

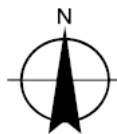
Appendix A

Site Location and Drawings



Coleman Adams Environmental

Project No. CAE1243.57.RA
Client: Gow Street Recycling Centre



Drawn By: MT

Scale: NTS

81 Gow St, Padstow NSW

Site Layout



Stockpile Location

Appendix B

Laboratory Test Certificates

Coleman and Adams Environmental Pty Ltd
PO Box R1370
The Royal Exchange
NSW 1255



NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing
 NATA is a signatory to the ILAC Mutual Recognition
 Arrangement for the mutual recognition of the
 equivalence of testing, medical testing, calibration,
 inspection, proficiency testing scheme providers and
 reference materials producers reports and certificates.

Attention: **Joanna Chen (ALL SRA'S)**

Report **1172951-S**

Project name

Project ID **1243.57**

Received Date **Dec 17, 2024**

Client Sample ID			1243.57.RA1	1243.57.RA2	1243.57.RA3	1243.57.RA4
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S24-De0049316	S24-De0049317	S24-De0049318	S24-De0049319
Date Sampled			Dec 17, 2024	Dec 17, 2024	Dec 17, 2024	Dec 17, 2024
Test/Reference	LOR	Unit				
Conductivity (1:5 aqueous extract at 25 °C as rec.)	10	uS/cm	110	120	160	120
Heavy Metals						
Arsenic	2	mg/kg	3.0	< 2	< 2	3.2
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	13	35	9.8	21
Copper	5	mg/kg	27	13	27	33
Lead	5	mg/kg	9.1	< 5	< 5	8.0
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	6.4	31	< 5	6.8
Zinc	5	mg/kg	34	23	39	55
Sample Properties						
% Moisture	1	%	3.9	3.5	2.8	2.1

Client Sample ID			1243.57.RA5
Sample Matrix			Soil
Eurofins Sample No.			S24-De0049320
Date Sampled			Dec 17, 2024
Test/Reference	LOR	Unit	
Conductivity (1:5 aqueous extract at 25 °C as rec.)	10	uS/cm	130
Heavy Metals			
Arsenic	2	mg/kg	6.2
Cadmium	0.4	mg/kg	< 0.4
Chromium	5	mg/kg	28
Copper	5	mg/kg	20
Lead	5	mg/kg	7.6
Mercury	0.1	mg/kg	< 0.1
Nickel	5	mg/kg	10.0
Zinc	5	mg/kg	49
Sample Properties			
% Moisture	1	%	2.3

Sample History

Where samples are submitted/analysed over several days, the last date of extraction is reported.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Conductivity (1:5 aqueous extract at 25 °C as rec.) - Method: LTM-INO-4030 Conductivity	Sydney	Dec 20, 2024	7 Days
Metals M8 - Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS	Sydney	Dec 20, 2024	28 Days
% Moisture - Method: LTM-GEN-7080 Moisture	Sydney	Dec 19, 2024	14 Days



web: www.eurofins.com.au
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Melbourne 6 Monterey Road Dandenong South VIC 3175 +61 3 8564 5000 NATA# 1261 Site# 1254	Geelong 19/8 Lewalan Street Grovedale VIC 3216 +61 3 8564 5000 NATA# 1261 Site# 25403	Sydney 179 Magowar Road Girraween NSW 2145 +61 2 9900 8400 NATA# 1261 Site# 18217	Canberra Unit 1,2 Dacre Street Mitchell ACT 2911 +61 2 6113 8091 NATA# 1261 Site# 25466	Brisbane 1/21 Smallwood Place Murarrie QLD 4172 T: +61 7 3902 4600 NATA# 1261 Site# 20794 & 2780	Newcastle 1/2 Frost Drive Mayfield West NSW 2304 +61 2 4968 8448 NATA# 1261 Site# 25079	Perth 46-48 Banksia Road Welshpool WA 6106 +61 8 6253 4444 NATA# 2377 Site# 2370 & 2554	Auckland 35 O'Rorke Road Penrose, Auckland 1061 +64 9 526 4551 IANZ# 1327	Auckland (Focus) Unit C1/4 Pacific Rise, Mount Wellington, Auckland 1061 +64 9 525 0568 IANZ# 1308	Christchurch 43 Detroit Drive Rolleston, Christchurch 7675 +64 3 343 5201 IANZ# 1290	Tauranga 1277 Cameron Road, Gate Pa, Tauranga 3112 +64 9 525 0568 IANZ# 1402
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Company Name:

Address:

Project Name:

Project ID:

Coleman and Adams Environmental Pty Ltd
PO Box R1370
The Royal Exchange
NSW 1255

1243.57

Order No.:

Report #:

Phone:

Fax:

1172951

0424 639 602

Received:

Due:

Priority:

Contact Name:

Dec 17, 2024 7:05 PM

Jan 13, 2025

15 Day

cc All Results/SRA/Invoices

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Asbestos - AS4964	Conductivity (1:5 aqueous extract at 25 °C as rec.)	Metals M8	Moisture Set
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X
External Laboratory									
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID				
1	1243.57.RA1	Dec 17, 2024		Soil	S24-De0049316	X	X	X	X
2	1243.57.RA2	Dec 17, 2024		Soil	S24-De0049317	X	X	X	X
3	1243.57.RA3	Dec 17, 2024		Soil	S24-De0049318	X	X	X	X
4	1243.57.RA4	Dec 17, 2024		Soil	S24-De0049319	X	X	X	X
5	1243.57.RA5	Dec 17, 2024		Soil	S24-De0049320	X	X	X	X
Test Counts						5	5	5	5

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follow guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013. They are included in this QC report where applicable. Additional QC data may be available on request.
2. Unless otherwise stated, all soil/sediment/solid results are reported on a dry weight basis.
3. Unless otherwise stated, all biota/food results are reported on a wet weight basis on the edible portion.
4. For CEC results where the sample's origin is unknown or environmentally contaminated, the results should be used advisedly.
5. Actual LORs are matrix dependent. Quoted LORs may be raised where sample extracts are diluted due to interferences.
6. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds where annotated.
7. SVOC analysis on waters is performed on homogenised, unfiltered samples unless noted otherwise.
8. Samples were analysed on an 'as received' basis.
9. Information identified in this report with **blue** colour indicates data provided by customers that may have an impact on the results.
10. This report replaces any interim results previously issued.

Holding Times

Please refer to the 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours before sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and despite any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the sampling date; therefore, compliance with these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether, the holding time is seven days; however, for all other VOCs, such as BTEX or C6-10 TRH, the holding time is 14 days.

Units

mg/kg: milligrams per kilogram	mg/L: milligrams per litre	ppm: parts per million
µg/L: micrograms per litre	ppb: parts per billion	%: Percentage
org/100 mL: Organisms per 100 millilitres	NTU: Nephelometric Turbidity Units	MPN/100 mL: Most Probable Number of organisms per 100 millilitres
CFU: Colony Forming Unit	Colour: Pt-Co Units (CU)	

Terms

APHA	American Public Health Association
CEC	Cation Exchange Capacity
COC	Chain of Custody
CP	Client Parent - QC was performed on samples pertaining to this report
CRM	Certified Reference Material (ISO17034) - reported as percent recovery.
Dry	Where moisture has been determined on a solid sample, the result is expressed on a dry weight basis.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
LOR	Limit of Reporting.
LCS	Laboratory Control Sample - reported as percent recovery.
Method Blank	In the case of solid samples, these are performed on laboratory-certified clean sands and in the case of water samples, these are performed on de-ionised water.
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC represents the sequence or batch that client samples were analysed within.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
SRA	Sample Receipt Advice
Surr - Surrogate	The addition of a similar compound to the analyte target is reported as percentage recovery. See below for acceptance criteria.
TBTO	Tributyltin oxide (<i>bis</i> -tributyltin oxide) - individual tributyltin compounds cannot be identified separately in the environment; however, free tributyltin was measured, and its values were converted stoichiometrically into tributyltin oxide for comparison with regulatory limits.
TCLP	Toxicity Characteristic Leaching Procedure
TEQ	Toxic Equivalency Quotient or Total Equivalence
QSM	US Department of Defense Quality Systems Manual Version 6.0
US EPA	United States Environmental Protection Agency
WA DWER	Sum of PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC - Acceptance Criteria

The acceptance criteria should only be used as a guide and may be different when site-specific Sampling Analysis and Quality Plan (SAQP) have been implemented.

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is ≤30%; however, the following acceptance guidelines are equally applicable:

Results <10 times the LOR:	No Limit
Results between 10-20 times the LOR:	RPD must lie between 0-50%
Results >20 times the LOR:	RPD must lie between 0-30%

NOTE: pH duplicates are reported as a range, not as RPD

Surrogate Recoveries: Recoveries must lie between 20-130% for Speciated Phenols & 50-150% for PFAS. SVOCs recoveries 20 – 150%, VOC recoveries 50 – 150%

PFAS field samples containing surrogate recoveries above the QC limit designated in QSM 6.0, where no positive PFAS results have been reported or reviewed, and no data was affected.

QC Data General Comments

1. Where a result is reported as less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown are not data from your samples.
3. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore, laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
4. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery, the term "INT" appears against that analyte.
5. For Matrix Spikes and LCS results, a dash "-" in the report means that the specific analyte was not added to the QC sample.
6. Duplicate RPDs are calculated from raw analytical data; thus, it is possible to have two sets of data.

