
12 December 2022

640.30612.00300-L02-v1.0-LOA-20221212.docx

Darebin City Council c/o Russell Kennedy Lawyers
274 Gower Street, Preston
Victoria 3072

Attention: Tim Curtis

Dear Tim,

Letter of Advice
Melbourne Innovation Centre
Building 2A & 3, 2 Wingrove Street, Alphington Victoria 3078

1 Introduction

SLR Consulting Australia Pty Ltd (SLR) was requested by Stefan Fiedler of Russell Kennedy Lawyers to conduct representative dust sampling of external surface for asbestos content within the 10 meters sampling at Building 2A & 3, 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 7 December 2022 by 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.

Figure 1 Site Location



Image Taken from Nearmap 2022

2 Methodologies

The asbestos external 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*.

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 39 external ground surface dust samples. Refer to **Table 1** for sample locations and results. Refer to **Appendix A** for Certificate of Analysis and. Photographic evidence can be found within **Appendix B**.

Table 1 Sample Locations and Results

Sample No.	Sample Location	Sample Description (including Weight/Size)	Analysis Results
12-174	Building 3 – External – Ground Surface – West – (Left side – 1 meter from the building)	Approximate Sample 25g / - mm Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
12-175	Building 3 – External – Ground Surface – West – (Left side – 2 meter from the building)	Approximate Sample 18g / - mm Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
12-176	Building 3 – External – Ground Surface – West – (Centre – 3 meter from the building)	Approximate Sample 13g / - mm Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.

Sample No.	Sample Location	Sample Description (including Weight/Size)	Analysis Results
12-177	Building 3 – External – Ground Surface – West – (Right side – 5 meter from the building)	Approximate Sample 12g / - mm Sample consisted of: Du	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
12-178	Building 3 – External – Ground Surface – West – (Right side – 7 meter from the building)	Approximate Sample 14g / - mm Sample consisted of: Du	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
12-179	Building 3 – External – Ground Surface – South – (Left side – 1 meter from the building)	Approximate Sample 15g / - mm Sample consisted of: Du	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
12-180	Building 3 – External – Ground Surface – South – (Left side – 2 meter from the building)	Approximate Sample 14g / - mm Sample consisted of: Du	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
12-181	Building 3 – External – Ground Surface – South – (Centre – 3 meter from the building)	Approximate Sample 11g / - mm Sample consisted of: Du	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
12--182	Building 3 – External – Ground Surface – South – (Right side – 2 meter from the building)	Approximate Sample 19g / - mm Sample consisted of: Du	No asbestos detected at the reporting limit of 0.01% w/w. Synthetic mineral fibre detected. Organic fibre detected. No trace asbestos detected.
12-183	Building 3 – External – Ground Surface – South – (Right side – 3 meter from the building)	Approximate Sample 15g / - mm Sample consisted of: Du	Chrysotile asbestos detected in the form of loose fibre bundle. Approximate dimensions: 5 x 2 x 1mm. Organic fibre detected. No trace asbestos detected.
12-184	Building 3 – External – Ground Surface – East – (Left side – 1 meter from the building)	Approximate Sample 12g 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.
12-185	Building 3 – External – Ground Surface – East – (Left side – 3 meter from the building)	Approximate Sample 14g 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 No.	Sample Location	Sample Description (including Weight/Size)	Analysis Results
12-186	Building 3 – External – Ground Surface – East – (Centre – 1 meter from the building)	Approximate Sample 12g 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.
12-187	Building 3 – External – Ground Surface – East – (Right side – 7 meter from the building)	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.
12-188	Building 3 – External – Ground Surface – East – (Right side – 3 meter from the building)	Approximate Sample 11g Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
12-189	Building 3 – External – Ground Surface – North – (Left side – 4 meter from the building)	Approximate Sample 6g 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. No trace asbestos detected.
12-190	Building 3 – External – Ground Surface – North – (Left side – 1 meter from the building)	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.
12-191	Building 3 – External – Ground Surface – North – (Centre – 3 meter from the building)	Approximate Sample 4g Sample consisted of: Dust	Chrysotile asbestos detected in the form of loose fibres of approximate size 5 x 2 x 1mm. Organic fibres detected. No trace asbestos detected.
12-192	Building 3 – External – Ground Surface – North – (Centre – 1 meter from the building)	Approximate Sample 6g Sample consisted of: Dust	Chrysotile asbestos detected in the form of loose fibres of approximate size 5 x 5 x 1mm. Organic fibres detected. No trace asbestos detected.

Sample No.	Sample Location	Sample Description (including Weight/Size)	Analysis Results
12-193	Building 3 – External – Ground Surface – North – (Right side – 6 meter from the building)	Approximate Sample 4g Sample consisted of: Dust	Chrysotile asbestos detected in the form of loose fibres of approximate size 5 x 2 x 2mm. Organic fibres detected. No trace asbestos detected.
12-194	Building 2A – External – Ground Surface – East – (Right side – 5 meter from the building)	Approximate Sample 6g / - mm Sample consisted of: Dust	Chrysotile asbestos detected in the form of loose fibre bundle. Approximate dimensions 10 x 5 x 2mm. Synthetic mineral fibres detected. Organic fibres detected. No trace asbestos detected.
12-195	Building 2A – External – Ground Surface – East – (Right side – 6 meter from the building)	Approximate Sample 8g / - mm Sample consisted of: Dust	Chrysotile asbestos detected in the form of loose fibre bundle. Approximate dimensions 10 x 5 x 1mm. Synthetic mineral fibres detected. Organic fibres detected. No trace asbestos detected.
12-196	Building 2A – External – Ground Surface – East – (Centre – 5 meter from the building)	Approximate Sample 5g / - 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.
12-197	Building 2A – External – Ground Surface – East – (Left side – 1 meter from the building)	Approximate Sample 5g / - mm Sample consisted of: Dust	Chrysotile asbestos detected in the form of loose fibre bundles. Approximate dimensions 5 x 5 x 2mm. Synthetic mineral fibres detected. Organic fibres detected. No trace asbestos detected.
12-198	Building 2A – External – Ground Surface – East – (Left side – 5 meter from the building)	Approximate Sample 9g / - 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 No.	Sample Location	Sample Description (including Weight/Size)	Analysis Results
12-199	Building 2A – External – Ground Surface – North – (Left side – 1 meter from the building)	Approximate Sample 6g / - mm Sample consisted of: Dust	Chrysotile asbestos detected in the form of loose fibre bundle. Approximate dimensions 10 x 5 x 2mm. Synthetic mineral fibres detected. Organic fibres detected. No trace asbestos detected.
12-200	Building 2A – External – Ground Surface – North – (Left side – 6 meter from the building)	Approximate Sample 8g / - mm Sample consisted of: Dust	Chrysotile asbestos detected in the form of fibre cement fragment. Approximate dimensions 5 x 5 x 2mm. Synthetic mineral fibres detected. Organic fibres detected. No trace asbestos detected.
12-201	Building 2A – External – Ground Surface – North – (Centre – 4 meter from the building)	Approximate Sample 11g / - mm Sample consisted of: Dust	Chrysotile and amosite asbestos detected in the form of fibre cement fragment. Approximate dimensions 10 x 5 x 2mm. Synthetic mineral fibres detected. Organic fibres detected. No trace asbestos detected.
12-202	Building 2A – External – Ground Surface – North – (Centre – 7 meter from the building)	Approximate Sample 19g / - 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.
12-203	Building 2A – External – Ground Surface – North – (Right side – 4 meter from the building)	Approximate Sample 6g / - mm Sample consisted of: Dust	Chrysotile, amosite and crocidolite asbestos detected in the form of fibre cement fragments and loose fibre bundles. Approximate dimensions 15 x 5 x 2mm. Synthetic mineral fibres detected. Organic fibres detected. Trace chrysotile, amosite and crocidolite asbestos detected.

