

25 November 2022

640.30578.00100-L02-v1.0-LOA-20221128.docx

Darebin City Council  
274 Gower Street, Preston Victoria 3072

**Attention: Daniel DeSimone**

Dear Daniel,

**Letter of Advice**  
**Melbourne Innovation Centre**  
**2 Wingrove Street, Alphington Victoria 3078**

## 1 Introduction

SLR Consulting Australia Pty Ltd (SLR) was requested by Daniel DeSimone of Darebin City Council to conduct sampling of surface dusts for asbestos content, and to undertake background air monitoring during sampling at Building 2A, 2 Wingrove Street, Alphington Victoria 3078 to ascertain extent of potential Asbestos Containing Dust (ACD) and to determine the extent of removal works required. The assessment was conducted on 23 November 2022 by James Bracken/Krishna Kadali from SLR.

The property located at currently 2 Wingrove Street, Alphington Victoria 3078 has a conforming Asbestos Register under the Work Health and Safety Regulation (2011).

**Figure 1 Site Location**



Image Taken from Nearmap 2022

## 2 Methodologies

The asbestos dust sampling was undertaken considering a risk management approach, in accordance with best practice, State Legislation and Safe Work Australia NOHSC Guidance. The survey was conducted in a manner which conforms with the *Occupational Health and Safety Regulations 2017*.

Control airborne fibre monitoring was conducted in accordance with Test Method NOHSC: 3003(2005) and SLR in-house technical procedures.

### 2.1 Asbestos Containing Dust (ACD)

Samples collection was performed by competent persons. Presumptions, based on knowledge and experience, that inaccessible areas may contain asbestos materials may also be made and stated within the report.

This letter of advice summarises the visual inspection with sampling/analysis of materials undertaken by a trained and experienced surveyor. Materials are assumed to contain asbestos where laboratory analysis has confirmed the presence of asbestos in a visually similar material.

Samples collected are representative of the material sampled, individually identified, transported, analysed and reported in accordance with Guidelines, relevant Statutory Regulations, Codes of Practice and SLR in-house Work Instructions and procedures. Samples were submitted to a NATA certified laboratory for confirmation analysis by stereo microscope and polarised light microscopy (PLM) with dispersion staining techniques.

Notably, with some asbestos containing bulk material it can be very difficult, or impossible, to detect the presence of asbestos using the polarised light microscopy analytical method, even after ashing or disintegration of samples. This is due to the low grade or small length or diameter of asbestos fibres present in the material, or attributed to the fact that, very fine fibres have been distributed individually throughout the materials. Some materials, such as vinyl tiles, may require further analysis via X-ray diffraction or Scanning Electron Microscopy.

## 3 Results

SLR obtained a total of 43 dust samples. Refer to **Table 1** for sample locations and results. Refer to **Appendix A** for Certificate of Analysis and **Appendix B** for Airborne Asbestos Monitoring Report. Photographic evidence can be found within **Appendix C**.

**Table 1 Sample Locations and Results**

Sample No.	Sample Location	Sample Description (including Weight/Size)	Analysis Results
11-873	Building 2A – North Wall – Left (at 1 meter height)	Approximate Sample 2g Sample consisted of: Dust	No Asbestos Detected
11-874	Building 2A – North Wall – Centre (at 1 meter height)	Approximate Sample 5g Sample consisted of: Dust	No Asbestos Detected
11-875	Building 2A – North Wall – Right (at 1 meter height)	Approximate Sample 1g Sample consisted of: Dust	No Asbestos Detected
11-876	Building 2A – North Wall – Left (at 2 meter height)	Approximate Sample 3g Sample consisted of: Dust	No Asbestos Detected
11-877	Building 2A – North Wall – Centre (at 2 meter height)	Approximate Sample 3g Sample consisted of: Dust	No Asbestos Detected

Sample No.	Sample Location	Sample Description (including Weight/Size)	Analysis Results
11-878	Building 2A – North Wall – Right (at 2 meter height)	Approximate Sample 2g Sample consisted of: Dust	No Asbestos Detected
11-879	Building 2A – North Wall – Left (at 3 meter height)	Approximate Sample <1g Sample consisted of: Dust	Chrysotile asbestos detected in the form of loose fibres of approximate size 10 x 5 x 2mm. Synthetic mineral fibres detected. Organic fibres detected. No trace asbestos detected.
11-880	Building 2A – North Wall – Right (at 3 meter height)	Approximate Sample <1g Sample consisted of: Dust	Chrysotile asbestos detected in the form of loose fibres of approximate size 5 x 5 x 2mm. Synthetic mineral fibres detected. Organic fibres detected. No trace asbestos detected.
11-881	Building 2A – East Wall – Shelf – Left (at 1 meter height)	Approximate Sample <1g Sample consisted of: Dust	No Asbestos Detected
11-882	Building 2A – East Wall – Right (at 1 meter height)	Approximate Sample <1g Sample consisted of: Dust	No Asbestos Detected
11-883	Building 2A – East Wall – Shelf (at 3 meter height)	Approximate Sample 2g Sample consisted of: Dust	No Asbestos Detected
11-884	Building 2A – East Wall – Left (at 4 meter height)	Approximate Sample 2g Sample consisted of: Dust	No Asbestos Detected
11-885	Building 2A – East Wall – Shelf - Centre (at 3 meter height)	Approximate Sample 2g Sample consisted of: Dust	Chrysotile asbestos detected in the form of loose fibre bundle approximate size: 5 x 1 x 1mm. Organic fibre detected. Synthetic mineral fibre detected. No trace asbestos detected.
11-886	Building 2A – East Wall – Centre (at 4 meter height)	Approximate Sample 2g Sample consisted of: Dust	No Asbestos Detected
11-887	Building 2A – South Wall – Centre (at 1 meter height)	Approximate Sample 3g Sample consisted of: Dust	No Asbestos Detected
11-888	Building 2A – South Wall – Right (at 1 meter height)	Approximate Sample 3g Sample consisted of: Dust	No Asbestos Detected
11-889	Building 2A – South Wall – Centre (at 2 meter height)	Approximate Sample 3g Sample consisted of: Dust	No Asbestos Detected
11-890	Building 2A – South Wall – Right (at 2 meter height)	Approximate Sample 3g Sample consisted of: Dust	No Asbestos Detected

Sample No.	Sample Location	Sample Description (including Weight/Size)	Analysis Results
11-891	Building 2A – West Wall – Left (at 3 meter height)	Approximate Sample 3g Sample consisted of: Dust	No Asbestos Detected
11-892	Building 2A – West Wall – Left (at 4 meter height)	Approximate Sample 2g Sample consisted of: Dust	No Asbestos Detected
11-893	Building 2A – West Wall – Right (at 3 meter height)	Approximate Sample 8g Sample consisted of: Dust	Chrysotile asbestos detected in fibre cement fragments of approximate size 5 x 2 x 2mm. Synthetic mineral fibres detected. Organic fibres detected. No trace asbestos detected.
11-894	Building 2A – North Wall – Right (at 4 meter height)	Approximate Sample 3g Sample consisted of: Dust	Chrysotile asbestos detected in the form of loose fibres of approximate size 5 x 5 x 2mm. Synthetic mineral fibres detected. Organic fibres detected. No trace asbestos detected.
11-895	Building 2A – Equipment – Band Saw	Approximate Sample <1g Sample consisted of: Dust	No Asbestos Detected
11-896	Building 2A – Floor -West	Approximate Sample 4g Sample consisted of: Dust	No Asbestos Detected
11-897	Building 2A – Floor – East	Approximate Sample 2g Sample consisted of: Dust	No Asbestos Detected
11-898	Building 2A – South Wall – Switchboard (at 1 meter height)	Approximate Sample 4g Sample consisted of: Dust	Chrysotile asbestos detected in the form of loose fibres of approximate size 5 x 5 x 2mm. Synthetic mineral fibres detected. Organic fibres detected. No trace asbestos detected.
11-899	Building 2A – South Wall – Right (at 1 meter height)	Approximate Sample 4g Sample consisted of: Dust	No Asbestos Detected
11-900	Building 2A – Equipment – Compressor	Approximate Sample 2g Sample consisted of: Dust	No Asbestos Detected
11-901	Building 2A – West Cupboard – Centre (at 1 meter height)	Approximate Sample <1g Sample consisted of: Dust	No Asbestos Detected
11-902	Building 2A – Shelf – Centre (at 1 meter height)	Approximate Sample 2g Sample consisted of: Dust	Chrysotile asbestos detected in the form of loose fibres of approximate size 10 x 5 x 2mm. Synthetic mineral fibres detected. Organic fibres detected. No trace asbestos detected.

Sample No.	Sample Location	Sample Description (including Weight/Size)	Analysis Results
11-903	Building 2A – South Wall – Centre (at 3 meter height)	Approximate Sample 2g Sample consisted of: Dust	No Asbestos Detected
11-904	Building 2A – East Wall – Above Offices (at 1 meter height)	Approximate Sample 3g Sample consisted of: Dust	No Asbestos Detected
11-905	Building 2A – East Wall – Above Offices (at 2 meter height)	Approximate Sample 3g Sample consisted of: Dust	No Asbestos Detected
11-906	Building 2A – Floor – above Offices	Approximate Sample 2g Sample consisted of: Dust	No Asbestos Detected
11-907	Building 2A – Floor – Centre	Approximate Sample 3g Sample consisted of: Dust	No Asbestos Detected
11-908	Building 2A – Window Sill (at 1 meter height)	Approximate Sample 1g Sample consisted of: Dust	No Asbestos Detected
11-909	Building 2A – Floor	Approximate Sample 2g Sample consisted of: Dust	No Asbestos Detected
11-910	Building 2A – Windowsill – Centre (at 1 meter height)	Approximate Sample 2g Sample consisted of: Dust	No Asbestos Detected
11-911	Building 2A – Shelf – Centre (at 1 meter height)	Approximate Sample 2g Sample consisted of: Dust	No Asbestos Detected
11-912	Building 2A – Shelf – Centre (at 1 meter height)	Approximate Sample 2g Sample consisted of: Dust	No Asbestos Detected
11-913	Building 2A – Floor – Centre	Approximate Sample 2g Sample consisted of: Dust	No Asbestos Detected
11-914	Building 2A – North Wall – Centre (at 1 meter height)	Approximate Sample 2g Sample consisted of: Dust	No Asbestos Detected
11-915	Building 2A – North Wall – Centre (at 2 meter height)	Approximate Sample 2g Sample consisted of: Dust	No Asbestos Detected

## 4 Recommendations

### 4.1 Immediate Action

It is the opinion of SLR that the following action is to be taken immediately:

- Asbestos contaminated dust was identified at the time of the inspection at 2 Wingrove Street, Alphington Victoria 3078. The friable asbestos/ACD was confirmed through laboratory analysis to be present in various locations, and should be assumed to be present to the general surface area(s) of the property.
- ACD is dust that is, or is assumed to be, contaminated with asbestos.
- Access to locations containing friable asbestos/ACD should be appropriately restricted (i.e. barricaded, etc). Persons wishing to access the areas must complete a suitable and sufficient risk assessment, the results of which include the use of appropriate Personal Protective Equipment (PPE) which include disposable coveralls and respiratory protection.

- SLR recommends that an air monitoring strategy be implemented as to assist with assessing the immediate risk of exposure to airborne fibres from the ACD
- Due to the potential of the friable asbestos in the dust becoming airborne, it is strongly recommended that access be restricted to the building until the area has been environmentally cleaned by a Class A asbestos removal contractor.
- Access should be restricted internally, and a management plan implemented to control the risk of human exposure. The area(s) should be labelled to indicate the presence of asbestos in the dust.
- The Work Health and Safety Regulations contain specific obligations for a number of duty holders in relation to safely removing asbestos, including requirements for asbestos removalists to be licensed.
- Asbestos contaminated dust or debris (ACD) at a workplace must be cleaned up by a Class A asbestos removalist unless the ACD that is associated with or derived from the removal of that non-friable ACM) as specified in the asbestos removal licence OHS Regulations r461 however, it would be strongly recommended that a Class A removalist is engaged to undertake these works.
- A Technical Scope of Works for remediation should be considered to be developed prior to undertaking works, to ensure all required aspects of the remediation are considered.

