.18^
Hexachlorobutadiene	ppm		<0.017^	<0.017^
Tetrachloroethene (PCE)	µg/badge	5	<5	<5
Tetrachloroethene (PCE)	mg/m³		<0.27	<0.27
Tetrachloroethene (PCE)	ppm		<0.04	<0.04
trans-1,3-dichloropropene	µg/badge	5	<5	<5
trans-1,3-dichloropropene	mg/m³		<0.26^	<0.26^

VOC Suite 3 in Badges				
Our Reference	UNITS	PQL	264002-1	264002-2
Your Reference			57596-1	57596-2
Date Sampled			18/06/2021	18/06/2021
Type of sample			Passive Sampler	Passive Sampler
trans-1,3-dichloropropene	ppm		<0.057^	<0.057^
Trichloroethene (TCE)	µg/badge	5	<5	<5
Trichloroethene (TCE)	mg/m³		<0.24	<0.24
Trichloroethene (TCE)	ppm		<0.044	<0.044
Hexane	µg/badge	5	<5	<5
Hexane	mg/m³		<0.25	<0.25
Hexane	ppm		<0.071	<0.071
Heptane	µg/badge	5	<5	<5
Heptane	mg/m³		<0.25	<0.25
Heptane	ppm		<0.06	<0.06
Octane	µg/badge	5	<5	<5
Octane	mg/m3		<0.27	<0.27
Octane	ppm		<0.057	<0.057
Nonane	µg/badge	5	<5	<5
Nonane	mg/m3		<0.33	<0.33
Nonane	ppm		<0.063	<0.063
Decane	µg/badge	5	<5	<5
Decane	mg/m3		<0.35	<0.35
Decane	ppm		<0.06	<0.06
Dodecane	µg/badge	5	<5	<5
Dodecane	mg/m3		<0.47^	<0.47^
Dodecane	ppm		<0.068^	<0.068^
Cyclohexane	µg/badge	5	<5	<5
Cyclohexane	mg/m3		<0.22	<0.22
Cyclohexane	ppm		<0.064	<0.064
3-Methylhexane	µg/badge	5	<5	<5
3-Methylhexane	mg/m³		<0.25^	<0.25^
3-Methylhexane	ppm		<0.06^	<0.06^
Methylcyclohexane	µg/badge	5	<5	<5
Methylcyclohexane	mg/m3		<0.24	<0.24
Methylcyclohexane	ppm		<0.06	<0.06
Acrylonitrile	µg/badge	5	<5	<5
Acrylonitrile	mg/m³		<0.18^	<0.18^
Acrylonitrile	ppm		<0.085^	<0.085^
n-Butyl Acetate	µg/badge	10	<10	<10
n-Butyl Acetate	mg/m3		<0.65	<0.65

VOC Suite 3 in Badges				
Our Reference	UNITS	PQL	264002-1	264002-2
Your Reference			57596-1	57596-2
Date Sampled			18/06/2021	18/06/2021
Type of sample			Passive Sampler	Passive Sampler
n-Butyl Acetate	ppm		<0.136	<0.136
Ethyl acetate	µg/badge	5	<5	<5
Ethyl Acetate	mg/m3		<0.3	<0.3
Ethyl Acetate	ppm		<0.082	<0.082
Ethyl Acrylate	µg/badge	5	<5	<5
Ethyl Acrylate	mg/m3		<0.25^	<0.25^
Ethyl Acrylate	ppm		<0.06^	<0.06^
Methylcyclopentane	µg/badge	5	<5	<5
Methylcyclopentane	mg/m^3		<0.22^	<0.22^
Methylcyclopentane	ppm		<0.064^	<0.064^
3-Methylpentane	µg/badge	5	<5	<5
3-Methylpentane	mg/m^3		<0.25^	<0.25^
3-Methylpentane	ppm		<0.071^	<0.071^
1,4-Dioxane	µg/badge	5	<5	<5
1,4-Dioxane	mg/m3		<0.27^	<0.27^
1,4-Dioxane	ppm		<0.075^	<0.075^
Benzyl chloride	µg/badge	5	<5	<5
Benzyl Chloride	mg/m3		<0.3	<0.3
Benzyl Chloride	ppm		<0.057	<0.057
Epichlorohydrin	µg/badge	5	<5	<5
Epichlorohydrin	mg/m3		<0.32	<0.32
Epichlorohydrin	ppm		<0.084	<0.084
Surrogate Toluene-d_8	%		90	89

Method ID	Methodology Summary
Org-020/022/025	Organic Vapours using GC-FID/GC-MS/GC-MSMS analysis in accordance with NIOSH methodology.

QUALITY CONTROL: VOC Suite 3 in Badges					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date extracted	-			21/06/2021	[NT]	[NT]	[NT]	[NT]	21/06/2021	[NT]
Date analysed	-			22/06/2021	[NT]	[NT]	[NT]	[NT]	22/06/2021	[NT]
Acetone	µg/badge	20	Org-020/022/025	<20	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Diisobutylketone (DIBK)	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Methyl Ethyl Ketone (MEK)	µg/badge	10	Org-020/022/025	<10	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
4-Methyl-2-Pentanone (MIBK)	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
3-Methyl-2-butanone (MIPK)	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Cyclohexanone	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Benzene	µg/badge	1	Org-020/022/025	<1	[NT]	[NT]	[NT]	[NT]	92	[NT]
Toluene	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	90	[NT]
Ethylbenzene	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	90	[NT]
m+p Xylene	µg/badge	10	Org-020/022/025	<10	[NT]	[NT]	[NT]	[NT]	92	[NT]
o Xylene	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	89	[NT]
Total Xylene	µg/badge	15	Org-020/022/025	<15	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
MtBE	µg/badge	10	Org-020/022/025	<10	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,2,4-Trimethylbenzene	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,3,5-Trimethylbenzene	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
4-Isopropyltoluene	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
a-methyl styrene	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Isopropylbenzene (Cumene)	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Naphthalene	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
n-butylbenzene	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
n-propylbenzene	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
s-butylbenzene	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Styrene	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
t-butylbenzene	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,1,1,2-Tetrachloroethane	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,1,1,-Trichloroethane	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,1,2,2-Tetrachloroethane	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,1,2,-Trichloroethane	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,1-Dichloroethane	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	94	[NT]
1,1-dichloroethene	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,1-Dichloropropene	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,2,3-Trichlorobenzene	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,2,3-Trichloropropane	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,2,4-Trichlorobenzene	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	90	[NT]
1,2-Dibromo-3-chloropropane	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,2-dibromoethane	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,2-Dichlorobenzene	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,2-Dichloroethane	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]