Sample No.	Sample Location	Sample Description (including Weight/Size)	Analysis Results
12-204	Building 2A – External – Ground Surface – West – (Centre – 1 meter from the building)	Approximate Sample 6g Sample consisted of: Dust	Chrysotile asbestos detected in the form of loose fibre bundle. Approximate dimensions 5 x 5 x 2mm. Organic fibres detected. No trace asbestos detected.
12-205	Building 2A – External – Ground Surface – West – (Centre – 2 meter from the building)	Approximate Sample 6g Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
12-206	Building 2A – External – Ground Surface – West – (Left side – 4 meter from the building)	Approximate Sample 6g Sample consisted of: Dust	Chrysotile asbestos detected in the form of loose fibre bundle. Approximate dimensions 10 x 5 x 1mm. Synthetic mineral fibres detected. Organic fibres detected. No trace asbestos detected.
12-207	Building 2A – External – Ground Surface – West – (Right side – 1 meter from the building)	Approximate Sample 8g Sample consisted of: Dust	Chrysotile asbestos detected in the form of loose fibre bundle. Approximate dimensions 15 x 5 x 2mm. Organic fibres detected. No trace asbestos detected.
12-208	Building 2A – External – Ground Surface – West – (Right side – 3 meter from the building)	Approximate Sample 7g Sample consisted of: Dust	Chrysotile asbestos detected in the form of loose fibre bundle. Approximate dimensions 5 x 5 x 1mm. Synthetic mineral fibres detected. Organic fibres detected. No trace asbestos detected.
12-209	Building 2A – External – Ground Surface – South – (Left side – 3 meter from the building)	Approximate Sample 15g Sample consisted of: Dust	Chrysotile and crocidolite asbestos detected in the form of loose fibre bundles. Approximate dimensions 15 x 5 x 2mm. Organic fibres detected. Trace chrysotile and crocidolite asbestos detected.

Sample No.	Sample Location	Sample Description (including Weight/Size)	Analysis Results
12-210	Building 2A – External – Ground Surface – South – (Centre – 3 meter from the building)	Approximate Sample 13g Sample consisted of: Dust	Chrysotile asbestos detected in the form of loose fibre bundle. Approximate dimensions 10 x 5 x 2mm. Synthetic mineral fibres detected. Organic fibres detected. No trace asbestos detected.
12-211	Building 2A – External – Ground Surface – South – (Right side – 1 meter from the building)	Approximate Sample 8g Sample consisted of: Dust	Chrysotile and crocidolite asbestos detected in the form of loose fibre bundles. Approximate dimensions 15 x 5 x 2mm. Synthetic mineral fibres detected. Organic fibres detected. Trace chrysotile and crocidolite asbestos detected.
11-212	Building 2A – External – Ground Surface – South – (Right side – 3 meter from the building)	Approximate Sample 12g Sample consisted of: Dust	Chrysotile and crocidolite asbestos detected in the form of loose fibre bundles. Approximate dimensions 15 x 5 x 2mm. Synthetic mineral fibres detected. Organic fibres detected. Trace chrysotile and crocidolite 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 on the ground surfaces external to Building 2A & 3 on, 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 external 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 external grounds adjacent the buildings until the area has been environmentally cleaned by a Class A asbestos removal contractor.
 - Access should be restricted externally, 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 (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.

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.

Yours sincerely

Krishna

KRISHNA KADALI
Senior Project Consultant

Checked/ JB Authorised by: JB

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 948079-AID
Project Name Melbourne Innovation Centre
Project ID 640.30612.00100
Received Date Dec 07, 2022
Date Reported Dec 08, 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 640.30612.00100
Date Sampled Dec 07, 2022
Report 948079-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
12-174 - Building 3 - External - Ground Surface - West	22-De0015359	Dec 07, 2022	Approximate Sample 25g / -mm Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
12-175 - Building 3 - External - Ground Surface - West	22-De0015360	Dec 07, 2022	Approximate Sample 18g / -mm Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
12-176 - Building 3 - External - Ground Surface - West	22-De0015361	Dec 07, 2022	Approximate Sample 13g / -mm Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
12-177 - Building 3 - External - Ground Surface - West	22-De0015362	Dec 07, 2022	Approximate Sample 12g / -mm Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
12-178 - Building 3 - External - Ground Surface - West	22-De0015363	Dec 07, 2022	Approximate Sample 14g / -mm Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
12-179 - Building 3 - External - Ground Surface - South	22-De0015364	Dec 07, 2022	Approximate Sample 15g / -mm Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
12-180 - Building 3 - External - Ground Surface - South	22-De0015365	Dec 07, 2022	Approximate Sample 14g / -mm Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
12-181 - Building 3 - External - Ground Surface - South	22-De0015366	Dec 07, 2022	Approximate Sample 11g / -mm Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
12-182 - Building 3 - External - Ground Surface - South	22-De0015367	Dec 07, 2022	Approximate Sample 19g / -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.
12-183 - Building 3 - External - Ground Surface - South	22-De0015368	Dec 07, 2022	Approximate Sample 15g / -mm Sample consisted of: Dust	Chrysotile asbestos detected in the form of loose fibre bundle. Approximate dimensions: 5 x 2 x 1mm. 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.

