serco sodexo
DEFENCE SERVICES

ENVIRONICS
THINK SAFETY WORK SAFELY
1300 HAZCHEM

Asbestos Assessor's Report:

TFTA (0233) CF3 P2

Fanning River Integration – COTTAGE ONE

Project Aim & Description

The site of the works is located at Townsville Field Training Area – Fanning River Station.

The aim of this project was to carry out an asbestos and lead in paint survey on buildings and structures to ascertain if asbestos containing materials are present prior to demolition works scheduled to be carried out.

Environics, 12th June 2014 – Report Number 140612-2 Rev0

Document Control

Environics (Qld) Pty Ltd
ABN 76 354 368 913
3 Jameson Street,
Hermit Park Qld. 4812

Telephone: 1300 - 429 243
URL: www.environics.com.au
E-mail: admin@environics.com.au

Quality System: www.ISNetworld.com.au

File No	Initial Release	Service Offer	Context
140612-2rev1	12/06/2014	Asbestos Assessor's Report: TFTA (0233) CF3 P2 Fanning River Integration Cottage One of Subject Property	The site of the works is located at Townsville Field Training Area – Fanning River Station. The aim of this project was to carry out an asbestos survey on buildings and structures to ascertain if asbestos containing materials are present prior to demolition works scheduled to be carried out.

DISCLAIMER:
Quantities of materials given in this report are approximates only and must not be relied upon when quoting for removal. When preparing a quote always make first hand measurements of materials within the scope of work.

Revision No	Date	Revision Description	Author	Co-Author
0	12/06/2014	Report, initial release	LL	BR

Copy No (s)	Rev No	Company	Representative(s)	
1	0	Serco Sodexo Defence Services	Rod Knight Sandra Gillard	Jade Collison
2	0	Environics	Lawrence Lyons	Bradley Rivers

12th June 2014

RE: NQ21608.16

Dear Client,

On behalf of Environics, I respectfully submit our report in relation to Cottage One of the subject property in the hope that it will receive the favourable consideration of Serco Sodexo Defence Services.

If further information or clarification is required please do not hesitate to contact me personally.

Sincerely,
Environics

Lawrence Lyons
(Principle)

Adobe EchoSign

0437 008 193

Contents

Photographs:

Appendix:

1. INTRODUCTION

1.1. Aim

The aim of this project was to carry out an asbestos and lead in paint survey of buildings and structures of the Fanning River Station to ascertain if asbestos containing materials and lead based paints where present and to estimate the cross sectional areas of these material(s) prior to the planned demolition of various buildings and structures.

1.2. Background Information

Fanning River that runs through the station is an tributary of the Burdekin River.

The station forms part of the Townsville field training area located south-west of Townsville. The majority of buildings and structures are located in the area referred to as 'Homestead'. Other assets are at various places across the property.

Contained in the section 2.1.1. is information as to the type of buildings and structures and their locations relative to each other and geographically by GPS coordinates.

1.3. Scope

The scope of this report is Cottage One of the property in relation to asbestos containing materials and lead based paint.

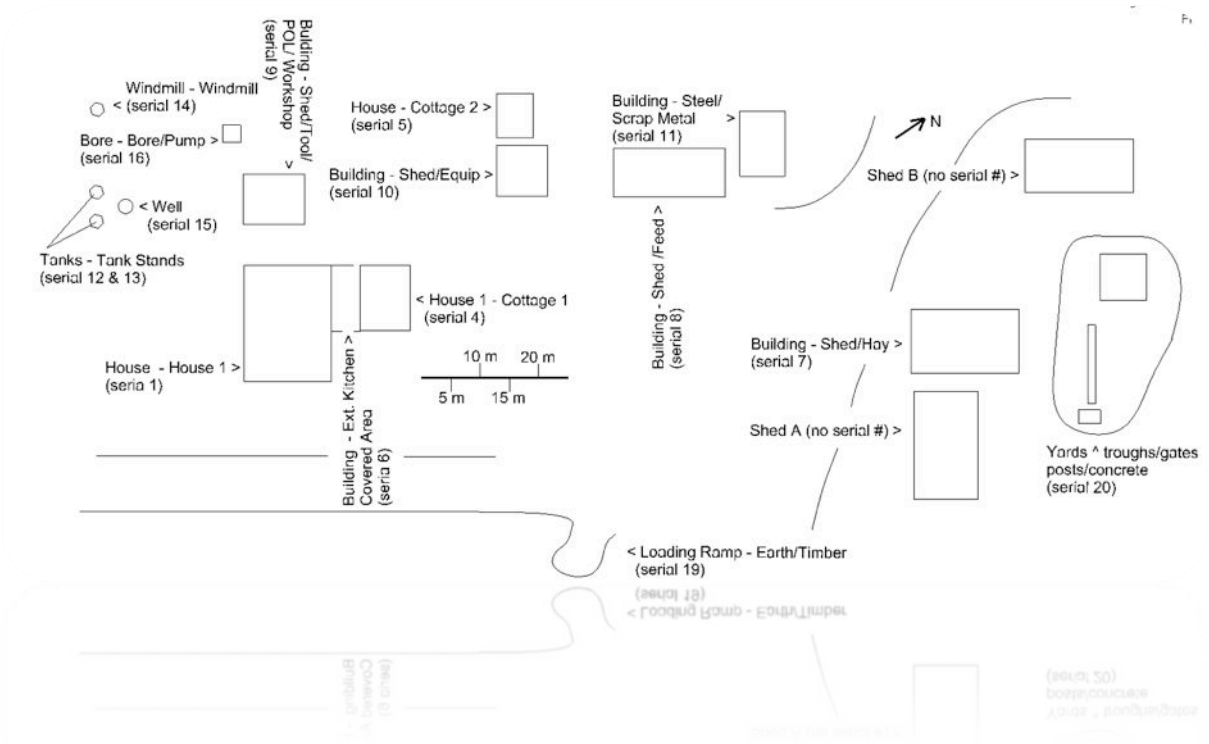
Photograph 1 – Showing Cottage One of the Property

