



# GREENLIGHT

ENVIRONMENTAL SERVICES

## Asbestos Sample Analysis Report

Due Diligence Testing

**Report Number** A1966.01.ASAM Rev 0  
**Issue Date** 4 April 2023

Client & Site Location	Report Prepared By
Joe Blogs 123 High St MELBOURNE, VIC 3000	Michael Tierney LE Director, Occupational Hygienist Asbestos Assessor (License No. LAA001018)
<b>Samples Collected</b> Monday, 3 April 2023	

### 1 Scope

Greenlight Environmental Services Pty Ltd (Greenlight) was engaged by Joe Blogs to analyse for (4) samples delivered to Greenlight for possible asbestos content.

### 2 Analysis Method

The samples were analysed under a Stereomicroscope and selected fibres were analysed by Polarised Light Microscopy in conjunction with dispersion staining techniques including Synthetic Mineral Fibre and Organic Fibre as per the Australian Standard AS 4964-2004 Method for the qualitative identification of asbestos in bulk samples.



Please Refer to [Appendix A](#) for the NATA Endorsed Asbestos Sample Analysis Report







### 3 Sample Results

<b>Total Samples Collected</b>	<b>4</b>	<b>Site Location</b> 123 High St MELBOURNE, VIC 3000
<b>Asbestos Containing Samples</b>	<b>2</b>	
<b>Non-Asbestos Samples</b>	<b>2</b>	
<b>Please note:</b> this document details samples collected by the client – The document <b>does not</b> constitute an asbestos register for the building.		<b>Samples Collected By</b> Joe Blogs

Location & Status	Assessment Details	Photo 1	Photo 2
<b>123 High St, MELBOURNE, VIC 3000</b>			
<b>Under front Verandah</b> Cement Sheeting Status: <b>Positive</b> i.e. the sample <b>contains</b> asbestos	<b>Your Reference Sample 1</b> <b>Lab Sample Number</b> GL008587 <b>Outcome</b> Chrysotile Asbestos Detected		
<b>Fully Enclosed Back Verandah (sun-room)</b> Cement sheeting (on wall & ceiling) Status: <b>Positive</b> i.e. the sample <b>contains</b> asbestos	<b>Your Reference Sample 2</b> <b>Lab Sample Number</b> GL008588 <b>Outcome</b> Chrysotile Asbestos Detected		



Location & Status	Assessment Details	Photo 1	Photo 2
<b>123 High St, MELBOURNE, VIC 3000 (continued... )</b>			
<p><b>Under Carpet in lounge/hall way</b></p> <p>Old Vinyl Flooring</p> <p>Status: <b>Negative</b></p> <p><b>i.e. the sample <u>does not</u> contain asbestos</b></p>	<p><b>Your Reference</b> Sample 3</p> <p><b>Lab Sample Number</b> GL008589</p> <p><b>Outcome</b> <i>No Asbestos Detected</i></p>		
<p><b>Kitchen / Dining Area</b></p> <p>Vinyl Tiles</p> <p>Status: <b>Negative</b></p> <p><b>i.e. the sample <u>does not</u> contain asbestos</b></p>	<p><b>Your Reference</b> Sample 4</p> <p><b>Lab Sample Number</b> GL008590</p> <p><b>Outcome</b> <i>No Asbestos Detected</i></p>		

Example Report



## 4 Limitations

Sample results represent samples as delivered to Greenlight with samples collected by unknown third parties. This report represents the results of that sample analysis and is not a statement regarding the presence or absence of asbestos within a property as a whole. Such a statement can only be made with a thorough investigation of the property with appropriate sampling as required by an experienced auditor.

We therefore limit any potential liability associated with our work to the cost of our services. Furthermore, it should be noted that there can be no guarantee that a sample is typical of an extended area, nor that the sample collected by the third party is a representative sample of that material.

