CFMEU
CONSTRUCTION

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12 April 2017

Senate Standing Committees on Economics
PO Box 6100
Parliament House
Canberra ACT 2600

By email: economics.sen@aph.gov.au

Dear Chair

Inquiry into Non-conforming building products – Supplementary information

I write regarding the Senate Economics References Committee's Inquiry into Non-conforming building products (**the Inquiry**) and the Committee's hearing, which was held in Perth on 9 March 2017. The Construction, Forestry, Mining and Energy Union - Construction and General Division-WA Divisional Branch) (**CFMEU**) raised a number of issues of critical importance to our members at the inquiry, particularly in relation to asbestos exposure at the Perth Children's Hospital Project (**the Project**).The Committee extended an opportunity to provide supplementary information. The CFMEU thanks the Committee for the opportunity to provide supplementary information for consideration.

The Committee requested the following:

a) Documentation that stated that the panels utilised on the PCH project did not contain asbestos;
b) Photographs taken at the PCH site;
c) Independent analysis and test results from the panels on the PCH; and
d) Various correspondence in relation to the asbestos in panels at the PCH.

I have enclosed the information for the Committee to peruse. Please do not hesitate to contact me on [redacted] if you require further information or you wish to discuss this matter in further detail.

Yours faithfully

[redacted]

Michael (Mick) Buchan
State Secretary

Building it for the kids

YUANDA

SAMPLE SUBMITTAL SHEET

Project Name	**Perth New Children's Hospital**	**Project No.**	520B
Contractor Name	**Yuanda**	**Date:**	15 Nov, 2012

Submittal No.:	**NCH-YuandAus-FA-SAM-0409** (Ref No.P61)	**Revision:**	**0**
Submittal Title:	Fibre Cement Panel - 12mm Th		
Drawing Ref	**NCH-AUR-FA-SPC-001_9**		

DESCRIPTION	LOCATION OF USE
12mm Th, Density Fibre Cement Sheet	Building(s): Tower/Podium/IPU Area(s)/Room(s):
Subcontractor/Supplier/Manufacturer: Zhongwuqinfeng (Changzhou) **Physical Product ID Marking : N/A**	

State Approval Required:	Yes ☐	No ☒
Specification References:	Complying ☒	Non Complying ☐
DCR: N/A	Complying ☐	Non Complying ☐

We certify that the documents/materials submitted herewith have been reviewed in detail and are in strict conformance with the above except as otherwise stated on the **attached Functional / Technical Brief. & Specification Compliance Comparison Sheet.**

Subcontractor/Supplier/Manufacturer:	Name: Yuanda Australia	Signature: [redacted]	Date: 15 November, 2012
QC Documentation checked:			
John Holland **(Package Manager) Initial comments:** INTERNAL ARCELOR ONLY.	Name [redacted]	Signature: [redacted]	Date: 15/1/13.

State approval:
Minutes of Meeting ref. No: Date: M.o.M. Item No:
Attachments [Y/N] M.o.M. Extract: ☐ Photo: ☐

Name: Signature: Date:

Sample Reviewers Comments

Aurecon Comments: NO COMMENTS

Attachments [Y/N] N
Name: [redacted] Signature: [redacted] Date: 22/1/13

☐ Approved
☐ Approved-with comments
☐ Not Approved - Rejected

BCJH Comments:

N/A

Attachments [Y/N]
Name: Signature: [redacted] Date:

☐ Approved
☐ Approved-with comments
☐ Not Approved - Rejected

JHG Summary / Final Comments

Attachments [Y/N]
Name: [redacted] Signature: [redacted] Date: 23/1/13

☒ Approved
☐ Approved-with comments
☐ Rejected – Revise & resubmit

2010000735M (2010)建材质监认字(03)号

№.119120

检 验 报 告

TEST REPORT

产品名称：压蒸无石棉纤维素纤维水泥平板
PRODUCT NAME: Autoclaved Cellulose Fiber Cement Flat Sheet(Non-asbestos)

委托单位：浙江汉德邦建材有限公司
CUSTOMER: Zhejiang Headerboard Building Materials Co.,Ltd.

生产单位：浙江汉德邦建材有限公司
MANUFACTURER: Zhejiang Headerboard Building Materials Co.,Ltd.

检验类别：抽 样 检 验
TEST MODE: Sampling Inspection

国家建筑材料工业
装饰装修建筑材料质量监督检验测试中心
QUALITY SUPERVISION AND INSPECTION CENTER OF NATIONAL BUILDING MATERIALS INDUSTRY FOR DECORATING AND FINISHING BUILDING MATERIALS

二〇一一年十二月二十六日
Dec. 26, 2011

国家建筑材料工业
装饰装修建筑材料质量监督检验测试中心

Quality Supervision and Inspection Center of National Building Materials Industry for Decorating and Finishing Building Materials

检　验　报　告

TEST　REPORT

№. 119120　　共 2 页　第 1 页　(page 2-1)

产品名称 Product Name	压蒸无石棉纤维素纤维水泥平板 Autoclaved Cellulose Fiber Cement Flat Sheet (Non-asbestos)	型号规格 Type and Dimension	CCA-NA H Ⅳ 2440×1220×12
		商　标 Trademark	汉德邦 hdb
委托单位 Customer	浙江汉德邦建材有限公司 Zhejiang Headerboard Building Materials Co.,Ltd.	检验类别 Test Mode	抽样检验 Sampling Inspection
生产单位 Manufacturer	浙江汉德邦建材有限公司 Zhejiang Headerboard Building Materials Co.,Ltd.	样品状态 Sample State	完好 Well
抽样地点 Sampling Site	企业库房 Enterprise Storehouse	抽样日期 Sampling Date	2011 年 11 月 21 日 Nov. 21, 2011
样品数量 Sample Quantity	5 张 5 Sheets	抽 样 者 Sampling Authority	陈勇　黄君
抽样基数 Cardinal Number	560 张 560 Sheets	生产日期 Produced Date	2011 年 11 月 12 日 Nov. 12, 2011
检验依据 Test Basis	Q/HDB 002-2009	检验项目 Test Item	全项（除不燃性） Overall (except incombustibility)
检验结论 Conclusion	按照企业标准 Q/HDB 002-2009《压蒸无石棉纤维素纤维水泥平板》对压蒸无石棉纤维素纤维水泥平板进行抽样检验，检验结论为所检项目符合标准要求。 The product was sampled and tested according to the enterprise standard Q/HDB 002-2009 *cellulose fiber cement flat sheets (autoclaved)*. The conclusion is that the tested data meet the standard. 签发日期：2011 年 12 月 26 日 Signed Date: Dec. 26, 2011		
备　注 Remarks	本检验报告有效期为壹年。 The valid period of the test report will only be within one year exactly after the signed date.		

Approved by [redacted]　Checked by [redacted]　Drawn by: [redacted]

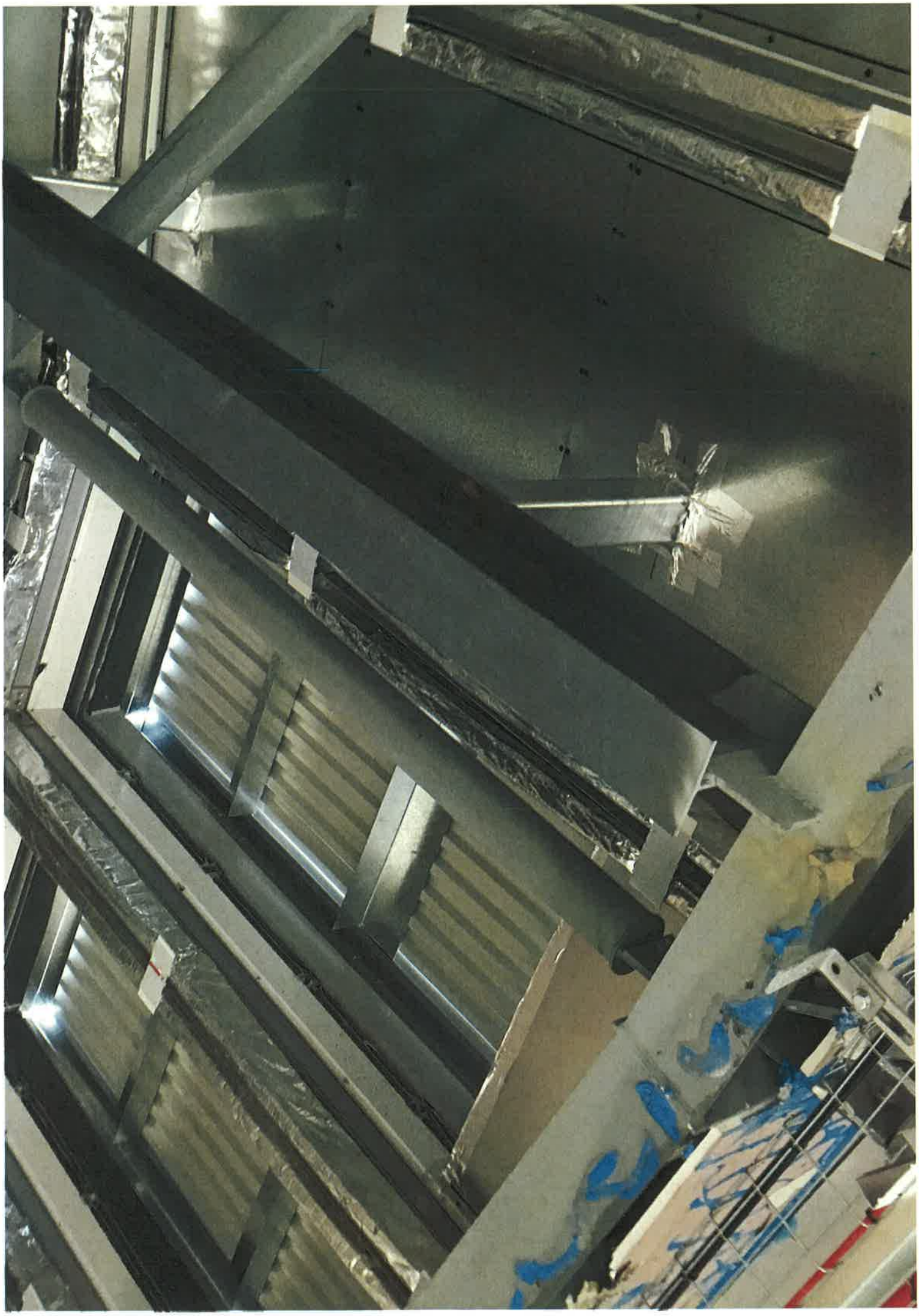
国家建筑材料工业
装饰装修建筑材料质量监督检验测试中心
Quality Supervision and Inspection Center of National Building Materials Industry for Decorating and Finishing Building Materials

