From: "Andrew McKenzie" <andrew.mckenzie@quadracon.com.au>
Sent: Wed, 9 Dec 2020 07:16:59 +1100
To: "Gordon Webb" <GWebb@wollongong.nsw.gov.au>
Cc: "Jeff Hunt" <jeff.hunt@quadracon.com.au>
Subject: Helensburgh Community Hall
Attachments: 20-12361-01-OH.pdf

Hi Gordon ,

Please find Attached Report from Clearsafe ,

Once you have had a look im happy to go over report and organize a site meeting with you.

Kind Regards

Andrew McKenzie, Supervisor - NSW
Quadracon Building, **M:** 0419 915 258
W: www.quadracon.com.au **T:** 1800 845 101

MICROBIAL ASSESSMENT

HELENSBURGH COMMUNITY CENTRE

26 WALKER STREET HELENSBURGH NSW 2508

Client:
Quadracon Building Pty Ltd
PO Box 249
Moss Vale NSW 2577

Reference:	Revision:	Date of Report:	Prepared By:	Authorised By:
20-12361-01-OH	Revision 0	8/12/2020	Luke Parkins	Michael Fernandez

Clearsafe Environmental Solutions Pty Ltd ABN: 31 146 947 766
W: www.clearsafe.com.au E: info@clearsafe.com.au T: 1300 042 962

Executive Summary

Clearsafe Environmental Solutions Pty Ltd (Clearsafe) was requested by Quadracon Building to undertake a limited assessment with regard to microbial levels within the subfloor space beneath the basketball court at the Helensburgh Community Centre, 26 Walker Street, Helensburgh NSW 2508. The investigation was commissioned following the identification of visible mould and broken timber joists within the subfloor of the Community centre during renovation works. Concerns were subsequently raised about the structural integrity of the timber floorboards and joists and any possible risk that the microbial impacts may present to any of the occupants within the immediate area during renovation.

Moisture level results for all of the measured timber building materials were above 10%, at the time of inspection. Moisture levels for timber surfaces above 10% are considered a trigger level for treatment/further assessment. It is noted that at the time of the inspection, water was visibly observed dripping from the timber joists/bearers throughout several locations within the subfloor and also on inspected brick wall surfaces within the subfloor (northern and western). The need for remediation and/or further investigation is recommended.

Surface swab analysis results indicate that all sampled locations returned detectable microbial concentrations at levels that suggest significant viable mould and bacteria. Samples 5 and 6 were unable to give accurate detectable yeast concentrations due to overgrown mould. However, all sample locations exhibited concentrations above double that of the reference sample, suggesting the need for further testing and/or remedial works. The mould count reported to the field blank sample is likely due to cross contamination and does not invalidate the results.

In conclusion, moisture readings in conjunction with surface swab analysis suggests that there is an underlying moisture ingress/microbial growth issue which appears to be present within the entirety of the basketball court subfloor. A visual inspection of the subfloor identified several timber bearers and timber joists that were either partially broken or had completely detached from their former position due to rot. Water was visually observed dripping from several of the timber joists within the subfloor and was also observed on the northern and western brick walls of the subfloor, coupled with what appeared to be a white powdery substance, which the inspecting consultant is of the belief is most likely efflorescence. Ground surfaces of the subfloor displayed evidence of dampness and trenches which appeared to be pathways for water ingress. A musty/damp odour was also present within the subfloor at the time of the inspection. Clearsafe recommends appropriate remediation as part of renovation.

The following recommendations apply to the microbial remediation works:

- Remediation work should be carried out by professional contractors in accordance with relevant guidelines and in consideration of the following points.

- The work area should not be occupied during cleaning processes.

- Conduct a building inspection by a professional building inspector to investigate the source of the water ingress within the subfloor, particular attention should be paid to the northern and western sides of the basketball court where the drainage extends from the exterior through the brick wall into the subfloor. Given the compromised structural integrity of the timber bearers and joists within the subfloor, Clearsafe recommends that access within it is restricted/limited.

- Clearsafe recommends that access to the basketball court by external parties (outside of companies working on behalf of the current scope of works) is completely restricted due to safety concerns posed by the structural integrity of the basketball court.