Quality Control Results

Test			Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Method Blank								
Conductivity (1:5 aqueous extract at 25 °C as rec.)			uS/cm	< 10		10	Pass	
Method Blank								
Heavy Metals								
Arsenic			mg/kg	< 2		2	Pass	
Cadmium			mg/kg	< 0.4		0.4	Pass	
Chromium			mg/kg	< 5		5	Pass	
Copper			mg/kg	< 5		5	Pass	
Lead			mg/kg	< 5		5	Pass	
Mercury			mg/kg	< 0.1		0.1	Pass	
Nickel			mg/kg	< 5		5	Pass	
Zinc			mg/kg	< 5		5	Pass	
Method Blank								
Heavy Metals								
Arsenic			mg/kg	< 2		2	Pass	
Cadmium			mg/kg	< 0.4		0.4	Pass	
Chromium			mg/kg	< 5		5	Pass	
Copper			mg/kg	< 5		5	Pass	
Lead			mg/kg	< 5		5	Pass	
Mercury			mg/kg	< 0.1		0.1	Pass	
Nickel			mg/kg	< 5		5	Pass	
Zinc			mg/kg	< 5		5	Pass	
LCS - % Recovery								
Heavy Metals								
Arsenic			%	93		80-120	Pass	
Cadmium			%	93		80-120	Pass	
Chromium			%	92		80-120	Pass	
Copper			%	93		80-120	Pass	
Lead			%	92		80-120	Pass	
Mercury			%	93		80-120	Pass	
Nickel			%	92		80-120	Pass	
Zinc			%	96		80-120	Pass	
LCS - % Recovery								
Heavy Metals								
Arsenic			%	97		80-120	Pass	
Cadmium			%	98		80-120	Pass	
Chromium			%	100		80-120	Pass	
Copper			%	101		80-120	Pass	
Lead			%	99		80-120	Pass	
Mercury			%	104		80-120	Pass	
Nickel			%	99		80-120	Pass	
Zinc			%	101		80-120	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery								
Heavy Metals				Result 1				
Chromium	N24-De0043165	NCP	%	93		75-125	Pass	
Nickel	N24-De0043165	NCP	%	91		75-125	Pass	
Spike - % Recovery								
Heavy Metals				Result 1				
Arsenic	S24-De0049317	CP	%	99		75-125	Pass	
Cadmium	S24-De0049317	CP	%	97		75-125	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Copper	S24-De0049317	CP	%	109			75-125	Pass	
Lead	S24-De0049317	CP	%	99			75-125	Pass	
Mercury	S24-De0049317	CP	%	102			75-125	Pass	
Zinc	S24-De0049317	CP	%	104			75-125	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
				Result 1	Result 2	RPD			
Conductivity (1:5 aqueous extract at 25 °C as rec.)	S24-De0049316	CP	uS/cm	110	390	23	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S24-De0043282	NCP	mg/kg	6.3	5.9	6.0	30%	Pass	
Cadmium	S24-De0043282	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	S24-De0043282	NCP	mg/kg	17	17	3.0	30%	Pass	
Copper	S24-De0043282	NCP	mg/kg	12	12	3.0	30%	Pass	
Lead	S24-De0043282	NCP	mg/kg	17	16	6.0	30%	Pass	
Mercury	S24-De0043282	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	S24-De0043282	NCP	mg/kg	8.7	8.4	4.0	30%	Pass	
Zinc	S24-De0043282	NCP	mg/kg	26	26	<1	30%	Pass	
Duplicate									
Sample Properties				Result 1	Result 2	RPD			
% Moisture	S24-De0049316	CP	%	3.9	2.3	50	30%	Fail	Q15

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
Q15	The RPD reported passes Eurofins Environment Testing's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Authorised by:

Ursula Long	Analytical Services Manager
Sayed Abu	Senior Analyst-Asbestos
Mickael Ros	Senior Analyst-Metal
Ryan Phillips	Senior Analyst-Sample Properties
Ryan Phillips	Senior Analyst-Inorganic



Glenn Jackson
Managing Director

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please [click here](#).

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Coleman and Adams Environmental Pty Ltd
PO Box R1370
The Royal Exchange
NSW 1255



NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025—Testing
NATA is a signatory to the ILAC Mutual Recognition
Arrangement for the mutual recognition of the
equivalence of testing, medical testing, calibration,
inspection, proficiency testing scheme providers and
reference materials producers reports and certificates.

Attention: Joanna Chen (ALL SRA'S)
Report 1172951-AID
Project Name
Project ID 1243.57
Received Date Dec 17, 2024
Date Reported Dec 30, 2024

Methodology:

Asbestos Fibre
Identification

Conducted in accordance with the Australian Standard AS 5370:2024* Sampling and qualitative identification of asbestos in bulk materials (ISO 22262-1:2012, MOD), formerly AS 4964-2004 and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques.

NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.

Man-made vitreous
fibre (MMVF)

Fibres exhibiting isotropic characteristics, including glass fibres, glass wool, rock wool, slag wool, ceramic fibres and bio-soluble fibres. NOTE: previously known as "synthetic mineral fibre" (SMF). Simple analytical procedures such as polarised light microscopy cannot detect or reliably identify asbestos in some types of commercial products containing asbestos, either because the fibres are below the resolution of optical microscopy or because the matrix material adheres too strongly to the fibres. For these types of products, electron microscopy may be necessary.

Subsampling Soil
Samples

The sample submitted is dried and passed through a 10 mm sieve followed by a 2 mm sieve. All fibrous matter greater than 10 mm and greater than 2 mm and the material passing through the 2 mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 g to 60 g, then a subsampling routine based on ISO 3082:2017(E) is employed.

NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be subsampled for trace analysis, in accordance with AS 5370:2024.*

Bonded asbestos-
containing material
(ACM)

The material is first examined, and any fibres are isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination. The resultant material is then further examined in accordance with AS 5370:2024*.

NOTE: Even after disintegration, it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.

Limit of Reporting
(LOR)

The performance limitation of the AS 5370:2024* method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w). The NEPM screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory limit of reporting, per se. Examination of large sample size (e.g., 500 mL) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Gravimetric determinations to this level of accuracy are outside of AS 5370:2024*, and hence, NATA Accreditation does not cover the performance of this service (non-NATA results are shown with an asterisk).

NOTE: NATA News March 2014, p.7, states in relation to AS 4964-2004: "This is a qualitative method with a nominal reporting limit of 0.01 % " and that currently in Australia "there is no validated method available for the quantification of asbestos". This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.

Project Name

Project ID

1243.57

Date Sampled

Dec 17, 2024

Report

1172951-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
1243.57.RA1	24-De0049316	Dec 17, 2024	Approximate Sample 62g Sample consisted of: Brown rock material and soil residue	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
1243.57.RA2	24-De0049317	Dec 17, 2024	Approximate Sample 45g Sample consisted of: Brown rock material, bitumen and soil residue	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
1243.57.RA3	24-De0049318	Dec 17, 2024	Approximate Sample 56g Sample consisted of: Brown rock material, bitumen and soil residue	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
1243.57.RA4	24-De0049319	Dec 17, 2024	Approximate Sample 45g Sample consisted of: Brown rock material and soil residue	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
1243.57.RA5	24-De0049320	Dec 17, 2024	Approximate Sample 55g Sample consisted of: Brown rock material and soil residue	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.

Sample History

Where samples are submitted/analysed over several days, the last date of extraction is reported.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8020	Sydney	Dec 19, 2024	Indefinite



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

Melbourne 6 Monterey Road Dandenong South VIC 3175 +61 3 8564 5000 NATA# 1261 Site# 1254	Geelong 19/8 Lewalan Street Grovedale VIC 3216 +61 3 8564 5000 NATA# 1261 Site# 25403	Sydney 179 Magowar Road Girraween NSW 2145 +61 2 9900 8400 NATA# 1261 Site# 18217	Canberra Unit 1,2 Dacre Street Mitchell ACT 2911 +61 2 6113 8091 NATA# 1261 Site# 25466	Brisbane 1/21 Smallwood Place Murarrie QLD 4172 T: +61 7 3902 4600 NATA# 1261 Site# 20794 & 2780	Newcastle 1/2 Frost Drive Mayfield West NSW 2304 +61 2 4968 8448 NATA# 1261 Site# 25079	Perth 46-48 Banksia Road Welshpool WA 6106 +61 8 6253 4444 NATA# 2377 Site# 2370 & 2554	Auckland 35 O'Rorke Road Penrose, Auckland 1061 +64 9 526 4551 IANZ# 1327	Auckland (Focus) Unit C1/4 Pacific Rise, Mount Wellington, Auckland 1061 +64 9 525 0568 IANZ# 1308	Christchurch 43 Detroit Drive Rolleston, Christchurch 7675 +64 3 343 5201 IANZ# 1290	Tauranga 1277 Cameron Road, Gate Pa, Tauranga 3112 +64 9 525 0568 IANZ# 1402
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Company Name:

Address:

Project Name:

Project ID:

Coleman and Adams Environmental Pty Ltd
PO Box R1370
The Royal Exchange
NSW 1255

1243.57

Order No.:

Report #:

Phone:

Fax:

1172951

0424 639 602

Received:

Due:

Priority:

Contact Name:

Dec 17, 2024 7:05 PM

Dec 30, 2024

15 Day

cc All Results/SRA/Invoices

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Asbestos - AS4964	Conductivity (1:5 aqueous extract at 25 °C as rec.)	Metals M8	Moisture Set
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X
External Laboratory									
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID				
1	1243.57.RA1	Dec 17, 2024		Soil	S24-De0049316	X	X	X	X
2	1243.57.RA2	Dec 17, 2024		Soil	S24-De0049317	X	X	X	X
3	1243.57.RA3	Dec 17, 2024		Soil	S24-De0049318	X	X	X	X
4	1243.57.RA4	Dec 17, 2024		Soil	S24-De0049319	X	X	X	X
5	1243.57.RA5	Dec 17, 2024		Soil	S24-De0049320	X	X	X	X
Test Counts						5	5	5	5

Internal Quality Control Review and Glossary General

- QC data may be available on request.
- All soil results are reported on a dry basis, unless otherwise stated.
- Samples were analysed on an 'as received' basis.
- Information identified on this report with the colour **blue** indicates data provided by customer that may have an impact on the results.
- This report replaces any interim results previously issued.

Holding Times

Please refer to the most recent version of the 'Sample Preservation and Container Guide' for holding times (QS3001).

Units

% w/w:	Percentage weight-for-weight basis, e.g. of asbestos in asbestos-containing finds in soil samples (% w/w)
F/fld	Airborne fibre filter loading as Fibres (N) per Fields counted (n)
F/mL	Airborne fibre reported concentration as Fibres per millilitre of air drawn over the sampler membrane (C)
g, kg	Mass, e.g. of whole sample (M) or asbestos-containing find within the sample (m)
g/kg	Concentration in grams per kilogram
L, mL	Volume, e.g. of air as measured in AFM (V = r x t)
L/min	Airborne fibre sampling Flowrate as litres per minute of air drawn over the sampler membrane (r)
min	Time (t), e.g. of air sample collection period

Calculations

Airborne Fibre Concentration: $C = \left(\frac{A}{a}\right) \times \left(\frac{N}{n}\right) \times \left(\frac{1}{r}\right) \times \left(\frac{1}{t}\right) = K \times \left(\frac{N}{n}\right) \times \left(\frac{1}{V}\right)$

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

Weighted Average (of asbestos): $\%_{WA} = \sum \frac{(m \times P_A) \times x}{x}$