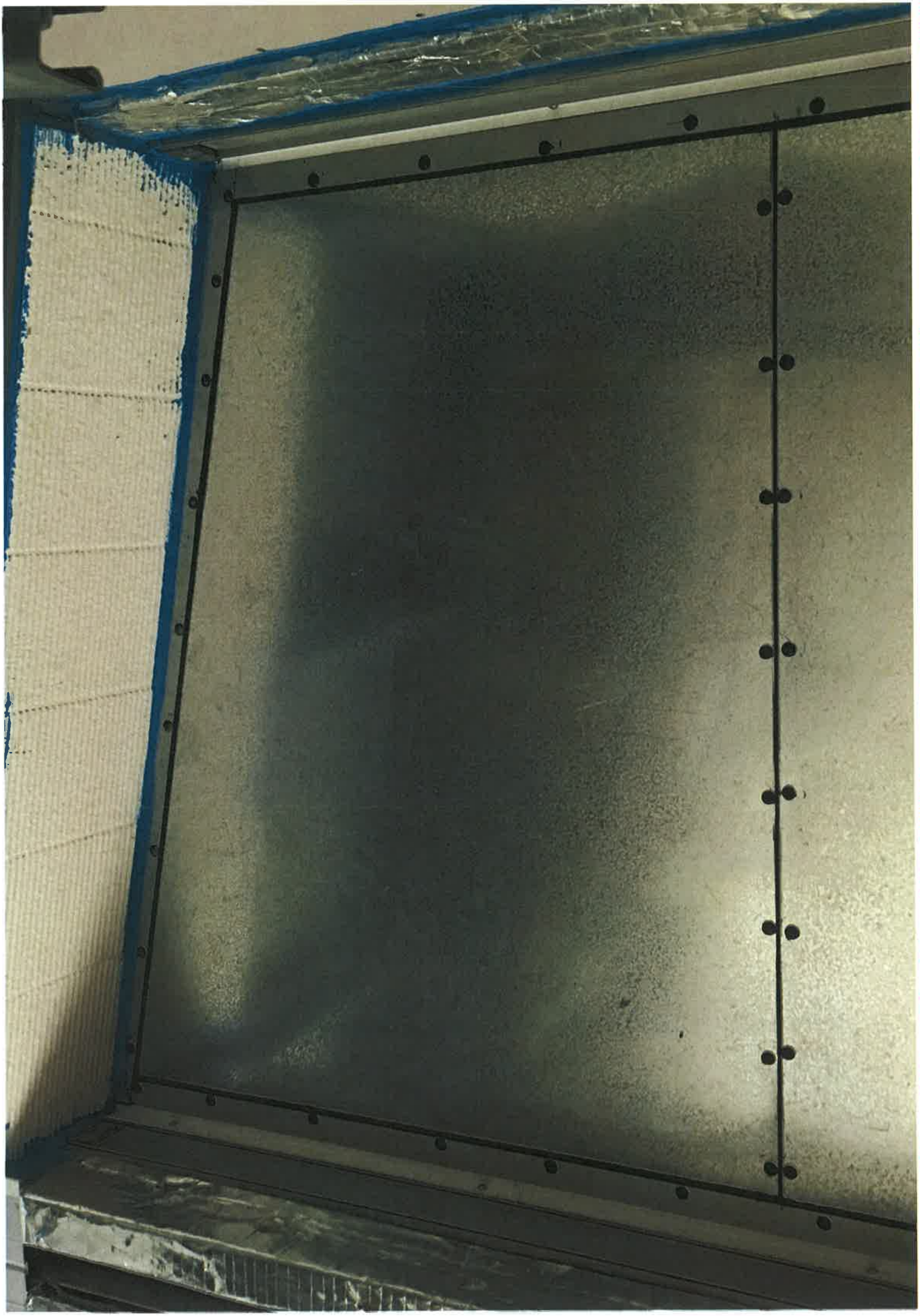
检 验 报 告
TEST REPORT

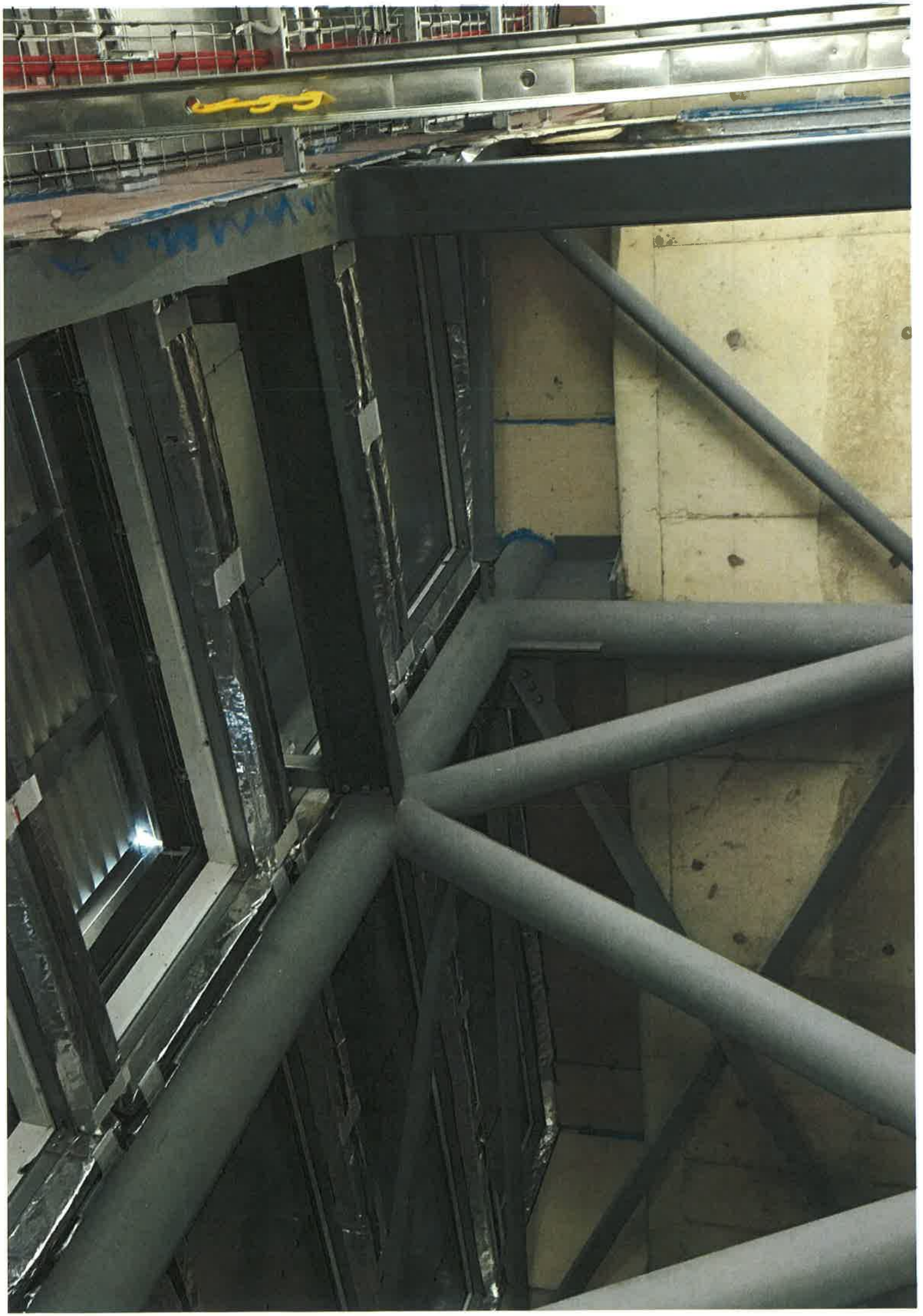
№. 119120

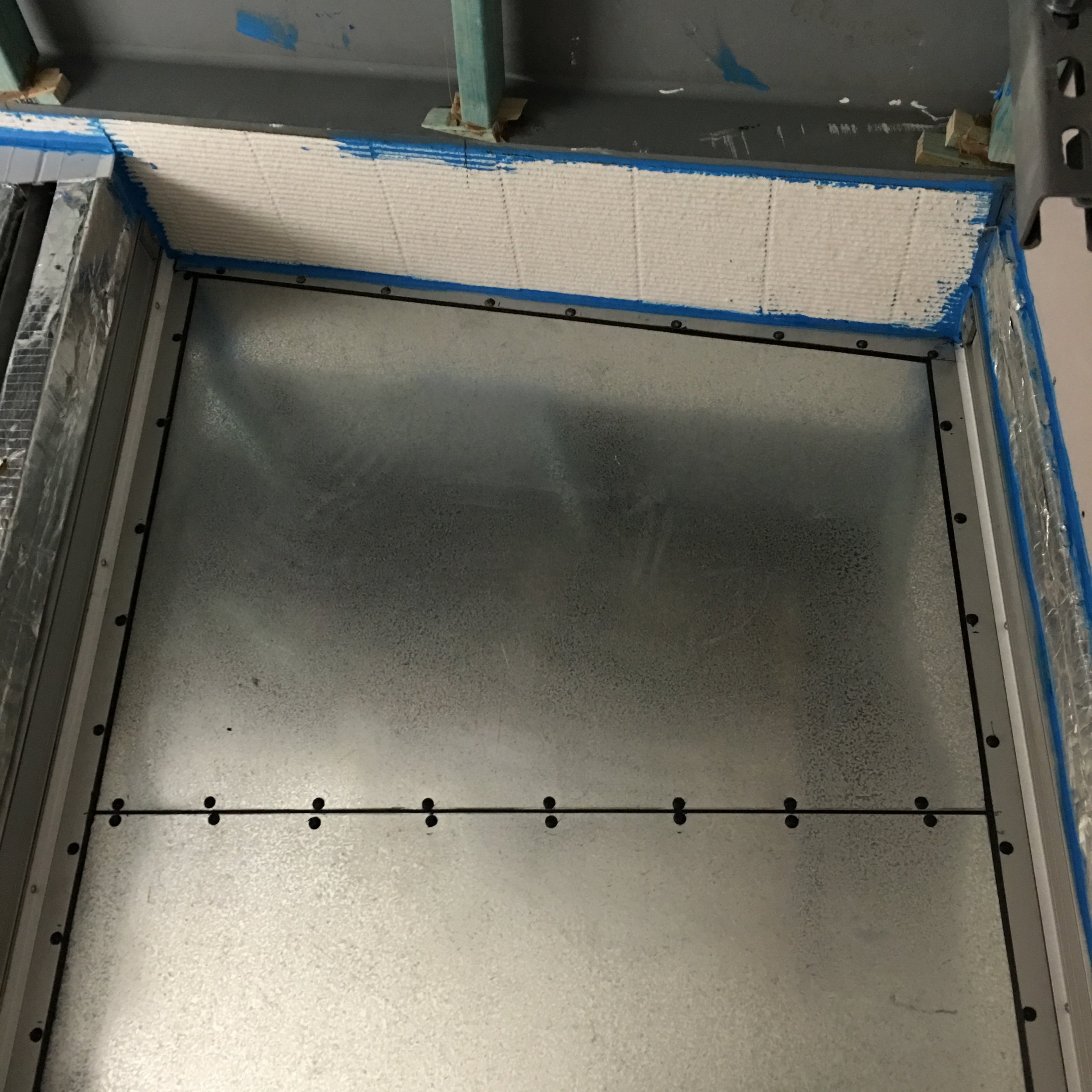
序号 №.	检验项目 TEST ITEM		单位 UNIT	检验结果 TEST RESULT	标准指标 STANDARD VALUE
1	外观质量 Appearance		—	无缺陷 No defect	无影响使用的缺陷 No influential defect for use
2	长度偏差 Variation in Length		mm	-2	±4
3	宽度偏差 Variation in Width		mm	-1	±5
4	厚度偏差 Variation in Thickness		mm	+0.8	±0.8
5	厚度不均匀度 Difference in Thickness		%	4	≤6
6	边缘直线度 Straightness of Edge		mm	1.0	≤3.0
7	边缘垂直度 Squareness by Edges		mm/m	0.5	≤3.0
8	对角线差 Difference in Diagonal		mm	3	≤5
9	密度 Density		g/cm^3	1.65	1.4<D≤1.7
10	吸水率 Water Absorption		%	16.8	≤25
11	不透水性 Water Impermeability		—	反面出现湿痕，未出现水滴 Wet trace on back without any drops of water	允许反面出现湿痕，但不得出现水滴 Allow wet trace on back without any drops of water
12	湿胀率 Wet Expansion		%	0.090	≤0.23
13	抗冻性 Frost resistance		—	无破裂、无分层 No cracks, no layers	经25次冻融循环，不得出现破裂、分层 No cracks, no layers under freezing or thawing in 25 cycles
14	抗折强度 Flexural Strength	气干 Dry	MPa	21.1	≥18
		饱水 Saturated		15.3	≥14
说明 Specification					