## 5 Limitations

Surveys/Inspections are conducted in a conscientious and professional manner. The nature of the task and the likely disproportion between any damage or loss which might arise from the work or reports prepared, and the cost of our services, is such that SLR cannot guarantee that all asbestos building materials have been identified and/or addressed.

Due to the possibility of renovations and additions to the building(s) over time, ACM may have been concealed (for example behind new walls, flooring, ceilings, within boxing, etc.); such areas may have been inaccessible during the inspection. If any materials reasonably suspected of containing asbestos are found during renovation and/or demolition of the building, which are not identified within this report, the client's independent consultant, SLR, should be contacted to complete additional confirmatory sampling and analysis as required.

The analysis was undertaken by Eurofins Mgt (NATA Accredited number: 1261).

The performance limitation of the AS 4964 (2004) method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w).

A change in building use/nature of activities could affect the control actions recommended within this report and a re-survey may be required.

Thus, while we carry out the work to the best of our ability, we totally exclude any loss or damages which may arise from services we have provided to Darebin City Council and/or associated parties.

Where potential ACM are identified these are normally reported on to the best of the consultant's ability. Analysis is not normally included and there is no guarantee that all such materials have been identified and/or addressed.

All work conducted and reports produced by SLR are prepared for a particular Client's objective and are based on a specific scope, conditions and limitations, as agreed upon between SLR and the Client. Information and/or report(s) prepared by SLR may therefore not be suitable for any use other than the intended objective. No parties other than the Client should use any information and/or report(s) without first conferring with SLR.

I trust that this report provides sufficient detail for your current requirements. We would be pleased to discuss this report with you as required - please do not hesitate to call me on (03) 0428788513 if you have any queries.

## 6 Feedback

At SLR, we are committed to delivering professional quality service to our clients. We are constantly looking for ways to improve the quality of our deliverables and our service to our clients. Client feedback is a valuable tool in helping us prioritise services and resources according to our client needs.

To achieve this, your feedback on the team's performance, deliverables and service are valuable and SLR welcome all feedback via <https://www.slrconsulting.com/en/feedback>. We recognise the value of your time and we will make a \$10 donation to our 2022 Charity Partner – Lifeline, for every completed form.

Yours sincerely



KRISHNA KADALI  
Senior Project Consultant  
Licensed Asbestos Assessor -

Checked/ JH  
Authorised by: JH

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# APPENDIX A

## Certificate of Analysis



**SLR Consulting (Vic)**  
**Suite 2, Grd Flr, 2 Domville Ave**  
**Hawthorn**  
**VIC 3122**



**NATA Accredited**  
**Accreditation Number 1261**  
**Site Number 1254**

Accredited for compliance with ISO/IEC 17025—Testing  
 NATA is a signatory to the ILAC Mutual Recognition  
 Arrangement for the mutual recognition of  
 the equivalence of testing, medical testing, calibration,  
 inspection, proficiency testing scheme providers and  
 reference materials producers reports and certificates.

**Attention:** James Bracken  
**Report** 943834-AID  
**Project Name** Melbourne Innovation Centre  
**Project ID** 640.30578.00100  
**Received Date** Nov 23, 2022  
**Date Reported** Nov 24, 2022

**Methodology:**

**Asbestos Fibre Identification** Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques.  
*NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.*

**Unknown Mineral Fibres** Mineral fibres of unknown type, as determined by PLM with DS, may require another analytical technique, such as Electron Microscopy, to confirm unequivocal identity.  
*NOTE: While Actinolite, Anthophyllite and Tremolite asbestos may be detected by PLM with DS, due to variability in the optical properties of these materials, AS4964 requires that these are reported as UMF unless confirmed by an independent technique.*

**Subsampling Soil Samples** The whole sample submitted is first dried and then passed through a 10mm sieve followed by a 2mm sieve. All fibrous matter greater than 10mm, greater than 2mm as well as the material passing through the 2mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 to 60g then a sub-sampling routine based on ISO 3082:2009(E) is employed.  
*NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be sub-sampled for trace analysis, in accordance with AS 4964-2004.*

**Bonded asbestos-containing material (ACM)** The material is first examined and any fibres isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination. The resultant material is then further examined in accordance with AS 4964 - 2004.  
*NOTE: Even after disintegration it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.*

**Limit of Reporting** The performance limitation of the AS 4964 (2004) method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w). The NEPM screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory Limit of Reporting (LOR), per se. Examination of a large sample size (e.g. 500 mL) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Gravimetric determinations to this level of accuracy are outside of AS 4964 and hence NATA Accreditation does not cover the performance of this service (non-NATA results shown with an asterisk).  
*NOTE: NATA News March 2014, p.7, states in relation to AS 4964: "This is a qualitative method with a nominal reporting limit of 0.01 % " and that currently in Australia "there is no validated method available for the quantification of asbestos". This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.*

**Project Name** Melbourne Innovation Centre  
**Project ID** 640.30578.00100  
**Date Sampled** Nov 23, 2022 to Dec 23, 2022  
**Report** 943834-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
11-873 - Building 2A	22-No0055683	Nov 23, 2022	Approximate Sample 2g Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Synthetic mineral fibres detected. Organic fibres detected. No trace asbestos detected.
11-874 - Building 2A	22-No0055684	Nov 23, 2022	Approximate Sample 5g Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Synthetic mineral fibres detected. Organic fibres detected. No trace asbestos detected.
11-875 - Building 2A	22-No0055685	Nov 23, 2022	Approximate Sample 1g Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Synthetic mineral fibres detected. Organic fibres detected. No trace asbestos detected.
11-876 - Building 2A	22-No0055686	Nov 23, 2022	Approximate Sample 3g Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Synthetic mineral fibres detected. Organic fibres detected. No trace asbestos detected.
11-877 - Building 2A	22-No0055687	Nov 23, 2022	Approximate Sample 3g Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Synthetic mineral fibres detected. Organic fibres detected. No trace asbestos detected.
11-878 - Building 2A	22-No0055688	Nov 23, 2022	Approximate Sample 2g Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Synthetic mineral fibres detected. Organic fibres detected. No trace asbestos detected.

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
11-879 - Building 2A	22-No0055689	Nov 23, 2022	Approximate Sample <1g Sample consisted of: Dust	Chrysotile asbestos detected in the form of loose fibres of approximate size 10 x 5 x 2mm. Synthetic mineral fibres detected. Organic fibres detected. No trace asbestos detected.
11-880 - Building 2A	22-No0055690	Nov 23, 2022	Approximate Sample <1g Sample consisted of: Dust	Chrysotile asbestos detected in the form of loose fibres of approximate size 5 x 5 x 2mm. Synthetic mineral fibres detected. Organic fibres detected. No trace asbestos detected.
11-881 - Building 2A	22-No0055691	Nov 23, 2022	Approximate Sample <1g Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Synthetic mineral fibres detected. Organic fibres detected. No trace asbestos detected.
11-882 - Building 2A	22-No0055692	Dec 23, 2022	Approximate Sample <1g Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Synthetic mineral fibres detected. Organic fibres detected. No trace asbestos detected.

**Sample History**

Where samples are submitted/analysed over several days, the last date of extraction is reported.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

<b>Description</b>	<b>Testing Site</b>	<b>Extracted</b>	<b>Holding Time</b>
Asbestos - LTM-ASB-8020	Melbourne	Nov 23, 2022	Indefinite

**Melbourne**  
6 Monterey Road  
Dandenong South  
VIC 3175  
Tel: +61 3 8564 5000  
NATA# 1261 Site# 1254

**Geelong**  
19/8 Lewalan Street  
Grovedale  
VIC 3216  
Tel: +61 3 8564 5000  
NATA# 1261 Site# 1254

**Sydney**  
179 Magowar Road  
Girraween  
NSW 2145  
Tel: +61 2 9900 8400  
NATA# 1261 Site# 18217

**Canberra**  
Unit 1,2 Dacre Street  
Mitchell  
ACT 2911  
Tel: +61 2 6113 8091

**Brisbane**  
1/21 Smallwood Place  
Murarrie  
QLD 4172  
Tel: +61 7 3902 4600  
NATA# 1261 Site# 20794

**Newcastle**  
4/52 Industrial Drive  
Mayfield East NSW 2304  
PO Box 60 Wickham 2293  
Tel: +61 2 4968 8448  
NATA# 1261 Site# 25079

**Perth**  
46-48 Banksia Road  
Welshpool  
WA 6106  
Tel: +61 8 6253 4444  
NATA# 2377 Site# 2370

**Auckland**  
35 O'Rorke Road  
Penrose,  
Auckland 1061  
Tel: +64 9 526 45 51  
IANZ# 1327

**Christchurch**  
43 Detroit Drive  
Rolleston,  
Christchurch 7675  
Tel: 0800 856 450  
IANZ# 1290

web: www.eurofins.com.au  
email: EnviroSales@eurofins.com

<b>Company Name:</b>	SLR Consulting (Vic)	<b>Order No.:</b>		<b>Received:</b>	Nov 23, 2022 5:29 PM
<b>Address:</b>	Suite 2, Grd Flr, 2 Domville Ave Hawthorn VIC 3122	<b>Report #:</b>	943834	<b>Due:</b>	Nov 24, 2022
<b>Project Name:</b>	Melbourne Innovation Centre	<b>Phone:</b>	03 9249 9400	<b>Priority:</b>	1 Day
<b>Project ID:</b>	640.30578.00100	<b>Fax:</b>		<b>Contact Name:</b>	James Bracken

**Eurofins Analytical Services Manager : Harry Bacalis**

Sample Detail						Asbestos Absence / Presence
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID	
Melbourne Laboratory - NATA # 1261 Site # 1254						X
External Laboratory						
1	11-873 - Building 2A	Nov 23, 2022		Building Materials	M22-No0055683	X
2	11-874 - Building 2A	Nov 23, 2022		Building Materials	M22-No0055684	X
3	11-875 - Building 2A	Nov 23, 2022		Building Materials	M22-No0055685	X
4	11-876 - Building 2A	Nov 23, 2022		Building Materials	M22-No0055686	X
5	11-877 - Building 2A	Nov 23, 2022		Building Materials	M22-No0055687	X
6	11-878 - Building 2A	Nov 23, 2022		Building Materials	M22-No0055688	X
7	11-879 - Building 2A	Nov 23, 2022		Building Materials	M22-No0055689	X
8	11-880 - Building 2A	Nov 23, 2022		Building Materials	M22-No0055690	X

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NATA# 1261 Site# 1254

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NATA# 1261 Site# 1254

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NATA# 1261 Site# 18217

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Tel: +61 7 3902 4600  
NATA# 1261 Site# 20794

**Newcastle**  
4/52 Industrial Drive  
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PO Box 60 Wickham 2293  
Tel: +61 2 4968 8448  
NATA# 1261 Site# 25079

**Perth**  
46-48 Banksia Road  
Welshpool  
WA 6106  
Tel: +61 8 6253 4444  
NATA# 2377 Site# 2370

**Auckland**  
35 O'Rorke Road  
Penrose  
Auckland 1061  
Tel: +64 9 526 45 51  
IANZ# 1327

**Christchurch**  
43 Detroit Drive  
Rolleston,  
Christchurch 7675  
Tel: 0800 856 450  
IANZ# 1290

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email: EnviroSales@eurofins.com

**Company Name:** SLR Consulting (Vic)  
**Address:** Suite 2, Grd Flr, 2 Domville Ave  
Hawthorn  
VIC 3122

**Project Name:** Melbourne Innovation Centre  
**Project ID:** 640.30578.00100

**Order No.:**  
**Report #:** 943834  
**Phone:** 03 9249 9400  
**Fax:**

**Received:** Nov 23, 2022 5:29 PM  
**Due:** Nov 24, 2022  
**Priority:** 1 Day  
**Contact Name:** James Bracken

**Eurofins Analytical Services Manager : Harry Bacalis**

Sample Detail						Asbestos Absence /Presence
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X
9	11-881 - Building 2A	Nov 23, 2022		Building Materials	M22-No0055691	X
10	11-882 - Building 2A	Dec 23, 2022		Building Materials	M22-No0055692	X
<b>Test Counts</b>						10

## Internal Quality Control Review and Glossary General

1. QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Samples were analysed on an 'as received' basis.
4. Information identified on this report with the colour **blue** indicates data provided by customer that may have an impact on the results.
5. Information identified on this report with the colour **orange** indicates sections of the report not covered by the laboratory's scope of NATA accreditation.
6. This report replaces any interim results previously issued.