- Clearsafe is of the understanding that as a part of the original remediation works, Quadracon was engaged to remove a nominated section of the timber hardwood floors within the basketball court. Cleasafe suggests that the original scope of works is reassessed and extended to include the entirety of the timber hardwood floors due to the uniform nature of damage observed throughout the subfloor during the inspection. It is also suggested that further consideration be undertaken in regards to the replacement of the timber bearers and joists within the subfloor.

- As per the Australian Mould Guidelines, mould damage is classified into a class system based on the extent and visible microbial impacts observed. As the mould damage was visible throughout the entirety of the subfloor beneath the basketball court and is compromising the structural integrity of the timber hardwood floor, the remedial works would be classified as a ***Building Class 4 - Extensive Visible Growth Greater Than 10m2 (Large Job)***. As per these guidelines the area should be restricted and clearly signposted, ground surfaces within the subfloor covered in plastic sheets and HVAC, ventilation and exhaust ducts adequately sealed. A decontamination unit installed at one of the entrances to the basketball court and all other access points adequately sealed and placed under negative air pressure by using an exhaust fan with a HEPA filter. All timber materials to be disposed of should be wrapped in plastic bags and the external of the bags HEPA vacuumed in the decontamination unit prior to removal from the enclosure. PPE should include disposable overalls, gloves, shoe protectors and a full face respirator mask with HEPA filtration with an activated carbon or organic vapour filter.

- Throughout the course of the inspection fibrous cement fragments suspected of containing asbestos were observed sporadically scattered throughout the subfloor ground surfaces. Clearsafe recommends an emu pick of the ground surfaces, with

consideration given to conducting a scrape of 50-100mm of soils within the subfloor due to the incredibly damp and most likely microbial impacted nature of the soils. If any material suspected of containing asbestos is identified in the future (outside of that already identified), stop work immediately, restrict access to the impacted area and contact Clearsafe for further advice.

- Clearsafe is of the understanding that the western wall of the basketball court is also being replaced and new ventilation is being installed, it is recommended that the northern wall of the basketball court is also removed and replaced and adequate ventilation installed to allow for air flow within the subfloor.

- Post mould remediation works reduce the humidity within the basketball court subfloor by natural or artificial means (desiccant, dehumidifiers, increasing air flow).

- Post mould remediation works, increase natural light levels and ventilation within the basketball court subfloor.

- An Occupational Hygiene consultant should be contacted to conduct a final inspection and clearance testing following remediation work.

Table of Contents

1 Introduction and Scope

Clearsafe Environmental Solutions Pty Ltd (Clearsafe) was requested by Quadracon Building to undertake a limited assessment with regard to microbial levels within the subfloor space beneath the basketball court at the Helensburgh Community Centre, 26 Walker Street, Helensburgh NSW 2508. The investigation was commissioned following the identification of visible mould and broken timber joists within the subfloor of the Community centre during renovation works. Concerns were subsequently raised about the structural integrity of the timber floorboards and joists and any possible risk that the microbial impacts may present to any of the occupants within the immediate area during renovation.

The agreed Scope of Work is summarised below:

- Moisture level spot checks in several locations throughout the subfloor using a hand-held moisture meter.
- Surficial microbial sampling (yeast, mould and bacteria) in eight (8) locations using sterilised swabs (Including a blank and reference sample)
- Visual inspection of the Helensburgh Community centre basketball court subfloor for visible evidence of water ingress and mould growth.
- Recommendations on the treatment of the mould and the surfaces affected.
- Preparation of a professional report summarising the findings of the investigation.

2 Limitations

All work is conducted in a conscientious and professional manner, with due diligence and appropriate care. However due to the disproportionate cost of potential damages or liability relative to the cost of our services, Clearsafe cannot offer any guarantee that all hazards have been identified. Subsequently, Clearsafe's liability to the client or any other party resulting from the performance or non-performance of the service, whether under contract law, tort law or otherwise, is limited to a maximum of up to five (5) times the total fee excluding expenses.

Clearsafe reports are not to be reproduced or reviewed except in full. All reports are prepared for a particular client's objective, and therefore should not be used by any third party as a basis for future decision-making.

Clearsafe relies on the accuracy of information provided by the client.