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8020	Melbourne	Dec 07, 2022	Indefinite

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

Project Name: Melbourne Innovation Centre
Project ID: 640.30612.00100

Order No.:
Report #: 948079
Phone: 03 9249 9400
Fax:

Received: Dec 7, 2022 5:00 PM
Due: Dec 8, 2022
Priority: 1 Day
Contact Name: 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	12-174 - Building 3 - External - Ground Surface - West	Dec 07, 2022		Building Materials	M22-De0015359	X
2	12-175 - Building 3 - External - Ground Surface - West	Dec 07, 2022		Building Materials	M22-De0015360	X
3	12-176 - Building 3 - External - Ground Surface - West	Dec 07, 2022		Building Materials	M22-De0015361	X
4	12-177 - Building 3 - External -	Dec 07, 2022		Building Materials	M22-De0015362	X

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Sample Detail						Asbestos Absence / Presence
Melbourne Laboratory - NATA # 1261 Site # 1254						X
	Ground Surface - West					
5	12-178 - Building 3 - External - Ground Surface - West	Dec 07, 2022		Building Materials	M22-De0015363	X
6	12-179 - Building 3 - External - Ground Surface - South	Dec 07, 2022		Building Materials	M22-De0015364	X
7	12-180 - Building 3 - External - Ground Surface - South	Dec 07, 2022		Building Materials	M22-De0015365	X
8	12-181 - Building 3 -	Dec 07, 2022		Building Materials	M22-De0015366	X

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Sample Detail						Asbestos Absence / Presence
Melbourne Laboratory - NATA # 1261 Site # 1254						X
	External - Ground Surface - South					
9	12-182 - Building 3 - External - Ground Surface - South	Dec 07, 2022		Building Materials	M22-De0015367	X
10	12-183 - Building 3 - External - Ground Surface - South	Dec 07, 2022		Building Materials	M22-De0015368	X
Test Counts						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 (% w/w)
F/fld	Airborne fibre filter loading as Fibres (N) per Fields counted (n)
F/mL	Airborne fibre reported concentration as Fibres per millilitre of air drawn over the sampler membrane (C)
g, kg	Mass, e.g. of whole sample (M) or asbestos-containing find within the sample (m)
g/kg	Concentration in grams per kilogram
L, mL	Volume, e.g. of air as measured in AFM (V = r x t)
L/min	Airborne fibre sampling Flowrate as litres per minute of air drawn over the sampler membrane (r)
min	Time (t), 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

%asbestos	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> .
ACM	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.
AF	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".
AFM	Airborne Fibre Monitoring, e.g. by the MFM.
Amosite	Amosite Asbestos Detected. Amosite may also refer to Fibrous Grunerite or Brown Asbestos. Identified in accordance with AS 4964-2004.
AS	Australian Standard.
Asbestos Content (as asbestos)	Total % w/w asbestos content in asbestos-containing finds in a soil sample (% w/w).
Chrysotile	Chrysotile Asbestos Detected. Chrysotile may also refer to Fibrous Serpentine or White Asbestos. Identified in accordance with AS 4964-2004.
COC	Chain of Custody.
Crocidolite	Crocidolite Asbestos Detected. Crocidolite may also refer to Fibrous Riebeckite or Blue Asbestos. Identified in accordance with AS 4964-2004.
Dry	Sample is dried by heating prior to analysis.
DS	Dispersion Staining. Technique required for Unequivocal Identification of asbestos fibres by PLM.
FA	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.
Fibre Count	Total of all fibres (whether asbestos or not) meeting the counting criteria set out in the NOHSC:3003
Fibre ID	Fibre Identification. Unequivocal identification of asbestos fibres according to AS 4964-2004. Includes Chrysotile, Amosite (Grunerite) or Crocidolite asbestos.
Friable	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.
HSG248	UK HSE HSG248, <i>Asbestos: The Analysts Guide</i> , 2nd Edition (2021).
HSG264	UK HSE HSG264, <i>Asbestos: The Survey Guide</i> (2012).
ISO (also ISO/IEC)	International Organization for Standardization / International Electrotechnical Commission.
K Factor	Microscope constant (K) as derived from the effective filter area of the given AFM membrane used for collecting the sample (A) and the projected eyepiece graticule area of the specific microscope used for the analysis (a).
LOR	Limit of Reporting.
MFM (also NOHSC:3003)	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)].
NEPM (also ASC NEPM)	National Environment Protection (Assessment of Site Contamination) Measure, (2013, as amended).
Organic	Organic Fibres Detected. Organic may refer to Natural or Man-Made Polymeric Fibres. Identified in accordance with AS 4964-2004.
PCM	Phase Contrast Microscopy. As used for Fibre Counting according to the MFM.
PLM	Polarised Light Microscopy. As used for Fibre Identification and Trace Analysis according to AS 4964-2004.
SMF	Synthetic Mineral Fibre Detected. SMF may also refer to Man Made Vitreous Fibres. Identified in accordance with AS 4964-2004.
SRA	Sample Receipt Advice.
Trace Analysis	Analytical procedure used to detect the presence of respirable fibres (particularly asbestos) in a given sample matrix.
UK HSE HSG	United Kingdom, Health and Safety Executive, Health and Safety Guidance, publication.
UMF	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.
WA DOH	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>
Weighted Average	Combined average % w/w asbestos content of all asbestos-containing finds in the given aliquot or total soil sample (%_{WA}).

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:

Sophie Bush 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 948082-AID
Project Name Melbourne Innovation Centre
Project ID 640.30612.00100
Received Date Dec 07, 2022
Date Reported Dec 08, 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 640.30612.00100
Date Sampled Dec 07, 2022
Report 948082-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
12-184 - Building 3 - External - Ground Surface - East	22-De0015376	Dec 07, 2022	Approximate Sample 12g 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.
12-185 - Building 3 - External - Ground Surface - East	22-De0015377	Dec 07, 2022	Approximate Sample 14g 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.
12-186 - Building 3 - External - Ground Surface - East	22-De0015378	Dec 07, 2022	Approximate Sample 12g 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.
12-187 - Building 3 - External - Ground Surface - East	22-De0015379	Dec 07, 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.
12-188 - Building 3 - External - Ground Surface - East	22-De0015380	Dec 07, 2022	Approximate Sample 11g Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
12-189 - Building 3 - External - Ground Surface - North	22-De0015381	Dec 07, 2022	Approximate Sample 6g 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. No trace asbestos detected.