## Holding Times

Please refer to the most recent version of the 'Sample Preservation and Container Guide' for holding times (QS3001).

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported. Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

## Units

% w/w:	Percentage weight-for-weight basis, e.g. of asbestos in asbestos-containing finds in soil samples ( <b>% w/w</b> )
F/fld	Airborne fibre filter loading as Fibres ( <b>N</b> ) per Fields counted ( <b>n</b> )
F/mL	Airborne fibre reported concentration as Fibres per millilitre of air drawn over the sampler membrane ( <b>C</b> )
g, kg	Mass, e.g. of whole sample ( <b>M</b> ) or asbestos-containing find within the sample ( <b>m</b> )
g/kg	Concentration in grams per kilogram
L, mL	Volume, e.g. of air as measured in AFM ( <b>V = r x t</b> )
L/min	Airborne fibre sampling Flowrate as litres per minute of air drawn over the sampler membrane ( <b>r</b> )
min	Time ( <b>t</b> ), e.g. of air sample collection period

## Calculations

Airborne Fibre Concentration: 
$$C = \left(\frac{A}{a}\right) \times \left(\frac{N}{n}\right) \times \left(\frac{1}{V}\right) \times \left(\frac{1}{r}\right) = K \times \left(\frac{N}{n}\right) \times \left(\frac{1}{Vr}\right)$$

Asbestos Content (as asbestos): 
$$\% w/w = \frac{(m \times P_A)}{M}$$

Weighted Average (of asbestos): 
$$\%_{WA} = \frac{\sum (m \times P_A) \times x}{x}$$

## Terms

<b>%asbestos</b>	Estimated percentage of asbestos in a given matrix. May be derived from knowledge or experience of the material, informed by HSG264 <i>Appendix 2</i> , else assumed to be 15% in accordance with WA DOH <i>Appendix 2 (PA)</i> .
<b>ACM</b>	Asbestos Containing Materials. Asbestos contained within a non-asbestos matrix, typically presented in bonded (non-friable) condition. For the purposes of the NEPM and WA DOH, ACM corresponds to material larger than 7 mm x 7 mm.
<b>AF</b>	Asbestos Fines. Asbestos contamination within a soil sample, as defined by WA DOH. Includes loose fibre bundles and small pieces of friable and non-friable material such as asbestos cement fragments mixed with soil. Considered under the NEPM as equivalent to "non-bonded / friable".
<b>AFM</b>	Airborne Fibre Monitoring, e.g. by the MFM.
<b>Amosite</b>	Amosite Asbestos Detected. Amosite may also refer to Fibrous Grunerite or Brown Asbestos. Identified in accordance with AS 4964-2004.
<b>AS</b>	Australian Standard.
<b>Asbestos Content (as asbestos)</b>	Total % w/w asbestos content in asbestos-containing finds in a soil sample ( <b>% w/w</b> ).
<b>Chrysotile</b>	Chrysotile Asbestos Detected. Chrysotile may also refer to Fibrous Serpentine or White Asbestos. Identified in accordance with AS 4964-2004.
<b>COC</b>	Chain of Custody.
<b>Crocidolite</b>	Crocidolite Asbestos Detected. Crocidolite may also refer to Fibrous Riebeckite or Blue Asbestos. Identified in accordance with AS 4964-2004.
<b>Dry</b>	Sample is dried by heating prior to analysis.
<b>DS</b>	Dispersion Staining. Technique required for Unequivocal Identification of asbestos fibres by PLM.
<b>FA</b>	Fibrous Asbestos. Asbestos containing material that is wholly or in part friable, including materials with higher asbestos content with a propensity to become friable with handling, and any material that was previously non-friable and in a severely degraded condition. For the purposes of the NEPM and WA DOH, FA generally corresponds to material larger than 7 mm x 7 mm, although FA may be more difficult to visibly distinguish and may be assessed as AF.
<b>Fibre Count</b>	Total of all fibres (whether asbestos or not) meeting the counting criteria set out in the NOHSC:3003
<b>Fibre ID</b>	Fibre Identification. Unequivocal identification of asbestos fibres according to AS 4964-2004. Includes Chrysotile, Amosite (Grunerite) or Crocidolite asbestos.
<b>Friable</b>	Asbestos-containing materials of any size that may be broken or crumbled by hand pressure. For the purposes of the NEPM, this includes both AF and FA. It is outside of the laboratory's remit to assess degree of friability.
<b>HSG248</b>	UK HSE HSG248, <i>Asbestos: The Analysts Guide</i> , 2nd Edition (2021).
<b>HSG264</b>	UK HSE HSG264, <i>Asbestos: The Survey Guide</i> (2012).
<b>ISO (also ISO/IEC)</b>	International Organization for Standardization / International Electrotechnical Commission.
<b>K Factor</b>	Microscope constant ( <b>K</b> ) as derived from the effective filter area of the given AFM membrane used for collecting the sample ( <b>A</b> ) and the projected eyepiece graticule area of the specific microscope used for the analysis ( <b>a</b> ).
<b>LOR</b>	Limit of Reporting.
<b>MFM (also NOHSC:3003)</b>	Membrane Filter Method. As described by the Australian Government National Occupational Health and Safety Commission, <i>Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres</i> , 2nd Edition [NOHSC:3003(2005)].
<b>NEPM (also ASC NEPM)</b>	National Environment Protection (Assessment of Site Contamination) Measure, (2013, as amended).
<b>Organic</b>	Organic Fibres Detected. Organic may refer to Natural or Man-Made Polymeric Fibres. Identified in accordance with AS 4964-2004.
<b>PCM</b>	Phase Contrast Microscopy. As used for Fibre Counting according to the MFM.
<b>PLM</b>	Polarised Light Microscopy. As used for Fibre Identification and Trace Analysis according to AS 4964-2004.
<b>SMF</b>	Synthetic Mineral Fibre Detected. SMF may also refer to Man Made Vitreous Fibres. Identified in accordance with AS 4964-2004.
<b>SRA</b>	Sample Receipt Advice.
<b>Trace Analysis</b>	Analytical procedure used to detect the presence of respirable fibres (particularly asbestos) in a given sample matrix.
<b>UK HSE HSG</b>	United Kingdom, Health and Safety Executive, Health and Safety Guidance, publication.
<b>UMF</b>	Unidentified Mineral Fibre Detected. Fibrous minerals that are detected but have not been unequivocally identified by PLM with DS according the AS 4964-2004. May include (but not limited to) Actinolite, Anthophyllite or Tremolite asbestos.
<b>WA DOH</b>	Reference document for the NEPM. Government of Western Australia, <i>Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia</i> (updated 2021), including Appendix Four: <i>Laboratory analysis</i>
<b>Weighted Average</b>	Combined average % w/w asbestos content of all asbestos-containing finds in the given aliquot or total soil sample ( <b>%<sub>WA</sub></b> ).

**Comments****Sample Integrity**

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	N/A
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

**Asbestos Counter/Identifier:**

Hiren Patel                      Senior Analyst-Asbestos

**Authorised by:**

Zoe Burke                         Senior Analyst-Asbestos



**Glenn Jackson**  
**General Manager**

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

\* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please [click here](#).

Eurofins shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.



**SLR Consulting (Vic)**  
**Suite 2, Grd Flr, 2 Domville Ave**  
**Hawthorn**  
**VIC 3122**



**NATA Accredited**  
**Accreditation Number 1261**  
**Site Number 1254**

Accredited for compliance with ISO/IEC 17025—Testing  
 NATA is a signatory to the ILAC Mutual Recognition  
 Arrangement for the mutual recognition of the  
 equivalence of testing, medical testing, calibration,  
 inspection, proficiency testing scheme providers and  
 reference materials producers reports and certificates.

**Attention:** James Bracken  
**Report** 943836-AID  
**Project Name** Melbourne Innovation Centre  
**Project ID** 640.30578.00100  
**Received Date** Nov 23, 2022  
**Date Reported** Nov 24, 2022

**Methodology:**

Asbestos Fibre  
 Identification

Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques.

*NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.*

Unknown Mineral  
 Fibres

Mineral fibres of unknown type, as determined by PLM with DS, may require another analytical technique, such as Electron Microscopy, to confirm unequivocal identity.

*NOTE: While Actinolite, Anthophyllite and Tremolite asbestos may be detected by PLM with DS, due to variability in the optical properties of these materials, AS4964 requires that these are reported as UMF unless confirmed by an independent technique.*

Subsampling Soil  
 Samples

The whole sample submitted is first dried and then passed through a 10mm sieve followed by a 2mm sieve. All fibrous matter greater than 10mm, greater than 2mm as well as the material passing through the 2mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 to 60g then a sub-sampling routine based on ISO 3082:2009(E) is employed.

*NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be sub-sampled for trace analysis, in accordance with AS 4964-2004.*

Bonded asbestos-  
 containing material  
 (ACM)

The material is first examined and any fibres isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination. The resultant material is then further examined in accordance with AS 4964 - 2004.

*NOTE: Even after disintegration it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.*

Limit of Reporting

The performance limitation of the AS 4964 (2004) method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w).

The NEPM screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory Limit of Reporting (LOR), per se. Examination of a large sample size (e.g. 500 mL) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Gravimetric determinations to this level of accuracy are outside of AS 4964 and hence NATA Accreditation does not cover the performance of this service (non-NATA results shown with an asterisk).

*NOTE: NATA News March 2014, p.7, states in relation to AS 4964: "This is a qualitative method with a nominal reporting limit of 0.01 % " and that currently in Australia "there is no validated method available for the quantification of asbestos". This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.*

**Project Name** Melbourne Innovation Centre  
**Project ID** 640.30578.00100  
**Date Sampled** Nov 23, 2022 to Dec 23, 2022  
**Report** 943836-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
11-883 - Building 2A	22-No0055696	Nov 23, 2022	Approximate Sample 2g Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Synthetic mineral fibre detected. Organic fibre detected. No trace asbestos detected.
11-884 - Building 2A	22-No0055697	Nov 23, 2022	Approximate Sample 2g Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Synthetic mineral fibre detected. Organic fibre detected. No trace asbestos detected.
11-885 - Building 2A	22-No0055698	Nov 23, 2022	Approximate Sample 2g Sample consisted of: Dust	Chrysotile asbestos detected in the form of loose fibre bundle approximate size: 5 x 1 x 1mm. Organic fibre detected. Synthetic mineral fibre detected. No trace asbestos detected.
11-886 - Building 2A	22-No0055699	Nov 23, 2022	Approximate Sample 2g Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Synthetic mineral fibre detected. Organic fibre detected. No trace asbestos detected.
11-887 - Building 2A	22-No0055700	Nov 23, 2022	Approximate Sample 3g Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Synthetic mineral fibre detected. Organic fibre detected. No trace asbestos detected.
11-888 - Building 2A	22-No0055701	Nov 23, 2022	Approximate Sample 3g Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Synthetic mineral fibre detected. Organic fibre detected. No trace asbestos detected.