2. LOCATION OF ASSETS SURVEYED

2.1. Drawing - Homestead Site Plan (Primary)

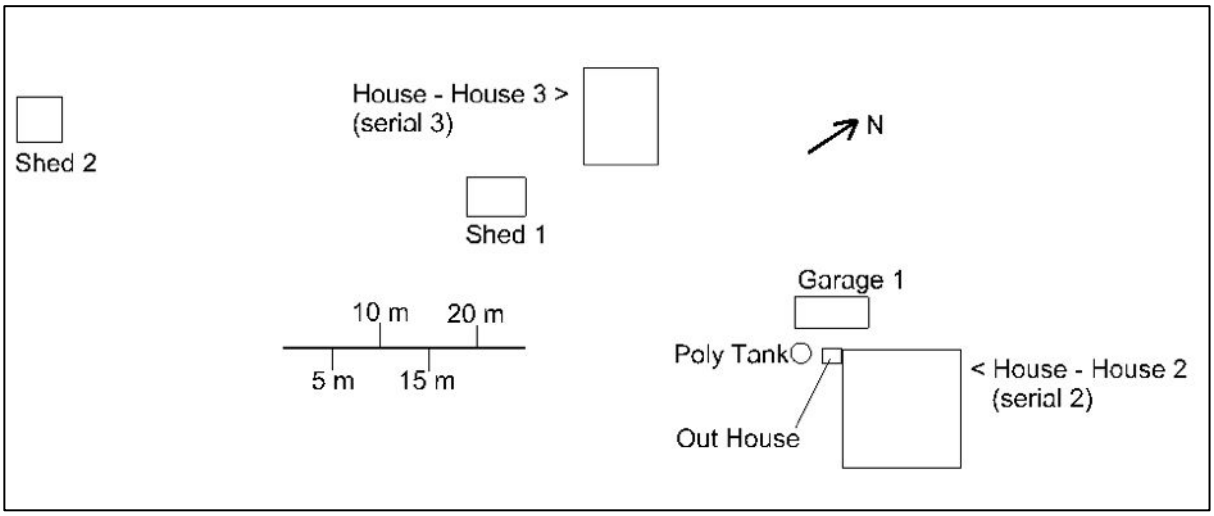
Shown on the following page are the primary buildings and structures of the homestead.

The GPS coordinates for the centre of the drawing are East 146" 25.874; and South 19" 43.860.



2.2. Drawing - Homestead Site Plan (Secondary)

Shown below are the secondary buildings and structures of the homestead. The GPS coordinates for the centre of the drawing are East 146" 25.799; and South 19" 43.975.



2.3. Details of Assets, Location, & Type

Table One – Details of Assets, Location and Type

Serial	Sector	GR E146 S19	Type	Description
1	Homestead	25.874 43.860	House	House 1
2	Homestead		House	House 2
3	Homestead		House	House 3
4	Homestead		House	Cottage 1
5	Homestead		House	Cottage 2
6	Homestead		Building	External Kitchen/Covered Area
7	Homestead		Building	Shed - Hay
8	Homestead		Building	Shed - Feed
9	Homestead		Building	Shed - Equipment/Tool/POL/Workshop
10	Homestead		Building	Shed - Equipment
11	Homestead		Building	Steel/Scrap metal
12	Homestead		Tank Stand	Tank Stand x 2
13	Homestead		Tank	Tanks x 2
14	Homestead		Windmill	Windmill
15	Homestead		Well	Well
16	Homestead		Bore	Bore/pump

Table One continues

Serial	Sector	GR E146 S19	Type	Description
17	Homestead		Septic Tanks	Septic Tanks
18	Homestead		Loading Ramp	Concrete
19	Homestead		Loading Ramp	Earth/Timber
20	Homestead		Yards - Homestead	Timber/steel/stable/troughs/gates/posts/concrete waste/fencing
21	Homestead		Airstrip	Fencing
22	Homestead	403 188	Waste	Steel/Scrap metal
23	Homestead	40824 18665	Yards - North	Tyre Licks x 6
24	Homestead	40736 18757	Water Point	Tank/3xtank rings/tyres/waste
25	Homestead	40699 18834	Bore	Bore
26	Sandy Creek	41521 19926	Gauging Station	Old Gauging Station foundations
27	Heifer	39364 20422	Water Point	Bore/scrap/Tyre Lick/waste (2ha area)
28	Box Creek	43272 25324	Yards	Yards/Dip/Shed/Hut/Scrap/Waste

Table One continues

Serial	Sector	GR E146 S19	Type	Description
29	Heifer	38570 23905	Water Point	Windmill & Tank
30	Steer	38 29	Water Point	Windmill & Tank
31	Sandy Creek	46658 19755	Water Point	Windmill/Well/Tanks x 2/Trough
32	Rocky	47802 16295	Water Point	Bore/Tyre Lick/Waste
33		420 201	Exploration Bore	Exploration Bore
34		39318 29629	Exploration Site	Bore
35	Sandy Creek	41322 19262	Dam	Dam/Trough/Lick
36	Yarraman	35320 12356	Dam	"Wall Dam
37	Homestead	38037 18512	Dam	Wall Dam/Trough/Tyre Licks x 2/Fence around trough
38	Kermpvale B	east boundary	Fence	Common boundary fence
39	Trace	east boundary	Fence	Common boundary fence
40	Impact West	south boundary	Fence	Common boundary fence

Table One continues

Serial	Sector	GR E146 S19	Type	Description
41	Impact East	west boundary	Fence	Common boundary fence
42	Impact East	Fanning R East to 532 288	Fence	Common boundary fence
43	Emu	45440 13330	Water Point	Windmill/Bore/Fibreglass Tank/Gal Tank/Trough/Licks x 3
44	Emu	42251 15583	Explorati on Site	Bore tubes/rubbish
45	River	39866 14078	Yards	Trough Lick
46	River	40225 16658	Yards	Trough Lick/Timber Pallets
47	Homestead	39103 18415	Water Point	Old Bore/Scrap/Waste
48	Yarraman	37527 14634	Water Point	Windmill (Comet)/Bore/Trough/Tank/ Tyre Licks x 2/Scrap
49	Sandy Creek	44776 22544	Water Point	Tank/Trough/Tyre Lick
50	Rocky	44332 16163	Water Point	Windmill/Well/Tank/Trough/ Tyre Licks x 4
52	Mingela Road	45455 15002	Cattle Grid	Cattle Grid
53	Mingela Road	36402 21467	Cattle Grid	Cattle Grid

Table One continues

Serial	Sector	GR E146 S19	Type	Description
54	Cow	36120 11025	Yards	Spear Gate
55	Cow	36338 10875	Water Point	Windmill/Well/Trough/Scrap /Spear Gate/Tyre Lick x 3
56	Cow	34280 07582	Water Point	Solar Bore/Tank/Trough/Licks x 3
57	Cow	38056 08547	Water Point	Solar Bore/Tank/Trough/Licks x 3/Spear Gates x 2
58	Cow	40687 09212	Water Point	Old Well/Trough/Scrap
59	Cow	41996 07876	Water Point	Old Bore/Trough/Lick
60	River	40960 11382	Yards	Tyre Lick/Trough
61	Heifer	41004 24230	Water Point	Bore/poly pipe/waste steel
62	Homestead	40430 17740	Water Point	Bore / Waste
63	Emu	43827 12786	Exploration Site	Exploration Drill Hole

3. METHODOLOGY

3.1. Terminology

Throughout this report standard terminology relating to asbestos and asbestos containing materials has been used.