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
12-190 - Building 3 - External - Ground Surface - North	22-De0015382	Dec 07, 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.
12-191 - Building 3 - External - Ground Surface - North	22-De0015383	Dec 07, 2022	Approximate Sample 4g Sample consisted of: Dust	Chrysotile asbestos detected in the form of loose fibres of approximate size 5 x 2 x 1mm. Organic fibres detected. No trace asbestos detected.
12-192 - Building 3 - External - Ground Surface - North	22-De0015384	Dec 07, 2022	Approximate Sample 6g Sample consisted of: Dust	Chrysotile asbestos detected in the form of loose fibres of approximate size 5 x 5 x 1mm. Organic fibres detected. No trace asbestos detected.
12-193 - Building 3 - External - Ground Surface - North	22-De0015385	Dec 07, 2022	Approximate Sample 4g Sample consisted of: Dust	Chrysotile asbestos detected in the form of loose fibres of approximate size 5 x 2 x 2mm. 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.

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8020	Melbourne	Dec 07, 2022	Indefinite

Company Name:	SLR Consulting (Vic)	Order No.:		Received:	Dec 7, 2022 5:00 PM
Address:	Suite 2, Grd Flr, 2 Domville Ave Hawthorn VIC 3122	Report #:	948082	Due:	Dec 8, 2022
Project Name:	Melbourne Innovation Centre	Phone:	03 9249 9400	Priority:	1 Day
Project ID:	640.30612.00100	Fax:		Contact Name:	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	12-184 - Building 3 - External - Ground Surface - East	Dec 07, 2022		Building Materials	M22-De0015376	X
2	12-185 - Building 3 - External - Ground Surface - East	Dec 07, 2022		Building Materials	M22-De0015377	X
3	12-186 - Building 3 - External - Ground Surface - East	Dec 07, 2022		Building Materials	M22-De0015378	X
4	12-187 - Building 3 - External -	Dec 07, 2022		Building Materials	M22-De0015379	X

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

Project Name: Melbourne Innovation Centre
Project ID: 640.30612.00100

Order No.:
Report #: 948082
Phone: 03 9249 9400
Fax:

Received: Dec 7, 2022 5:00 PM
Due: Dec 8, 2022
Priority: 1 Day
Contact Name: James Bracken

Eurofins Analytical Services Manager : Harry Bacalis

Sample Detail						Asbestos Absence / Presence
Melbourne Laboratory - NATA # 1261 Site # 1254						X
	Ground Surface - East					
5	12-188 - Building 3 - External - Ground Surface - East	Dec 07, 2022		Building Materials	M22-De0015380	X
6	12-189 - Building 3 - External - Ground Surface - North	Dec 07, 2022		Building Materials	M22-De0015381	X
7	12-190 - Building 3 - External - Ground Surface - North	Dec 07, 2022		Building Materials	M22-De0015382	X
8	12-191 - Building 3 -	Dec 07, 2022		Building Materials	M22-De0015383	X

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Geelong
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Company Name:	SLR Consulting (Vic)	Order No.:		Received:	Dec 7, 2022 5:00 PM
Address:	Suite 2, Grd Flr, 2 Domville Ave Hawthorn VIC 3122	Report #:	948082	Due:	Dec 8, 2022
Project Name:	Melbourne Innovation Centre	Phone:	03 9249 9400	Priority:	1 Day
Project ID:	640.30612.00100	Fax:		Contact Name:	James Bracken

Eurofins Analytical Services Manager : Harry Bacalis

Sample Detail						Asbestos Absence / Presence
Melbourne Laboratory - NATA # 1261 Site # 1254						X
	External - Ground Surface - North					
9	12-192 - Building 3 - External - Ground Surface - North	Dec 07, 2022		Building Materials	M22-De0015384	X
10	12-193 - Building 3 - External - Ground Surface - North	Dec 07, 2022		Building Materials	M22-De0015385	X
Test Counts						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 (% w/w)
F/fld	Airborne fibre filter loading as Fibres (N) per Fields counted (n)
F/mL	Airborne fibre reported concentration as Fibres per millilitre of air drawn over the sampler membrane (C)
g, kg	Mass, e.g. of whole sample (M) or asbestos-containing find within the sample (m)
g/kg	Concentration in grams per kilogram
L, mL	Volume, e.g. of air as measured in AFM (V = r x t)
L/min	Airborne fibre sampling Flowrate as litres per minute of air drawn over the sampler membrane (r)
min	Time (t), 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

%asbestos	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> .
ACM	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.
AF	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".
AFM	Airborne Fibre Monitoring, e.g. by the MFM.
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AS	Australian Standard.
Asbestos Content (as asbestos)	Total % w/w asbestos content in asbestos-containing finds in a soil sample (% w/w).
Chrysotile	Chrysotile Asbestos Detected. Chrysotile may also refer to Fibrous Serpentine or White Asbestos. Identified in accordance with AS 4964-2004.
COC	Chain of Custody.
Crocidolite	Crocidolite Asbestos Detected. Crocidolite may also refer to Fibrous Riebeckite or Blue Asbestos. Identified in accordance with AS 4964-2004.
Dry	Sample is dried by heating prior to analysis.
DS	Dispersion Staining. Technique required for Unequivocal Identification of asbestos fibres by PLM.
FA	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.
Fibre Count	Total of all fibres (whether asbestos or not) meeting the counting criteria set out in the NOHSC:3003
Fibre ID	Fibre Identification. Unequivocal identification of asbestos fibres according to AS 4964-2004. Includes Chrysotile, Amosite (Grunerite) or Crocidolite asbestos.
Friable	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.
HSG248	UK HSE HSG248, <i>Asbestos: The Analysts Guide</i> , 2nd Edition (2021).
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ISO (also ISO/IEC)	International Organization for Standardization / International Electrotechnical Commission.
K Factor	Microscope constant (K) as derived from the effective filter area of the given AFM membrane used for collecting the sample (A) and the projected eyepiece graticule area of the specific microscope used for the analysis (a).
LOR	Limit of Reporting.
MFM (also NOHSC:3003)	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)].
NEPM (also ASC NEPM)	National Environment Protection (Assessment of Site Contamination) Measure, (2013, as amended).
Organic	Organic Fibres Detected. Organic may refer to Natural or Man-Made Polymeric Fibres. Identified in accordance with AS 4964-2004.
PCM	Phase Contrast Microscopy. As used for Fibre Counting according to the MFM.
PLM	Polarised Light Microscopy. As used for Fibre Identification and Trace Analysis according to AS 4964-2004.
SMF	Synthetic Mineral Fibre Detected. SMF may also refer to Man Made Vitreous Fibres. Identified in accordance with AS 4964-2004.
SRA	Sample Receipt Advice.
Trace Analysis	Analytical procedure used to detect the presence of respirable fibres (particularly asbestos) in a given sample matrix.
UK HSE HSG	United Kingdom, Health and Safety Executive, Health and Safety Guidance, publication.
UMF	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.
WA DOH	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>
Weighted Average	Combined average % w/w asbestos content of all asbestos-containing finds in the given aliquot or total soil sample (%_{WA}).