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
11-889 - Building 2A	22-No0055702	Nov 23, 2022	Approximate Sample 3g Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Synthetic mineral fibre detected. Organic fibre detected. No trace asbestos detected.
11-890 - Building 2A	22-No0055703	Nov 23, 2022	Approximate Sample 3g Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Synthetic mineral fibre detected. Organic fibre detected. No trace asbestos detected.
11-891 - Building 2A	22-No0055704	Nov 23, 2022	Approximate Sample 3g Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Synthetic mineral fibre detected. Organic fibre detected. No trace asbestos detected.
11-892 - Building 2A	22-No0055705	Dec 23, 2022	Approximate Sample 2g Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Synthetic mineral fibre detected. Organic fibre detected. No trace asbestos detected.

**Sample History**

Where samples are submitted/analysed over several days, the last date of extraction is reported.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

<b>Description</b>	<b>Testing Site</b>	<b>Extracted</b>	<b>Holding Time</b>
Asbestos - LTM-ASB-8020	Melbourne	Nov 23, 2022	Indefinite

**Melbourne**  
6 Monterey Road  
Dandenong South  
VIC 3175  
Tel: +61 3 8564 5000  
NATA# 1261 Site# 1254

**Geelong**  
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Grovedale  
VIC 3216  
Tel: +61 3 8564 5000  
NATA# 1261 Site# 1254

**Sydney**  
179 Magowar Road  
Girraween  
NSW 2145  
Tel: +61 2 9900 8400  
NATA# 1261 Site# 18217

**Canberra**  
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**Brisbane**  
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Tel: +61 7 3902 4600  
NATA# 1261 Site# 20794

**Newcastle**  
4/52 Industrial Drive  
Mayfield East NSW 2304  
PO Box 60 Wickham 2293  
Tel: +61 2 4968 8448  
NATA# 1261 Site# 25079

**Perth**  
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WA 6106  
Tel: +61 8 6253 4444  
NATA# 2377 Site# 2370

**Auckland**  
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Penrose,  
Auckland 1061  
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**Christchurch**  
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Rolleston,  
Christchurch 7675  
Tel: 0800 856 450  
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email: EnviroSales@eurofins.com

<b>Company Name:</b>	SLR Consulting (Vic)	<b>Order No.:</b>		<b>Received:</b>	Nov 23, 2022 5:29 PM
<b>Address:</b>	Suite 2, Grd Flr, 2 Domville Ave Hawthorn VIC 3122	<b>Report #:</b>	943836	<b>Due:</b>	Nov 24, 2022
<b>Project Name:</b>	Melbourne Innovation Centre	<b>Phone:</b>	03 9249 9400	<b>Priority:</b>	1 Day
<b>Project ID:</b>	640.30578.00100	<b>Fax:</b>		<b>Contact Name:</b>	James Bracken

**Eurofins Analytical Services Manager : Harry Bacalis**

Sample Detail						Asbestos Absence / Presence
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID	
Melbourne Laboratory - NATA # 1261 Site # 1254						X
External Laboratory						
1	11-883 - Building 2A	Nov 23, 2022		Building Materials	M22-No0055696	X
2	11-884 - Building 2A	Nov 23, 2022		Building Materials	M22-No0055697	X
3	11-885 - Building 2A	Nov 23, 2022		Building Materials	M22-No0055698	X
4	11-886 - Building 2A	Nov 23, 2022		Building Materials	M22-No0055699	X
5	11-887 - Building 2A	Nov 23, 2022		Building Materials	M22-No0055700	X
6	11-888 - Building 2A	Nov 23, 2022		Building Materials	M22-No0055701	X
7	11-889 - Building 2A	Nov 23, 2022		Building Materials	M22-No0055702	X
8	11-890 - Building 2A	Nov 23, 2022		Building Materials	M22-No0055703	X

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**Company Name:** SLR Consulting (Vic)  
**Address:** Suite 2, Grd Flr, 2 Domville Ave  
Hawthorn  
VIC 3122

**Project Name:** Melbourne Innovation Centre  
**Project ID:** 640.30578.00100

**Order No.:**  
**Report #:** 943836  
**Phone:** 03 9249 9400  
**Fax:**

**Received:** Nov 23, 2022 5:29 PM  
**Due:** Nov 24, 2022  
**Priority:** 1 Day  
**Contact Name:** James Bracken

**Eurofins Analytical Services Manager : Harry Bacalis**

Sample Detail						Asbestos Absence /Presence
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X
9	11-891 - Building 2A	Nov 23, 2022		Building Materials	M22-No0055704	X
10	11-892 - Building 2A	Dec 23, 2022		Building Materials	M22-No0055705	X
<b>Test Counts</b>						10

## Internal Quality Control Review and Glossary General

1. QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Samples were analysed on an 'as received' basis.
4. Information identified on this report with the colour **blue** indicates data provided by customer that may have an impact on the results.
5. Information identified on this report with the colour **orange** indicates sections of the report not covered by the laboratory's scope of NATA accreditation.
6. This report replaces any interim results previously issued.

## Holding Times

Please refer to the most recent version of the 'Sample Preservation and Container Guide' for holding times (QS3001).

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported. Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

## Units

% w/w:	Percentage weight-for-weight basis, e.g. of asbestos in asbestos-containing finds in soil samples ( <b>% w/w</b> )
F/fld	Airborne fibre filter loading as Fibres ( <b>N</b> ) per Fields counted ( <b>n</b> )
F/mL	Airborne fibre reported concentration as Fibres per millilitre of air drawn over the sampler membrane ( <b>C</b> )
g, kg	Mass, e.g. of whole sample ( <b>M</b> ) or asbestos-containing find within the sample ( <b>m</b> )
g/kg	Concentration in grams per kilogram
L, mL	Volume, e.g. of air as measured in AFM ( <b>V = r x t</b> )
L/min	Airborne fibre sampling Flowrate as litres per minute of air drawn over the sampler membrane ( <b>r</b> )
min	Time ( <b>t</b> ), e.g. of air sample collection period

## Calculations

Airborne Fibre Concentration: 
$$C = \left(\frac{A}{a}\right) \times \left(\frac{N}{n}\right) \times \left(\frac{1}{V}\right) \times \left(\frac{1}{r}\right) = K \times \left(\frac{N}{n}\right) \times \left(\frac{1}{Vr}\right)$$

Asbestos Content (as asbestos): 
$$\% w/w = \frac{(m \times P_A)}{M}$$

Weighted Average (of asbestos): 
$$\%_{WA} = \frac{\sum (m \times P_A) \times x}{x}$$

## Terms

<b>%asbestos</b>	Estimated percentage of asbestos in a given matrix. May be derived from knowledge or experience of the material, informed by HSG264 <i>Appendix 2</i> , else assumed to be 15% in accordance with WA DOH <i>Appendix 2 (PA)</i> .
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<b>LOR</b>	Limit of Reporting.
<b>MFM (also NOHSC:3003)</b>	Membrane Filter Method. As described by the Australian Government National Occupational Health and Safety Commission, <i>Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres</i> , 2nd Edition [NOHSC:3003(2005)].
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<b>SRA</b>	Sample Receipt Advice.
<b>Trace Analysis</b>	Analytical procedure used to detect the presence of respirable fibres (particularly asbestos) in a given sample matrix.
<b>UK HSE HSG</b>	United Kingdom, Health and Safety Executive, Health and Safety Guidance, publication.
<b>UMF</b>	Unidentified Mineral Fibre Detected. Fibrous minerals that are detected but have not been unequivocally identified by PLM with DS according the AS 4964-2004. May include (but not limited to) Actinolite, Anthophyllite or Tremolite asbestos.
<b>WA DOH</b>	Reference document for the NEPM. Government of Western Australia, <i>Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia</i> (updated 2021), including Appendix Four: <i>Laboratory analysis</i>
<b>Weighted Average</b>	Combined average % w/w asbestos content of all asbestos-containing finds in the given aliquot or total soil sample ( <b>%<sub>WA</sub></b> ).

**Comments****Sample Integrity**

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	N/A
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

**Asbestos Counter/Identifier:**

Zoe Burke Senior Analyst-Asbestos

**Authorised by:**

Sheha Prakash Senior Analyst-Asbestos



**Glenn Jackson**  
**General Manager**

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

\* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please [click here](#).

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**Hawthorn**  
**VIC 3122**



**NATA Accredited**  
**Accreditation Number 1261**  
**Site Number 1254**

Accredited for compliance with ISO/IEC 17025—Testing  
 NATA is a signatory to the ILAC Mutual Recognition  
 Arrangement for the mutual recognition of the  
 equivalence of testing, medical testing, calibration,  
 inspection, proficiency testing scheme providers and  
 reference materials producers reports and certificates.

**Attention:** James Bracken  
**Report** 943837-AID  
**Project Name** Melbourne Innovation Centre  
**Project ID** 640.30578.00100  
**Received Date** Nov 23, 2022  
**Date Reported** Nov 24, 2022

**Methodology:**

**Asbestos Fibre Identification** Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques.  
*NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.*

**Unknown Mineral Fibres** Mineral fibres of unknown type, as determined by PLM with DS, may require another analytical technique, such as Electron Microscopy, to confirm unequivocal identity.  
*NOTE: While Actinolite, Anthophyllite and Tremolite asbestos may be detected by PLM with DS, due to variability in the optical properties of these materials, AS4964 requires that these are reported as UMF unless confirmed by an independent technique.*

**Subsampling Soil Samples** The whole sample submitted is first dried and then passed through a 10mm sieve followed by a 2mm sieve. All fibrous matter greater than 10mm, greater than 2mm as well as the material passing through the 2mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 to 60g then a sub-sampling routine based on ISO 3082:2009(E) is employed.  
*NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be sub-sampled for trace analysis, in accordance with AS 4964-2004.*

**Bonded asbestos-containing material (ACM)** The material is first examined and any fibres isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination. The resultant material is then further examined in accordance with AS 4964 - 2004.  
*NOTE: Even after disintegration it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.*

**Limit of Reporting** The performance limitation of the AS 4964 (2004) method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w).  
 The NEPM screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory Limit of Reporting (LOR), per se. Examination of a large sample size (e.g. 500 mL) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Gravimetric determinations to this level of accuracy are outside of AS 4964 and hence NATA Accreditation does not cover the performance of this service (non-NATA results shown with an asterisk).  
*NOTE: NATA News March 2014, p.7, states in relation to AS 4964: "This is a qualitative method with a nominal reporting limit of 0.01 % " and that currently in Australia "there is no validated method available for the quantification of asbestos". This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.*

**Project Name** Melbourne Innovation Centre  
**Project ID** 640.30578.00100  
**Date Sampled** Nov 23, 2022 to Dec 23, 2022  
**Report** 943837-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
11-893 - Building 2A	22-No0055706	Nov 23, 2022	Approximate Sample 8g Sample consisted of: Dust	Chrysotile asbestos detected in fibre cement fragments of approximate size 5 x 2 x 2mm. Synthetic mineral fibres detected. Organic fibres detected. No trace asbestos detected.
11-894 - Building 2A	22-No0055707	Nov 23, 2022	Approximate Sample 3g Sample consisted of: Dust	Chrysotile asbestos detected in the form of loose fibres of approximate size 5 x 5 x 2mm. Synthetic mineral fibres detected. Organic fibres detected. No trace asbestos detected.
11-895 - Building 2A	22-No0055708	Nov 23, 2022	Approximate Sample <1g Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Synthetic mineral fibres detected. Organic fibres detected. No trace asbestos detected.
11-896 - Building 2A	22-No0055709	Nov 23, 2022	Approximate Sample 4g Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Synthetic mineral fibres detected. Organic fibres detected. No trace asbestos detected.
11-897 - Building 2A	22-No0055710	Nov 23, 2022	Approximate Sample 2g Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibres detected. No trace asbestos detected.

