Geotest Services

ABN: 39 089 302 009
18/24 Garling Road, Kings Park NSW 2148
P (02) 9671 4443
E admin@geotestservices.com.au

Wednesday 6th October 2021

Our Ref. **33465-2**

853 Pacific Highway Pty Ltd
C/- Sanctuary Partners

Via email: nicholas@sanctuarypartners.com.au

Re: Limited Environmental Investigation, 849 – 859 Pacific Hwy & 2 Wilson Street Chatswood NSW 2067

1. INTRODUCTION

This report presents the results of a Limited Environmental Site Investigation undertaken by Geotest Services Pty Ltd (Geotest) at the Site. This report was commissioned by Sanctuary Partners to characterise environmental and geotechnical ground conditions at the Site in support the clients' acquisition of the Site. A geotechnical report (ref. 33465-1) has been prepared and should be read separately to this report.

The Site comprises four registered lots. Their respective street identification and approximate area is within the table below:

Lot Identification	Street Identification	Approx. Area (m^2)	Site plan
SP1496	849 Pacific Hwy Chatswood	900	
SP60178	853 Pacific Hwy Chatswood	760	
SP10110	859 Pacific Hwy Chatswood	730	
SP522947	2 Wilson Street Chatswood	725	

The comprised area of investigation across the four registered lots is approximately ~3,115m^2. The lots all have a boundary to the Pacific Hwy (west), with Wilson Street and O'Brien Street (north and south) respectively. Taken from a central location within the comprised site, the following geographical coordinates were measured on the NSW Department of Lands website: -33.793027 S, 151.180245 E.

The locality of the Site and borehole locations is presented in Figure 1.

2. OBJECTIVES

The objective of this investigation was to identify preliminary environmental contamination risks at the Site from a scope of works that included a limited desktop assessment, select intrusive site works and limited environmental sampling and analysis program.

3. SCOPE OF WORKS

The following scope of works was undertaken to address the objective:

- Limited desktop assessment
- Site inspection
- Four boreholes undertaken with drill rig
- Sample collection
- NATA laboratory analysis for broad chemical screen
- Interpretation of results and preparation of this report

4. LIMITED DESKTOP ASSESSMENT

Regional Geology

Published information indicates that the Site is underlain by rock formations of the Wianamatta Group, principally shale.

Regional Topography and Drainage

The NSW Department of Lands Spatial Information Exchange maps (SIX Maps, hiip://imagery.maps.nsw.gov.au) indicates that the Site lies at an elevation of approximately 100 metres Australian Height Datum (AHD). It is expected that Site surface waters would either percolate into sub-surface soils (where permeability allows) or become run-off and generally drain off-site to the street drainage on the western and southern boundaries.

Regional Hydrogeology

A search for registered groundwater monitoring bores within a 500m radius of the Site was undertaken using the NSW Department of Primary Industries department for Water (DPI Water) online resource, 'All Groundwater Map' (hiip://allwaterdata.water.nsw.gov.au/) on 2nd October 2021. The results of the searches did not identify any registered groundwater bores located within the 500-metre search radius. There was insufficient data available to make a desktop assessment of likely depth to groundwater or the expected yield on the Site.

Acid Sulfate Soils

The Department of Land and Water Conservation (DLWC) has a platform for searching Acid Sulfate Soils in Australia. The National Acid Sulfate Soils Atlas was developed by the Australian government (in conjunction with Commonwealth Scientific and Industrial Research Organisation CSIRO - hiip://www.asris.csiro.au/).

The results of the search indicated that the Site is situated in an area where there is a very low probability of ASS and no known occurrence. The site is not likely to be affected by ASS. Furthermore, the site is situated at an approx. elevation of 100 m AHD. The presence of acid sulfate soils is generally limited to elevations less than 10m AHD.

Is it considered that ASS or potential ASS is unlikely to be present at the Site.

NSW Office of Environment and Heritage Contaminated Land Record

Geotest conducted a search NSW Office of Environment (OEH) contaminated land record information on the 2nd October 2021. The searches did not identify any contaminated land record for the Site or for the properties located adjacent to the Site.

NSW EPA POEO Public Register Search

Geotest conducted a search of POEO records for Environment Protection licences, applications, notices, audits or pollution studies and reduction programs within vicinity of the site on 2nd October 2021. No records for the Site or within the immediately vicinity of the Site was identified.

Historical Photography

Geotest reviewed the publicly available aerial photographs for the site made available via NSW Government Department of Finance, Services and Innovation (hiips://portal.spatial.nsw.gov.au/portal/apps/). Geotest makes the following comments regarding land use at the site and surrounding the site:

		
1943	**1965**	**1970**
		
1986	**2005**	**2015**

As it can be seen from the above imagery the site has been primarily used for residential purposes. The current light industrial building is present to the east since 1970. The north-shore train line is further east. O'Brien Street is to the south, and Chatswood CBD further south. The Pacific Highway and residential areas to the West and North. The Shell (Coles Express) service station is present approximately 80m to the north of the Site.

Site Walkover

A site walkover was conducted on the 20th September 2021 and the following general site observations and potential environmental contamination risks were observed:

- All the individual lots are being used for high density residential purposes (apartments)
- The apartments present are of varying ages. 2 Wilson St appears to be most recently constructed building
    - It can be assumed that hazardous materials (eg. lead and asbestos products) were used as part of building construction and may be present in the 849 – 859 Pacific Hwy buildings
- Both 2 Wilson St & 853 Pacific Hwy had underground parking basements (no access)
- The building to the east appeared to be an at grade, light-industrial warehouse/ office. The building was occupied
- No underground or above ground storage tanks (eg. petrol or diesel) were observed
- No obvious visual or olfactory contamination indicators (eg. spills, wastes, staining or odours) were observed
- Vegetation at the site was in a good condition with no signs of extensive stress or dieback
- Some elevated gardens and landscaping were present, typical with residential land use. It is assumed that fill (in addition to other topsoils across the site) is present within these areas.