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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Suite 2, Grd Flr, 2 Domville Ave
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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 948085-AID
Project Name Melbourne Innovation Centre
Project ID 640.30612.00100
Received Date Dec 07, 2022
Date Reported Dec 09, 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 640.30612.00100
Date Sampled Dec 07, 2022
Report 948085-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
12-194 - Building 2A - External - Ground Surface - East	22-De0015396	Dec 07, 2022	Approximate Sample 6g / -mm Sample consisted of: Dust	Chrysotile asbestos detected in the form of loose fibre bundle. Approximate dimensions 10 x 5 x 2mm. Synthetic mineral fibres detected. Organic fibres detected. No trace asbestos detected.
12-195 - Building 2A - External - Ground Surface - East	22-De0015397	Dec 07, 2022	Approximate Sample 8g / -mm Sample consisted of: Dust	Chrysotile asbestos detected in the form of loose fibre bundle. Approximate dimensions 10 x 5 x 1mm. Synthetic mineral fibres detected. Organic fibres detected. No trace asbestos detected.
12-196 - Building 2A - External - Ground Surface - East	22-De0015398	Dec 07, 2022	Approximate Sample 5g / -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.
12-197 - Building 2A - External - Ground Surface - East	22-De0015399	Dec 07, 2022	Approximate Sample 5g / -mm Sample consisted of: Dust	Chrysotile asbestos detected in the form of loose fibre bundles. Approximate dimensions 5 x 5 x 2mm. Synthetic mineral fibres detected. Organic fibres detected. No trace asbestos detected.
12-198 - Building 2A - External - Ground Surface - East	22-De0015400	Dec 07, 2022	Approximate Sample 9g / -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
12-199 - Building 2A - External - Ground Surface - North	22-De0015401	Dec 07, 2022	Approximate Sample 6g / -mm Sample consisted of: Dust	Chrysotile asbestos detected in the form of loose fibre bundle. Approximate dimensions 10 x 5 x 2mm. Synthetic mineral fibres detected. Organic fibres detected. No trace asbestos detected.
12-200 - Building 2A - External - Ground Surface - North	22-De0015402	Dec 07, 2022	Approximate Sample 8g / -mm Sample consisted of: Dust	Chrysotile asbestos detected in the form of fibre cement fragment. Approximate dimensions 5 x 5 x 2mm. Synthetic mineral fibres detected. Organic fibres detected. No trace asbestos detected.
12-201 - Building 2A - External - Ground Surface - North	22-De0015403	Dec 07, 2022	Approximate Sample 11g / -mm Sample consisted of: Dust	Chrysotile and amosite asbestos detected in the form of fibre cement fragment. Approximate dimensions 10 x 5 x 2mm. Synthetic mineral fibres detected. Organic fibres detected. No trace asbestos detected.
12-202 - Building 2A - External - Ground Surface - North	22-De0015404	Dec 07, 2022	Approximate Sample 19g / -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.
12-203 - Building 2A - External - Ground Surface - North	22-De0015405	Dec 07, 2022	Approximate Sample 6g / -mm Sample consisted of: Dust	Chrysotile, amosite and crocidolite asbestos detected in the form of fibre cement fragments and loose fibre bundles. Approximate dimensions 15 x 5 x 2mm. Synthetic mineral fibres detected. Organic fibres detected. Trace chrysotile, amosite and crocidolite 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.

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8020	Melbourne	Dec 07, 2022	Indefinite

Company Name:	SLR Consulting (Vic)	Order No.:		Received:	Dec 7, 2022 5:00 PM
Address:	Suite 2, Grd Flr, 2 Domville Ave Hawthorn VIC 3122	Report #:	948085	Due:	Dec 9, 2022
Project Name:	Melbourne Innovation Centre	Phone:	03 9249 9400	Priority:	2 Day
Project ID:	640.30612.00100	Fax:		Contact Name:	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	12-194 - Building 2A - External - Ground Surface - East	Dec 07, 2022		Building Materials	M22-De0015396	X
2	12-195 - Building 2A - External - Ground Surface - East	Dec 07, 2022		Building Materials	M22-De0015397	X
3	12-196 - Building 2A - External - Ground Surface - East	Dec 07, 2022		Building Materials	M22-De0015398	X
4	12-197 - Building 2A - External -	Dec 07, 2022		Building Materials	M22-De0015399	X

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

Project Name: Melbourne Innovation Centre
Project ID: 640.30612.00100

Order No.:
Report #: 948085
Phone: 03 9249 9400
Fax:

Received: Dec 7, 2022 5:00 PM
Due: Dec 9, 2022
Priority: 2 Day
Contact Name: James Bracken

Eurofins Analytical Services Manager : Harry Bacalis

Sample Detail						Asbestos Absence / Presence
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Melbourne Laboratory - NATA # 1261 Site # 1254						
	Ground Surface - East					X
5	12-198 - Building 2A - External - Ground Surface - East	Dec 07, 2022		Building Materials	M22-De0015400	X
6	12-199 - Building 2A - External - Ground Surface - North	Dec 07, 2022		Building Materials	M22-De0015401	X
7	12-200 - Building 2A - External - Ground Surface - North	Dec 07, 2022		Building Materials	M22-De0015402	X
8	12-201 - Building 2A -	Dec 07, 2022		Building Materials	M22-De0015403	X

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

Project Name: Melbourne Innovation Centre
Project ID: 640.30612.00100

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Priority: 2 Day
Contact Name: James Bracken

Eurofins Analytical Services Manager : Harry Bacalis

Sample Detail						Asbestos Absence / Presence
Melbourne Laboratory - NATA # 1261 Site # 1254						X
	External - Ground Surface - North					
9	12-202 - Building 2A - External - Ground Surface - North	Dec 07, 2022		Building Materials	M22-De0015404	X
10	12-203 - Building 2A - External - Ground Surface - North	Dec 07, 2022		Building Materials	M22-De0015405	X
Test Counts						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 (% w/w)
F/fld	Airborne fibre filter loading as Fibres (N) per Fields counted (n)
F/mL	Airborne fibre reported concentration as Fibres per millilitre of air drawn over the sampler membrane (C)
g, kg	Mass, e.g. of whole sample (M) or asbestos-containing find within the sample (m)
g/kg	Concentration in grams per kilogram
L, mL	Volume, e.g. of air as measured in AFM (V = r x t)
L/min	Airborne fibre sampling Flowrate as litres per minute of air drawn over the sampler membrane (r)
min	Time (t), 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