Definitions of these terms can be found in Section 1.3 of the Queensland Code of Practice; *How to Manage and Control Asbestos in the Workplace - Code of Practice 2011.*

3.2. Investigation Methods

Sampling for asbestos and lead in paint was undertaken in accordance with Environics (QLD) Health Safety & Hygiene's internal procedure for Asbestos Identification Sampling. In relation to asbestos, the procedure aligns with the process outlined in Appendix A of the Queensland Code of Practice; How to Manage and Control Asbestos in the Workplace - Code of Practice 2011. In relation to 'lead in paint' the same procedure is applicable in terms of best practice.

In each instance the sample was:

- Of a quantity sufficient to confirm status of asbestos presence and type, and the presence of lead in paint.
- Double sealed in individual sampling bags.
- Tools were wet wiped clean after sampling to avoid cross contamination.
- Intrusive sampling was sealed with spray paint.
- A photograph was taken indicative of condition and location that included a reference number.

All building material samples for asbestos or lead analysis were submitted to a NATA accredited laboratory for analysis.

All samples taken during this project were submitted to:

Envirolab Services Pty Ltd, 12 Ashley Street, Chatswood NSW 2067.

3.3. Legislation

Applicable legislation and Codes of Practice:

- Queensland State Work Health and Safety Act and Regulation 2011
- How to Manage and Control Asbestos in the Workplace, Code of Practice 2011 (current approved code of practice under Commonwealth and QLD OHS legislation. How to Safely Remove Asbestos, Code of Practice 2011 (current approved code of practice under Commonwealth and QLD OHS legislation)
- Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres 2nd Edition (NOHSC:3003(2005)) (Approved method for monitoring airborne asbestos under state and commonwealth OHS legislation)
- Environmental Protection Act 1994 and Regulation 2008 (transport of asbestos waste)
- Local council regulations (approved landfill sites for disposal)

3.4. Risk Ratings

In relation to asbestos the following risk ratings are used in this report.

Risk Rating	Description
Very High	Friable (un-bonded) ACM likely to pose a risk to health from exposure. The material is readily accessible and prone to further disturbance, or unsealed friable asbestos material.
High	Friable (un-bonded) ACM that has deteriorated significantly. The material is readily accessible and prone to further disturbance, or unsealed friable asbestos, that is only likely to be disturbed during routine maintenance activity.
Medium	ACM showing minor deterioration that is only likely to be disturbed during routine maintenance activity.
Low	ACM that shows no or very minor signs of damage/deterioration, the ACM is not friable and in a stable condition (sealed/encapsulated). Regular access to the ACM is unlikely to cause significant deterioration, or the material is adequately sealed.

4. RISK ASSESSMENT

4.1. Airborne Asbestos Fibres

The subject property has been confirmed to have a significant amount of asbestos-containing materials (ACMs), which are bonded materials such as asbestos cement sheet and pipe.

The potential for creating airborne asbestos fibres generated by the mechanical and weather related disintegration of ACMs and subsequent dispersion of fibres into the air is currently low.

The ACMs may be removed under B-Class controls as the risk is low to medium.

However, this potential will become high should any form of construction work or demolition work be undertaken. Airborne dust has the potential to contain respirable asbestos fibres.

It is for this reason that the ACMs must be removed before any construction or demolition works are undertaken.

5. RESULTS

5.1. Asbestos

Contained in 'Attachment One' are the AHIRs for Cottage One and the details in relation to the location where asbestos containing materials (ACMs) where found, their type, and their approximate cross section area in square meters. A substantial amount of bonded ACM was found.

5.2. Lead in Paint

Contained in 'Attachment Two' are the AHIRs for Cottage One and the details in relation to the location where lead in paint(s) where found, and their approximate cross section area in square meters. A substantial amount of lead based paint was found.

6. CONCLUSION

The removal of ACMs from the subject property represent a low to medium risk as they are bonded and mostly sealed with a paint, noting that much of the paint of the property is lead based.

Further inspection by the assigned Asbestos Removalist will required prior to work commencing to ensure B-class controls are adequate.

Appendix One –

AHIRs Cottage One (Asbestos)

Appendix One – AHIRs Asbestos, Cottage 1

1. COTTAGE ONE

1.1. AHIR 140414-18 A/C Stand Pipe

Region:	NQ - NQ	Property:	TFTA (0233) CF3 P2 Fanning River Integration	Structure:	Cottage 1
AHIR:	14041418	Level:	Survey	Location:	GR 25.883 43.850
				Space:	External Area

AHIR ACM: A/C pipe — Estate Details: Townsville Field Training Area, Fanning River Station. — ACM MGT: Remove for demolition

Secondary Location: North West — Quantity (m2): 4 — Occupancy In Use: ☐ No In Use: ■ — Accessibility - Accessible: ■ Inaccessible: ☐

Application: Utility — Control - Encapsulate: ☐ Leave and Manage: ☐ Remove: ■ N/A: ☐ Other:

ACM Status: Detected: ■ — Labels - Appixed: ■ Remove: ☐ Required: ☐ Sample ID #:

Friable: ☐ Bonded: ■ Not Detected: ☐

References / Attachments / Comments:

Condition: Fair

Upright pipe attached to north west wall of cottage

Photo Caption: A/C stand pipe

Laboratory: Envirolab Services Pty Ltd

Cert. of Analysis: 110214

Lab. Refer: 110214-4

Environics Refer: A004

Lead in Paint

%w/w

Area m2:

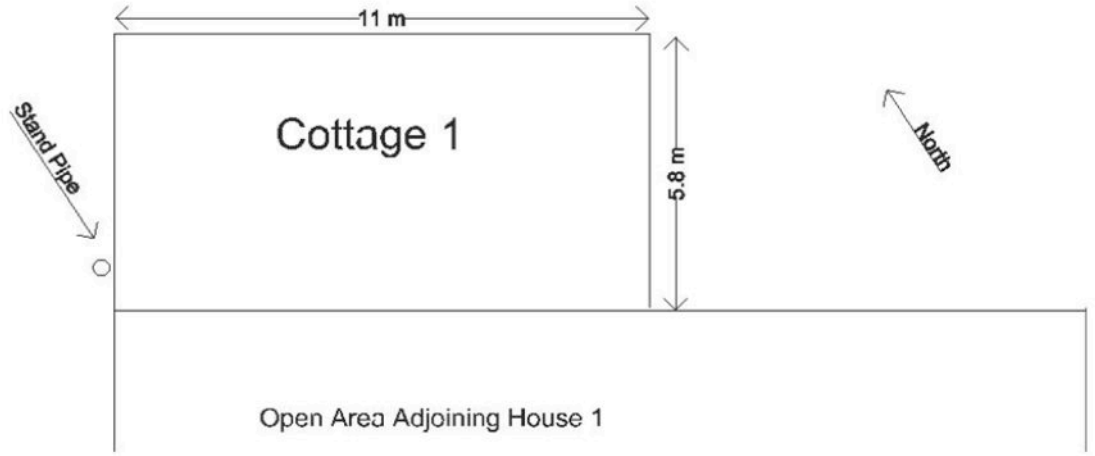
Asbestos Detected - Yes: ■ No: ☐ **Asbestos**