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
11-898 - Building 2A	22-No0055711	Nov 23, 2022	Approximate Sample 4g Sample consisted of: Dust	Chrysotile asbestos detected in the form of loose fibres of approximate size 5 x 5 x 2mm. Synthetic mineral fibres detected. Organic fibres detected. No trace asbestos detected.
11-899 - Building 2A	22-No0055712	Nov 23, 2022	Approximate Sample 4g Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Synthetic mineral fibres detected. Organic fibres detected. No trace asbestos detected.
11-900- Building 2A	22-No0055713	Nov 23, 2022	Approximate Sample 2g Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Synthetic mineral fibres detected. Organic fibres detected. No trace asbestos detected.
11-901- Building 2A	22-No0055714	Nov 23, 2022	Approximate Sample <1g Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Synthetic mineral fibres detected. Organic fibres detected. No trace asbestos detected.
11-902 - Building 2A	22-No0055715	Dec 23, 2022	Approximate Sample 2g Sample consisted of: Dust	Chrysotile asbestos detected in the form of loose fibres of approximate size 10 x 5 x 2mm. Synthetic mineral fibres detected. Organic fibres detected. No trace asbestos detected.

**Sample History**

Where samples are submitted/analysed over several days, the last date of extraction is reported.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

<b>Description</b>	<b>Testing Site</b>	<b>Extracted</b>	<b>Holding Time</b>
Asbestos - LTM-ASB-8020	Melbourne	Nov 23, 2022	Indefinite

<b>Company Name:</b>	SLR Consulting (Vic)	<b>Order No.:</b>		<b>Received:</b>	Nov 23, 2022 5:29 PM
<b>Address:</b>	Suite 2, Grd Flr, 2 Domville Ave Hawthorn VIC 3122	<b>Report #:</b>	943837	<b>Due:</b>	Nov 24, 2022
<b>Project Name:</b>	Melbourne Innovation Centre	<b>Phone:</b>	03 9249 9400	<b>Priority:</b>	1 Day
<b>Project ID:</b>	640.30578.00100	<b>Fax:</b>		<b>Contact Name:</b>	James Bracken

**Eurofins Analytical Services Manager : Harry Bacalis**

<b>Sample Detail</b>	Asbestos Absence / Presence
----------------------	-----------------------------

Melbourne Laboratory - NATA # 1261 Site # 1254 X

External Laboratory

No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID	
1	11-893 - Building 2A	Nov 23, 2022		Building Materials	M22-No0055706	X
2	11-894 - Building 2A	Nov 23, 2022		Building Materials	M22-No0055707	X
3	11-895 - Building 2A	Nov 23, 2022		Building Materials	M22-No0055708	X
4	11-896 - Building 2A	Nov 23, 2022		Building Materials	M22-No0055709	X
5	11-897 - Building 2A	Nov 23, 2022		Building Materials	M22-No0055710	X
6	11-898 - Building 2A	Nov 23, 2022		Building Materials	M22-No0055711	X
7	11-899 - Building 2A	Nov 23, 2022		Building Materials	M22-No0055712	X
8	11-900 - Building 2A	Nov 23, 2022		Building Materials	M22-No0055713	X

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**Company Name:** SLR Consulting (Vic)  
**Address:** Suite 2, Grd Flr, 2 Domville Ave  
Hawthorn  
VIC 3122

**Project Name:** Melbourne Innovation Centre  
**Project ID:** 640.30578.00100

**Order No.:**  
**Report #:** 943837  
**Phone:** 03 9249 9400  
**Fax:**

**Received:** Nov 23, 2022 5:29 PM  
**Due:** Nov 24, 2022  
**Priority:** 1 Day  
**Contact Name:** James Bracken

**Eurofins Analytical Services Manager : Harry Bacalis**

Sample Detail						Asbestos Absence /Presence
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X
9	11-901 - Building 2A	Nov 23, 2022		Building Materials	M22-No0055714	X
10	11-902 - Building 2A	Dec 23, 2022		Building Materials	M22-No0055715	X
<b>Test Counts</b>						10

## Internal Quality Control Review and Glossary General

1. QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Samples were analysed on an 'as received' basis.
4. Information identified on this report with the colour **blue** indicates data provided by customer that may have an impact on the results.
5. Information identified on this report with the colour **orange** indicates sections of the report not covered by the laboratory's scope of NATA accreditation.
6. This report replaces any interim results previously issued.

## Holding Times

Please refer to the most recent version of the 'Sample Preservation and Container Guide' for holding times (QS3001).

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported. Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

## Units

% w/w:	Percentage weight-for-weight basis, e.g. of asbestos in asbestos-containing finds in soil samples ( <b>% w/w</b> )
F/fld	Airborne fibre filter loading as Fibres ( <b>N</b> ) per Fields counted ( <b>n</b> )
F/mL	Airborne fibre reported concentration as Fibres per millilitre of air drawn over the sampler membrane ( <b>C</b> )
g, kg	Mass, e.g. of whole sample ( <b>M</b> ) or asbestos-containing find within the sample ( <b>m</b> )
g/kg	Concentration in grams per kilogram
L, mL	Volume, e.g. of air as measured in AFM ( <b>V = r x t</b> )
L/min	Airborne fibre sampling Flowrate as litres per minute of air drawn over the sampler membrane ( <b>r</b> )
min	Time ( <b>t</b> ), e.g. of air sample collection period

## Calculations

Airborne Fibre Concentration: 
$$C = \left(\frac{A}{a}\right) \times \left(\frac{N}{n}\right) \times \left(\frac{1}{V}\right) \times \left(\frac{1}{r}\right) = K \times \left(\frac{N}{n}\right) \times \left(\frac{1}{Vr}\right)$$

Asbestos Content (as asbestos): 
$$\% w/w = \frac{(m \times P_A)}{M}$$

Weighted Average (of asbestos): 
$$\%_{WA} = \frac{\sum (m \times P_A) \times x}{x}$$

## Terms

<b>%asbestos</b>	Estimated percentage of asbestos in a given matrix. May be derived from knowledge or experience of the material, informed by HSG264 <i>Appendix 2</i> , else assumed to be 15% in accordance with WA DOH <i>Appendix 2 (PA)</i> .
<b>ACM</b>	Asbestos Containing Materials. Asbestos contained within a non-asbestos matrix, typically presented in bonded (non-friable) condition. For the purposes of the NEPM and WA DOH, ACM corresponds to material larger than 7 mm x 7 mm.
<b>AF</b>	Asbestos Fines. Asbestos contamination within a soil sample, as defined by WA DOH. Includes loose fibre bundles and small pieces of friable and non-friable material such as asbestos cement fragments mixed with soil. Considered under the NEPM as equivalent to "non-bonded / friable".
<b>AFM</b>	Airborne Fibre Monitoring, e.g. by the MFM.
<b>Amosite</b>	Amosite Asbestos Detected. Amosite may also refer to Fibrous Grunerite or Brown Asbestos. Identified in accordance with AS 4964-2004.
<b>AS</b>	Australian Standard.
<b>Asbestos Content (as asbestos)</b>	Total % w/w asbestos content in asbestos-containing finds in a soil sample ( <b>% w/w</b> ).
<b>Chrysotile</b>	Chrysotile Asbestos Detected. Chrysotile may also refer to Fibrous Serpentine or White Asbestos. Identified in accordance with AS 4964-2004.
<b>COC</b>	Chain of Custody.
<b>Crocidolite</b>	Crocidolite Asbestos Detected. Crocidolite may also refer to Fibrous Riebeckite or Blue Asbestos. Identified in accordance with AS 4964-2004.
<b>Dry</b>	Sample is dried by heating prior to analysis.
<b>DS</b>	Dispersion Staining. Technique required for Unequivocal Identification of asbestos fibres by PLM.
<b>FA</b>	Fibrous Asbestos. Asbestos containing material that is wholly or in part friable, including materials with higher asbestos content with a propensity to become friable with handling, and any material that was previously non-friable and in a severely degraded condition. For the purposes of the NEPM and WA DOH, FA generally corresponds to material larger than 7 mm x 7 mm, although FA may be more difficult to visibly distinguish and may be assessed as AF.
<b>Fibre Count</b>	Total of all fibres (whether asbestos or not) meeting the counting criteria set out in the NOHSC:3003
<b>Fibre ID</b>	Fibre Identification. Unequivocal identification of asbestos fibres according to AS 4964-2004. Includes Chrysotile, Amosite (Grunerite) or Crocidolite asbestos.
<b>Friable</b>	Asbestos-containing materials of any size that may be broken or crumbled by hand pressure. For the purposes of the NEPM, this includes both AF and FA. It is outside of the laboratory's remit to assess degree of friability.
<b>HSG248</b>	UK HSE HSG248, <i>Asbestos: The Analysts Guide</i> , 2nd Edition (2021).
<b>HSG264</b>	UK HSE HSG264, <i>Asbestos: The Survey Guide</i> (2012).
<b>ISO (also ISO/IEC)</b>	International Organization for Standardization / International Electrotechnical Commission.
<b>K Factor</b>	Microscope constant ( <b>K</b> ) as derived from the effective filter area of the given AFM membrane used for collecting the sample ( <b>A</b> ) and the projected eyepiece graticule area of the specific microscope used for the analysis ( <b>a</b> ).
<b>LOR</b>	Limit of Reporting.
<b>MFM (also NOHSC:3003)</b>	Membrane Filter Method. As described by the Australian Government National Occupational Health and Safety Commission, <i>Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres</i> , 2nd Edition [NOHSC:3003(2005)].
<b>NEPM (also ASC NEPM)</b>	National Environment Protection (Assessment of Site Contamination) Measure, (2013, as amended).
<b>Organic</b>	Organic Fibres Detected. Organic may refer to Natural or Man-Made Polymeric Fibres. Identified in accordance with AS 4964-2004.
<b>PCM</b>	Phase Contrast Microscopy. As used for Fibre Counting according to the MFM.
<b>PLM</b>	Polarised Light Microscopy. As used for Fibre Identification and Trace Analysis according to AS 4964-2004.
<b>SMF</b>	Synthetic Mineral Fibre Detected. SMF may also refer to Man Made Vitreous Fibres. Identified in accordance with AS 4964-2004.
<b>SRA</b>	Sample Receipt Advice.
<b>Trace Analysis</b>	Analytical procedure used to detect the presence of respirable fibres (particularly asbestos) in a given sample matrix.
<b>UK HSE HSG</b>	United Kingdom, Health and Safety Executive, Health and Safety Guidance, publication.
<b>UMF</b>	Unidentified Mineral Fibre Detected. Fibrous minerals that are detected but have not been unequivocally identified by PLM with DS according the AS 4964-2004. May include (but not limited to) Actinolite, Anthophyllite or Tremolite asbestos.
<b>WA DOH</b>	Reference document for the NEPM. Government of Western Australia, <i>Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia</i> (updated 2021), including Appendix Four: <i>Laboratory analysis</i>
<b>Weighted Average</b>	Combined average % w/w asbestos content of all asbestos-containing finds in the given aliquot or total soil sample ( <b>%<sub>WA</sub></b> ).

**Comments****Sample Integrity**

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	N/A
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

**Asbestos Counter/Identifier:**

Hiren Patel                      Senior Analyst-Asbestos

**Authorised by:**

Zoe Burke                         Senior Analyst-Asbestos



**Glenn Jackson**  
**General Manager**

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

\* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please [click here](#).

Eurofins shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.



**SLR Consulting (Vic)**  
**Suite 2, Grd Flr, 2 Domville Ave**  
**Hawthorn**  
**VIC 3122**



**NATA Accredited**  
**Accreditation Number 1261**  
**Site Number 1254**

Accredited for compliance with ISO/IEC 17025—Testing  
 NATA is a signatory to the ILAC Mutual Recognition  
 Arrangement for the mutual recognition of the  
 equivalence of testing, medical testing, calibration,  
 inspection, proficiency testing scheme providers and  
 reference materials producers reports and certificates.