Terms

%asbestos	Estimated percentage of asbestos in a given matrix may be derived from knowledge or experience of the material, informed by HSG264 <i>Appendix 2</i> , else assumed to be 15% in accordance with WA DOH <i>Appendix 2</i> (PA). This estimate is not NATA-accredited.
ACM	Asbestos Containing Materials. Asbestos contained within a non-asbestos matrix, typically presented in bonded (non-friable) condition. For the purposes of the NEPM and WA DOH, ACM corresponds to material larger than 7 mm x 7 mm.
AF	Asbestos Fines. Asbestos contamination within a soil sample, as defined by WA DOH. Includes loose fibre bundles and small pieces of friable and non-friable material such as asbestos cement fragments mixed with soil. Considered under the NEPM as equivalent to "non-bonded / friable".
AFM	Airborne Fibre Monitoring, e.g., by the MFM.
Amosite	Amosite Asbestos Detected. Amosite may also refer to Fibrous Grunerite or Brown Asbestos. Identified in accordance with AS 5370:2024* Sampling and qualitative identification of asbestos in bulk materials (ISO 22262-1:2012, MOD), formerly AS 4964-2004.
AS	Australian Standard.
Asbestos Content (as asbestos)	Total %w/w asbestos content in asbestos-containing finds in a soil sample (% w/w).
Chrysotile	Chrysotile Asbestos Detected. Chrysotile may also refer to Fibrous Serpentine or White Asbestos. Identified in accordance with AS 5370:2024* Sampling and qualitative identification of asbestos in bulk materials (ISO 22262-1:2012, MOD), formerly AS 4964-2004..
COC	Chain of Custody.
Crocidolite	Crocidolite Asbestos Detected. Crocidolite may also refer to Fibrous Riebeckite or Blue Asbestos. Identified in accordance with AS 5370:2024* Sampling and qualitative identification of asbestos in bulk materials (ISO 22262-1:2012, MOD), formerly AS 4964-2004..
Dry	Sample is dried by heating prior to analysis.
DS	Dispersion Staining. Technique required for unequivocal Identification of asbestos fibres by PLM.
FA	Fibrous Asbestos. Asbestos-containing material that is wholly or in part friable, including materials with higher asbestos content with a propensity to become friable with handling, and any material that was previously non-friable and in a severely degraded condition. For the purposes of the NEPM and WA DOH, FA generally corresponds to material larger than 7 mm x 7 mm, although FA may be more difficult to distinguish visibly and may be assessed as AF.
Fibre Count	Total of all fibres (whether asbestos or not) meeting the counting criteria set out in the NOHSC:3003
Fibre ID	Fibre Identification. Unequivocal identification of asbestos fibres according to AS 5370:2024* Sampling and qualitative identification of asbestos in bulk materials (ISO 22262-1:2012, MOD), formerly AS 4964-2004.. Includes Chrysotile, Amosite (Grunerite) or Crocidolite asbestos.
Friable	Asbestos-containing materials of any size that may be broken or crumbled by hand pressure. For the purposes of the NEPM, this includes both AF and FA. It is outside of the laboratory's remit to assess the degree of friability.
HSG248	UK HSE HSG248, <i>Asbestos: The Analysts Guide</i> , 2 nd Edition (2021), ISBN: 9780616667079.
HSG264	UK HSE HSG264, <i>Asbestos: The Survey Guide</i> (2012), .ISBN: 9780717665020
ISO (also ISO/IEC)	International Organization for Standardization / International Electrotechnical Commission.
K Factor	Microscope constant (K) as derived from the effective filter area of the given AFM membrane used for collecting the sample (A) and the projected eyepiece graticule area of the specific microscope used for the analysis (a).
LOR	Limit of Reporting.
MFM (also NOHSC:3003)	Membrane Filter Method. As described by the Australian Government National Occupational Health and Safety Commission, <i>Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres</i> , 2nd Edition [NOHSC:3003(2005)].
MMVF	Man-Made Vitreous Fibre - exhibiting isotropic characteristics, including glass fibres, glass wool, rock wool, slag wool, ceramic fibres and "bio-soluble fibres". NOTE: previously known as "synthetic mineral fibre" (SMF).
NEPM (also ASC NEPM)	National Environment Protection (Assessment of Site Contamination) Measure, (2013, as amended).
Organic	Organic Fibres Detected. Organic may refer to Natural or Man-Made Polymeric Fibres. Identified in accordance with AS 5370:2024* Sampling and qualitative identification of asbestos in bulk materials (ISO 22262-1:2012, MOD), formerly AS 4964-2004..
PCM	Phase Contrast Microscopy. This is used for fibre counting according to the MFM.
PLM	Polarised Light Microscopy. As used for Fibre Identification and Trace Analysis according to AS 5370:2024* Sampling and qualitative identification of asbestos in bulk materials (ISO 22262-1:2012, MOD), formerly AS 4964-2004..
Sampling	Unless otherwise stated, Eurofins are not responsible for sampling equipment or the sampling process.
SRA	Sample Receipt Advice.
Trace Analysis	An analytical procedure is used to detect the presence of respirable fibres (particularly asbestos) in a given sample matrix.
UK HSE HSG	United Kingdom, Health and Safety Executive, Health and Safety Guidance, publication.
UMF	Unidentified Mineral Fibre Detected. Fibrous minerals that are detected but have not been unequivocally identified by PLM with DS according to AS 5370:2024* Sampling and qualitative identification of asbestos in bulk materials (ISO 22262-1:2012, MOD), formerly AS 4964-2004.. It may include (but is not limited to) actinolite, anthophyllite, or tremolite asbestos.
WA DOH	Reference document for the NEPM. Government of Western Australia, <i>Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia</i> (updated 2021), including Appendix Four: <i>Laboratory analysis</i>
Weighted Average	Combined average %w/w asbestos content of all asbestos-containing finds in the given aliquot or total soil sample (%_{WA}).

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Asbestos Counter/Identifier:

Chamath JHM Annakkage Senior Analyst-Asbestos

Authorised by:

Sayeed Abu Senior Analyst-Asbestos



Glenn Jackson
Managing Director

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please [click here](#).

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Eurofins Environment Testing Australia Pty Ltd

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Eurofins Environment Testing NZ Ltd

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Sample Receipt Advice

Company name: Coleman and Adams Environmental Pty Ltd
Contact name: cc All Results/SRA/Invoices
Project name: Not provided
Project ID: 1243.57
Turnaround time: 15 Day
Date/Time received: Dec 17, 2024 7:05 PM
Eurofins reference: 1172951

Sample Information

- ✓ A detailed list of analytes logged into our LIMS, is included in the attached summary table.
- ✓ All samples have been received as described on the above COC.
- ✓ COC has been completed correctly.
- ✓ Attempt to chill was evident.
- ✓ Appropriately preserved sample containers have been used.
- ✓ All samples were received in good condition.
- ✓ Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.
- ✓ Appropriate sample containers have been used.
- ✓ Sample containers for volatile analysis received with zero headspace.
- ✗ Split sample sent to requested external lab.
- ✗ Some samples have been subcontracted.
- N/A Custody Seals intact (if used).

Notes

Please be advised that over the holiday period, the standard TAT has been extended. Results for samples received after the 13th of December will be reported in January 2025. Please contact our ASM team if you have any questions.