If Detected, What Type: Chrysotile

Sample Description: Grey compressed fibre cement material — Area m2: 4

Asbestos Assessor: Lawrie Lyons (Environics)

Drawings & Illustrations



1.2. AHIR 140414-19 Facia Boards

Region:	NQ - NQ	Property:	TFTA (0233) CF3 P2 Fanning River Integration	Structure:	Cottage 1
AHIR:	140414-19	Level:	Survey	Location:	GR 25.883 43.850
				Space:	External Area

AHIR ACM: Estate Details: Townsville Field Training Area, Fanning River Station. ACM MGT: Remove for demolition

Secondary Location: North West | Quantity (m2): | Occupancy In Use: | No In Use: ■ | Accessibility - Accessible: ■ | Inaccessible:

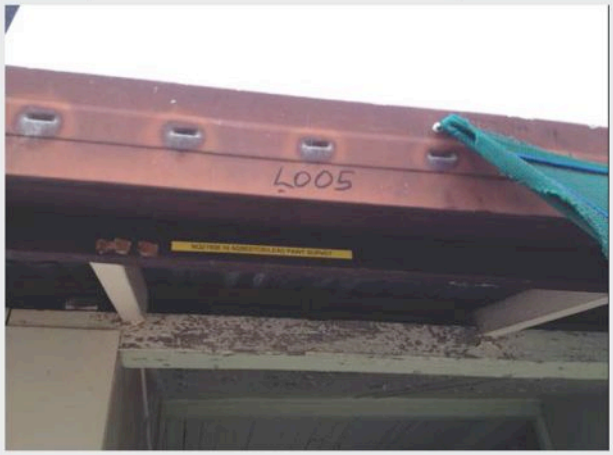
Application: Facia Board | Control - Encapsulate: | Leave and Manage: | Remove: ■ | N/A: | Other:

ACM Status: Detected: | Labels - Appixed: ■ | Remove: | Required: | Sample ID #:

Friable: | Bonded: | Not Detected: | References / Attachments / Comments:

Condition: Fair | Facia below gutter painted brown

Photo Caption: L005 Sample Location | Laboratory: Envirolab Services Pty Ltd



Cert. of Analysis: 110213

Lab. Refer: 110213-5

Environics Refer: L005

Lead in Paint

%w/w <0.05

Area m2: 6

Asbestos Detected - Yes: | No: | **Asbestos**

If Detected, What Type:

Sample Description: | Area m2:

Asbestos Assessor: Lawrie Lyons (Environics)

Drawings & Illustrations

1.3. AHIR 140414-20 Ceiling of North East Bedroom

Region:	NQ - NQ	Property:	TFTA (0233) CF3 P2 Fanning River Integration	Structure:	Cottage 1
AHIR:	140414-20	Level:	Survey	Location:	GR 25.883 43.850
				Space:	External Area

AHIR ACM: Chrysotile & Amosite Estate Details: Townsville Field Training Area, Fanning River Station. ACM MGT: Remove for demolition

Secondary Location: N.E. bedroom Quantity (m2): 13 Occupancy In Use: ☐ No In Use: ■ Accessibility - Accessible: ■ Inaccessible: ☐

Application: Ceiling Control - Encapsulate: ☐ Leave and Manage: ☐ Remove: ■ N/A: ☐ Other:

ACM Status: Detected: ■ Labels - Appixed: ■ Remove: ☐ Required: ☐ Sample ID #:

Friable: ☐ Bonded: ■ Not Detected: ☐

Condition: Fair

References / Attachments / Comments:

Facia below gutter painted brown

Photo Caption: A005 Sample Location

Laboratory: Envirolab Services Pty Ltd

Cert. of Analysis: 110214

Lab. Refer: 110214-5

Environics Refer: A005

Lead in Paint

%w/w

Area m2:

Asbestos Detected - Yes: ■ No: ☐ **Asbestos**

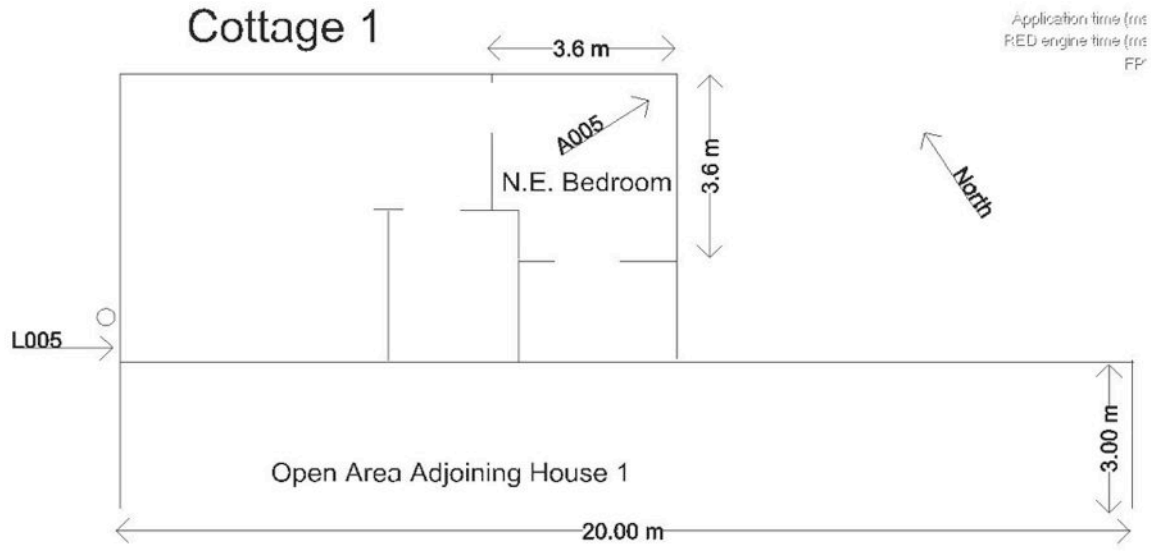
If Detected, What Type: Chrysotile & Amosite

Sample Description: Area m2: 13

Grey fibre cement material

Asbestos Assessor: Lawrie Lyons (Environics)

Drawings & Illustrations



1.4. AHIR 140414-21 Bathroom Walls

Region:	NQ - NQ	Property:	TFTA (0233) CF3 P2 Fanning River Integration	Structure:	Cottage 1
AHIR:	140414-21	Level:	Survey	Location:	GR 25.883 43.850
				Space:	Internal Area

AHIR ACM: Chrysotile — Estate Details: Townsville Field Training Area, Fanning River Station. — ACM MGT: Remove for demolition

Secondary Location: Bathroom — Quantity (m2): 18 — Occupancy In Use: ☐ No In Use: ■ — Accessibility - Accessible: ■ Inaccessible: ☐

Application: Walls — Control - Encapsulate: ☐ Leave and Manage: ☐ Remove: ■ N/A: ☐ Other:

ACM Status: Detected: ■ — Labels - Appixed: ■ Remove: ☐ Required: ☐ — Sample ID #: A006

Friable: ☐ Bonded: ■ Not Detected: ☐

References / Attachments / Comments:

Condition: Fair

Walls

Photo Caption: A006 Sample Location

Laboratory: Envirolab Services Pty Ltd

Cert. of Analysis: 110214

Lab. Refer: 110214-6

Environics Refer: A006

Lead in Paint

%w/w

Area m2:

Asbestos Detected - Yes: ■ No: ☐ **Asbestos**

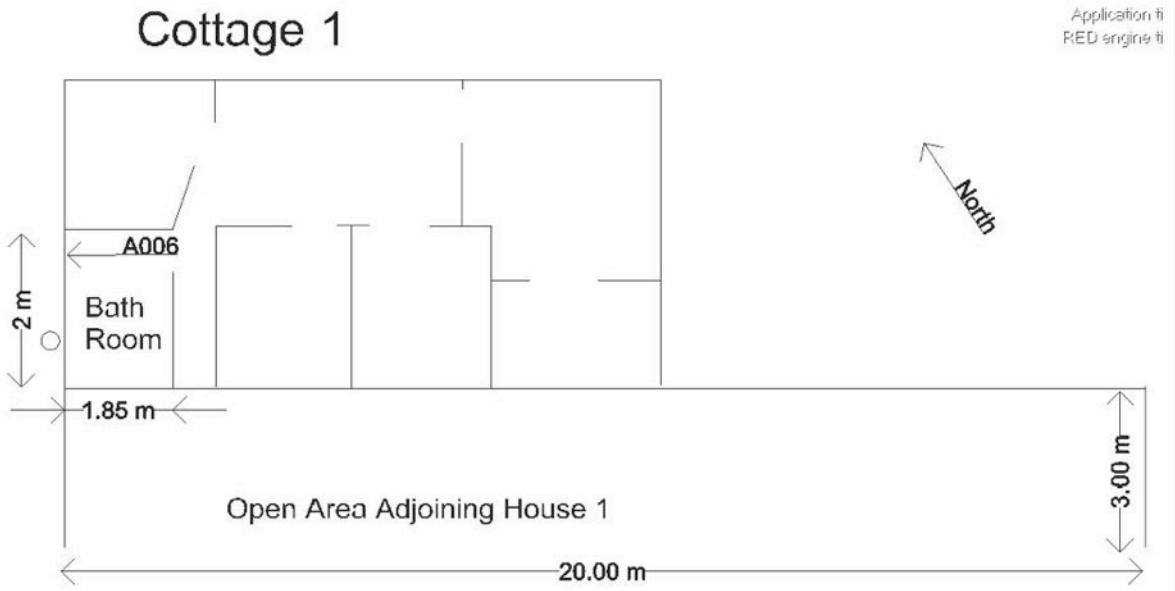
If Detected, What Type: Chrysotile

Sample Description: Area m2: 18

Grey fibre cement material

Asbestos Assessor: Lawrie Lyons (Environics)

Drawings & Illustrations



1.5. AHIR 140414-22 Bathroom Floor

Region:	NQ - NQ	Property:	TFTA (0233) CF3 P2 Fanning River Integration	Structure:	Cottage 1		
AHIR:	140414-22	Level:	Survey	Location:	GR 25.883 43.850	Space:	Internal Area
AHIR	ACM:	Chrysotile	Estate Details:	Townsville Field Training Area, Fanning River Station.	ACM MGT:	Remove for demolition	

Secondary Location:	Bathroom	Quantity (m2):	3.6	Occupancy In Use:		No In Use:	■	Accessibility - Accessible:	■ Inaccessible:
Application:	Floors	Control - Encapsulate:		Leave and Manage:		Remove:	■	N/A:	Other:
ACM Status: Detected:	■	Labels - Appixed:	■	Remove:		Required:		Sample ID #:	A007
Friable:	Bonded: ■	Not Detected:		References / Attachments / Comments:					
Condition:	Fair	Vinyl tile if unable to be manual lifted and requires grinding will become friable.							

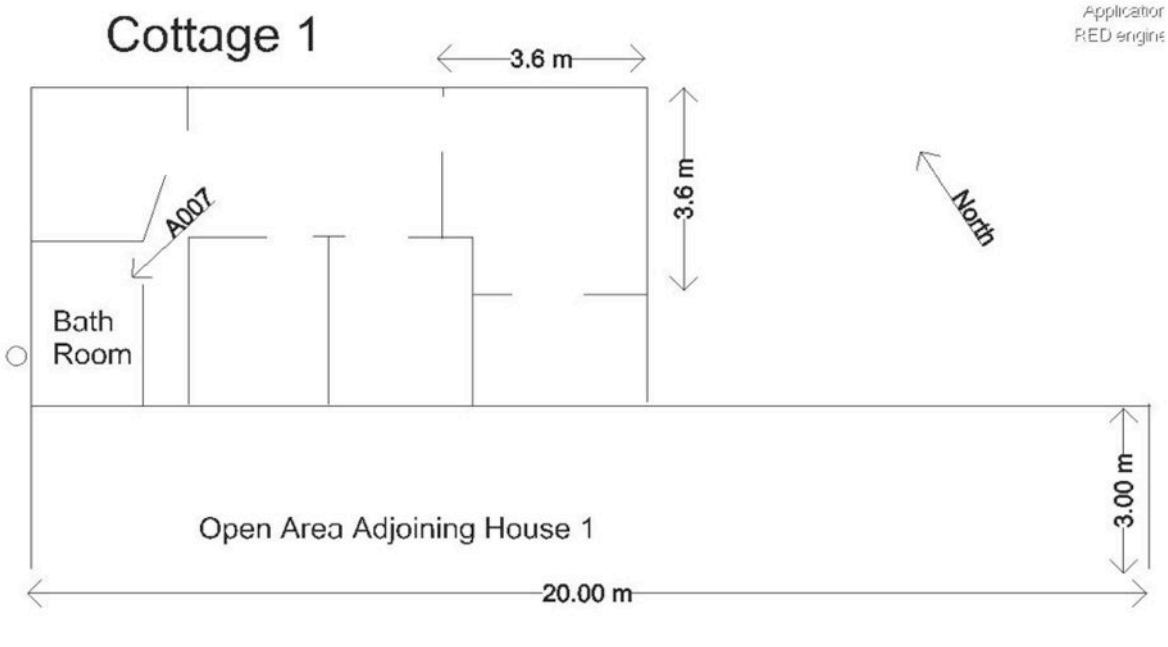
Photo Caption:	A007 Sample Location	Laboratory:	Envirolab Services Pty Ltd

Cert. of Analysis:	110214	**Lead in Paint**	
Lab. Refer:	110214-7	%w/w	
Environics Refer:	A007	Area m2:	

Asbestos Detected - Yes:	■	No:	**Asbestos**
If Detected, What Type:	Chrysotile		
Sample Description:		Area m2:	3.6
Beige brittle vinyl tile			