Any Party that uses or relies on this document, in doing so acknowledges, on behalf of themselves and all other legal entities that they represent, the unequivocal approval, acceptance and endorsement of the limitations and exclusions stated within this document, else this document should not be used or relied upon for any purpose.

3 Sampling Details

A site inspection and sampling was undertaken on the 27th of November 2020.

A TechCheck Plus (SN 13960) hand held moisture meter was used to undertake spot checks and measure relative moisture levels within representative building materials such as walls/ceiling surfaces and timber within a limited number of representative areas within the building.

Microbial samples were collected onto sterile, sealed and pre-packaged transport swabs/growth media using standard Clearsafe sampling procedures. The samples were transported in an iced insulated box and arrived at the nominated testing laboratory within 24hrs subsequent to the sampling.

Samples were collected from locations which were considered to be representative of the general conditions at the time of sampling.

The microbial sampling program was limited to surficial viable microorganisms in selected locations and during a specific period in time. Viable microorganism concentrations are known to vary markedly with differing meteorological and seasonal conditions.

4 Adopted Standards

Viable micro-organisms are common on urban surfaces and within indoor air. Microbial levels are relevant to indoor air quality as they can cause allergies and infections and may also negatively impact on an area's aesthetics by affecting surface coatings and releasing odorous volatile organic compounds.

The human body is well adapted to cope with most micro-organisms that are regularly encountered. As such it has not been possible for the scientific community to reproducibly establish levels of micro-organisms (on surfaces or in air) that are considered to be 'safe' or 'unsafe'.

The established methodology for assessing microbial levels is to collect samples from both affected and non-affected locations and make comparisons. It is common for there to be large variations detected between locations and therefore Clearsafe, in line with the industry accepted standard, uses the following triggers to indicate a need for remediation or further investigation:

- Evident mould growth as observed by a trained and experienced consultant.
- Microbial sample results greater than double (x2) the reference sample.

5 Observations

The site consists of the Helensburgh Community Centre located at 26 Walker Street Helensburgh. The primary area of concern for this report is within the subfloor of the Helensburgh Community Centre basketball court.

Clearsafe was advised the following information from the client:

- The timber floorboards of the western section (approximately ⅓) of the basketball courts were scheduled to be removed and replaced. A small section of the timber floorboards were removed (approximately 1m x 1.5m) and the client noticed the deteriorated condition of the timber joists and what appeared to be visible mould growth
- New ventilation is to be installed along the western wall of the basketball court
- The basketball court is hired out to external parties for use
- Mouldy/musty olfactory sensations had been reported within the subfloor of the basketball court

The following observations were noted during the inspection:

- A mouldy/musty odour was present within the subfloor of the basketball court at the time of the inspection
- The western section of the basketball court had been fenced off to restrict access
- Visible microbial growth was observed on the underside of the floorboards and on structural timber joists within the subfloor (refer to photos in Appendix A)
- The ground surfaces and timber joists/bearers within the subfloor were visibly damp in multiple locations, the timber bearers/joists were dripping with water at the time of the inspection
- A white growth was observed on the western and northern brick walls of the subfloor, both of which were also considerably wet
- Several timber joists and timber bearers within the subfloor had completely broken off and/or were significantly damaged compromising the timber floors structural integrity
- Viewed from above, several spots on the basketball court were visibly uneven
- Several fibrous cement fragments (presumed to be asbestos-containing) were found within the subfloor at the time of the inspection

- Pipes were observed along the western brick wall of the subfloor that extend from the outside of the building to within the subfloor (believed to be the source of the water ingress)

6 Moisture Level Spot Checks

Method:

A Tech Check Plus hand held moisture meter was used to measure moisture within timber surfaces in several locations.

Results:

Table 1: Moisture level of timber surfaces

Location	Timber Surfaces (%)
Internal, basketball court (western section), subfloor timber bearer immediately adjacent exposed entry	**Above instrument threshold (Tech Check Plus reading displayed as HIGH)**
Internal, basketball court (western section), subfloor timber joist immediately adjacent exposed entry	**Above instrument threshold (Tech Check Plus reading displayed as HIGH)**
Internal, basketball court (western section), timber hardwood floor immediately adjacent exposed entry	**12.7%**
Internal, basketball court (central section), underside of timber joist	**17.1%**
Internal, basketball court (eastern section), underside of timber bearer	**15.6%**

Discussion:

Moisture level results for all of the measured timber building materials were above 10%, at the time of inspection. Moisture levels for timber surfaces above 10% are considered a trigger level for treatment/further assessment. It is noted that at the time of the inspection, water was visibly observed dripping from the timber joists/bearers throughout several locations within the subfloor and also on inspected brick wall surfaces within the subfloor (northern and western). The need for remediation and/or further investigation is recommended.