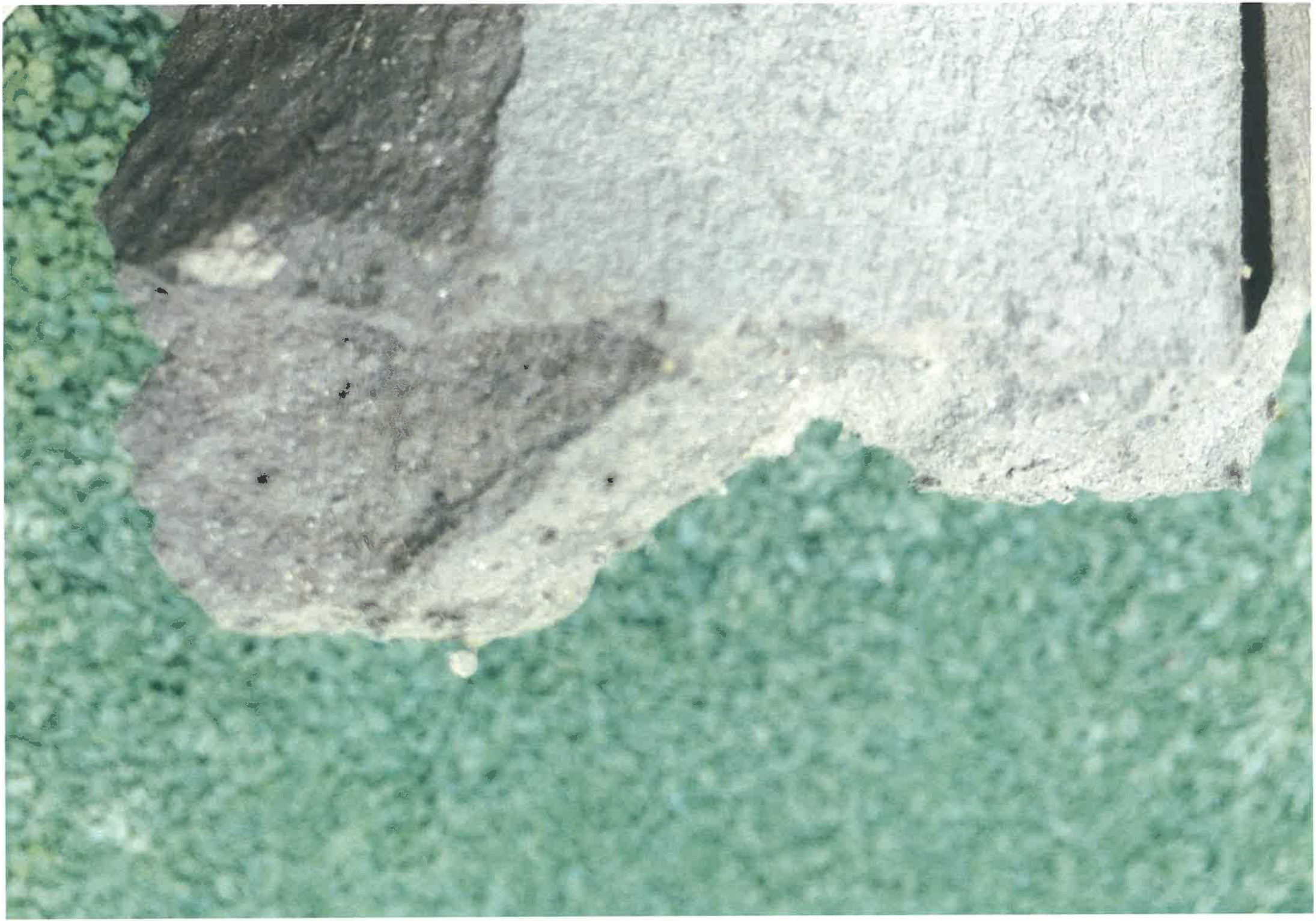
批 准: [redacted] 审 核: [redacted] 编 制: [redacted]
Approved by: Checked by: Drawn by:

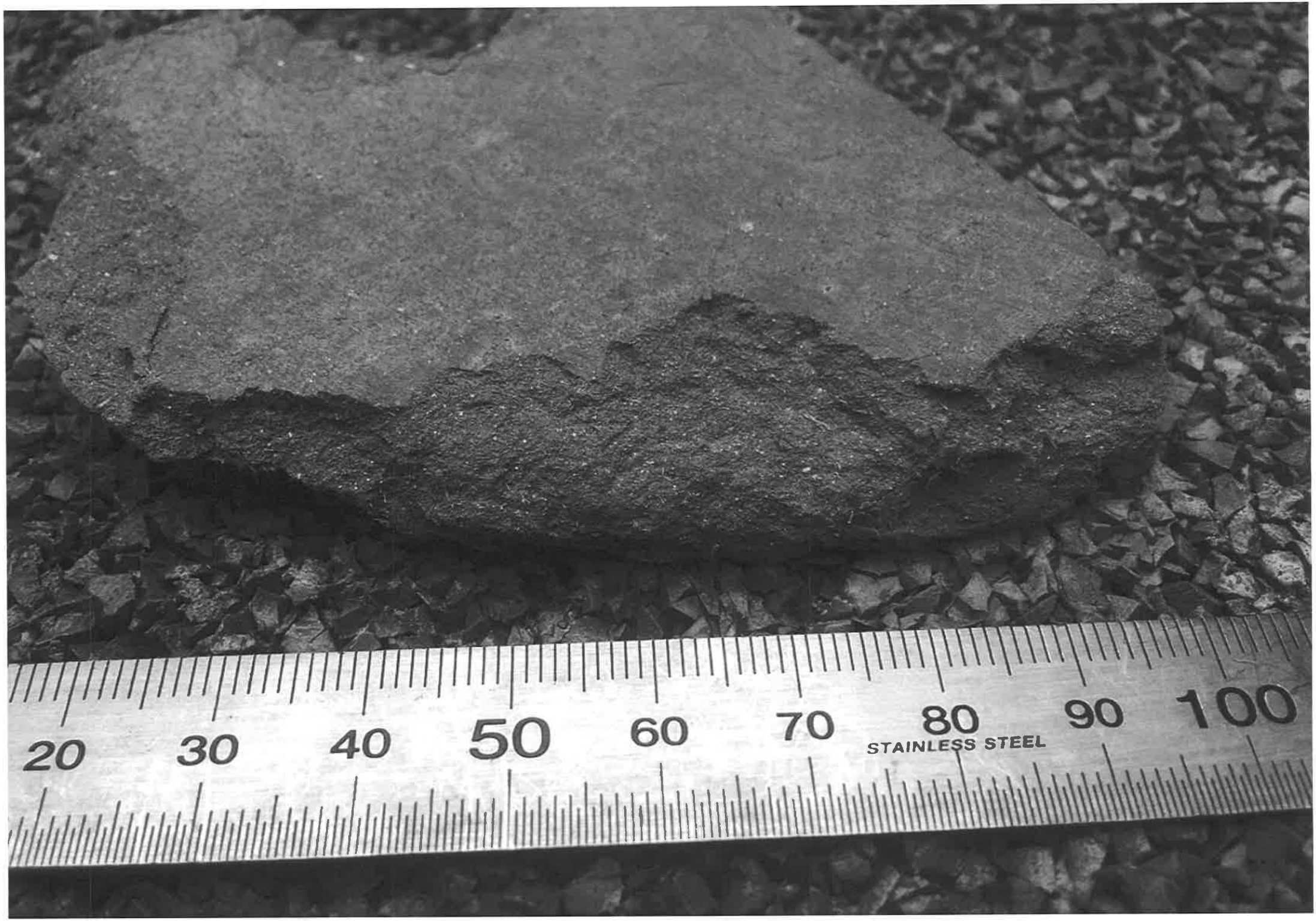











20
30
40
50
60
70
80
90
100
STAINLESS STEEL


MM

Suite 5 & 6
642 Albany Hwy
Victoria Park
WA 6100

Client: Coffey Environments
Job number: 16_0841
Sample: 16_0841_01
Client ID: CFMEU Job Site – ceiling tile
Date: 15/7/16
Analysis: Optical microscopy
Scanning electron microscopy (SEM) with elemental analysis by energy dispersive spectroscopy (EDS)
X-ray diffraction (XRD) - quantitative

Sample preparation

The sample was supplied to Microanalysis Australia as a cementitious panel section approximately 10 mm thick by 60 mm x 60 mm. the section appeared to have a dry blade saw cut down one side/face. See image 1.

Image 1 - sample as received

A representative sub-sample was removed and placed on top of a double sided carbon tab before being carbon coated. Non-conducting samples require coating prior to SEM analysis to prevent charging whilst being analysed by the electron beam.

Analysis

SEM: The sample was analysed using a Carl Zeiss EVO50 scanning electron microscope (SEM) fitted with an Oxford INCA X-Max energy dispersive spectrometer (EDS). EDS is a semi-quantitative technique (at best) on well prepared, optically flat samples. Factors such as sample unevenness may adversely bias elemental concentration interpretation. EDS has a spatial resolution of ~5 µm meaning spectra from particles less than this size may contain elemental concentrations biased by their surroundings. All images were acquired using backscatter electrons. Image contrast is directly proportional to average atomic number i.e. the brighter the area, the higher the atomic number.

XRD: A representative sub –sample was removed and lightly ground in a microniser (McCrone) in ethanol with a 10 wt% corundum spike, such that 90% was passing 20 µm. Grinding to this size helps eliminate preferred orientation. Only crystalline material present in the sample will give peaks in the XRD scan. Amorphous (non crystalline) material will add to the background. The search match software used was EVA/TOPAS/GSAS using a full Rietveld refinement. This method takes into account preferred orientation, substitution and lattice strain. An up-to-date ICDD (pdf4) card set was used. The X-ray source was cobalt radiation.

Chrysotile (white asbestos) or more technically correct, asbestiform Antigorite, has the stoichiometric formula $Mg_3Si_2O_5(OH)_2$. The relative concentration of elements in decreasing order is: O, Mg, Si and H (H is not detectable by EDS).

Summary

Chrysotile asbestos was observed in this sample at approximately (7 ± 2) wt % by SEM and (5 ± 0.5) wt % by XRD.

All observed chrysotile fibres, either as discrete fibres or as fibrils (fibre bundles), were countable under NOHSC:3003 (2005) definition with lengths > 5 µm, widths < 3 µm and aspect ratios > 5:1. A high percentage of the chrysotile fibre had widths < 1 µm. Cellulose (organic) fibres were also observed.
The cement matrix was observed to contain a small number of alkali-silicate reaction (ASR) gel deposits indicative of reactive aggregate. It would be considered unusual to observe ASR in a concrete sample < 5 years of age.