**Attention:** James Bracken  
**Report** 943840-AID  
**Project Name** Melbourne Innovation Centre  
**Project ID** 640.30578.00100  
**Received Date** Nov 23, 2022  
**Date Reported** Nov 24, 2022

**Methodology:**

- Asbestos Fibre Identification** Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques.  
*NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.*
- Unknown Mineral Fibres** Mineral fibres of unknown type, as determined by PLM with DS, may require another analytical technique, such as Electron Microscopy, to confirm unequivocal identity.  
*NOTE: While Actinolite, Anthophyllite and Tremolite asbestos may be detected by PLM with DS, due to variability in the optical properties of these materials, AS4964 requires that these are reported as UMF unless confirmed by an independent technique.*
- Subsampling Soil Samples** The whole sample submitted is first dried and then passed through a 10mm sieve followed by a 2mm sieve. All fibrous matter greater than 10mm, greater than 2mm as well as the material passing through the 2mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 to 60g then a sub-sampling routine based on ISO 3082:2009(E) is employed.  
*NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be sub-sampled for trace analysis, in accordance with AS 4964-2004.*
- Bonded asbestos-containing material (ACM)** The material is first examined and any fibres isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination. The resultant material is then further examined in accordance with AS 4964 - 2004.  
*NOTE: Even after disintegration it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.*
- Limit of Reporting** The performance limitation of the AS 4964 (2004) method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w).  
 The NEPM screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory Limit of Reporting (LOR), per se. Examination of a large sample size (e.g. 500 mL) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Gravimetric determinations to this level of accuracy are outside of AS 4964 and hence NATA Accreditation does not cover the performance of this service (non-NATA results shown with an asterisk).  
*NOTE: NATA News March 2014, p.7, states in relation to AS 4964: "This is a qualitative method with a nominal reporting limit of 0.01 % " and that currently in Australia "there is no validated method available for the quantification of asbestos". This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.*

**Project Name** Melbourne Innovation Centre  
**Project ID** 640.30578.00100  
**Date Sampled** Nov 23, 2022 to Dec 23, 2022  
**Report** 943840-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
11-903 - Building 2A	22-No0055724	Nov 23, 2022	Approximate Sample 2g / -mm Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Synthetic mineral fibre detected. Organic fibre detected. No trace asbestos detected.
11-904 - Building 2A	22-No0055725	Nov 23, 2022	Approximate Sample 3g / -mm Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Synthetic mineral fibre detected. Organic fibre detected. No trace asbestos detected.
11-905 - Building 2A	22-No0055726	Nov 23, 2022	Approximate Sample 3g / -mm Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Synthetic mineral fibre detected. Organic fibre detected. No trace asbestos detected.
11-906 - Building 2A	22-No0055727	Nov 23, 2022	Approximate Sample 2g / -mm Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Synthetic mineral fibre detected. Organic fibre detected. No trace asbestos detected.
11-907 - Building 2A	22-No0055728	Nov 23, 2022	Approximate Sample 3g / -mm Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Synthetic mineral fibre detected. Organic fibre detected. No trace asbestos detected.
11-908 - Building 2A	22-No0055729	Nov 23, 2022	Approximate Sample 1g / -mm Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Synthetic mineral fibre detected. Organic fibre detected. No trace asbestos detected.
11-909 - Building 2A	22-No0055730	Nov 23, 2022	Approximate Sample 2g / -mm Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Synthetic mineral fibre detected. Organic fibre detected. No trace asbestos detected.

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
11-910- Building 2A	22-No0055731	Nov 23, 2022	Approximate Sample 2g / -mm Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Synthetic mineral fibre detected. Organic fibre detected. No trace asbestos detected.
11-911- Building 2A	22-No0055732	Nov 23, 2022	Approximate Sample 2g / -mm Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Synthetic mineral fibre detected. Organic fibre detected. No trace asbestos detected.
11-912 - Building 2A	22-No0055733	Dec 23, 2022	Approximate Sample 2g / -mm Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Synthetic mineral fibre detected. Organic fibre detected. No trace asbestos detected.

**Sample History**

Where samples are submitted/analysed over several days, the last date of extraction is reported.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

<b>Description</b>	<b>Testing Site</b>	<b>Extracted</b>	<b>Holding Time</b>
Asbestos - LTM-ASB-8020	Melbourne	Nov 23, 2022	Indefinite

<b>Company Name:</b>	SLR Consulting (Vic)	<b>Order No.:</b>		<b>Received:</b>	Nov 23, 2022 5:29 PM
<b>Address:</b>	Suite 2, Grd Flr, 2 Domville Ave Hawthorn VIC 3122	<b>Report #:</b>	943840	<b>Due:</b>	Nov 24, 2022
<b>Project Name:</b>	Melbourne Innovation Centre	<b>Phone:</b>	03 9249 9400	<b>Priority:</b>	1 Day
<b>Project ID:</b>	640.30578.00100	<b>Fax:</b>		<b>Contact Name:</b>	James Bracken

**Eurofins Analytical Services Manager : Harry Bacalis**

<b>Sample Detail</b>	Asbestos Absence / Presence
----------------------	-----------------------------

<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X
<b>External Laboratory</b>						
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID	
1	11-903 - Building 2A	Nov 23, 2022		Building Materials	M22-No0055724	X
2	11-904 - Building 2A	Nov 23, 2022		Building Materials	M22-No0055725	X
3	11-905 - Building 2A	Nov 23, 2022		Building Materials	M22-No0055726	X
4	11-906 - Building 2A	Nov 23, 2022		Building Materials	M22-No0055727	X
5	11-907 - Building 2A	Nov 23, 2022		Building Materials	M22-No0055728	X
6	11-908 - Building 2A	Nov 23, 2022		Building Materials	M22-No0055729	X
7	11-909 - Building 2A	Nov 23, 2022		Building Materials	M22-No0055730	X
8	11-910 - Building 2A	Nov 23, 2022		Building Materials	M22-No0055731	X

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<b>Company Name:</b>	SLR Consulting (Vic)	<b>Order No.:</b>		<b>Received:</b>	Nov 23, 2022 5:29 PM
<b>Address:</b>	Suite 2, Grd Flr, 2 Domville Ave Hawthorn VIC 3122	<b>Report #:</b>	943840	<b>Due:</b>	Nov 24, 2022
<b>Project Name:</b>	Melbourne Innovation Centre	<b>Phone:</b>	03 9249 9400	<b>Priority:</b>	1 Day
<b>Project ID:</b>	640.30578.00100	<b>Fax:</b>		<b>Contact Name:</b>	James Bracken
<b>Eurofins Analytical Services Manager : Harry Bacalis</b>					

<b>Sample Detail</b>					Asbestos Absence /Presence	
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>					X	
9	11-911 - Building 2A	Nov 23, 2022		Building Materials	M22-No0055732	X
10	11-912 - Building 2A	Dec 23, 2022		Building Materials	M22-No0055733	X
<b>Test Counts</b>					10	

## Internal Quality Control Review and Glossary General

1. QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Samples were analysed on an 'as received' basis.
4. Information identified on this report with the colour **blue** indicates data provided by customer that may have an impact on the results.
5. Information identified on this report with the colour **orange** indicates sections of the report not covered by the laboratory's scope of NATA accreditation.
6. This report replaces any interim results previously issued.

## Holding Times

Please refer to the most recent version of the 'Sample Preservation and Container Guide' for holding times (QS3001).

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported. Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

## Units

% w/w:	Percentage weight-for-weight basis, e.g. of asbestos in asbestos-containing finds in soil samples ( <b>% w/w</b> )
F/fld	Airborne fibre filter loading as Fibres ( <b>N</b> ) per Fields counted ( <b>n</b> )
F/mL	Airborne fibre reported concentration as Fibres per millilitre of air drawn over the sampler membrane ( <b>C</b> )
g, kg	Mass, e.g. of whole sample ( <b>M</b> ) or asbestos-containing find within the sample ( <b>m</b> )
g/kg	Concentration in grams per kilogram
L, mL	Volume, e.g. of air as measured in AFM ( <b>V = r x t</b> )
L/min	Airborne fibre sampling Flowrate as litres per minute of air drawn over the sampler membrane ( <b>r</b> )
min	Time ( <b>t</b> ), e.g. of air sample collection period

## Calculations

Airborne Fibre Concentration: 
$$C = \left(\frac{A}{a}\right) \times \left(\frac{N}{n}\right) \times \left(\frac{1}{V}\right) \times \left(\frac{1}{r}\right) = K \times \left(\frac{N}{n}\right) \times \left(\frac{1}{Vr}\right)$$

Asbestos Content (as asbestos): 
$$\% w/w = \frac{(m \times P_A)}{M}$$

Weighted Average (of asbestos): 
$$\%_{WA} = \frac{\sum (m \times P_A) \times x}{x}$$

## Terms

<b>%asbestos</b>	Estimated percentage of asbestos in a given matrix. May be derived from knowledge or experience of the material, informed by HSG264 <i>Appendix 2</i> , else assumed to be 15% in accordance with WA DOH <i>Appendix 2 (PA)</i> .
<b>ACM</b>	Asbestos Containing Materials. Asbestos contained within a non-asbestos matrix, typically presented in bonded (non-friable) condition. For the purposes of the NEPM and WA DOH, ACM corresponds to material larger than 7 mm x 7 mm.
<b>AF</b>	Asbestos Fines. Asbestos contamination within a soil sample, as defined by WA DOH. Includes loose fibre bundles and small pieces of friable and non-friable material such as asbestos cement fragments mixed with soil. Considered under the NEPM as equivalent to "non-bonded / friable".
<b>AFM</b>	Airborne Fibre Monitoring, e.g. by the MFM.
<b>Amosite</b>	Amosite Asbestos Detected. Amosite may also refer to Fibrous Grunerite or Brown Asbestos. Identified in accordance with AS 4964-2004.
<b>AS</b>	Australian Standard.
<b>Asbestos Content (as asbestos)</b>	Total % w/w asbestos content in asbestos-containing finds in a soil sample ( <b>% w/w</b> ).
<b>Chrysotile</b>	Chrysotile Asbestos Detected. Chrysotile may also refer to Fibrous Serpentine or White Asbestos. Identified in accordance with AS 4964-2004.
<b>COC</b>	Chain of Custody.
<b>Crocidolite</b>	Crocidolite Asbestos Detected. Crocidolite may also refer to Fibrous Riebeckite or Blue Asbestos. Identified in accordance with AS 4964-2004.
<b>Dry</b>	Sample is dried by heating prior to analysis.
<b>DS</b>	Dispersion Staining. Technique required for Unequivocal Identification of asbestos fibres by PLM.
<b>FA</b>	Fibrous Asbestos. Asbestos containing material that is wholly or in part friable, including materials with higher asbestos content with a propensity to become friable with handling, and any material that was previously non-friable and in a severely degraded condition. For the purposes of the NEPM and WA DOH, FA generally corresponds to material larger than 7 mm x 7 mm, although FA may be more difficult to visibly distinguish and may be assessed as AF.
<b>Fibre Count</b>	Total of all fibres (whether asbestos or not) meeting the counting criteria set out in the NOHSC:3003
<b>Fibre ID</b>	Fibre Identification. Unequivocal identification of asbestos fibres according to AS 4964-2004. Includes Chrysotile, Amosite (Grunerite) or Crocidolite asbestos.
<b>Friable</b>	Asbestos-containing materials of any size that may be broken or crumbled by hand pressure. For the purposes of the NEPM, this includes both AF and FA. It is outside of the laboratory's remit to assess degree of friability.
<b>HSG248</b>	UK HSE HSG248, <i>Asbestos: The Analysts Guide</i> , 2nd Edition (2021).
<b>HSG264</b>	UK HSE HSG264, <i>Asbestos: The Survey Guide</i> (2012).
<b>ISO (also ISO/IEC)</b>	International Organization for Standardization / International Electrotechnical Commission.
<b>K Factor</b>	Microscope constant ( <b>K</b> ) as derived from the effective filter area of the given AFM membrane used for collecting the sample ( <b>A</b> ) and the projected eyepiece graticule area of the specific microscope used for the analysis ( <b>a</b> ).
<b>LOR</b>	Limit of Reporting.
<b>MFM (also NOHSC:3003)</b>	Membrane Filter Method. As described by the Australian Government National Occupational Health and Safety Commission, <i>Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres</i> , 2nd Edition [NOHSC:3003(2005)].
<b>NEPM (also ASC NEPM)</b>	National Environment Protection (Assessment of Site Contamination) Measure, (2013, as amended).
<b>Organic</b>	Organic Fibres Detected. Organic may refer to Natural or Man-Made Polymeric Fibres. Identified in accordance with AS 4964-2004.
<b>PCM</b>	Phase Contrast Microscopy. As used for Fibre Counting according to the MFM.
<b>PLM</b>	Polarised Light Microscopy. As used for Fibre Identification and Trace Analysis according to AS 4964-2004.
<b>SMF</b>	Synthetic Mineral Fibre Detected. SMF may also refer to Man Made Vitreous Fibres. Identified in accordance with AS 4964-2004.
<b>SRA</b>	Sample Receipt Advice.
<b>Trace Analysis</b>	Analytical procedure used to detect the presence of respirable fibres (particularly asbestos) in a given sample matrix.
<b>UK HSE HSG</b>	United Kingdom, Health and Safety Executive, Health and Safety Guidance, publication.
<b>UMF</b>	Unidentified Mineral Fibre Detected. Fibrous minerals that are detected but have not been unequivocally identified by PLM with DS according the AS 4964-2004. May include (but not limited to) Actinolite, Anthophyllite or Tremolite asbestos.
<b>WA DOH</b>	Reference document for the NEPM. Government of Western Australia, <i>Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia</i> (updated 2021), including Appendix Four: <i>Laboratory analysis</i>
<b>Weighted Average</b>	Combined average % w/w asbestos content of all asbestos-containing finds in the given aliquot or total soil sample ( <b>%<sub>WA</sub></b> ).

