



CERTIFICATE OF ANALYSIS
FIBRE IDENTIFICATION

Job No.: HL1516-000 **Date of Report:** 26.10.2015 **Samples Taken by:** Client **Samples Received:** 26.10.2015
Client: Joe Blog **Attention:** **Email/Tel. No:** xx@xxxx.net.au
Client Reference: 20 Osprey Drive, South Perth

METHODOLOGY SUMMARY

Test Specification Employed: In-House Test Procedure LPH-01 based on AS 4964-2004

Samples of material are examined to determine the presence of asbestos fibres using AS4964 (2004) & In-House Procedure LPH-01 i.e. Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by **Polarised Light Microscopy (PLM)** in conjunction with **Dispersion Staining (DS)**. Unequivocal identification of asbestos minerals present is made by assessing fibre properties to see whether the values are typical and consistent with published data. This provides a reasonable degree of certainty to determine whether a fibre under investigation is asbestiform or not. Careful application of the test procedure provides sufficient diagnostic clues to allow unequivocal identification of asbestos types, and so, to determine whether a sample contains asbestos or not. If sufficient diagnostic clues are absent, then positive identification of fibrous asbestos is not possible.

CLIENT SUPPLIED SAMPLES

Emission Assessments is not responsible for the accuracy or competence of sampling carried by third parties. Sample location(s) and/or sample type(s) of third party samples delivered to the laboratory are given by the client at the time of delivery. Under these circumstances, Emission Assessments cannot be held responsible for the interpretation of the results shown. Emission Assessments takes responsibility of information reported only when a staff member takes the sample(s).

REPORTING OF RESULTS

'Asbestos Detected': Asbestos detected by **Polarised Light Microscopy (PLM)**, including **Dispersion Staining (DS)**

'No Asbestos Detected': No Asbestos detected by **Polarised Light Microscopy (PLM)**, including **Dispersion Staining (DS)**

'UMF Detected': Mineral fibres of unknown type detected by **Polarised Light Microscopy (PLM)**, including **Dispersion Staining (DS)**. Confirmation by another independent analytical technique may be necessary.

"Hand-picked" refers to small discrete amounts of asbestos unevenly distributed in a large body of non-asbestos material.

Limit of Detection (LOD) & Limit of Report (LOR)

Known limitations of the test procedure using **Polarised Light Microscopy (PLM)** are:

- **PLM** is a qualitative technique only;
- It does not cover identification of airborne or water-borne asbestos;
- The less encountered asbestos mineral fibres actinolite, anthophyllite and tremolite exhibit a wide range of optical properties that preclude unequivocal identification by **PLM** and **Dispersion Staining (DS)**. Thus, the method is used to positively identify the three major asbestos minerals: amosite ("brown"), chrysotile ("white") and crocidolite ("blue");
- Valid identification requires that the sample material contains a sufficient quantity of the unknown fibres in excess of the practical detection limit used (in this case, **PLM** and **Dispersion Staining**, which has a calculated practical detection limit of **0.01 - 0.1% w/w** equivalent to **0.1 - 1g/kg (AS4964-2004:App.A4)**).

Results relate only to the sample(s) submitted for testing. Test report must not be reproduced except in full.

Sample No.	Client Ref.	Location	Physical Structure	Sample Description	Analysis of Fibrous Content
L20576	# 1	Back Fence	Asbestos Cement Product	4g	Chrysotile Asbestos Detected
L20577	#2	Bob Side Fence	Asbestos Cement Product	6g	Amosite Asbestos Detected Chrysotile Asbestos Detected
L20578	#3	Maria Side Fence	Cementitious Mass	150x70x7mm	No Asbestos Detected

Number of Samples: 3

Dr. Monika Bürger
Approved Identifier



Dr. Monika Bürger
Approved Signatory