%asbestos	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> .
ACM	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.
AF	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".
AFM	Airborne Fibre Monitoring, e.g. by the MFM.
Amosite	Amosite Asbestos Detected. Amosite may also refer to Fibrous Grunerite or Brown Asbestos. Identified in accordance with AS 4964-2004.
AS	Australian Standard.
Asbestos Content (as asbestos)	Total % w/w asbestos content in asbestos-containing finds in a soil sample (% w/w).
Chrysotile	Chrysotile Asbestos Detected. Chrysotile may also refer to Fibrous Serpentine or White Asbestos. Identified in accordance with AS 4964-2004.
COC	Chain of Custody.
Crocidolite	Crocidolite Asbestos Detected. Crocidolite may also refer to Fibrous Riebeckite or Blue Asbestos. Identified in accordance with AS 4964-2004.
Dry	Sample is dried by heating prior to analysis.
DS	Dispersion Staining. Technique required for Unequivocal Identification of asbestos fibres by PLM.
FA	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.
Fibre Count	Total of all fibres (whether asbestos or not) meeting the counting criteria set out in the NOHSC:3003
Fibre ID	Fibre Identification. Unequivocal identification of asbestos fibres according to AS 4964-2004. Includes Chrysotile, Amosite (Grunerite) or Crocidolite asbestos.
Friable	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.
HSG248	UK HSE HSG248, <i>Asbestos: The Analysts Guide</i> , 2nd Edition (2021).
HSG264	UK HSE HSG264, <i>Asbestos: The Survey Guide</i> (2012).
ISO (also ISO/IEC)	International Organization for Standardization / International Electrotechnical Commission.
K Factor	Microscope constant (K) as derived from the effective filter area of the given AFM membrane used for collecting the sample (A) and the projected eyepiece graticule area of the specific microscope used for the analysis (a).
LOR	Limit of Reporting.
MFM (also NOHSC:3003)	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)].
NEPM (also ASC NEPM)	National Environment Protection (Assessment of Site Contamination) Measure, (2013, as amended).
Organic	Organic Fibres Detected. Organic may refer to Natural or Man-Made Polymeric Fibres. Identified in accordance with AS 4964-2004.
PCM	Phase Contrast Microscopy. As used for Fibre Counting according to the MFM.
PLM	Polarised Light Microscopy. As used for Fibre Identification and Trace Analysis according to AS 4964-2004.
SMF	Synthetic Mineral Fibre Detected. SMF may also refer to Man Made Vitreous Fibres. Identified in accordance with AS 4964-2004.
SRA	Sample Receipt Advice.
Trace Analysis	Analytical procedure used to detect the presence of respirable fibres (particularly asbestos) in a given sample matrix.
UK HSE HSG	United Kingdom, Health and Safety Executive, Health and Safety Guidance, publication.
UMF	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.
WA DOH	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>
Weighted Average	Combined average % w/w asbestos content of all asbestos-containing finds in the given aliquot or total soil sample (%_{WA}).

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 948088-AID
Project Name Melbourne Innovation Centre
Project ID 640.30612.00100
Received Date Dec 07, 2022
Date Reported Dec 09, 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 640.30612.00100
Date Sampled Dec 07, 2022
Report 948088-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
12-204 - Building 2A - External - Ground Surface - West	22-De0015406	Dec 07, 2022	Approximate Sample 6g Sample consisted of: Dust	Chrysotile asbestos detected in the form of loose fibre bundle. Approximate dimensions 5 x 5 x 2mm. Organic fibres detected. No trace asbestos detected.
12-205 - Building 2A - External - Ground Surface - West	22-De0015407	Dec 07, 2022	Approximate Sample 6g Sample consisted of: Dust	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
12-206 - Building 2A - External - Ground Surface - West	22-De0015408	Dec 07, 2022	Approximate Sample 6g Sample consisted of: Dust	Chrysotile asbestos detected in the form of loose fibre bundle. Approximate dimensions 10 x 5 x 1mm. Synthetic mineral fibres detected. Organic fibres detected. No trace asbestos detected.
12-207 - Building 2A - External - Ground Surface - West	22-De0015409	Dec 07, 2022	Approximate Sample 8g Sample consisted of: Dust	Chrysotile asbestos detected in the form of loose fibre bundle. Approximate dimensions 15 x 5 x 2mm. Organic fibres detected. No trace asbestos detected.
12-208 - Building 2A - External - Ground Surface - West	22-De0015410	Dec 07, 2022	Approximate Sample 7g Sample consisted of: Dust	Chrysotile asbestos detected in the form of loose fibre bundle. Approximate dimensions 5 x 5 x 1mm. Synthetic mineral fibres detected. Organic fibres detected. No trace asbestos detected.
12-209 - Building 2A - External - Ground Surface - South	22-De0015411	Dec 07, 2022	Approximate Sample 15g Sample consisted of: Dust	Chrysotile and crocidolite asbestos detected in the form of loose fibre bundles. Approximate dimensions 15 x 5 x 2mm. Organic fibres detected. Trace chrysotile and crocidolite asbestos detected.

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
12-210 - Building 2A - External - Ground Surface - South	22-De0015412	Dec 07, 2022	Approximate Sample 13g Sample consisted of: Dust	Chrysotile asbestos detected in the form of loose fibre bundle. Approximate dimensions 10 x 5 x 2mm. Synthetic mineral fibres detected. Organic fibres detected. No trace asbestos detected.
12-211 - Building 2A - External - Ground Surface - South	22-De0015413	Dec 07, 2022	Approximate Sample 8g Sample consisted of: Dust	Chrysotile and crocidolite asbestos detected in the form of loose fibre bundles. Approximate dimensions 15 x 5 x 2mm. Synthetic mineral fibres detected. Organic fibres detected. Trace chrysotile and crocidolite asbestos detected.
12-212 - Building 2A - External - Ground Surface - South	22-De0015414	Dec 07, 2022	Approximate Sample 12g Sample consisted of: Dust	Chrysotile and crocidolite asbestos detected in the form of loose fibre bundles. Approximate dimensions 15 x 5 x 2mm. Synthetic mineral fibres detected. Organic fibres detected. Trace chrysotile and crocidolite 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.