Kind Regards,

Michael Tierney BE  
Director, Occupational Hygienist  
Asbestos Assessor  
(License No. LAA001018)

Example Report



# Example Report

## APPENDIX A - LAB REPORT

**Greenlight Enviro Serv P/L ATF Greenlight Serv**  
**Office 24, 15 Cochranes Rd**  
**Moorabbin**  
**VIC 3189**



**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:** Michael Tierney  
**Report** 977769-AID  
**Project Name**  
**Project ID** A1966.01  
**Received Date** Apr 03, 2023  
**Date Reported** Apr 04, 2023

**Methodology:**

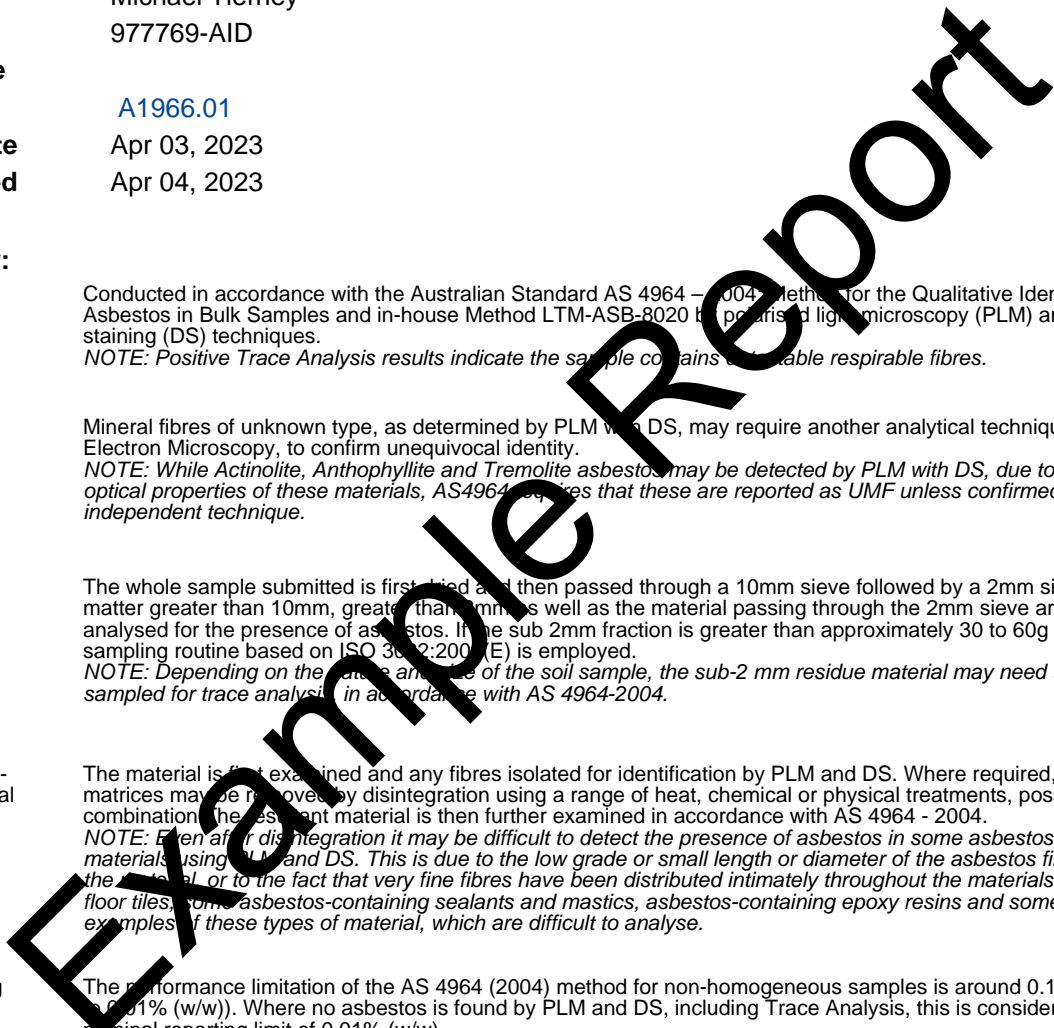
**Asbestos Fibre Identification** Conducted in accordance with the Australian Standard AS 4964 – 2004 Method for the Qualitative Identification of Asbestos in Bulk Samples and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques.  
*NOTE: Positive Trace 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 3062:2000 (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**