Analyst: Dan Cukierski, M.Sc.Geoscience, Sandy Lam, B.Sc.Nanotechology, Rick Hughes, B.Sc.Physics(Hons), Owen Carpenter

Reported: Rick Hughes, B.Sc.Physics(Hons)

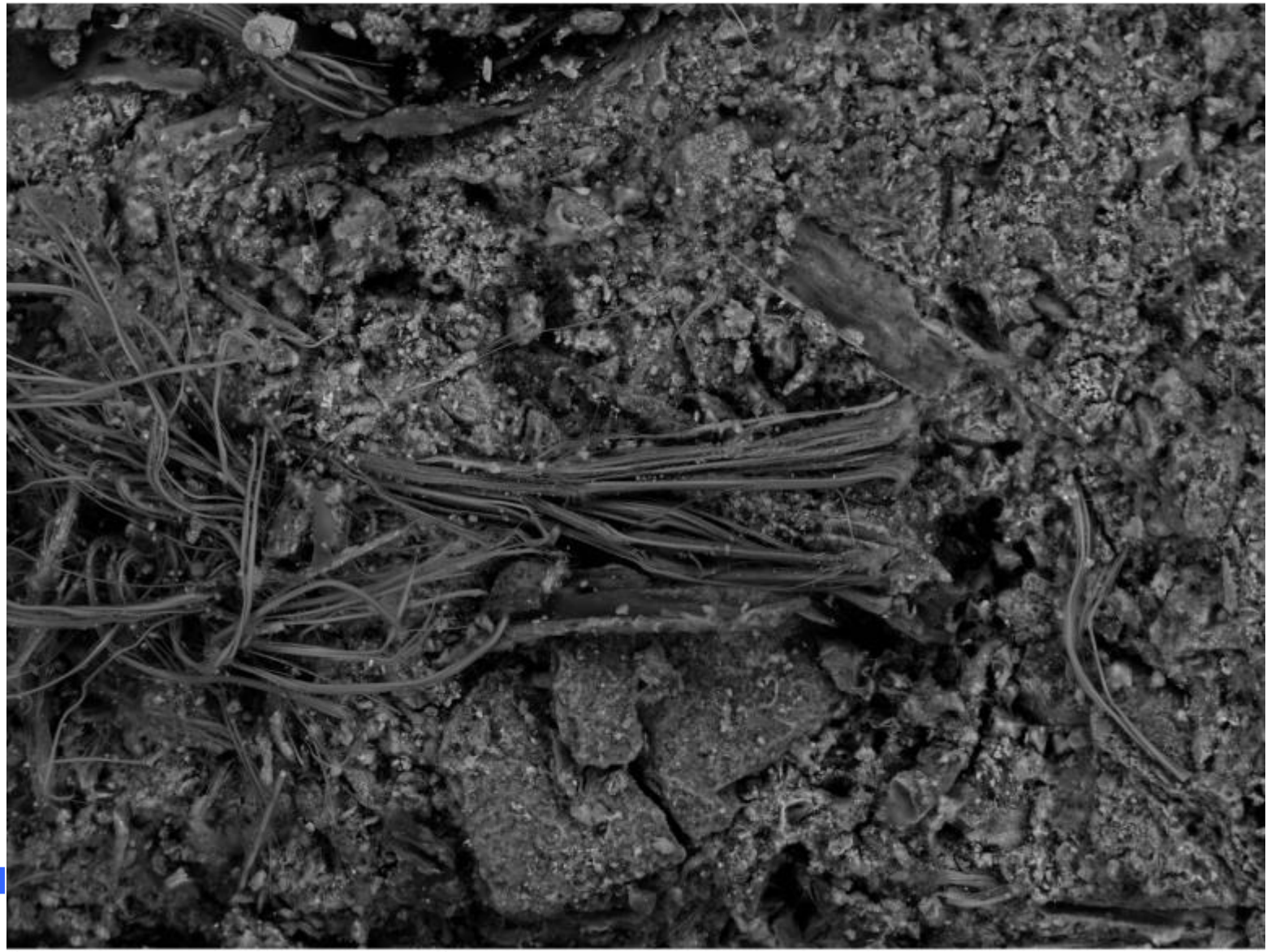
Approved: Rick Hughes, B.Sc.Physics(Hons), MAIP, MAICD

Appendix

Image 2 - optical image (80x)

Image 3 - optical image (80x)

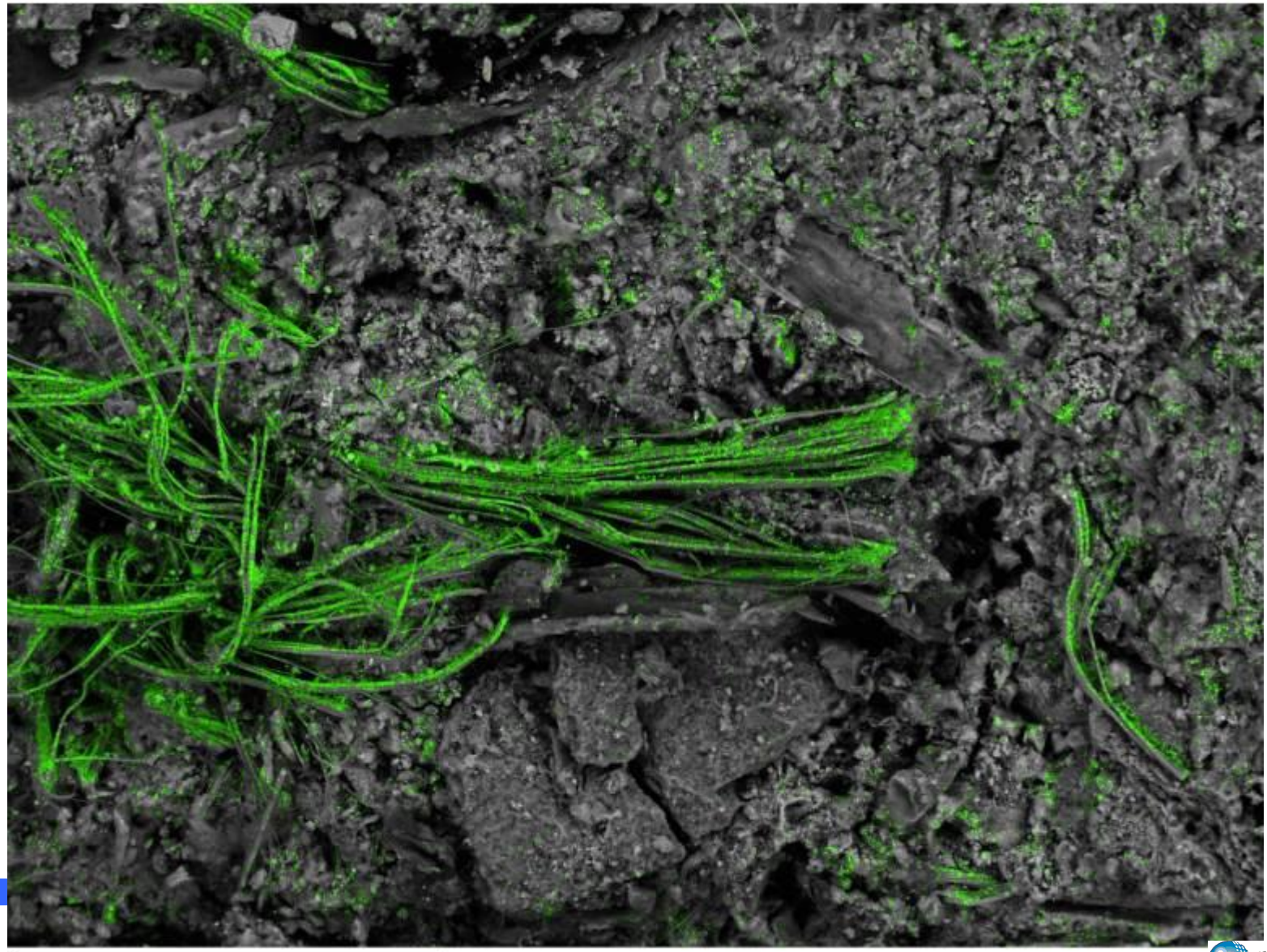
Sample: 16_0841_01	Project: 16_0841d
Type: Default	Owner: lab
ID: CFMEU Job Site - Ceiling Tile	Site: Site of Interest 1