**Comments****Sample Integrity**

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	N/A
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

**Asbestos Counter/Identifier:**

Zoe Burke Senior Analyst-Asbestos

**Authorised by:**

Sheha Prakash Senior Analyst-Asbestos



**Glenn Jackson**  
**General Manager**

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

\* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please [click here](#).

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**SLR Consulting (Vic)**  
**Suite 2, Grd Flr, 2 Domville Ave**  
**Hawthorn**  
**VIC 3122**



**NATA Accredited**  
**Accreditation Number 1261**  
**Site Number 1254**

Accredited for compliance with ISO/IEC 17025—Testing  
 NATA is a signatory to the ILAC Mutual Recognition  
 Arrangement for the mutual recognition of the  
 equivalence of testing, medical testing, calibration,  
 inspection, proficiency testing scheme providers and  
 reference materials producers reports and certificates.

**Attention:** James Bracken  
**Report** 943842-AID  
**Project Name** Melbourne Innovation Centre  
**Project ID** 640.30578.00100  
**Received Date** Nov 23, 2022  
**Date Reported** Nov 24, 2022

**Methodology:**

Asbestos Fibre  
 Identification

Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques.

*NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.*

Unknown Mineral  
 Fibres

Mineral fibres of unknown type, as determined by PLM with DS, may require another analytical technique, such as Electron Microscopy, to confirm unequivocal identity.

*NOTE: While Actinolite, Anthophyllite and Tremolite asbestos may be detected by PLM with DS, due to variability in the optical properties of these materials, AS4964 requires that these are reported as UMF unless confirmed by an independent technique.*

Subsampling Soil  
 Samples

The whole sample submitted is first dried and then passed through a 10mm sieve followed by a 2mm sieve. All fibrous matter greater than 10mm, greater than 2mm as well as the material passing through the 2mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 to 60g then a sub-sampling routine based on ISO 3082:2009(E) is employed.

*NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be sub-sampled for trace analysis, in accordance with AS 4964-2004.*

Bonded asbestos-  
 containing material  
 (ACM)

The material is first examined and any fibres isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination. The resultant material is then further examined in accordance with AS 4964 - 2004.

*NOTE: Even after disintegration it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.*

Limit of Reporting

The performance limitation of the AS 4964 (2004) method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w).

The NEPM screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory Limit of Reporting (LOR), per se. Examination of a large sample size (e.g. 500 mL) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Gravimetric determinations to this level of accuracy are outside of AS 4964 and hence NATA Accreditation does not cover the performance of this service (non-NATA results shown with an asterisk).

*NOTE: NATA News March 2014, p.7, states in relation to AS 4964: "This is a qualitative method with a nominal reporting limit of 0.01 % " and that currently in Australia "there is no validated method available for the quantification of asbestos". This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.*

**Project Name** Melbourne Innovation Centre  
**Project ID** 640.30578.00100  
**Date Sampled** Nov 23, 2022 to Dec 23, 2022  
**Report** 943842-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
11-913 - Building 2A	22-No0055748	Nov 23, 2022	Approximate Sample 2g Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Synthetic mineral fibres detected. Organic fibres detected. No trace asbestos detected.
11-914 - Building 2A	22-No0055749	Nov 23, 2022	Approximate Sample 2g Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Synthetic mineral fibres detected. Organic fibres detected. No trace asbestos detected.
11-915 - Building 2A	22-No0055750	Nov 23, 2022	Approximate Sample 3g Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Synthetic mineral fibres detected. Organic fibres detected. No trace asbestos detected.
11-916 - Building 3A-3D - Mezzanine	22-No0055751	Nov 23, 2022	Approximate Sample <1g Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Synthetic mineral fibres detected. Organic fibres detected. No trace asbestos detected.
11-917 - Building 3A-3D - Mezzanine	22-No0055752	Nov 23, 2022	Approximate Sample 4g Sample consisted of: Dust	Chrysotile asbestos detected in the form of loose fibres of approximate size 10 x 5 x 2mm.  Synthetic mineral fibres detected. Organic fibres detected.
11-918 - Building 3A-3D - Mezzanine	22-No0055753	Nov 23, 2022	Approximate Sample 3g Sample consisted of: Dust	Chrysotile asbestos detected in the form of loose fibres of approximate size 5 x 5 x 1mm.  Synthetic mineral fibres detected. Organic fibres detected.

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
11-919 - Building 3A-3D - Mezzanine	22-No0055754	Nov 23, 2022	Approximate Sample 3g Sample consisted of: Dust	Chrysotile asbestos detected in the form of loose fibres of approximate size 10 x 2 x 2mm. Synthetic mineral fibres detected. Organic fibres detected.
11-920 - Building 3A-3D - Mezzanine	22-No0055755	Nov 23, 2022	Approximate Sample 1g Sample consisted of: Dust	Chrysotile asbestos detected in the form of loose fibres of approximate size 5 x 5 x 2mm. Synthetic mineral fibres detected. Organic fibres detected.
11-921 - Building 3A-3D - Mezzanine	22-No0055756	Nov 23, 2022	Approximate Sample 2g Sample consisted of: Dust	Chrysotile asbestos detected in the form of loose fibres of approximate size 5 x 5 x 2mm. Synthetic mineral fibres detected. Organic fibres detected.
11-922 - Building 3A-3D - Mezzanine	22-No0055757	Dec 23, 2022	Approximate Sample 5g Sample consisted of: Dust	Chrysotile asbestos detected in the form of loose fibres of approximate size 10 x 2 x 2mm. Synthetic mineral fibres detected. Organic fibres detected.

**Sample History**

Where samples are submitted/analysed over several days, the last date of extraction is reported.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

<b>Description</b>	<b>Testing Site</b>	<b>Extracted</b>	<b>Holding Time</b>
Asbestos - LTM-ASB-8020	Melbourne	Nov 23, 2022	Indefinite

<b>Company Name:</b>	SLR Consulting (Vic)	<b>Order No.:</b>		<b>Received:</b>	Nov 23, 2022 5:29 PM
<b>Address:</b>	Suite 2, Grd Flr, 2 Domville Ave Hawthorn VIC 3122	<b>Report #:</b>	943842	<b>Due:</b>	Nov 24, 2022
<b>Project Name:</b>	Melbourne Innovation Centre	<b>Phone:</b>	03 9249 9400	<b>Priority:</b>	1 Day
<b>Project ID:</b>	640.30578.00100	<b>Fax:</b>		<b>Contact Name:</b>	James Bracken

**Eurofins Analytical Services Manager : Harry Bacalis**

Sample Detail						Asbestos Absence / Presence
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID	
Melbourne Laboratory - NATA # 1261 Site # 1254						X
External Laboratory						
1	11-913 - Building 2A	Nov 23, 2022		Building Materials	M22-No0055748	X
2	11-914 - Building 2A	Nov 23, 2022		Building Materials	M22-No0055749	X
3	11-915 - Building 2A	Nov 23, 2022		Building Materials	M22-No0055750	X
4	11-916 - Building 3A-3D -Mezzanine	Nov 23, 2022		Building Materials	M22-No0055751	X
5	11-917 - Building 3A-3D -Mezzanine	Nov 23, 2022		Building Materials	M22-No0055752	X
6	11-918 - Building 3A-3D -Mezzanine	Nov 23, 2022		Building Materials	M22-No0055753	X
7	11-919 -	Nov 23, 2022		Building	M22-No0055754	X

<b>Company Name:</b>	SLR Consulting (Vic)	<b>Order No.:</b>		<b>Received:</b>	Nov 23, 2022 5:29 PM
<b>Address:</b>	Suite 2, Grd Flr, 2 Domville Ave Hawthorn VIC 3122	<b>Report #:</b>	943842	<b>Due:</b>	Nov 24, 2022
<b>Project Name:</b>	Melbourne Innovation Centre	<b>Phone:</b>	03 9249 9400	<b>Priority:</b>	1 Day
<b>Project ID:</b>	640.30578.00100	<b>Fax:</b>		<b>Contact Name:</b>	James Bracken

**Eurofins Analytical Services Manager : Harry Bacalis**

<b>Sample Detail</b>						Asbestos Absence /Presence
<b>Melbourne Laboratory - NATA # 1261 Site # 1254</b>						X
	Building 3A-3D -Mezzanine			Materials		
8	11-920 - Building 3A-3D -Mezzanine	Nov 23, 2022		Building Materials	M22-No0055755	X
9	11-921 - Building 3A-3D -Mezzanine	Nov 23, 2022		Building Materials	M22-No0055756	X
10	11-922 - Building 3A-3D -Mezzanine	Dec 23, 2022		Building Materials	M22-No0055757	X
<b>Test Counts</b>						10

## Internal Quality Control Review and Glossary General

1. QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Samples were analysed on an 'as received' basis.
4. Information identified on this report with the colour **blue** indicates data provided by customer that may have an impact on the results.
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## Holding Times

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If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported. Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

## Units

% w/w:	Percentage weight-for-weight basis, e.g. of asbestos in asbestos-containing finds in soil samples ( <b>% w/w</b> )
F/fld	Airborne fibre filter loading as Fibres ( <b>N</b> ) per Fields counted ( <b>n</b> )
F/mL	Airborne fibre reported concentration as Fibres per millilitre of air drawn over the sampler membrane ( <b>C</b> )
g, kg	Mass, e.g. of whole sample ( <b>M</b> ) or asbestos-containing find within the sample ( <b>m</b> )
g/kg	Concentration in grams per kilogram
L, mL	Volume, e.g. of air as measured in AFM ( <b>V = r x t</b> )
L/min	Airborne fibre sampling Flowrate as litres per minute of air drawn over the sampler membrane ( <b>r</b> )
min	Time ( <b>t</b> ), e.g. of air sample collection period

## Calculations

Airborne Fibre Concentration: 
$$C = \left(\frac{A}{a}\right) \times \left(\frac{N}{n}\right) \times \left(\frac{1}{V}\right) \times \left(\frac{1}{r}\right) = K \times \left(\frac{N}{n}\right) \times \left(\frac{1}{Vr}\right)$$