Contact

If you have any questions with respect to these samples, please contact your Analytical Services Manager:

Asim Khan on phone : or by email: Asim.Khan@eurofinsanz.com

Results will be delivered electronically via email to cc All Results/SRA/Invoices - enviro@colemanadams.com.au.



CHAIN OF CUSTODY RECORD

Eurofins | Environment Testing | ABN 50 005 085 521

☒ **Sydney Laboratory**
Unit F3 Bld.F 16 Mars Road Lane Cove West NSW 2065
02 9900 8400 EnviroSampleNSW@eurofins.com

☐ **Brisbane Laboratory**
Unit 1 21 Smallwood Place Murarie QLD 4172
07 3902 4600 EnviroSampleQLD@eurofins.com

☐ **Perth Laboratory**
Unit 2 91 Leach Highway Kewdale WA 6105
08 9251 9600 EnviroSampleWA@eurofins.com

☐ **Melbourne Laboratory**
6 Monterey Road Dandenong South VIC 3175
03 8564 5000 EnviroSampleVic@eurofins.com

Company		Coleman Adams Environmental		Project No		1243.57		Project Manager		Sampler(s)														
Address				Project Name				EDD Format E.S.dH, E.QulS etc		Handed over by		J Lu												
Contact Name		J Chen		Analyses Where results are requested, please specify "Total" or "Filtered". SITE code must be used to avoid SUTIE pricing.		EC		8 Heavy Metals		Asbestos ID		Email for Invoice												
Phone No												Email for Results		enviro@colemanadams.com.au										
Special Directions												Containers Change container type & size if necessary.		Required Turnaround Time (TAT) Default will be 5 days if not ticked.										
Purchase Order												500mL Plastic		250mL Plastic		125mL Plastic		200mL Amber Glass		40mL VOA vial		500mL PFAS Bottle		Jar (Glass or HDPE)
Quote ID No		NSW-24-0157-COL																				Sample Comments / Dangerous Goods Hazard Warning		
No	Client Sample ID		Sampled Date/Time dd/mm/yy hh:mm		Matrix Solid (S) Water (W)		EC		8 Heavy Metals		Asbestos ID													
1	1243.57.RA1		17.12.2024		S		✓		✓		✓													
2	1243.57.RA2		17.12.2024		S		✓		✓		✓													
3	1243.57.RA3		17.12.2024		S		✓		✓		✓													
4	1243.57.RA4		17.12.2024		S		✓		✓		✓													
5	1243.57.RA5		17.12.2024		S		✓		✓		✓													
6																								
7																								
8																								
9																								
10																								
Total Counts																								
Method of Shipment		☒ Courier (#)		☐ Hand Delivered		☐ Postal		Name		Signature		Date		Time		Temperature								
Laboratory Use Only		Received By		sharlene Santos		SYD BNE MEL PER ADL NTL DRW		Signature		SS		Date		17/12		Time		7:05pm		Temperature		23.6°C chill		
		Received By				SYD BNE MEL PER ADL NTL DRW		Signature				Date				Time				Report No				

1172951

FOREIGN MATERIALS CONTENT TEST REPORT

METHOD RMS: T276

Client:	Coleman Adams Environmental P/L				
Project :	Materials Testing				
Location:	Gow St				
Project No.	LCAE242/ Client Project No. 1243.57				
Date Reported:	23/12/2024				
Report No.	LCAE242-1				
TEST METHOD	RMS T276				
Sample Number	1243.57.RA1	1243.57.RA2	1243.57.RA3	1243.57.RA4	1243.57.RA5
Date Sampled	17/12/2024	17/12/2024	17/12/2024	17/12/2024	17/12/2024
Sample Location / Source	Sampled by Client	Sampled by Client	Sampled by Client	Sampled by Client	Sampled by Client
Material Description	Gravel - Grey	Gravel - Grey	Gravel - Grey	Gravel - Grey	Gravel - Grey
Foreign Material Type	Percentage Retained (%)				
<u>TYPE 1</u>					
Metal	0.0	0.0	0.0	0.0	0.0
<u>TYPE 2</u>					
Plaster	0.0	0.0	0.0	0.0	0.0
<u>TYPE 3</u>					
Rubber, Plastic, Bitumen, Paper, Cloth, Paint, Wood and other Vegetable Matter	0.0	0.0	0.0	0.0	0.0

NOTES:

Laboratory Test
Date: 21/12/24

- Variation to test
method T276 = foreign
material types tested as
requested by client



Accredited for compliance with ISO/IEC
17025- Testing

Accreditation No: 20097

Approved Signatory:

Samer Ghanem

Date:

23/12/2024

Sign:



Material Test Report

Report Number: DE-737-2
Issue Number: 1
Date Issued: 13/11/2024
Client: Gow Street Recycling Centre
81 Gow Street, Padstow NSW 2211
Contact: Mick Muscat 0414447705
Project Number: DE-737
Project Name: Padstow
Project Location: 81 Gow Street, Padstow
Contractor: Gow Street Recycling Centre
Work Request: 6308
Sample Number: S-6308A
Date Sampled: 26/09/2024
Dates Tested: 26/09/2024 - 15/10/2024
Sampling Method: Sampled by Client
The results apply to the sample as received
Preparation Method: In accordance with the test method
Remarks: Class1 DGB20



Down to Earth
Geotechnical & Environmental

Down to Earth Geotechnical & Environmental Pty Ltd
Sydney Laboratory
11/93-97 Newton Road Wetherill Park NSW 2570
Phone: (02) 9756 0404
Email: jesse@d2egeo.com.au

Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Jesse Gao
Lab Manager
NATA Accredited Laboratory Number: 19788

Dry Density - Moisture Relationship (AS 1289 5.1.1 & 2.1.1)		Min	Max
Mould Type	1 LITRE MOULD A		
Compaction	Standard		
Maximum Dry Density (t/m ³)	1.73		
Optimum Moisture Content (%)	15.0		
Oversize Sieve (mm)	19.0		
Oversize Material Wet (%)	0		
Method used to Determine Plasticity	visual		
Curing Hours (h)	2.0		

Moisture Content (AS 1289 2.1.1)	
Moisture Content (%)	10.6

Atterberg Limit (AS1289 3.1.2 & 3.2.1 & 3.3.1)		Min	Max
Sample History	Oven Dried		
Preparation Method	Dry Sieve		
Liquid Limit (%)	19		
Plastic Limit (%)	13		
Plasticity Index (%)	6		

Particle Size Distribution (AS1141.11.1)				
Sample Washing	Sample was Washed			
Sieve	Passed %	Passing Limits	Retained %	Retained Limits
75 mm	100		0	
63 mm	100		0	
53 mm	100		0	
37.5 mm	100		0	
26.5 mm	100		0	
19 mm	97		3	
13.2 mm	88		9	
9.5 mm	77		11	
6.7 mm	66		12	
4.75 mm	55		11	
2.36 mm	40		15	
1.18 mm	31		9	
0.6 mm	25		6	
0.425 mm	23		2	
0.3 mm	12		11	
0.15 mm	10		2	
0.075 mm	9		1	

Particle Shape (AS 1141.14)		Min	Max
Proportional Caliper	2 : 1		
Misshapen Particles %	28		
Wet / Dry Strength Variation (AS 1141.22)		Min	Max
Dry Strength (kN)	147		
Wet Strength (kN)	96		
Variation (%)	34		
Nominal Size of Aggregate (mm)	19		
Fraction Tested (mm)	-13.2mm +9.5mm		
Test Cylinder Size (mm)	75		
Breakdown	No		
Nature of Bulk Sample	Production Sample		
Duplicate Testing Performed ?	No		

Material Test Report

Report Number: DE-737-2
Issue Number: 1
Date Issued: 13/11/2024
Client: Gow Street Recycling Centre
81 Gow Street, Padstow NSW 2211
Contact: Mick Muscat 0414447705
Project Number: DE-737
Project Name: Padstow
Project Location: 81 Gow Street, Padstow
Contractor: Gow Street Recycling Centre
Work Request: 6308
Dates Tested: 26/09/2024 - 03/10/2024
Sampling Method: Sampled by Client
The results apply to the sample as received
Preparation Method: In accordance with the test method
Remarks: Class1 DGB20
Location: Gow Street



Down to Earth
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Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Jesse Gao
Lab Manager
NATA Accredited Laboratory Number: 19788

Unconfined Compressive Strength (RMS T116 & T120)					Min	Max
Sample Number	S-6308A					
Sample Depth	**					
Material	**					
Date Sampled	26/09/2024					
Date Tested	03/10/2024					
Location	**					
Mass Retained 19.0mm Sieve (%)	0					
Curing Details	7 Days Accelerate curing					
Condition After Curing	Dry					
Method of Addition	**					
Elapsed Time for Binder (hh:mm)	**					
Additive Source	**					
Additive Type	**					
Additive Content (%)	**					
Compactive Effort	Standard					
Moisture Content 1 (%)	15.5					
Moisture Content 2 (%)	14.5					
Cap Used 1	None					
Cap Used 2	None					
Defects 1	None					
Defects 2	None					
Target Dry Density (t/m ³)	1.73					
Dry Density 1 (t/m ³)	1.75					
Dry Density 2 (t/m ³)	1.78					
UCS Cylinder 1 (MPa)	0.50					
UCS Cylinder 2 (MPa)	0.40					
UCS Average (MPa)	0.4					
Remarks	**					

Attachment C Photographs



Photograph 1: Stockpile of DGB20 at source site.



Photograph 2: Recycled DGB20 at source site.