Asbestos Assessor:	Lawrie Lyons (Environics)

Drawings & Illustrations



Appendix Two –

AHIRs Cottage One
(Lead in Paint)

Appendix Two – AHIRs Lead in Paint, House 1

1. COTTAGE ONE

1.1. AHIR 140414-19 Facia Boards

Region:	NQ - NQ	Property:	TFTA (0233) CF3 P2 Fanning River Integration	Structure:	Cottage 1
AHIR:	140414-19	Level:	Survey	Location:	GR 25.883 43.850
Space:	External Area				

AHIR ACM: Estate Details: Townsville Field Training Area, Fanning River Station. ACM MGT: Remove for demolition

Secondary Location: North West

Quantity (m2): Occupancy In Use: No In Use: ■ Accessibility - Accessible: ■ Inaccessible:

Application: Facia Board

Control - Encapsulate: Leave and Manage: Remove: ■ N/A: Other:

ACM Status: Detected: Labels - Appixed: ■ Remove: Required: Sample ID #:

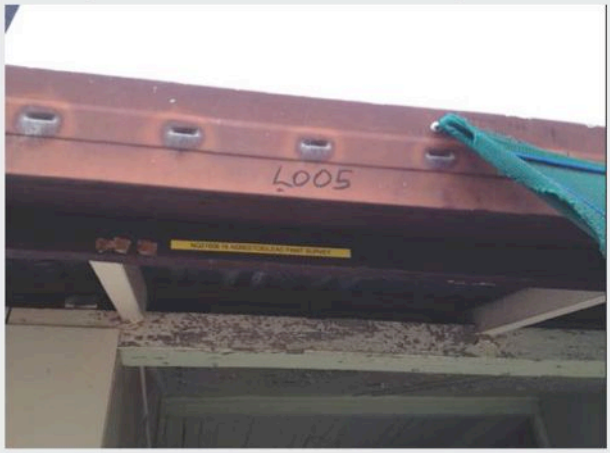
Friable: Bonded: Not Detected: *References / Attachments / Comments:*

Condition: Fair

Facia below gutter painted brown

Photo Caption: L005 Sample Location

Laboratory: Envirolab Services Pty Ltd



Cert. of Analysis: 110213

Lab. Refer: 110213-5

Environics Refer: L005

Lead in Paint

%w/w <0.05

Area m2: 6

Asbestos Detected - Yes: No: **Asbestos**

If Detected, What Type:

Sample Description: Area m2:

Asbestos Assessor: Lawrie Lyons (Environics)

Drawings & Illustrations

1.2. AHIR 140414-19B Ext. & Internal Walls, & Ceilings

Region:	NQ - NQ	Property:	TFTA (0233) CF3 P2 Fanning River Integration	Structure:	Cottage 1
AHIR:	14041419B	Level:	Survey	Location:	GR 25.883 43.850
				Space:	External Area

AHIR ACM: | Estate Details: Townsville Field Training Area, Fanning River Station. | ACM MGT: Remove for demolition

Secondary Location: Walls & Ceilings | Quantity (m2): | Occupancy In Use: ☐ No In Use: ■ | Accessibility - Accessible: ■ Inaccessible: ☐

Application: | Control - Encapsulate: ☐ Leave and Manage: ☐ Remove: ■ N/A: ☐ Other:

ACM Status: Detected: ☐ | Labels - Appixed: ■ Remove: ☐ Required: ☐ Sample ID #:

Friable: ☐ Bonded: ☐ Not Detected: ☐

References / Attachments / Comments:

Condition: Fair

Cream paint external and internal of Cottage 1 is of the same type used in relation to the adjoining house which was found contain lead as follows:

Photo Caption:

Laboratory: Envirolab Services Pty Ltd

Cert. of Analysis: 110213

Lab. Refer: 110213-3

Environics Refer: L003

Lead in Paint

%w/w 0.2

Area m2: 250

Asbestos Detected - Yes: ☐ No: ☐ **Asbestos**

If Detected, What Type:

Sample Description: Area m2:

Asbestos Assessor: Lawrie Lyons (Environics)

Drawings & Illustrations

Appendix Three –

NATA Laboratory Results, Cottage One (Asbestos)

Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
enquiries@envirolabservices.com.au
www.envirolabservices.com.au

CERTIFICATE OF ANALYSIS 110214

Client:
Environics (Qld) Pty Ltd
3 Jameson St
Hermit Park
QLD 4812

Attention: Lawrence Lyons

Sample log in details:

Your Reference:	**NQ21608-15 TFTA 0233, Fanning River Station**
No. of samples:	30 Materials
Date samples received / completed instructions received	22/05/2014 / 22/05/2014

Analysis Details:
Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for solids and on an as received basis for other matrices.
Please refer to the last page of this report for any comments relating to the results.

Report Details:

Date results requested by: / Issue Date:	29/05/14 / 27/05/14
Date of Preliminary Report:	Not Issued

NATA accreditation number 2901. This document shall not be reproduced except in full.
Accredited for compliance with ISO/IEC 17025. **Tests not covered by NATA are denoted with *.**

Results Approved By:

Jacinta Hurst
Laboratory Manager

Asbestos ID - materials						
Our Reference:	UNITS	110214-1	110214-2	110214-3	110214-4	110214-5
Your Reference	----------	A001	A002	A003	A004	A005
Date Sampled	----------	10/04/2014	10/04/2014	10/04/2014	10/04/2014	10/04/2014
Type of sample		Material	Material	Material	Material	Material
Date analysed	-	27/05/2014	27/05/2014	27/05/2014	27/05/2014	27/05/2014
Mass / Dimension of Sample	-	35x15x5mm	40x30x5mm	30x25x5mm	25x16x2mm	40x22x2mm
Sample Description	-	Pink fibre cement material	Grey compressed fibre cement material	Grey compressed fibre cement material	Grey compressed fibre cement material	Grey fibre cement material
Asbestos ID in materials	-	Chrysotile asbestos detected Amosite asbestos detected	Chrysotile asbestos detected Amosite asbestos detected	Chrysotile asbestos detected	Chrysotile asbestos detected	Chrysotile asbestos detected Amosite asbestos detected

Asbestos ID - materials						
Our Reference:	UNITS	110214-6	110214-7	110214-8	110214-9	110214-10
Your Reference	----------	A006	A007	A008	A009	A010
Date Sampled	----------	10/04/2014	10/04/2014	10/04/2014	10/04/2014	10/04/2014
Type of sample		Material	Material	Material	Material	Material
Date analysed	-	27/05/2014	27/05/2014	27/05/2014	27/05/2014	27/05/2014
Mass / Dimension of Sample	-	20x18x5mm	60x52x1mm	27x25x5mm	35x27x6mm	65x40x5mm
Sample Description	-	Pale grey fibre cement material	Beige brittle vinyl tile	Grey compressed fibre cement material	Grey compressed fibre cement material	Grey compressed fibre cement material
Asbestos ID in materials	-	Chrysotile asbestos detected	Chrysotile asbestos detected	Chrysotile asbestos detected	Chrysotile asbestos detected	Chrysotile asbestos detected