7 Surficial Microbial Sampling

Method:

Surficial microbial sampling was undertaken in eight (8) locations using swabs (Including a blank and reference sample). The swabs are used to collect microbial spores from direct contact with surfaces and are then placed onto growth media and incubated in a controlled environment, before being analysed for viable colony forming units (CFU). The results are then compared with control samples collected from a similar non-affected location nearby.

Results:

Table 2: Surficial Microbial Counts Using Swabs

Sample No.	Location	Bacteria Count (CFU/plate)	Yeast Count (CFU/plate)	Mould Count (CFU/plate)
20-12361/ Blank	Field Blank	10 est.	<10	**1100**
20-12361/ Ref	Internal, basketball court, on fire hose reel box immediately adjacent southern entry	<10	<10	10 est.
20-12361/ S1	Subfloor (beneath basketball court), on broken timber joist directly below western subfloor access point	**5000**	<10	**1900**
20-12361/ S2	Subfloor (beneath basketball court), on western brick wall	**56000 est.**	<10	**400**
20-12361/ S3	Subfloor (beneath basketball court), on broken timber bearer immediately adjacent subfloor access point	**5500**	<10	**2200**
20-12361/ S4	Subfloor (beneath basketball court), on northern brick wall	**350**	<10	**500**

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20-12361/ S5	Subfloor (beneath basketball court), centrally located, on underside of timber floorboards	**11000**	Unable to determine Yeast count due to TNTC mould	**>3000 est.**
20-12361/ S6	Subfloor (beneath basketball court), on top surface of PVC pipe immediately adjacent eastern subfloor entry	**7200**	Unable to determine Yeast count due to TNTC mould	**>3000 est.**

Note: est. = Estimated

Discussion:

With reference to Table 2, above, results indicate that all sampled locations returned detectable microbial concentrations at levels that suggest significant viable mould and bacteria. Samples 5 and 6 were unable to give accurate detectable yeast concentrations due to overgrown mould. However, all sample locations exhibited concentrations above double that of the reference sample, suggesting the need for further testing and/or remedial works. The mould count reported to the field blank sample is likely due to cross contamination and does not invalidate the results.

8 Conclusion

Clearsafe Environmental Solutions Pty Ltd (Clearsafe) was requested by Quadracon Building to undertake a limited assessment with regard to microbial levels within the subfloor space beneath the basketball court at the Helensburgh Community Centre, 26 Walker Street, Helensburgh NSW 2508. The investigation was commissioned following the identification of visible mould and broken timber joists within the subfloor of the Community centre during renovation works. Concerns were subsequently raised about the structural integrity of the timber floorboards and joists and any possible risk that the microbial impacts may present to any of the occupants within the immediate area during renovation.

Moisture level results for all of the measured timber building materials were above 10%, at the time of inspection. Moisture levels for timber surfaces above 10% are considered a trigger level for treatment/further assessment. It is noted that at the time of the inspection, water was visibly observed dripping from the timber joists/bearers throughout several locations within the subfloor and also on inspected brick wall surfaces within the subfloor (northern and western). The need for remediation and/or further investigation is recommended.

Surface swab analysis results indicate that all sampled locations returned detectable microbial concentrations at levels that suggest significant viable mould and bacteria. Samples 5 and 6 were unable to give accurate detectable yeast concentrations due to overgrown mould. However, all sample locations exhibited concentrations above double that of the reference sample, suggesting the need for further testing and/or remedial works. The mould count reported to the field blank sample is likely due to cross contamination and does not invalidate the results.