Asbestos Content (as asbestos): 
$$\% w/w = \frac{(m \times P_A)}{M}$$

Weighted Average (of asbestos): 
$$\%_{WA} = \frac{\sum (m \times P_A) \times x}{x}$$

## Terms

<b>%asbestos</b>	Estimated percentage of asbestos in a given matrix. May be derived from knowledge or experience of the material, informed by HSG264 <i>Appendix 2</i> , else assumed to be 15% in accordance with WA DOH <i>Appendix 2 (PA)</i> .
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<b>AS</b>	Australian Standard.
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<b>DS</b>	Dispersion Staining. Technique required for Unequivocal Identification of asbestos fibres by PLM.
<b>FA</b>	Fibrous Asbestos. Asbestos containing material that is wholly or in part friable, including materials with higher asbestos content with a propensity to become friable with handling, and any material that was previously non-friable and in a severely degraded condition. For the purposes of the NEPM and WA DOH, FA generally corresponds to material larger than 7 mm x 7 mm, although FA may be more difficult to visibly distinguish and may be assessed as AF.
<b>Fibre Count</b>	Total of all fibres (whether asbestos or not) meeting the counting criteria set out in the NOHSC:3003
<b>Fibre ID</b>	Fibre Identification. Unequivocal identification of asbestos fibres according to AS 4964-2004. Includes Chrysotile, Amosite (Grunerite) or Crocidolite asbestos.
<b>Friable</b>	Asbestos-containing materials of any size that may be broken or crumbled by hand pressure. For the purposes of the NEPM, this includes both AF and FA. It is outside of the laboratory's remit to assess degree of friability.
<b>HSG248</b>	UK HSE HSG248, <i>Asbestos: The Analysts Guide</i> , 2nd Edition (2021).
<b>HSG264</b>	UK HSE HSG264, <i>Asbestos: The Survey Guide</i> (2012).
<b>ISO (also ISO/IEC)</b>	International Organization for Standardization / International Electrotechnical Commission.
<b>K Factor</b>	Microscope constant ( <b>K</b> ) as derived from the effective filter area of the given AFM membrane used for collecting the sample ( <b>A</b> ) and the projected eyepiece graticule area of the specific microscope used for the analysis ( <b>a</b> ).
<b>LOR</b>	Limit of Reporting.
<b>MFM (also NOHSC:3003)</b>	Membrane Filter Method. As described by the Australian Government National Occupational Health and Safety Commission, <i>Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres</i> , 2nd Edition [NOHSC:3003(2005)].
<b>NEPM (also ASC NEPM)</b>	National Environment Protection (Assessment of Site Contamination) Measure, (2013, as amended).
<b>Organic</b>	Organic Fibres Detected. Organic may refer to Natural or Man-Made Polymeric Fibres. Identified in accordance with AS 4964-2004.
<b>PCM</b>	Phase Contrast Microscopy. As used for Fibre Counting according to the MFM.
<b>PLM</b>	Polarised Light Microscopy. As used for Fibre Identification and Trace Analysis according to AS 4964-2004.
<b>SMF</b>	Synthetic Mineral Fibre Detected. SMF may also refer to Man Made Vitreous Fibres. Identified in accordance with AS 4964-2004.
<b>SRA</b>	Sample Receipt Advice.
<b>Trace Analysis</b>	Analytical procedure used to detect the presence of respirable fibres (particularly asbestos) in a given sample matrix.
<b>UK HSE HSG</b>	United Kingdom, Health and Safety Executive, Health and Safety Guidance, publication.
<b>UMF</b>	Unidentified Mineral Fibre Detected. Fibrous minerals that are detected but have not been unequivocally identified by PLM with DS according the AS 4964-2004. May include (but not limited to) Actinolite, Anthophyllite or Tremolite asbestos.
<b>WA DOH</b>	Reference document for the NEPM. Government of Western Australia, <i>Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia</i> (updated 2021), including Appendix Four: <i>Laboratory analysis</i>
<b>Weighted Average</b>	Combined average % w/w asbestos content of all asbestos-containing finds in the given aliquot or total soil sample ( <b>%<sub>WA</sub></b> ).

**Comments****Sample Integrity**

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	N/A
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

**Asbestos Counter/Identifier:**

Hiren Patel Senior Analyst-Asbestos

**Authorised by:**

Sheha Prakash Senior Analyst-Asbestos



**Glenn Jackson**  
**General Manager**

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

\* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please [click here](#).

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# APPENDIX B

## Airborne Asbestos Monitoring Report



SLR Consulting Australia Pty Ltd  
ABN 29 001 584 612  
<http://www.slrconsulting.com>

Sydney Office  
Tenancy 202, Submarine School  
Sub-Base Platypus, 120 High Street  
North Sydney NSW 2060  
+61 2 9427 8100



**NATA ACCREDITED LABORATORY  
NUMBER:3130**

Accredited for compliance with  
ISO/IEC 17025- Testing. This report  
cannot be reproduced except in full.

## Asbestos Air Monitoring Report

Test method in accordance with NOHSC:3003(2005) AP-01.03, AP-02.01, 02.03, 02.04 & AP-03

**Reference:** 640.30578.00100-R001-v1.0-AMR

**Date of Analysis:** 25 November 2022

**Date of Issue:** 26 November 2022

**Removal Contractor:** N/A

**Site Address:** Melbourne Innovation Centre, 2 Wingrove Street, Alphington VIC 3078

**Client:** Darebin City Council

**Client Address:**

274 Gower Street

Preston 3072

**Field Lab Address:** N/A

Date of Test	Sample Code	Type of Mon	Mon Loc'n	Airflow (L/min)			On	Time Off	Total (min)	Count		Conc'n (fibres/ml)
				On	Off	Avg				Fields	Fibres	
23/11/2022	Blank	N/A	0	N/A	N/A	N/A	N/A	N/A	N/A	100	0.0	N/A
23/11/2022	V-00074-1	Background	1	1.0	1.0	1.0	09:27	16:50	443	100	1.0	<0.01
23/11/2022	V-00074-2	Background	2	1.0	1.0	1.0	09:29	16:52	443	100	1.0	<0.01
23/11/2022	V-00074-3	Background	3	1.0	1.0	1.0	09:31	16:54	443	100	1.0	<0.01
23/11/2022	V-00074-4	Background	4	2.0	2.0	2.0	14:35	18:40	245	100	2.0	<0.01
23/11/2022	V-00074-5	Background	5	2.0	2.0	2.0	14:37	18:39	242	100	3.0	<0.01

### Monitoring Locations

- 0 Blank
- 1 Building 2A - Ground Level - Workshop - West Wall
- 2 Building 2A - Ground Level - Workshop - Northwall
- 3 Building 2A - Ground Level - Kitchen - East Wall
- 4 Building 3A-3D - Mezzanine Level - Ladies Toilet-Central
- 5 Building 3A-3D - Mezzanine Level - Kitchen - Central

### Notes:

- 1) The results contained within this report relate only to the samples tested.
- 2) The report and/or information produced by SLR Consulting Australia Pty Ltd should not be reproduced and/or presented/reviewed except in full.
- 3) Mon = Monitoring; Loc'n = Location; Conc'n = Concentration.

Sampling Undertaken By: Krishna Kadali  
Approved Fibre Counter: Krishna Kadali  
Approved Fibre Signatory: James Bracken

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# APPENDIX C

## Photographs

**Photo 1: Sample 11-879**



**Photo 2: Sample 11-880**



**Photo 3: Sample 11-885**



**Photo 4: Sample 11-893**



Photo 5: Sample 11-894



Photo 6: Sample 11-898



Photo 7: Sample 11-902



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# APPENDIX D

## Sample Locations

FIGURE 1

Project Number: 640.30578.00100

Date: November 2022

Drawn by: Krishna Kadali

Version: V01

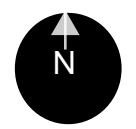
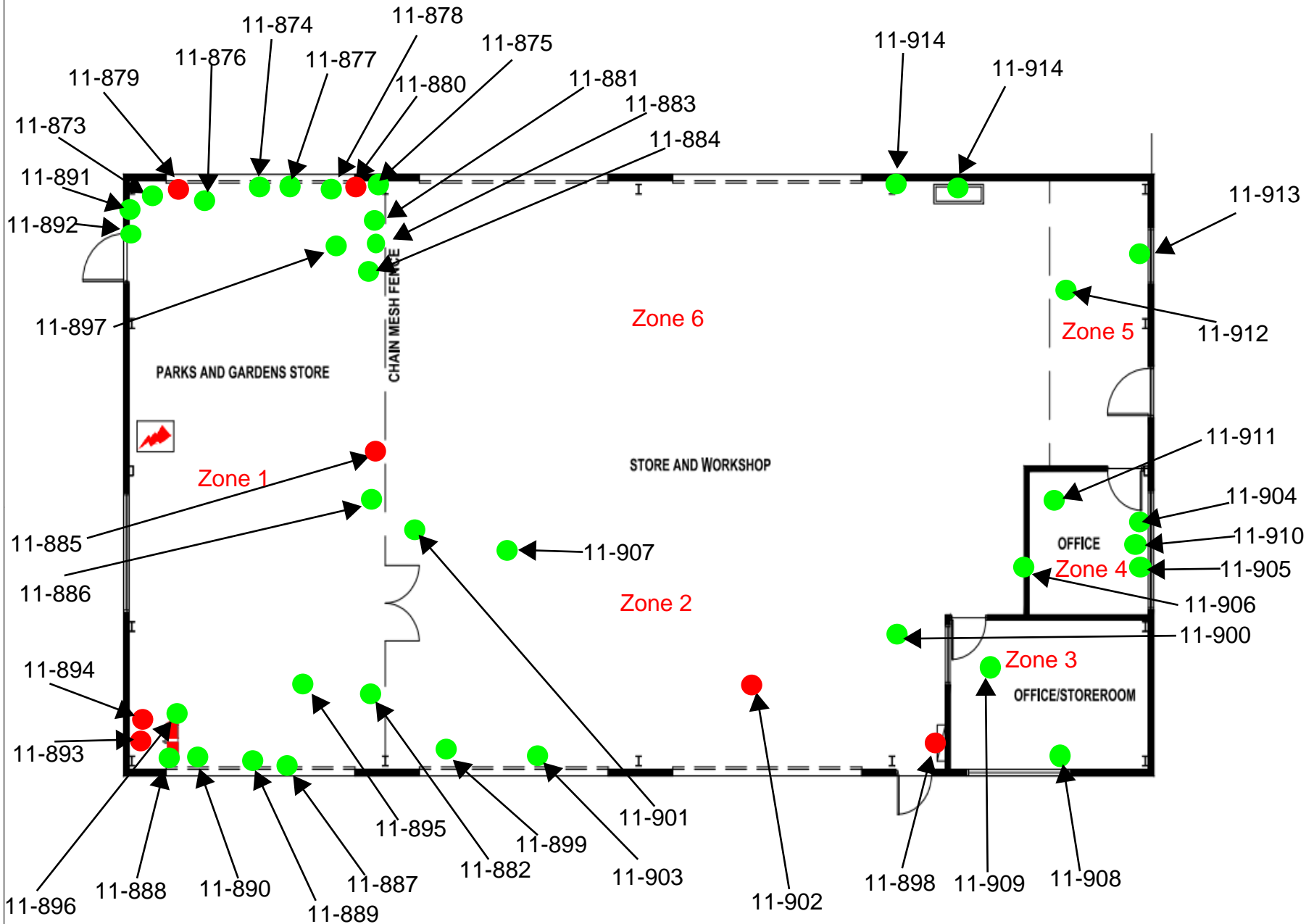
Client: Darebin Council

Floor Level: Ground Level

Address:

LEGEND

- Positive Sample Location
- Negative Sample Location



Note: Drawing not to scale