Asbestos ID - materials						
Our Reference:	UNITS	110214-11	110214-12	110214-13	110214-14	110214-15
Your Reference	----------	A011	A012	A013	A014	A015
Date Sampled	----------	10/04/2014	10/04/2014	10/04/2014	11/04/2014	11/04/2014
Type of sample		Material	Material	Material	Material	Material
Date analysed	-	27/05/2014	27/05/2014	27/05/2014	27/05/2014	27/05/2014
Mass / Dimension of Sample	-	45x25x5mm	45x30x5mm	35x30x5mm	90x40x1mm	35x25x5mm
Sample Description	-	Grey compressed fibre cement material	Black compressed bituminous material	Grey compressed fibre cement material	Millboard backed beige vinyl sheet	Grey compressed fibre cement material
Asbestos ID in materials	-	Chrysotile asbestos detected Amosite asbestos detected	Chrysotile asbestos detected	Chrysotile asbestos detected	Chrysotile asbestos detected	Chrysotile asbestos detected

Asbestos ID - materials						
Our Reference:	UNITS	110214-16	110214-17	110214-18	110214-19	110214-20
Your Reference	----------	A016	A017	A018	A019	A020
Date Sampled	----------	11/04/2014	11/04/2014	11/04/2014	11/04/2014	11/04/2014
Type of sample		Material	Material	Material	Material	Material
Date analysed	-	27/05/2014	27/05/2014	27/05/2014	27/05/2014	27/05/2014
Mass / Dimension of Sample	-	42x17x5mm	35x30x7mm	90x16x6mm	34x26x2mm	27x25x2mm
Sample Description	-	Grey compressed fibre cement material	Grey compressed fibre cement material	Grey compressed fibre cement material	A)Grey brittle vinyl tile B) Adhesive	A)Marble colored vinyl tile B) Adhesive
Asbestos ID in materials	-	Chrysotile asbestos detected	Chrysotile asbestos detected Amosite asbestos detected	Chrysotile asbestos detected Amosite asbestos detected	A)Chrysotile asbestos detected B)No asbestos detected	A)Chrysotile asbestos detected B)No asbestos detected

Asbestos ID - materials						
Our Reference:	UNITS	110214-21	110214-22	110214-23	110214-24	110214-25
Your Reference	----------	A021	A022	A023	A024	A025
Date Sampled	----------	11/04/2014	11/04/2014	11/04/2014	11/04/2014	11/04/2014
Type of sample		Material	Material	Material	Material	Material
Date analysed	-	27/05/2014	27/05/2014	27/05/2014	27/05/2014	27/05/2014
Mass / Dimension of Sample	-	32x24x1mm	21x17x1mm	32x30x5mm	35x20x6mm	30x20x4mm
Sample Description	-	Fibrous bituminous backed vinyl material	Fibrous bituminous backed vinyl material	Grey compressed fibre cement material	Brown compressed fibre cement material	Beige fibre cement material
Asbestos ID in materials	-	No asbestos detected	No asbestos detected	Chrysotile asbestos detected	Chrysotile asbestos detected Amosite asbestos detected	Chrysotile asbestos detected

Asbestos ID - materials						
Our Reference:	UNITS	110214-26	110214-27	110214-28	110214-29	110214-30
Your Reference	----------	A026	A027	A028	A029	A030
Date Sampled	----------	11/04/2014	11/04/2014	11/04/2014	11/04/2014	11/04/2014
Type of sample		Material	Material	Material	Material	Material
Date analysed	-	27/05/2014	27/05/2014	27/05/2014	27/05/2014	27/05/2014
Mass / Dimension of Sample	-	51x40x5mm	50x20x4mm	13x12x3mm	30x15x3mm	20x11x1mm
Sample Description	-	Grey compressed fibre cement material	Ivory compressed fibre cement material	Grey quartzy cement material	Grey quartzy cement material	Beige compressed pebbly cement material
Asbestos ID in materials	-	Chrysotile asbestos detected	Chrysotile asbestos detected Amosite asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected

Method ID	Methodology Summary
ASB-001	Asbestos ID - Qualitative identification of asbestos in bulk samples using Polarised Light Microscopy and Dispersion Staining Techniques including Synthetic Mineral Fibre and Organic Fibre as per Australian Standard 4964-2004.

Report Comments:

Sample 110214-19; The supplied sample was sub-sampled (110214-19A & 110214-19B) in order to accurately report the analytical results representative of the entire sample, as per AS4964-2004.

Sample 110214-20; The supplied sample was sub-sampled (110214-20A & 110214-20B) in order to accurately report the analytical results representative of the entire sample, as per AS4964-2004.

Asbestos ID was analysed by Approved Identifier: Paul Ching
Asbestos ID was authorised by Approved Signatory: Paul Ching

INS: Insufficient sample for this test
NA: Test not required
<: Less than

PQL: Practical Quantitation Limit
RPD: Relative Percent Difference
>: Greater than

NT: Not tested
NA: Test not required
LCS: Laboratory Control Sample

Quality Control Definitions

Blank: This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.

Duplicate: This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.

Matrix Spike : A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.

LCS (Laboratory Control Sample) : This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.

Surrogate Spike: Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.
Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.
Spikes for Physical and Aggregate Tests are not applicable.
For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: <5xPQL - any RPD is acceptable; >5xPQL - 0-50% RPD is acceptable.
Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals; 60-140% for organics and 10-140% for SVOC and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Appendix Four –

NATA Laboratory Results, Cottage One (Lead in Paint)

Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
enquiries@envirolabservices.com.au
www.envirolabservices.com.au

CERTIFICATE OF ANALYSIS 110213

Client:
Environics (Qld) Pty Ltd
3 Jameson St
Hermit Park
QLD 4812

Attention: Lawrence Lyons

Sample log in details:

Your Reference:	**NQ21608-15 TFTA 0233, Fanning River Station**
No. of samples:	10 paints
Date samples received / completed instructions received	22/05/14 / 22/05/14

Analysis Details:
Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for solids and on an as received basis for other matrices.
Please refer to the last page of this report for any comments relating to the results.