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8020	Melbourne	Dec 07, 2022	Indefinite

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

Project Name: Melbourne Innovation Centre
Project ID: 640.30612.00100

Order No.:
Report #: 948088
Phone: 03 9249 9400
Fax:

Received: Dec 7, 2022 5:00 PM
Due: Dec 9, 2022
Priority: 2 Day
Contact Name: 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	12-204 - Building 2A - External - Ground Surface - West	Dec 07, 2022		Building Materials	M22-De0015406	X
2	12-205 - Building 2A - External - Ground Surface - West	Dec 07, 2022		Building Materials	M22-De0015407	X
3	12-206 - Building 2A - External - Ground Surface - West	Dec 07, 2022		Building Materials	M22-De0015408	X
4	12-207 - Building 2A - External -	Dec 07, 2022		Building Materials	M22-De0015409	X

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

Project Name: Melbourne Innovation Centre
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Order No.:
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Eurofins Analytical Services Manager : Harry Bacalis

Sample Detail						Asbestos Absence / Presence
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Melbourne Laboratory - NATA # 1261 Site # 1254						X
	Ground Surface - West					
5	12-208 - Building 2A - External - Ground Surface - West	Dec 07, 2022		Building Materials	M22-De0015410	X
6	12-209 - Building 2A - External - Ground Surface - South	Dec 07, 2022		Building Materials	M22-De0015411	X
7	12-210 - Building 2A - External - Ground Surface - South	Dec 07, 2022		Building Materials	M22-De0015412	X
8	12-211 - Building 2A -	Dec 07, 2022		Building Materials	M22-De0015413	X

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

Project Name: Melbourne Innovation Centre
Project ID: 640.30612.00100

Order No.:
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Received: Dec 7, 2022 5:00 PM
Due: Dec 9, 2022
Priority: 2 Day
Contact Name: James Bracken

Eurofins Analytical Services Manager : Harry Bacalis

Sample Detail						Asbestos Absence / Presence
Melbourne Laboratory - NATA # 1261 Site # 1254						X
	External - Ground Surface - South					
9	12-212 - Building 2A - External - Ground Surface - South	Dec 07, 2022		Building Materials	M22-De0015414	X
Test Counts						9

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

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

%asbestos	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> .
ACM	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.
AF	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".
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COC	Chain of Custody.
Crocidolite	Crocidolite Asbestos Detected. Crocidolite may also refer to Fibrous Riebeckite or Blue Asbestos. Identified in accordance with AS 4964-2004.
Dry	Sample is dried by heating prior to analysis.
DS	Dispersion Staining. Technique required for Unequivocal Identification of asbestos fibres by PLM.
FA	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.
Fibre Count	Total of all fibres (whether asbestos or not) meeting the counting criteria set out in the NOHSC:3003
Fibre ID	Fibre Identification. Unequivocal identification of asbestos fibres according to AS 4964-2004. Includes Chrysotile, Amosite (Grunerite) or Crocidolite asbestos.
Friable	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.
HSG248	UK HSE HSG248, <i>Asbestos: The Analysts Guide</i> , 2nd Edition (2021).
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ISO (also ISO/IEC)	International Organization for Standardization / International Electrotechnical Commission.
K Factor	Microscope constant (K) as derived from the effective filter area of the given AFM membrane used for collecting the sample (A) and the projected eyepiece graticule area of the specific microscope used for the analysis (a).
LOR	Limit of Reporting.
MFM (also NOHSC:3003)	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)].
NEPM (also ASC NEPM)	National Environment Protection (Assessment of Site Contamination) Measure, (2013, as amended).
Organic	Organic Fibres Detected. Organic may refer to Natural or Man-Made Polymeric Fibres. Identified in accordance with AS 4964-2004.
PCM	Phase Contrast Microscopy. As used for Fibre Counting according to the MFM.
PLM	Polarised Light Microscopy. As used for Fibre Identification and Trace Analysis according to AS 4964-2004.
SMF	Synthetic Mineral Fibre Detected. SMF may also refer to Man Made Vitreous Fibres. Identified in accordance with AS 4964-2004.
SRA	Sample Receipt Advice.
Trace Analysis	Analytical procedure used to detect the presence of respirable fibres (particularly asbestos) in a given sample matrix.
UK HSE HSG	United Kingdom, Health and Safety Executive, Health and Safety Guidance, publication.
UMF	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.
WA DOH	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>
Weighted Average	Combined average % w/w asbestos content of all asbestos-containing finds in the given aliquot or total soil sample (%_{WA}).

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](#).

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APPENDIX C

Photographs

Photo 1: Sample 12-183



Photo 2: Sample 12-187



Photo 3: Sample 12-189



Photo 4: Sample 12-190



Photo 5: Sample 12-191



Photo 6: Sample 12-192



Photo 7: Sample 12-193



Photo 8: Sample 12-194



Photo 9: Sample 12-195



Photo 10: Sample 12-197



Photo 11: Sample 12-199



Photo 12: Sample 12-200



Photo 13: Sample 12-201



Photo 14: Sample 12-203



Photo 15: Sample 12-204



Photo 16: Sample 12-206



Photo 17: Sample 12-207



Photo 18: Sample 12-208



Photo 19: Sample 12-209



Photo 20: Sample 12-210



Photo 21: Sample 12-211



Photo 22: Sample 12-212



APPENDIX D

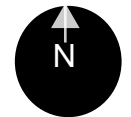
Sample Locations

FIGURE 1

Project Number: 640.30612.00300
Date: December 2022
Drawn by: Krishna Kadali
Version: V01
Client: Darebin Council
Floor Level: External, Ground
Address:

LEGEND

- Positive Sample Location (Red dot)
- Negative Sample Location (Green dot)