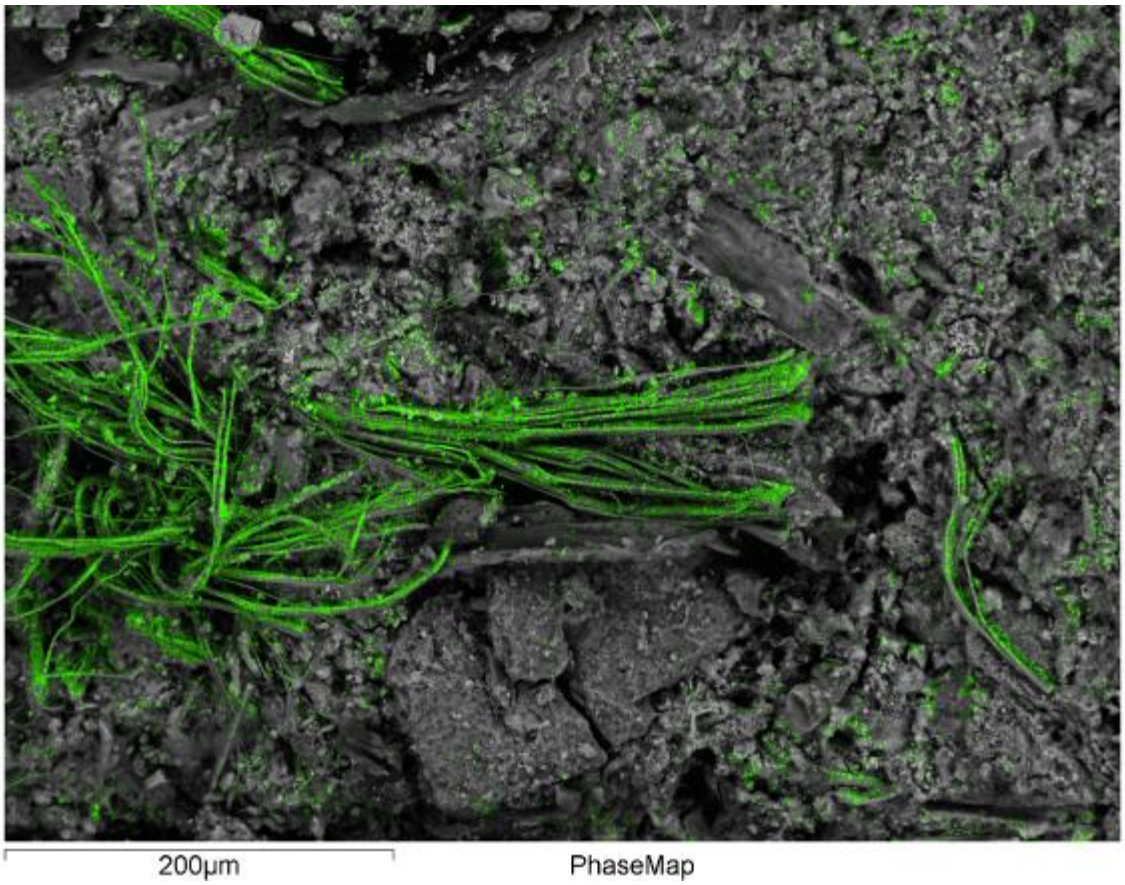
Electron Image 1

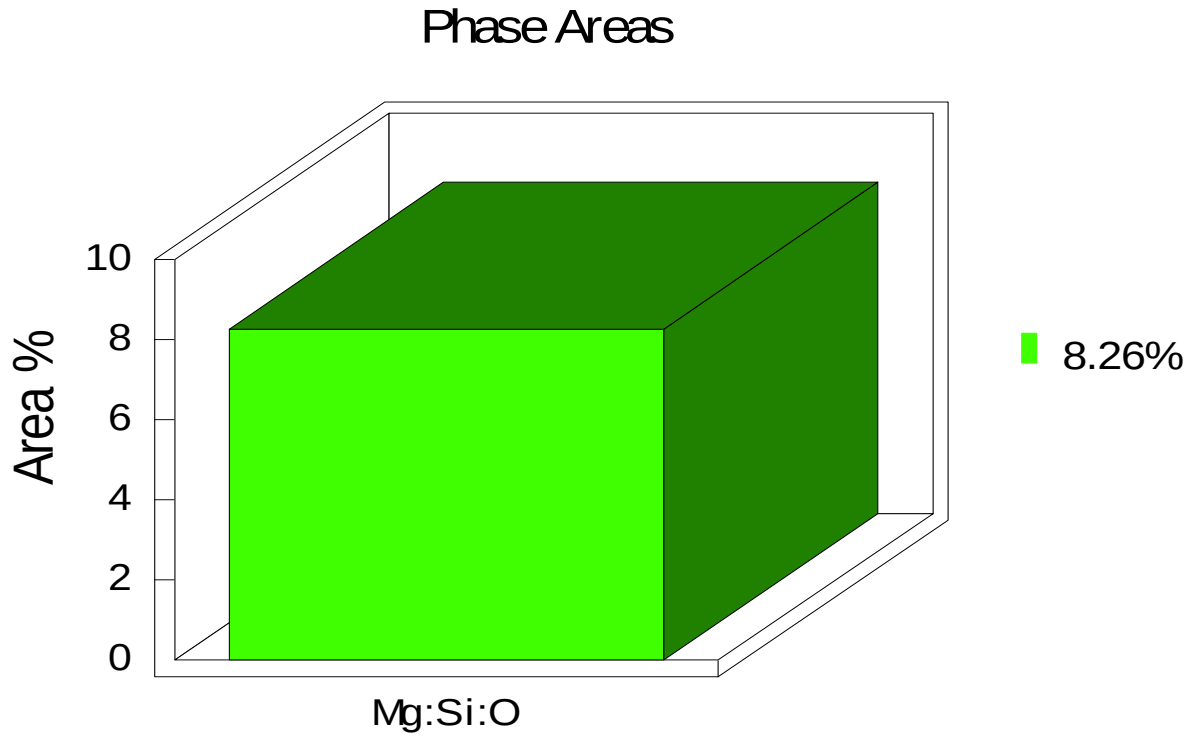
microanalysis australia

Sample: 16_0841_01 Type: X-ray mapping for Mg:Si:O phase ID: CFMEU Job Site - Ceiling Tile	Project: 16_0841d Owner: lab Site: Site of Interest 1



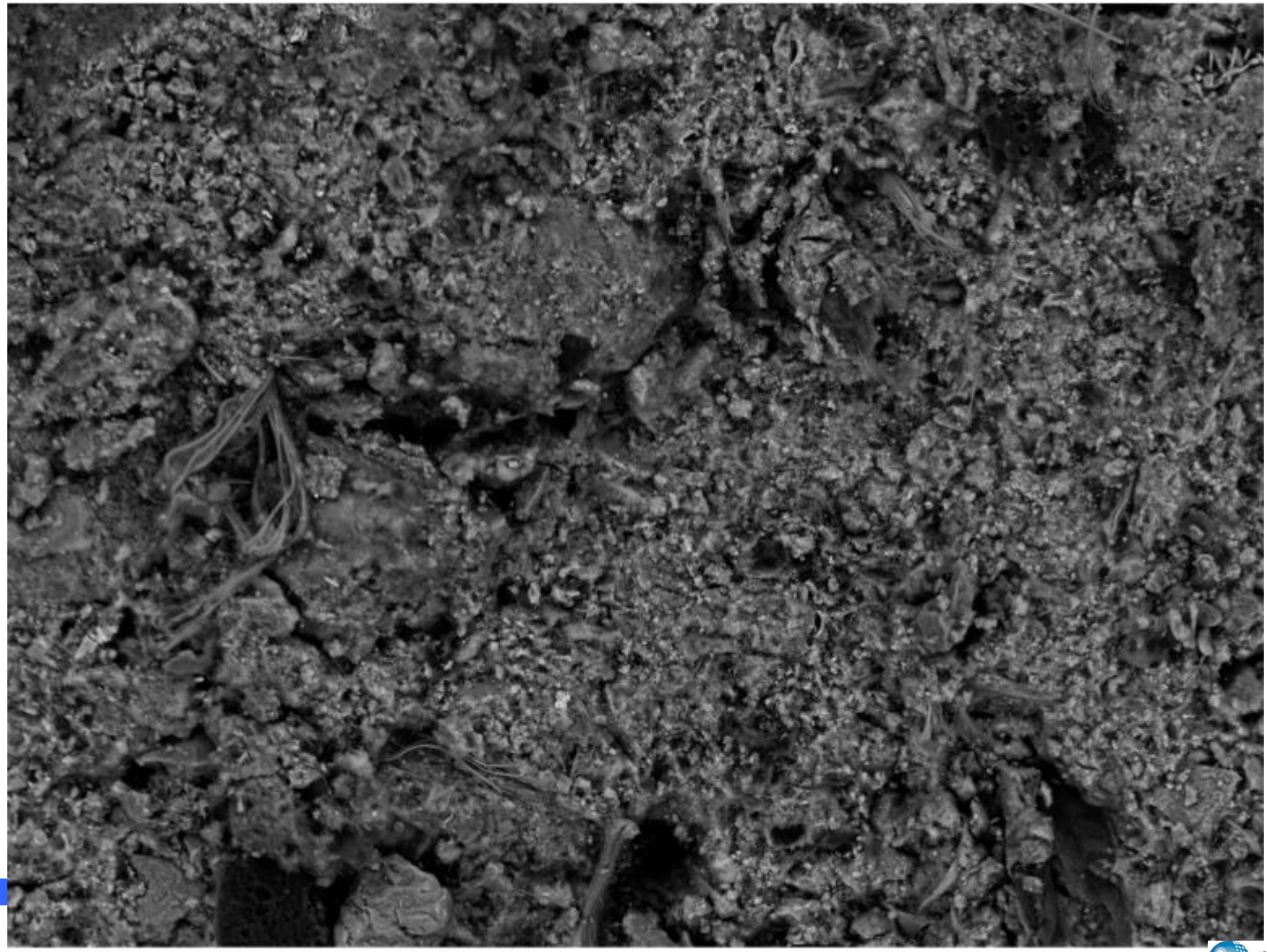
microanalysis australia





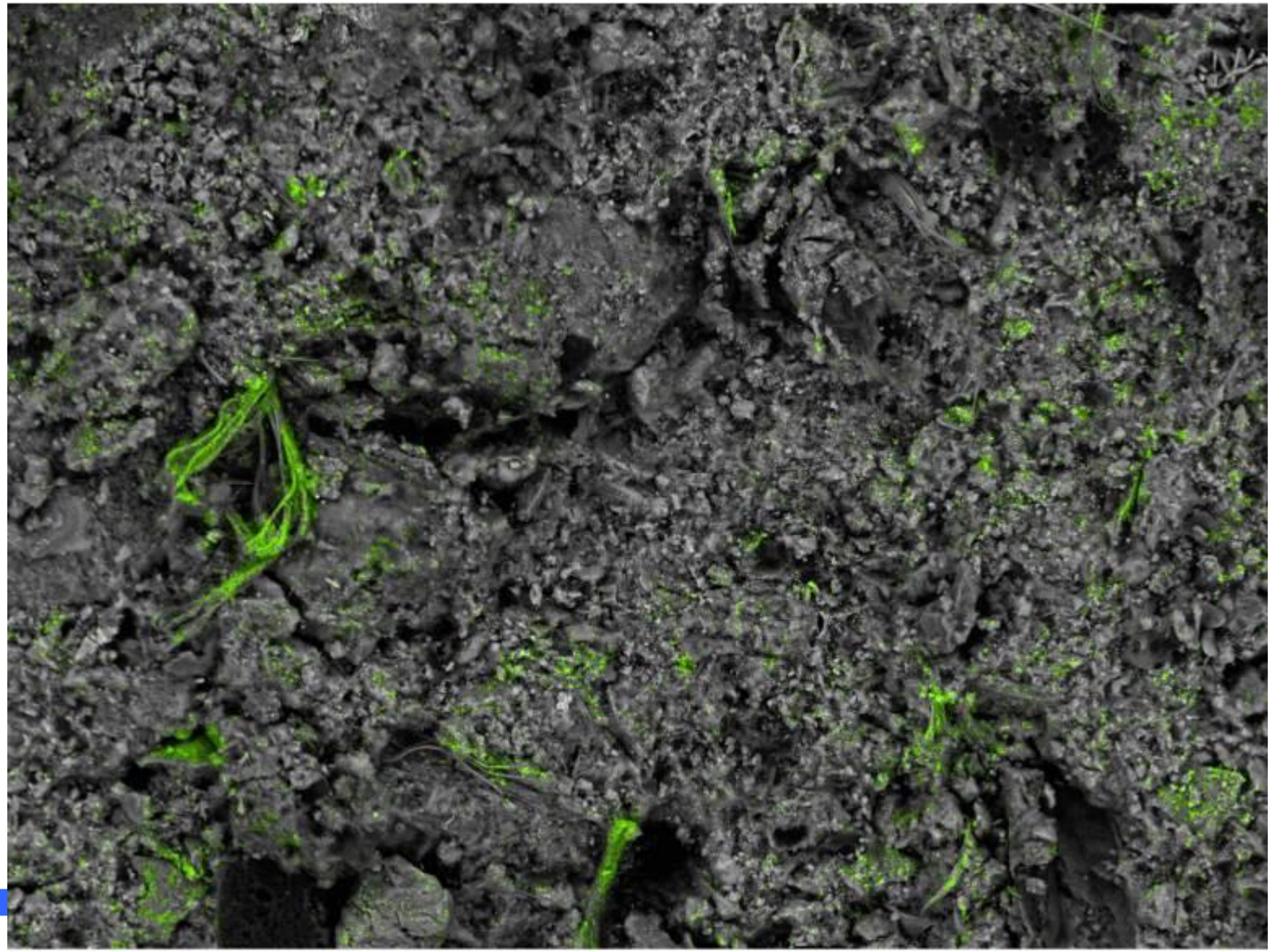
Comment:

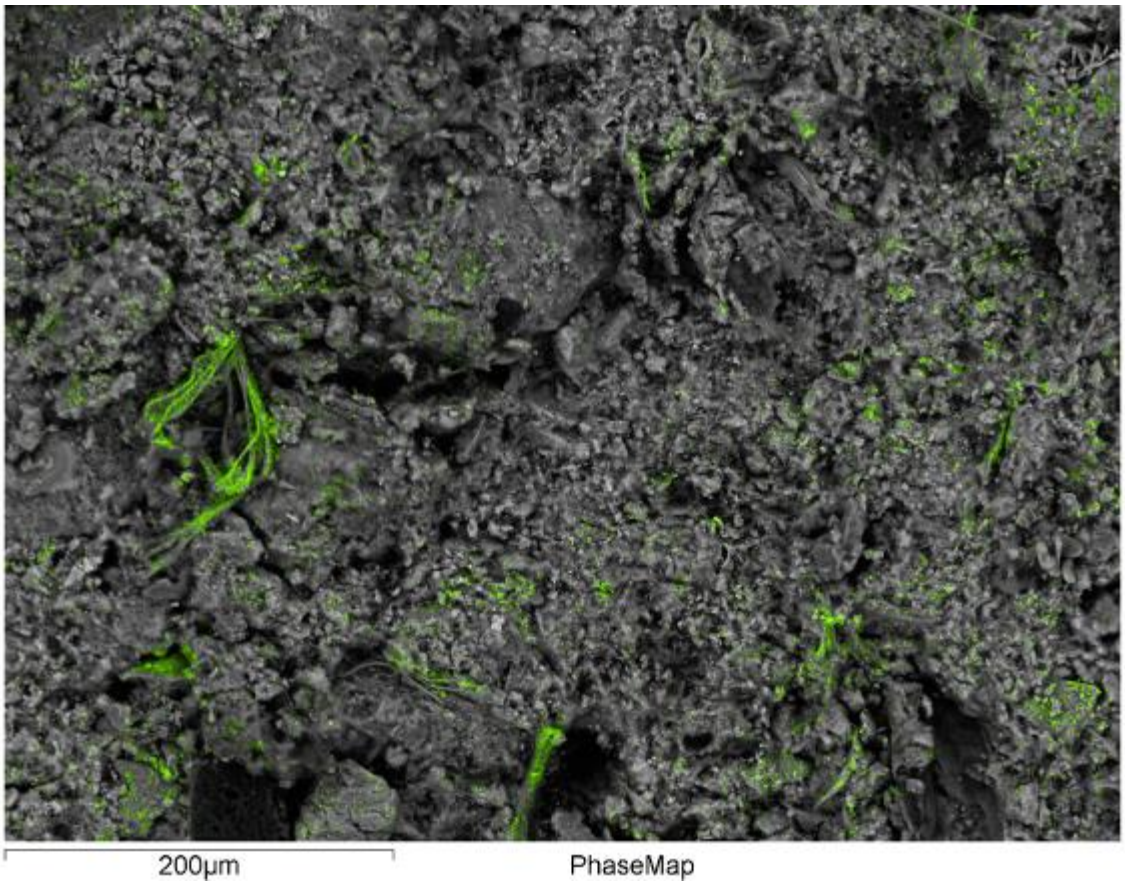
Sample: 16_0841_01	Project: 16_0841d
Type: Backscatter electron image	Owner: lab
ID: CFMEU Job Site - Ceiling Tile	Site: Site of Interest 2

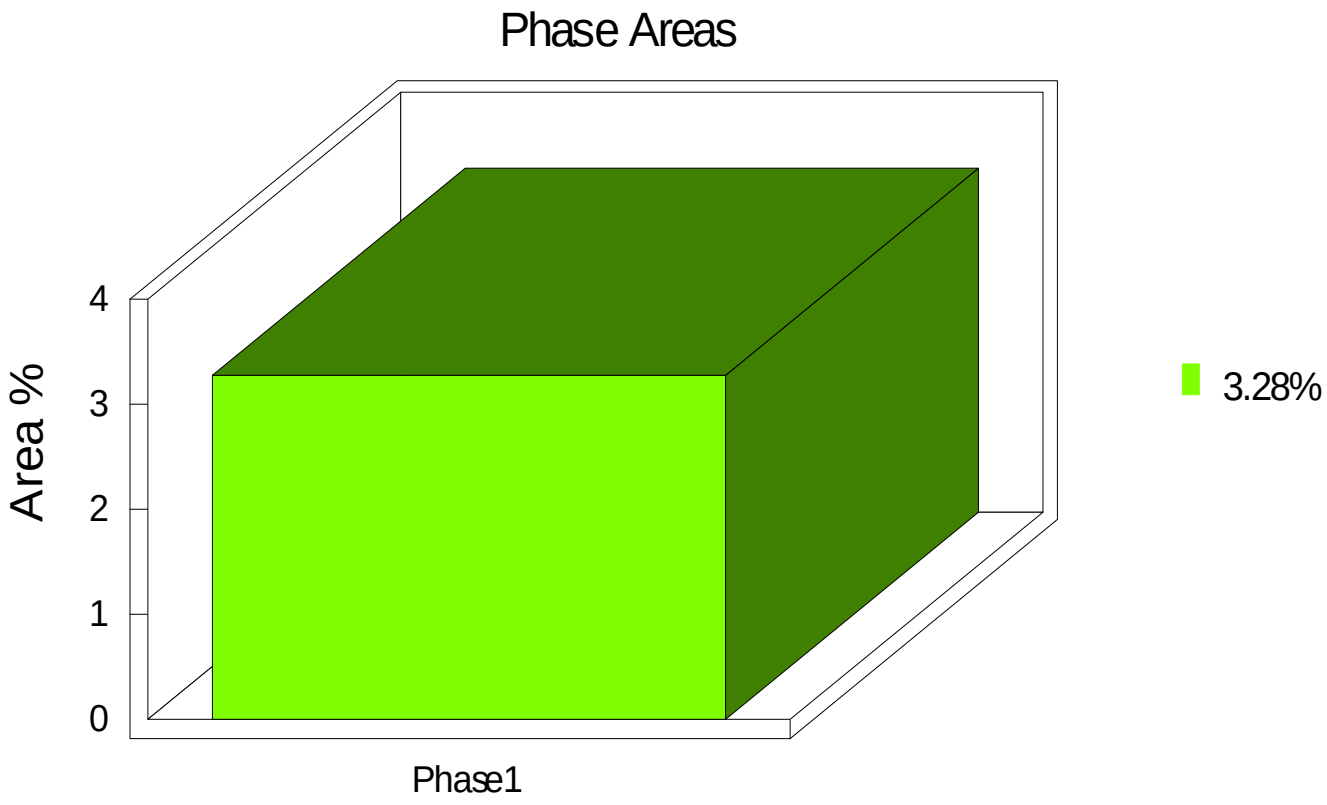


microanalysis australia

Sample: 16_0841_01 Type: X-ray mapping for Mg:Si:O phase ID: CFMEU Job Site - Ceiling Tile	Project: 16_0841d Owner: lab Site: Site of Interest 2