Report Details:

Date results requested by: / Issue Date:	28/05/14 / 27/05/14
Date of Preliminary Report:	Not Issued

NATA accreditation number 2901. This document shall not be reproduced except in full.
Accredited for compliance with ISO/IEC 17025. **Tests not covered by NATA are denoted with *.**

Results Approved By:

Jacinta Hurst
Laboratory Manager

Lead in Paint						
Our Reference:	UNITS	110213-1	110213-2	110213-3	110213-4	110213-5
Your Reference	----------	L001	L002	L003	L004	L005
Type of sample	----------	paint	paint	paint	paint	paint
Date Sampled		10/042014	10/042014	10/042014	10/042014	10/042014
Date prepared	-	23/05/2014	23/05/2014	23/05/2014	23/05/2014	23/05/2014
Date analysed	-	23/05/2014	23/05/2014	23/05/2014	23/05/2014	23/05/2014
Lead in paint	%w/w	0.2	<0.05	0.2	0.1	<0.05

Lead in Paint						
Our Reference:	UNITS	110213-6	110213-7	110213-8	110213-9	110213-10
Your Reference	----------	L006	L007	L008	L009	L010
Type of sample	----------	paint	paint	paint	paint	paint
Date Sampled		11/04/2014	11/04/2014	11/04/2014	11/04/2014	12/04/2014
Date prepared	-	23/05/2014	23/05/2014	23/05/2014	23/05/2014	23/05/2014
Date analysed	-	23/05/2014	23/05/2014	23/05/2014	23/05/2014	23/05/2014
Lead in paint	%w/w	0.3	<0.05	3.3	<0.05	<0.05

Method ID	Methodology Summary
Metals-004	Digestion of Paint chips/scrapings/liquids for Metals determination by ICP-AES/MS and or CV/AAS.

QUALITY CONTROL Lead in Paint	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Date prepared	-			23/05/2014	110213-1	23/05/2014 || 23/05/2014	LCS-1	23/05/2014
Date analysed	-			23/05/2014	110213-1	23/05/2014 || 23/05/2014	LCS-1	23/05/2014
Lead in paint	% w/w	0.05	Metals-004	<0.05	110213-1	0.2 || 0.3 || RPD: 40	LCS-1	108%

Report Comments:

Asbestos ID was analysed by Approved Identifier:	Not applicable for this job
Asbestos ID was authorised by Approved Signatory:	Not applicable for this job

INS: Insufficient sample for this test	PQL: Practical Quantitation Limit	NT: Not tested
NA: Test not required	RPD: Relative Percent Difference	NA: Test not required
<: Less than	>: Greater than	LCS: Laboratory Control Sample

Quality Control Definitions

Blank: This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.

Duplicate: This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.

Matrix Spike : A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.

LCS (Laboratory Control Sample) : This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.

Surrogate Spike: Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

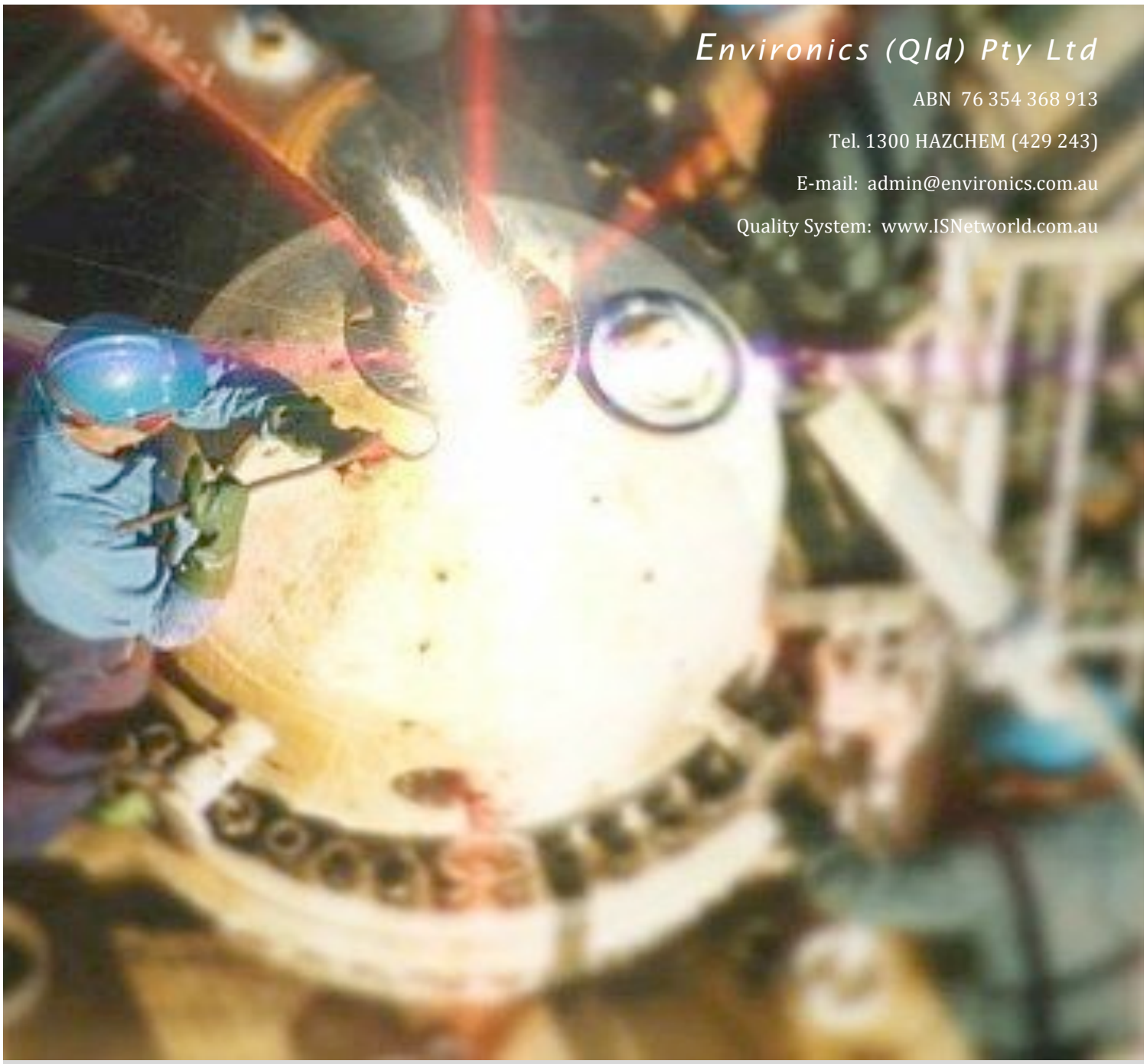
Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.
Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.
Spikes for Physical and Aggregate Tests are not applicable.
For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: <5xPQL - any RPD is acceptable; >5xPQL - 0-50% RPD is acceptable.
Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals; 60-140% for organics and 10-140% for SVOC and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.



Environics (Qld) Pty Ltd

ABN 76 354 368 913

Tel. 1300 HAZCHEM (429 243)

E-mail: admin@environics.com.au

Quality System: www.ISNetworld.com.au

Think Safety, Work Safely

The first recognised institution to print the word ***Environics*** was Cambridge University when in 1969 they defined the word in their dictionary as meaning:

" The study of human behaviour as influenced by environmental factors."

Accordingly, environmental factors from an industrial worker's perspective also includes the conditions of a workplace and it was for this reason we incorporated the word in 1995 for use in Australia as describing what we do best as workplace assessors, environmental scientists and engineers.

Environics (Australia)