Note: Drawing not to scale

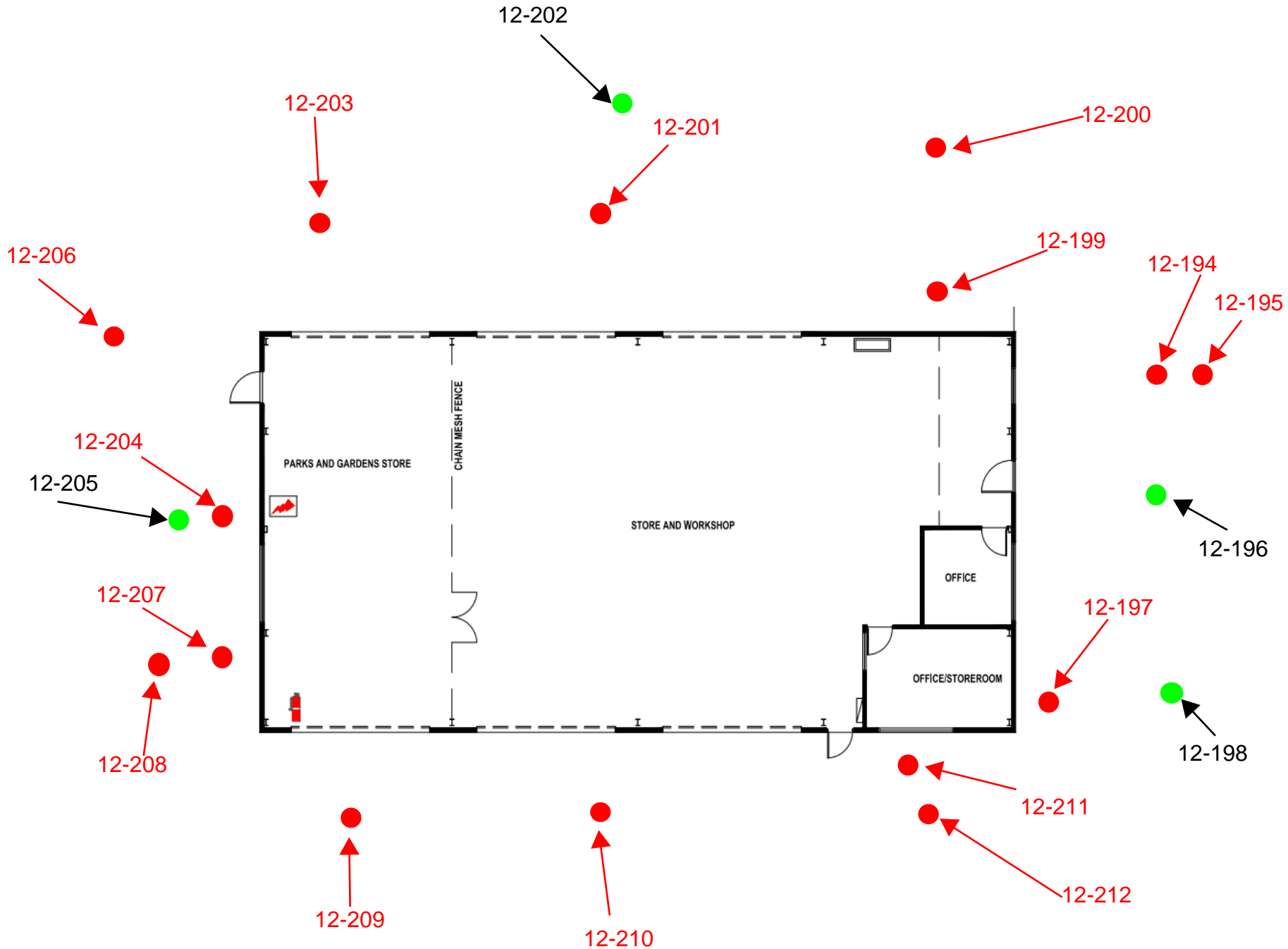
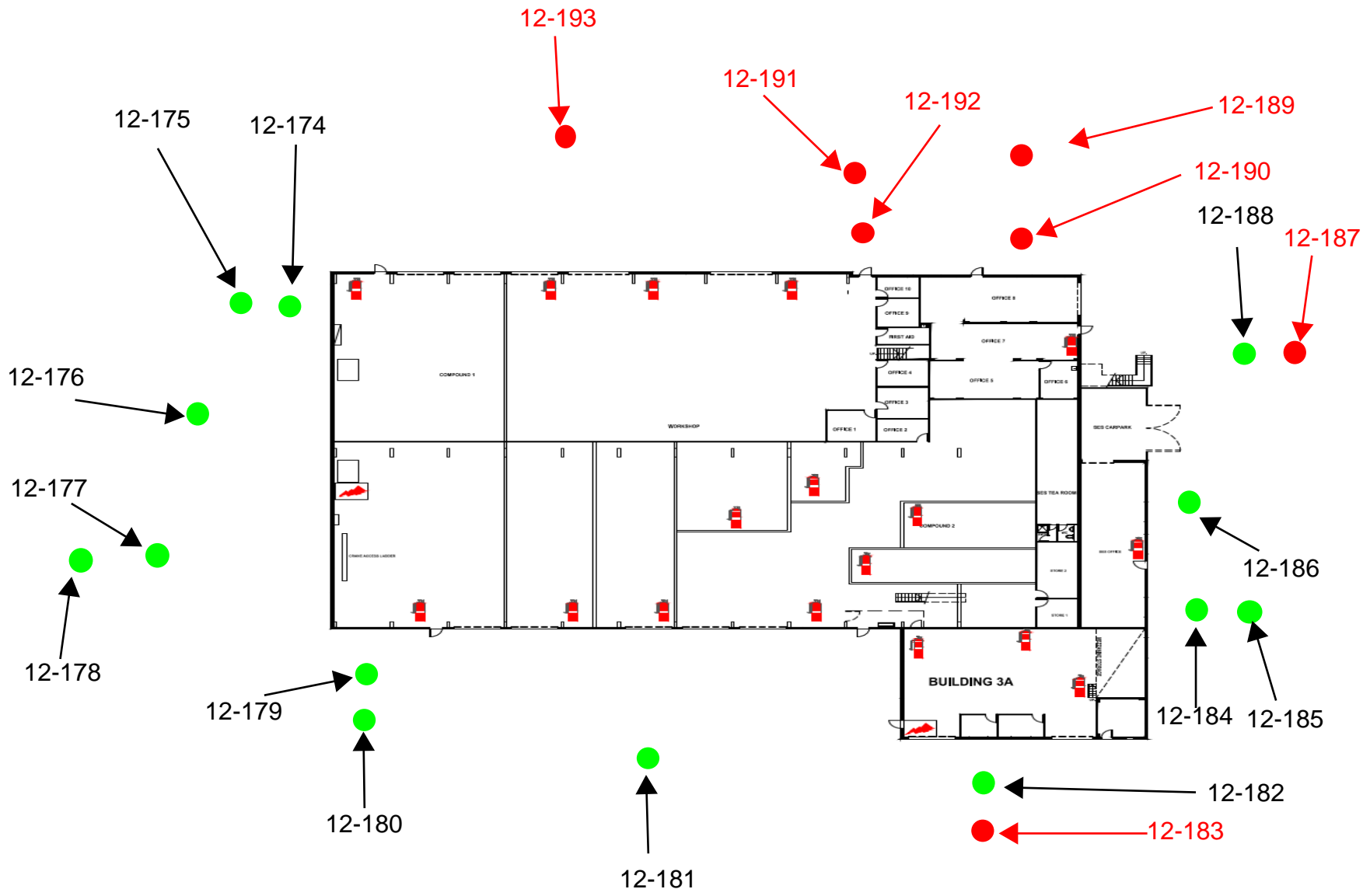


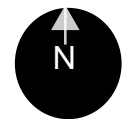
FIGURE 1

Project Number: 640.30612.00300
 Date: December 2022
 Drawn by: Krishna Kadali
 Version: V01
 Client: Darebin Council
 Floor Level: External, Ground
 Address:



LEGEND

- Positive Sample Location
- Negative Sample Location



Note: Drawing not to scale