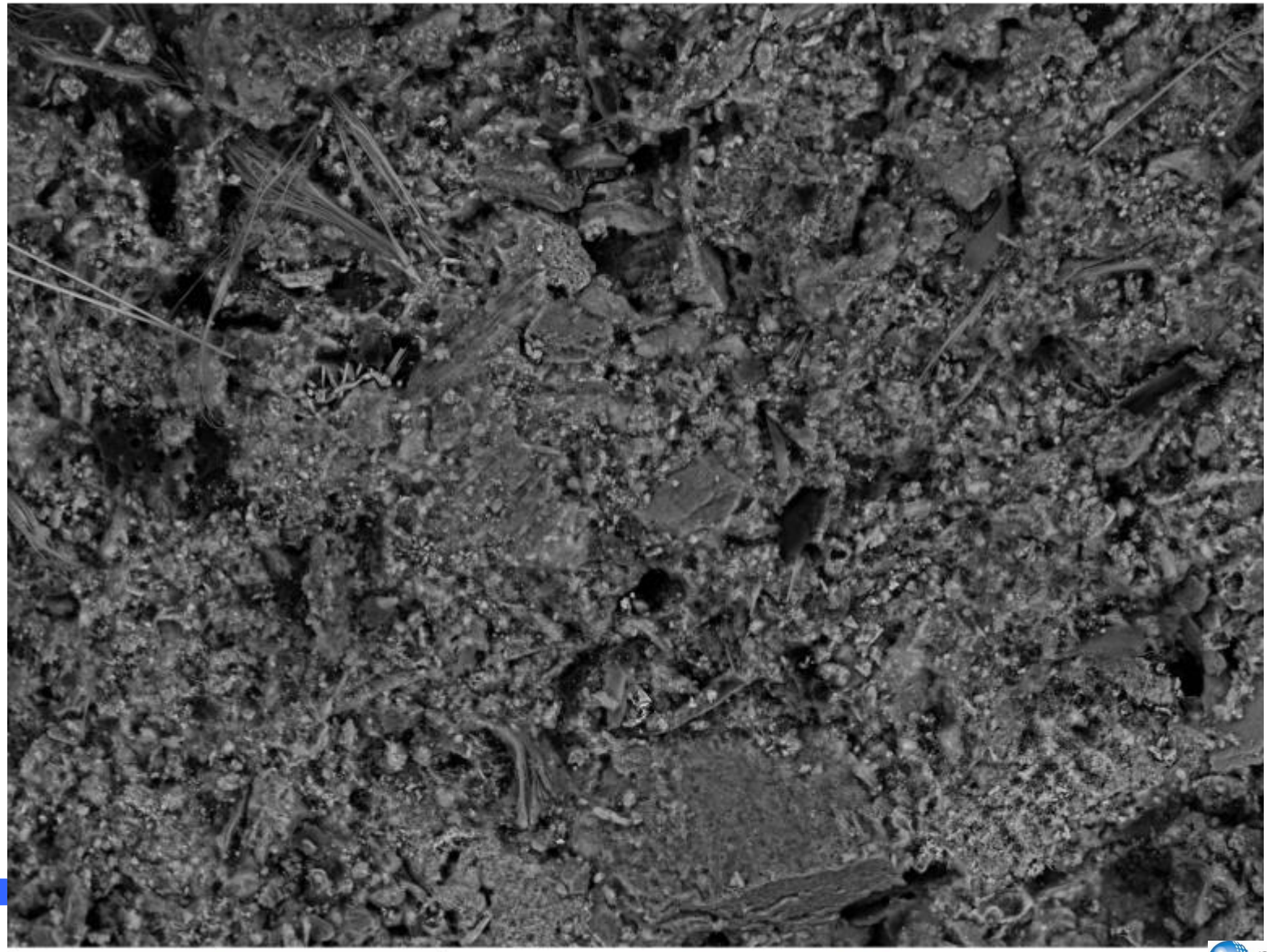






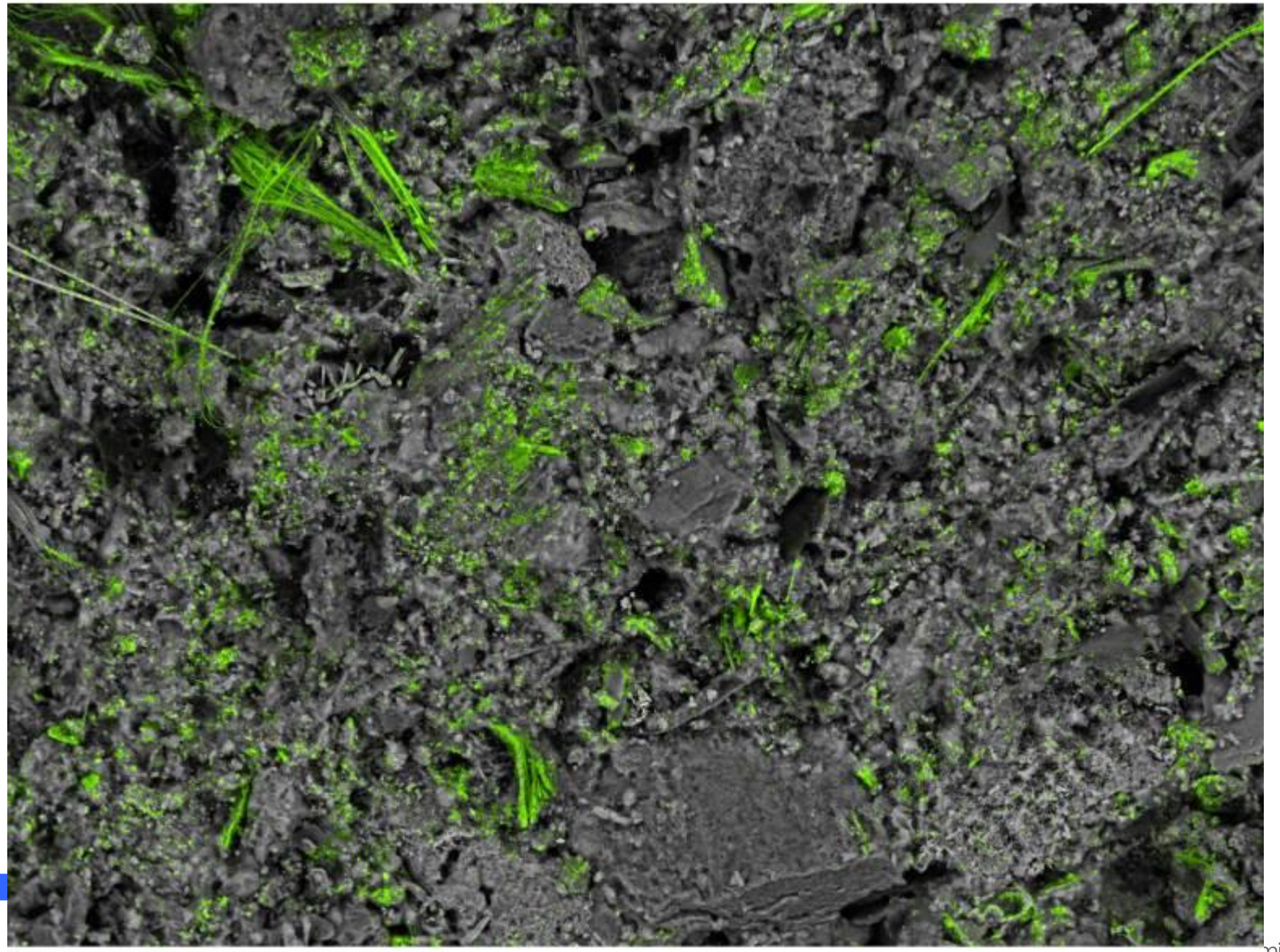
Comment:

Sample: 16_0841_01	Project: 16_0841d
Type: Backscatter electron image	Owner: lab
ID: CFMEU Job Site - Ceiling Tile	Site: Site of Interest 3

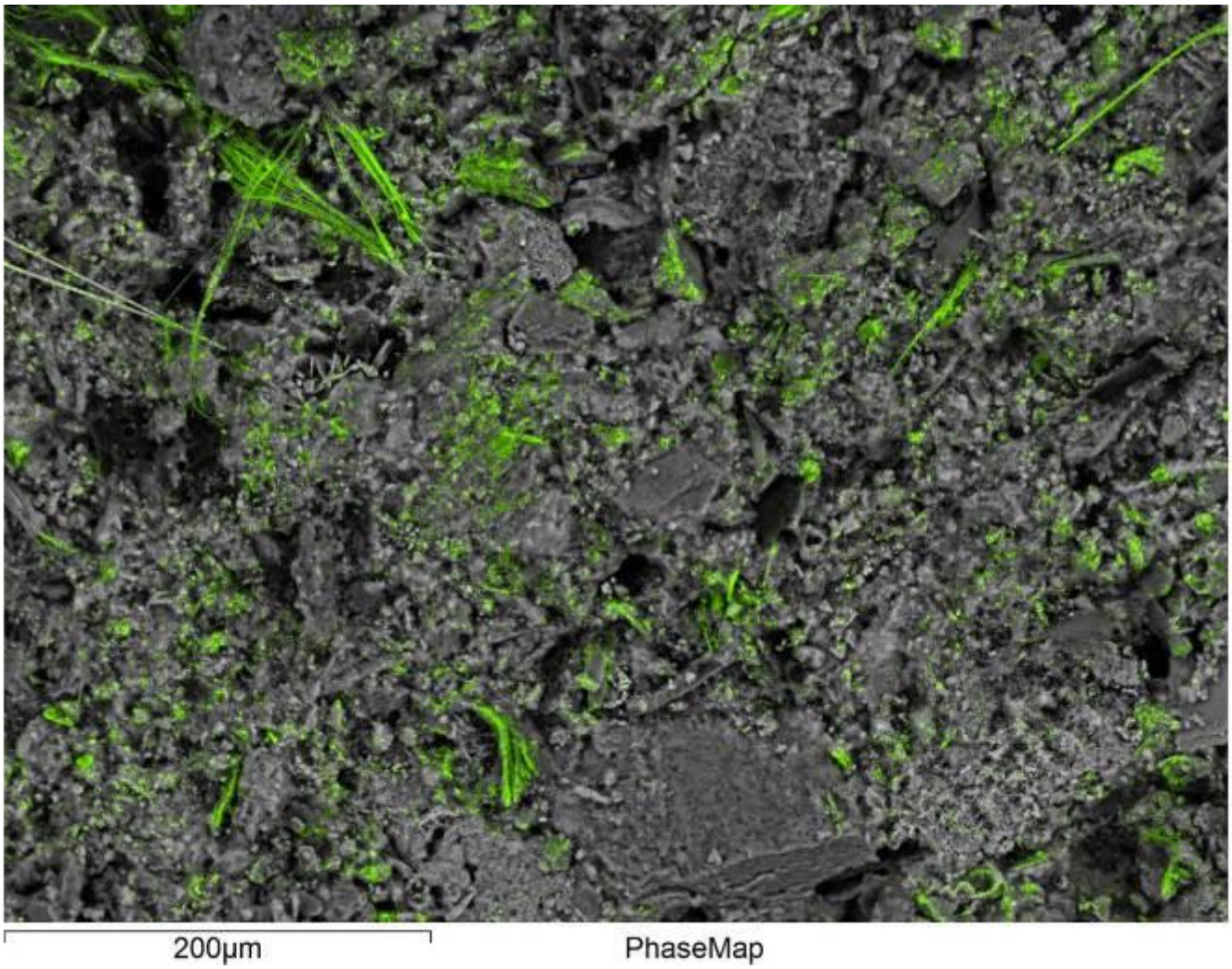


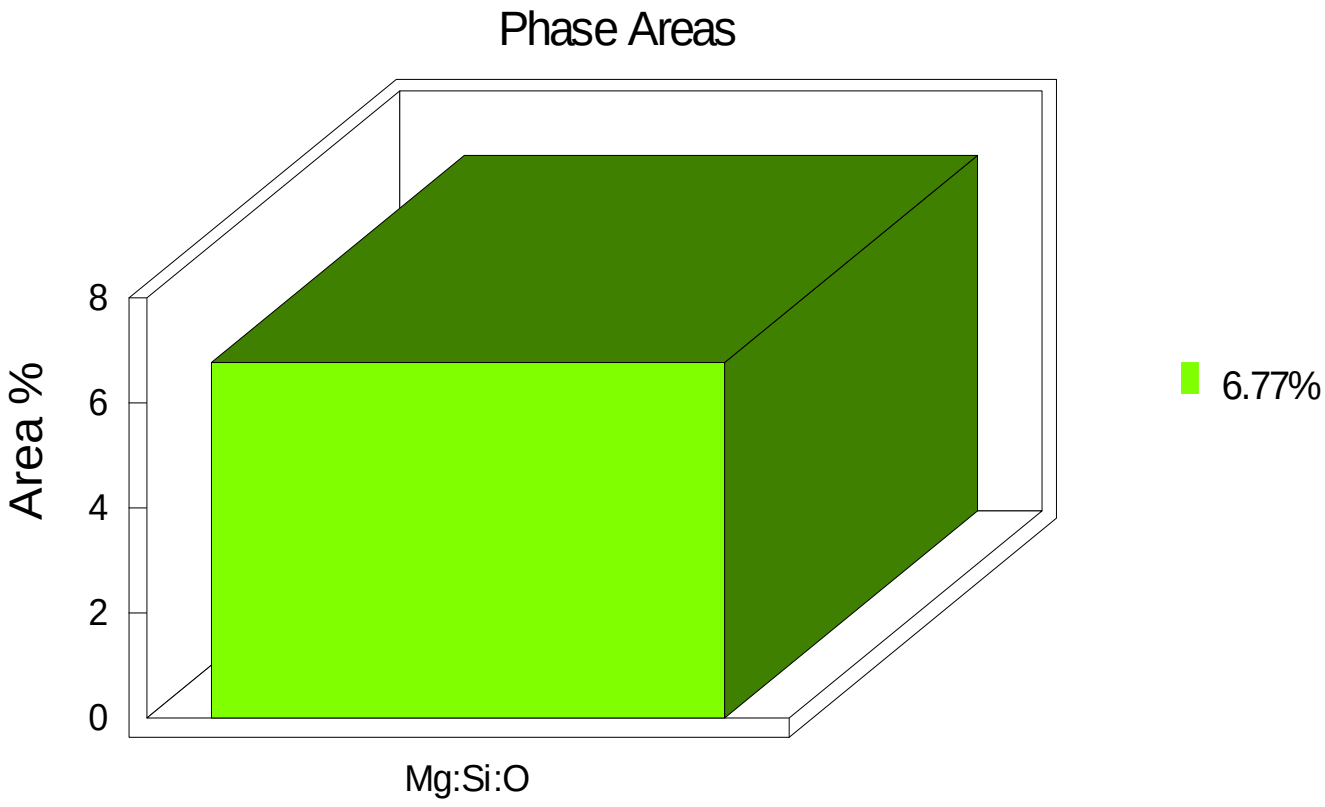
microanalysis australia

Sample: 16_0841_01 Type: X-ray mapping for Mg:Si:O phase ID: CFMEU Job Site - Ceiling Tile	Project: 16_0841d Owner: lab Site: Site of Interest 3



microanalysis australia


200µm
PhaseMap


Phase Areas
Area %
8
6
4
2
0
Mg:Si:O
6.77%

Sample: 16_0841_01	Project: 16_0841
Type: Default	Owner: lab
ID: CFMEU Job Site - Ceiling Tile	Site: Site of Interest 9