In conclusion, moisture readings in conjunction with surface swab analysis suggests that there is an underlying moisture ingress/microbial growth issue which appears to be present within the entirety of the basketball court subfloor. A visual inspection of the subfloor identified several timber bearers and timber joists that were either partially broken or had completely detached from their former position due to rot. Water was visually observed dripping from several of the timber joists within the subfloor and was also observed on the northern and western brick walls of the subfloor, coupled with what appeared to be a white powdery substance, which the inspecting consultant is of the belief is most likely efflorescence. Ground surfaces of the subfloor displayed evidence of dampness and trenches which appeared to be pathways for water ingress. A musty/damp odour was also present within the subfloor at the time of the inspection. Clearsafe recommends appropriate remediation as part of renovation.

As per the Australian Mould Guidelines, mould damage is classified into a class system based on the extent and visible microbial impacts observed. As the mould damage was visible throughout the entirety of the subfloor beneath the basketball court and is compromising the structural integrity of the timber hardwood floor, the remedial works would

be classified as a ***Building Class 4 - Extensive Visible Growth Greater Than 10m2 (Large Job)***.

9 Recommendations

The following recommendations apply to the microbial remediation works:

- Remediation work should be carried out by professional contractors in accordance with relevant guidelines and in consideration of the following points.
- The work area should not be occupied during cleaning processes.
- Conduct a building inspection by a professional building inspector to investigate the source of the water ingress within the subfloor, particular attention should be paid to the northern and western sides of the basketball court where the drainage extends from the exterior through the brick wall into the subfloor. Given the compromised structural integrity of the timber bearers and joists within the subfloor, Clearsafe recommends that access within it is restricted/limited.
- Clearsafe recommends that access to the basketball court by external parties (outside of companies working on behalf of the current scope of works) is completely restricted due to safety concerns posed by the structural integrity of the basketball court.
- Clearsafe is of the understanding that as a part of the original remediation works, Quadracon was engaged to remove a nominated section of the timber hardwood floors within the basketball court. Cleasafe suggests that the original scope of works is reassessed and extended to include the entirety of the timber hardwood floors due to the uniform nature of damage observed throughout the subfloor during the inspection. It is also suggested that further consideration be undertaken in regards to the replacement of the timber bearers and joists within the subfloor.
- As per the Australian Mould Guidelines, mould damage is classified into a class system based on the extent and visible microbial impacts observed. As the mould damage was visible throughout the entirety of the subfloor beneath the basketball court and is compromising the structural integrity of the timber hardwood floor, the remedial works would be classified as a ***Building Class 4 - Extensive Visible Growth Greater Than 10m2 (Large Job)***. As per these guidelines the area should be restricted and clearly signposted, ground surfaces within the subfloor covered in plastic sheets and HVAC, ventilation and exhaust ducts adequately sealed. A decontamination unit installed at one of the entrances to the basketball court and all other access points adequately sealed and placed under negative air pressure by using an exhaust fan with a HEPA filter. All timber materials to be disposed of should be wrapped in plastic bags and the external of the bags HEPA vacuumed in the decontamination unit prior to removal from the enclosure. PPE should include disposable overalls, gloves, shoe protectors and a full face respirator mask with HEPA filtration with an activated carbon or organic vapour filter.

- Throughout the course of the inspection fibrous cement fragments suspected of containing asbestos were observed sporadically scattered throughout the subfloor ground surfaces. Clearsafe recommends an emu pick of the ground surfaces, with consideration given to conducting a scrape of 50-100mm of soils within the subfloor due to the incredibly damp and most likely microbial impacted nature of the soils. If any material suspected of containing asbestos is identified in the future (outside of that already identified), stop work immediately, restrict access to the impacted area and contact Clearsafe for further advice.

- Clearsafe is of the understanding that the western wall of the basketball court is also being replaced and new ventilation is being installed, it is recommended that the northern wall of the basketball court is also removed and replaced and adequate ventilation installed to allow for air flow within the subfloor.

- Post mould remediation works reduce the humidity within the basketball court subfloor by natural or artificial means (desiccant, dehumidifiers, increasing air flow).

- Post mould remediation works, increase natural light levels and ventilation within the basketball court subfloor.

- An Occupational Hygiene consultant should be contacted to conduct a final inspection and clearance testing following remediation work.

10 Closure and Contact Information

For any queries relating to this report, please contact Clearsafe on 1300 042 962 or info@clearsafe.com.au.