QUALITY CONTROL: VOC Suite 3 in Badges					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
1,2-Dichloropropane	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,3-Dichlorobenzene	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,3-Dichloropropane	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,4-Dichlorobenzene	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	92	[NT]
2,2-Dichloropropane	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
2-Chlorotoluene	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
4-Chlorotoluene	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Bromobenzene	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Bromochloromethane	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Bromodichloromethane	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Tribromomethane (Bromoform)	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Carbon Tetrachloride	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	91	[NT]
Chlorobenzene	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Trichloromethane (Chloroform)	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	90	[NT]
cis-1,2-Dichloroethene	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
cis-13-dichloropropene	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Chlorodibromomethane	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Dibromomethane	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Hexachlorobutadiene	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Tetrachloroethene (PCE)	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	96	[NT]
trans-1,3-dichloropropene	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Trichloroethene (TCE)	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	87	[NT]
Hexane	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Heptane	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Octane	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Nonane	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Decane	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Dodecane	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Cyclohexane	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
3-Methylhexane	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Methylcyclohexane	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Acrylonitrile	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
n-Butyl Acetate	µg/badge	10	Org-020/022/025	<10	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Ethyl acetate	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Ethyl Acrylate	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Methylcyclopentane	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
3-Methylpentane	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
1,4-Dioxane	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Benzyl chloride	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Epichlorohydrin	µg/badge	5	Org-020/022/025	<5	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]

QUALITY CONTROL: VOC Suite 3 in Badges					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Surrogate Toluene-d_8	%			108	[NT]	[NT]	[NT]	[NT]	88	[NT]

Result Definitions

DOL	Samples rejected due to particulate overload
RPF	Sample rejected due to pump failure
RFD	Sample rejected due to filter damage
RUD	Sample rejected due to uneven deposition
PQL	Practical quantitation limit

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.

The recommended maximums for analytes in urine are taken from “2018 TLVs and BEIs”, as published by ACGIH (where available). Limit provided for Nickel is a precautionary guideline as per Position Paper prepared by AIOH Exposure Standards Committee, 2016.

Guideline limits for Rinse Water Quality reported as per analytical requirements and specifications of AS 4187, Amdt 2 2019, Table 7.2

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Measurement Uncertainty estimates are available for most tests upon request.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

Report Comments

VOC Suite 3 in Badges - ^sampling rate and/or desorption efficiency data unavailable for this media - values used are based on data available for target analytes with a similar chemical structure.

Appendix C – Lead Swab Laboratory Results

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CERTIFICATE OF ANALYSIS 271895

Client Details

Client	Airsafe Laboratories
Attention	Simon Gorham
Address	93 Beattie St, Balmain, NSW, 2041

Sample Details

Your Reference	**57593, 122 Pyrmont Bridge Rd Camperdown**
Number of Samples	3 Swab
Date samples received	17/06/2021
Date completed instructions received	17/06/2021

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

Date results requested by	18/06/2021
Date of Issue	18/06/2021

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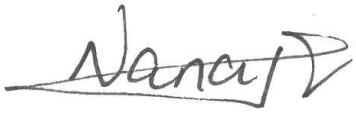
Results Approved By
Giovanni Agosti, Group Technical Manager

Authorised By



Nancy Zhang, Laboratory Manager

Lead in swab				
Our Reference		271895-1	271895-2	271895-3
Your Reference	UNITS	57593-1	57593-2	57593-3
Date Sampled		17/06/2021	17/06/2021	17/06/2021
Type of sample		Swab	Swab	Swab
Date prepared	-	18/06/2021	18/06/2021	18/06/2021
Date analysed	-	18/06/2021	18/06/2021	18/06/2021
Lead in Swabs	µg/swab	42	18	2

Method ID	Methodology Summary
Metals-020/021/022	Digestion of Dust wipes/swabs and /or miscellaneous samples for Metals determination by ICP-AES/MS and/or CV-AAS

QUALITY CONTROL: Lead in swab					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			18/06/2021	[NT]	[NT]	[NT]	[NT]	18/06/2021	[NT]
Date analysed	-			18/06/2021	[NT]	[NT]	[NT]	[NT]	18/06/2021	[NT]
Lead in Swabs	µg/swab	1	Metals-020/021/022	<1	[NT]	[NT]	[NT]	[NT]	96	[NT]

Result Definitions

NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.

The recommended maximums for analytes in urine are taken from “2018 TLVs and BEIs”, as published by ACGIH (where available). Limit provided for Nickel is a precautionary guideline as per Position Paper prepared by AIOH Exposure Standards Committee, 2016.

Guideline limits for Rinse Water Quality reported as per analytical requirements and specifications of AS 4187, Amdt 2 2019, Table 7.2

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.