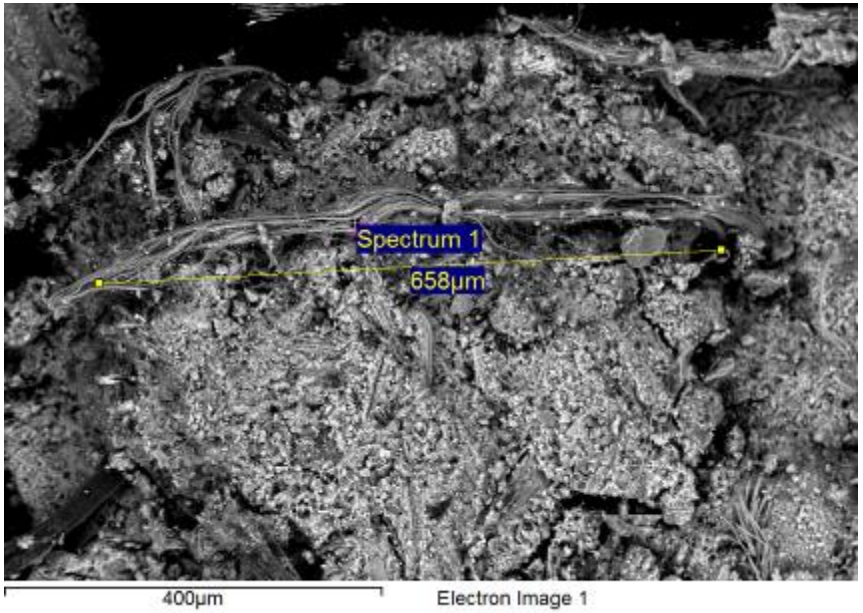
Spectrum processing :

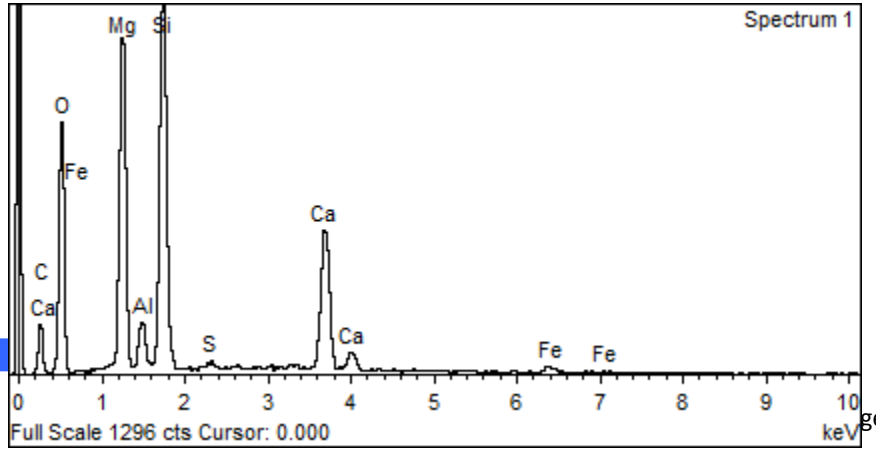
No peaks omitted

Processing option : All elements analyzed (Normalised)

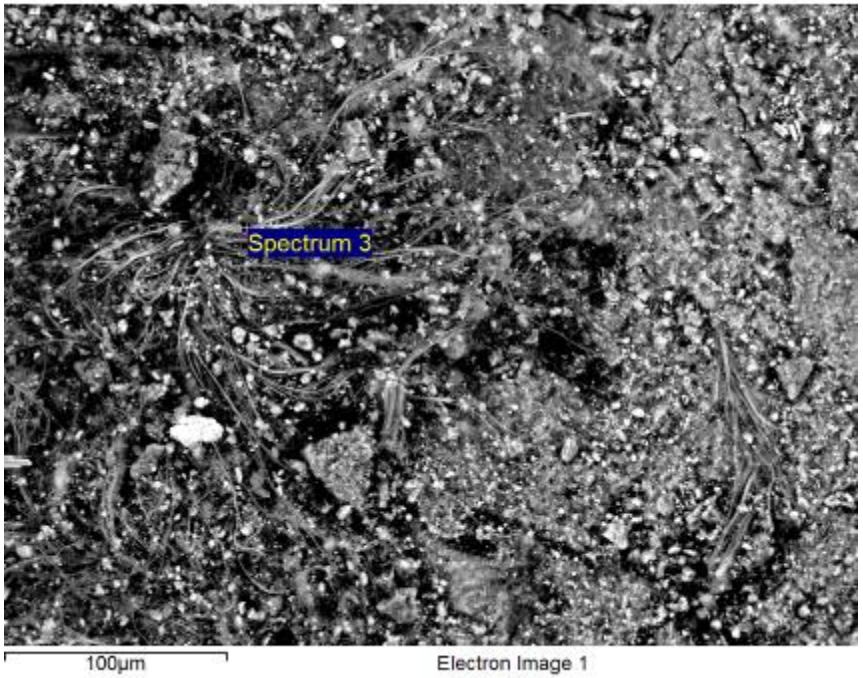
Number of iterations = 4

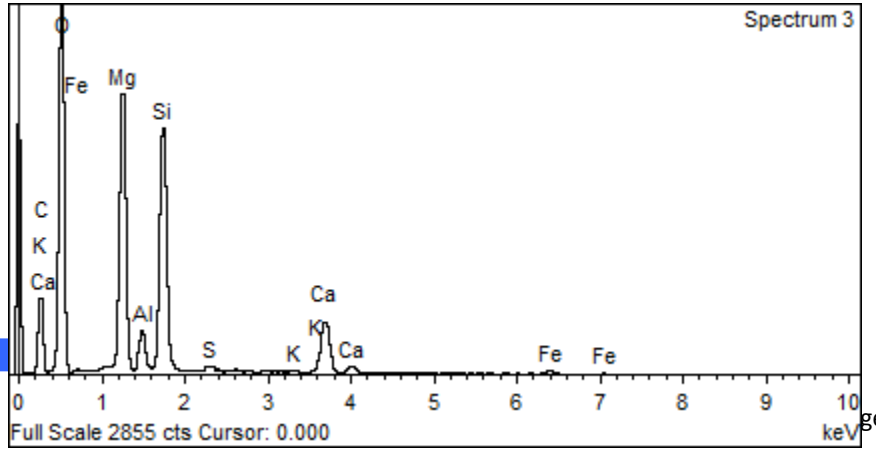
Element	Weight%	Atomic%
C K	18.14	27.18
O K	43.51	48.95
Mg K	12.53	9.28
Al K	1.76	1.17
Si K	14.05	9.00
S K	0.21	0.12
Ca K	8.93	4.01
Fe K	0.88	0.28
Totals	100.00	





Sample: 16_0841_01	Project: 16_0841
Type: Default	Owner: lab
ID: CFMEU Job Site - Ceiling Tile	Site: Site of Interest 2





Spectrum processing :

Peak possibly omitted : 4.487 keV

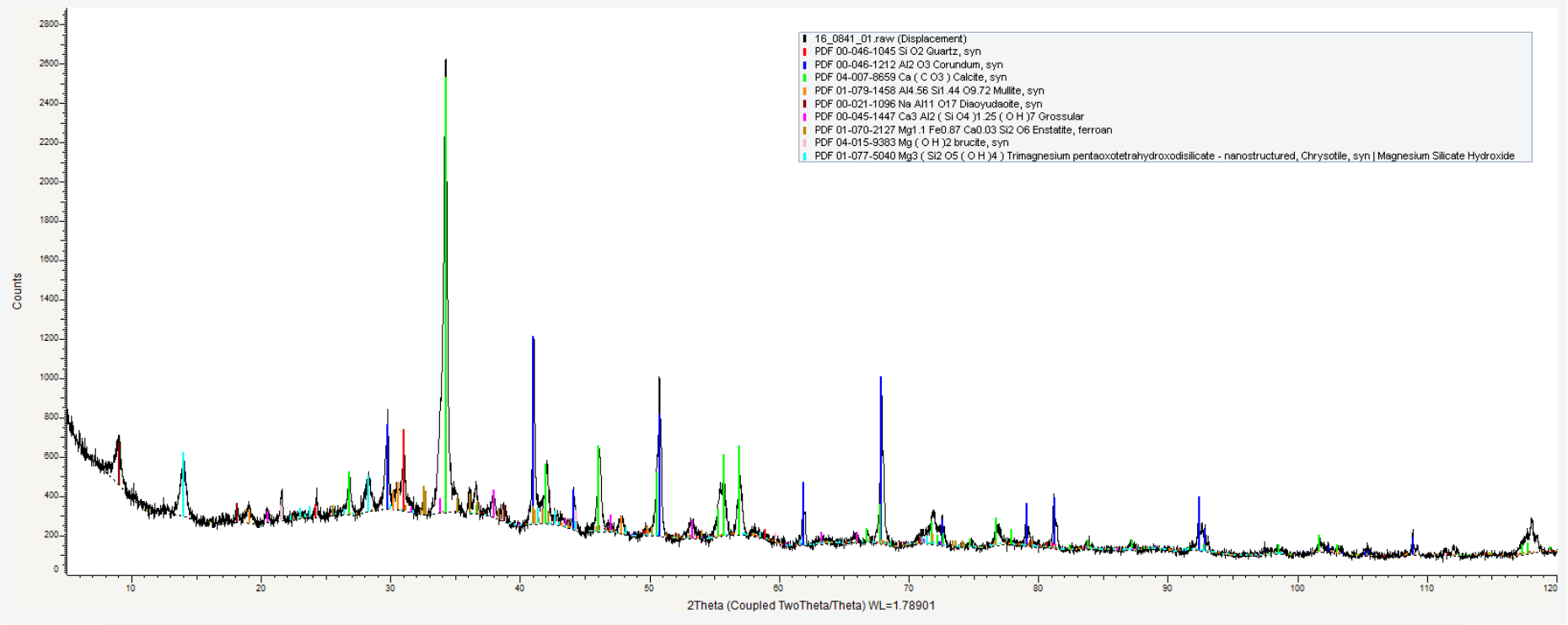
Processing option : All elements analyzed (Normalised)

Number of iterations = 6

Element	Weight%	Atomic%
C K	25.15	34.06
O K	51.05	51.89
Mg K	10.25	6.86
Al K	1.31	0.79
Si K	8.46	4.90
S K	0.19	0.10
K K	0.11	0.05
Ca K	2.99	1.21
Fe K	0.49	0.14
Totals	100.00	

ge

microanalysis australia



Mineral phase	Wt %
Calcite	18.0%
Chrysotile	(5.0 ± 0.5) %
Mullite	2.6%
Grossular	1.8%
Quartz	1.5%
Brucite	0.1%
Enstatite	0.1%
Amorphous	70.9%

CFMEU
WESTERN AUSTRALIA

February 2017

Environmental and Occupational Health & Safety Unit

OHS ALERT

FAKE SCAFFOLD TEST CERTIFICATES

It appears that some uncertified scaffolding systems and components are in Australia and may be in use on site.

Fake scaffold test reports and certificates have been found that look almost identical to real certificates, but the name and address of manufacturers has been altered.

The company name on the fake certificates is “NANJING WENSAI METALWORK”.

If you come across scaffolding from “NANJING WENSAI METALWORK”, call the Union urgently.

Some of the scaffold componentry may not be up to Australian Standards.

If you come across scaffolding from “NANJING WENSAI METALWORK”, call [redacted], your CFMEU organiser or CFMEU Safety Officer on [redacted]

Safety is union business.

Stand Up. Speak Out. Come Home.

Authorised M Buchan CFMEU WA 80 Beaufort Street Perth WA