Clearsafe is pleased to provide our consulting services for this commission.

Kind Regards,

Luke Parkins
Project Consultant

Michael Fernandez
Regional Manager

APPENDIX A

SITE PHOTOGRAPHS

Photo	Location
	Representative photograph of the basketball court (including the western ‘restricted’ section)
	Representative photograph of the western access point into the subfloor

	Representative photograph of one of the pipes along the western wall of the subfloor
	Representative photograph of several floor timber joists that have partially broken and are coated with moisture

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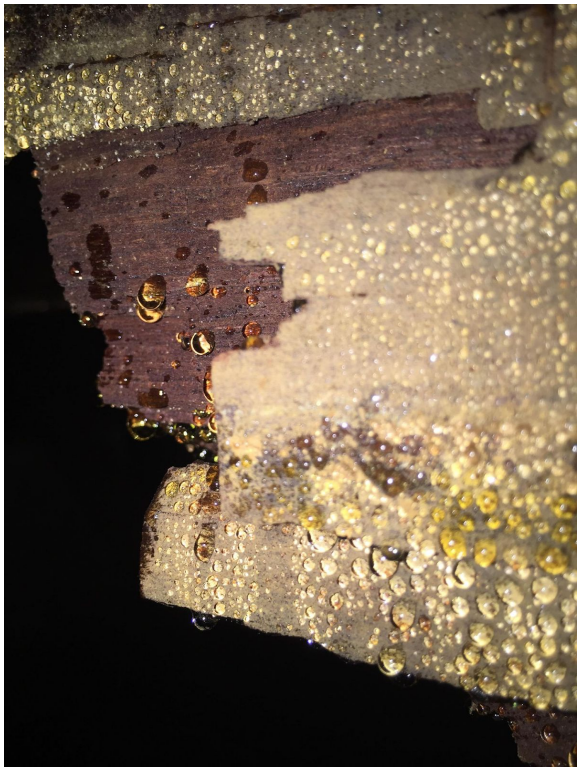
Version: 1, Version Date: 15/12/2020

	Representative photograph of one (of many) of the floor timber joists
	Representative photograph of a broken floor timber joist within the subfloor

	Representative photograph of a fractured floor timber bearer
	Representative photograph of remnant fibrous cement sheeting within the subfloor

	Representative photograph of fibrous cement packers supporting the timber bearers
	Representative photograph of the northern brick wall within the subfloor

	Representative photograph of a floor timber bearer immediately adjacent the northern brick wall

APPENDIX B

LABORATORY REPORTS

SILLIKER AUSTRALIA
SYDNEY LABORATORY
Unit C2, 391 Park Road
Regents Park, NSW 2143
02 8718 6888 Fax 02 8718 6899

CERTIFICATE OF ANALYSIS

COA No:	SYD-51514163-0
Supersedes:	None
COA Date:	07/12/2020
Page 1 of 5	

TO:
Clearsafe Environmental Solutions
Clearsafe Environmental Solutions
PO Box 337
UNANDERRA, NSW 2526

Received From:	Unanderra, NSW
Received Date:	27/11/2020

Location of Test: (except where noted)
Regents Park, NSW

Analytical Results

Desc. 1: ^ 20-12361/Blank

Sample Number: 456455852
Condition Rec'd: NORMAL
Temp Rec'd (°C): 18.0
Date Started: 27/11/2020

Results apply only to the sample as received

Analyte	Result	Units	Method Reference	Result Date	Loc.
Total Bacterial Count	10 est.	CFU/swab	M17.2	30/11/2020	
Total Mould Count	1100	CFU/swab	M17.2	02/12/2020	
Total Yeast Count	<10	CFU/swab	M17.2	02/12/2020	

Desc. 1: ^ 20-12361/Ref

Sample Number: 456455854
Condition Rec'd: NORMAL
Temp Rec'd (°C): 18.0
Date Started: 27/11/2020

Results apply only to the sample as received

Analyte	Result	Units	Method Reference	Result Date	Loc.
Total Bacterial Count	<10	CFU/swab	M17.2	30/11/2020	
Total Mould Count	10 est.	CFU/swab	M17.2	02/12/2020	
Total Yeast Count	<10	CFU/swab	M17.2	02/12/2020	

Accredited for compliance with ISO/IEC 17025 - Testing
NATA Corporate Accreditation Number: 2020
Melbourne Microbiology Site No: 2013
Sydney Microbiology Site No: 2759 Chemistry Site No: 2135
Perth Microbiology Site No: 10635
Brisbane Microbiology Site No: 15147

^ Customer supplied information

The data pertains solely to the analytical and sampling procedure(s) used and the condition and homogeneity of the sample(s). The data therefore may not be representative of the lot or batch or other samples.