**Project ID**

A1966.01

**Date Sampled**

Apr 03, 2023

**Report**

977769-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
GL008587	23-Ap0003449	Apr 03, 2023	Approximate Sample 5g / 35 x 30 x 5mm Sample consisted of: Cement sheet	Chrysotile asbestos detected. Organic fibres detected.
GL008588	23-Ap0003450	Apr 03, 2023	Approximate Sample 5g / 40 x 22 x 5mm Sample consisted of: Cement sheet	Chrysotile asbestos detected. Organic fibres detected.
GL008589	23-Ap0003451	Apr 03, 2023	Approximate Sample 5g / 50 x 50 x 1mm Sample consisted of: Vinyl sheet	No asbestos detected. Organic fibres detected. No trace asbestos detected.
GL008590	23-Ap0003452	Apr 03, 2023	Approximate Sample 5g / 40 x 16 x 1mm Sample consisted of: Vinyl sheet with adhesive backing	No asbestos detected. Organic fibres detected. No trace asbestos detected.

Example Report

**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	Apr 03, 2023	Indefinite

Example Report



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

**Geelong**  
19/8 Lewalan Street  
Grovedale  
VIC 3216  
Tel: +61 3 8564 5000  
NATA# 1261 Site# 25403

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

**Canberra**  
Unit 1,2 Dacre Street  
Mitchell  
ACT 2911  
Tel: +61 2 6113 8091  
NATA# 1261 Site# 25466

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

**Newcastle**  
1/2 Frost Drive  
Mayfield West NSW 2304  
Tel: +61 2 4968 8448  
NATA# 1261  
Site# 25079 & 25289

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

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

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

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

**Company Name:** Greenlight Enviro Serv P/L ATF Greenlight OH&S  
**Address:** Office 24, 15 Cochranes Rd  
Moorabbin  
VIC 3189

**Project Name:**  
**Project ID:**

**Order No.:**  
**Report #:** 977769  
**Phone:** 0416 388 825  
**Fax:**

**Received:** Apr 3, 2023 5:20 PM  
**Due:** Apr 4, 2023  
**Priority:** 1 Day  
**Contact Name:** - ALL SRA's & Reports

**Eurofins Analytical Services Manager : Zoe Burke**

Sample Detail						Asbestos Absence / Presence
Melbourne Laboratory - NATA # 1261 Site # 1254						X
External Laboratory						
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID	
1	GL008587	Apr 03, 2023		Building Materials	M23-Ap0003449	
2	GL008588	Apr 03, 2023		Building Materials	M23-Ap0003450	X
3	GL008589	Apr 03, 2023		Building Materials	M23-Ap0003451	X
4	GL008590	Apr 03, 2023		Building Materials	M23-Ap0003452	X
<b>Test Counts</b>						4

EXAMPLE REPORT

**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. 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/field	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:  $C = \left(\frac{A}{a}\right) \times \left(\frac{N}{n}\right) \times \left(\frac{1}{r}\right) \times \left(\frac{1}{t}\right) = K \times \left(\frac{N}{n}\right) \times \left(\frac{1}{t}\right)$

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

Weighted Average (of asbestos):  $\% w_A = \frac{\sum (m \times PA)_x}{x}$

**Terms**

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

EXAMPLE REPORT

**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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**Example Report**



## Contact Information & Further Services

Thank you for engaging Greenlight. If you have any queries about the report or any other asbestos related matters, please do not hesitate to contact our office on:

**Phone:** 03 9048 4411

**email:** [info@greenlightservices.com.au](mailto:info@greenlightservices.com.au)

Be sure to quote the report number: **A1966.01** when making contact so that we can view the site's report along with your enquiry.

Greenlight are an experienced occupational hygiene and project management company and may be of further assistance in the following areas:

- Asbestos Registers for Commercial or Residential Developments
- Asbestos Removal Works Project Management - we have a number of safe and reliable contractors we can call on to carry out works on your behalf;
- Division 6 Asbestos Audits;
- Asbestos Clearance Certificates;
- Asbestos Air Monitoring;
- Meth Testing (for methamphetamine drug residue within the site); or
- Indoor Air Quality Assessments.

Please do not hesitate to contact us if we can be of any further assistance.

Example Report