Measurement Uncertainty (MU) can be found by logging in to MyMXNS

TGA Licence No: MI-04072005-LI-000664-2

AU-COA-33 v8

MERIEUX NutriSciences

SILLIKER AUSTRALIA
SYDNEY LABORATORY
Unit C2, 391 Park Road
Regents Park, NSW 2143
02 8718 6888 Fax 02 8718 6899

CERTIFICATE OF ANALYSIS

COA No:	SYD-51514163-0
Supersedes:	None
COA Date:	07/12/2020
Page 2 of 5	

TO:
Clearsafe Environmental Solutions
Clearsafe Environmental Solutions
PO Box 337
UNANDERRA, NSW 2526

Received From:	Unanderra, NSW
Received Date:	27/11/2020

Location of Test: (except where noted)
Regents Park, NSW

Analytical Results

Desc. 1: ^ 20-12361/S1

Sample Number: 456455855
Condition Rec'd: NORMAL
Temp Rec'd (°C): 18.0
Date Started: 27/11/2020
Results apply only to the sample as received

Analyte	Result	Units	Method Reference	Result Date	Loc.
Total Bacterial Count	5000	CFU/swab	M17.2	30/11/2020	
Total Mould Count	1900	CFU/swab	M17.2	02/12/2020	
Total Yeast Count	<10	CFU/swab	M17.2	02/12/2020	

Desc. 1: ^ 20-12361/S2

Sample Number: 456455856
Condition Rec'd: NORMAL
Temp Rec'd (°C): 18.0
Date Started: 27/11/2020
Results apply only to the sample as received

Analyte	Result	Units	Method Reference	Result Date	Loc.
Total Bacterial Count	56000 est.	CFU/swab	M17.2	30/11/2020	
Total Mould Count	400	CFU/swab	M17.2	02/12/2020	
Total Yeast Count	<10	CFU/swab	M17.2	02/12/2020	

NATA WORLD RECOGNISED ACCREDITATION

Accredited for compliance with ISO/IEC 17025 - Testing
NATA Corporate Accreditation Number: 2020
Melbourne Microbiology Site No: 2013
Sydney Microbiology Site No: 2759 Chemistry Site No: 2135
Perth Microbiology Site No: 10635
Brisbane Microbiology Site No: 15147

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MERIEUX NutriSciences

SILLIKER AUSTRALIA
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Unit C2, 391 Park Road
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COA No:	SYD-51514163-0
Supersedes:	None
COA Date:	07/12/2020
Page 3 of 5	

TO:
Clearsafe Environmental Solutions
Clearsafe Environmental Solutions
PO Box 337
UNANDERRA, NSW 2526

Received From:	Unanderra, NSW
Received Date:	27/11/2020

Location of Test: (except where noted)
Regents Park, NSW

Analytical Results

Desc. 1: ^ 20-12361/S3

Sample Number: 456455857
Condition Rec'd: NORMAL
Temp Rec'd (°C): 18.0
Date Started: 27/11/2020

Results apply only to the sample as received

Analyte	Result	Units	Method Reference	Result Date	Loc.
Total Bacterial Count	5500	CFU/swab	M17.2	30/11/2020	
Total Mould Count	2200	CFU/swab	M17.2	02/12/2020	
Total Yeast Count	<10	CFU/swab	M17.2	02/12/2020	

Desc. 1: ^ 20-12361/S4

Sample Number: 456455858
Condition Rec'd: NORMAL
Temp Rec'd (°C): 18.0
Date Started: 27/11/2020

Results apply only to the sample as received

Analyte	Result	Units	Method Reference	Result Date	Loc.
Total Bacterial Count	350	CFU/swab	M17.2	30/11/2020	
Total Mould Count	500	CFU/swab	M17.2	02/12/2020	
Total Yeast Count	<10	CFU/swab	M17.2	02/12/2020	

NATA WORLD RECOGNISED ACCREDITATION

Accredited for compliance with ISO/IEC 17025 - Testing
NATA Corporate Accreditation Number: 2020
Melbourne Microbiology Site No: 2013
Sydney Microbiology Site No: 2759 Chemistry Site No: 2135
Perth Microbiology Site No: 10635
Brisbane Microbiology Site No: 15147

^ Customer supplied information

The data pertains solely to the analytical and sampling procedure(s) used and the condition and homogeneity of the sample(s). The data therefore may not be representative of the lot or batch or other samples.

Measurement Uncertainty (MU) can be found by logging in to MyMXNS

TGA Licence No: MI-04072005-LI-000664-2

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CERTIFICATE OF ANALYSIS

COA No:	SYD-51514163-0
Supersedes:	None
COA Date:	07/12/2020
Page 4 of 5	

TO:
Clearsafe Environmental Solutions
Clearsafe Environmental Solutions
PO Box 337
UNANDERRA, NSW 2526

Received From:	Unanderra, NSW
Received Date:	27/11/2020

Location of Test: (except where noted)
Regents Park, NSW

Analytical Results

Desc. 1: ^ 20-12361/S5

Sample Number: 456455859
Condition Rec'd: NORMAL
Temp Rec'd (°C): 18.0
Date Started: 27/11/2020

Results apply only to the sample as received

Analyte	Result	Units	Method Reference	Result Date	Loc.
Total Bacterial Count	11000	CFU/swab	M17.2	30/11/2020	
Total Mould Count	>3000 est.	CFU/swab	M17.2	07/12/2020	
Total Yeast Count	Unable to determine the Yeast Count due to TNTC mould.	CFU/swab	M17.2	07/12/2020	

Desc. 1: ^ 20-12361/S6

Sample Number: 456455860
Condition Rec'd: NORMAL
Temp Rec'd (°C): 18.0
Date Started: 27/11/2020

Results apply only to the sample as received

Analyte	Result	Units	Method Reference	Result Date	Loc.
Total Bacterial Count	7200	CFU/swab	M17.2	30/11/2020	
Total Mould Count	>3000 est.	CFU/swab	M17.2	07/12/2020	
Total Yeast Count	Unable to determine Yeast Count due to TNTC mould.	CFU/swab	M17.2	07/12/2020	

Accredited for compliance with ISO/IEC 17025 - Testing
NATA Corporate Accreditation Number: 2020
Melbourne Microbiology Site No: 2013
Sydney Microbiology Site No: 2759 Chemistry Site No: 2135
Perth Microbiology Site No: 10635
Brisbane Microbiology Site No: 15147

^ Customer supplied information

The data pertains solely to the analytical and sampling procedure(s) used and the condition and homogeneity of the sample(s). The data therefore may not be representative of the lot or batch or other samples.

Measurement Uncertainty (MU) can be found by logging in to MyMXNS

TGA Licence No: MI-04072005-LI-000664-2

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SILLIKER AUSTRALIA
SYDNEY LABORATORY
Unit C2, 391 Park Road
Regents Park, NSW 2143
02 8718 6888 Fax 02 8718 6899

CERTIFICATE OF ANALYSIS

COA No:	SYD-51514163-0
Supersedes:	None
COA Date:	07/12/2020
Page 5 of 5	

TO:
Clearsafe Environmental Solutions
Clearsafe Environmental Solutions
PO Box 337
UNANDERRA, NSW 2526

Received From:	Unanderra, NSW
Received Date:	27/11/2020

Location of Test: (except where noted)
Regents Park, NSW

Analytical Results

GEORGE GEORGAS
LABORATORY MANAGER

MXNS Abbreviations/Definitions:
| <: Less Than | >: Greater Than | CFU: Colony Forming Units | D: Detected | ND: Not Detected | MPN: Most Probable Number | LOR: Level of Reporting | LOD: Level of Detection |
| LOQ: Limit of Quantification | est. : Estimate |

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NATA Corporate Accreditation Number: 2020
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