5. ENVIRONMENTAL RISK AREAS

Item	AEC	COPC	Mitigation Strategy
1	Footprints of former structures and deteriorated HAZMAT material	Asbestos, Metals (8), asbestos, elevated foreign materials in or on soils	Ensure all material picked up prior to demolition. Ensure demolition is undertaken to high standard – not cross-contaminating ground
2	Fill under building footprints, behind retaining/ structural walls or any other uncontrolled fill area	Asbestos, Metals (8), PAH, TRH, BTEX, OCP, PCB, asbestos, elevated foreign materials in soils	Following demolition of above ground structures, investigate footprint and basement areas
3	Adjacent industrial uses including light-industrial office to the east and service station further to the north	Asbestos, Metals (8), PAH, TRH, BTEX, PCB	Undertake intrusive investigation including locations nearest to boundaries of potential source

6. FIELD WORK

Sampling

A total of four borehole locations were undertaken as part of client-guided geotechnical investigations at the Site. Due to access constraints no boreholes were conducted in 2 Wilson St. The existing building footprints occupy most of the site area across all lots. Therefore, the most accessible locations outside the footprints were utilised and to target adjoining property land uses. Based on the site history and current site features this was considered acceptable to address the objectives of the investigation.

Sampling was carried out on 24th September 2021 by a suitably experienced environmental scientist from Geotest Services. The boreholes were undertaken using a track mounted geo-probe drill rig. Samples were collected directly from the auger/ sample recovery tool. The boreholes were logged by a suitably experienced geotechnical engineer. The boreholes were terminated following confirmation of adequate investigation, discovery of natural soils, or refusal onto bedrock.

Soil samples were placed into laboratory supplied glass jars with Teflon lined seals to limit volatile loss and plastic zip locked bags. The samples were placed into an ice-brick chilled cooler. The samples were dispatched to a NATA accredited laboratory under chain of custody protocols.

Areas not investigated

Due to the ongoing use of the Site for high-density residential occupancy, the building footprints, elevated landscaped areas, and areas surrounding underground infrastructure were not investigated. These areas should be investigated following demolition.

Laboratory Analysis

Samples were submitted to Eurofins, Lane Cove (#827443) laboratory analysis for the relevant contaminants of potential concern.

Sample Preservation and Storage

Sample storage and preservation is presented in the table below:

Analyte	Sample Volume and Container	Preservative	Storage
Organics/ inorganics (soil)	250ml glass & Teflon lined lid	Nil	Insulated container with ice
Asbestos	Sealed plastic zip lock bag	Nil	With the samples above

The sample containers were transported to the NATA accredited analytical laboratory with the Chain of Custody (COC) form, recording the following information:

- project reference;
- date of sampling;
- sample identification;
- matrix and container details;
- preservation method;
- name of sampler;
- required analysis;
- turnaround times required; and
- signatures of sender and receiving laboratory.

A copy of the COC was kept in the project file. Samples were transported to the laboratory with sufficient time to perform analysis within the applicable holding period.

Reported Data Quality Conclusion

Based on our data quality evaluation including third-party historical data, field data and laboratory data, we consider the data in this investigation to be suitable for its intended purpose.

7. RESULTS

Site Specific Geology

Generally, a residual clay profile overlain by a thin layer of uncontrolled fill/ topsoil (up to 0.5m) and underlain by shale bedrock was encountered. The geology at the site can be broadly described as:

Topsoil: Clayey Silt, dark grey

Silty CLAY, high plasticity, dark brown, red, light grey, some ironstone bands

SHALE, brown and grey, extremely to distinctly weathered, very low to medium strength

It is likely that encountered filling was associated with re-contouring, retaining and landscaping of the site following building construction.

Borehole locations are shown in Figure 1.

Visual and Olfactory Observations

The Site was free of widespread, significant offensive visual or olfactory contamination indicators. The table below indicates the recorded depths of fill at the site:

TABLE 10.2

Borehole ID	Total Depth of fill recorded (approx., m, bgl)	Elevated foreign materials or asbestos identified (Y / N)
BH1	0.0-0.4	N
BH2	0.0-0.6	N
BH3	0.2-0.6	N
BH4	0.11-0.31	N

The fill was observed to be free from any visual and olfactory contamination indicators. Some asphaltic concrete fines and light concrete rubble was identified to comprise the fill in select bore holes. These foreign inclusions were observed in very low quantities and were not considered to be aesthetically unsuitable.

Groundwater

Groundwater was not encountered in any of the boreholes undertaken to a maximum depth of 7.5m bgl.

Reported Laboratory Results

The laboratory results (Eurofins Report # are summarised below including maximum concentrations. The results were compared to the most conservative published site contamination criteria under NEPM 2013 for reference.

Metals

The results for metals in soils were all less than the adopted site reference criteria for human health in a standard residential land use setting. Lead was equal to the most conservative human health criteria (HIL-A Sensitive Residential) within sample BH03-1_1.4m (300mg/kg).

Analyte	Units	PQL	NEPM HIL A (2013) #	NEPM EIL (2013) 'aged' (Col 2)	BH01-1 0.3M	BH02-1 0.5M	BH03-1 0.4M	BH04-1 0.2M
Arsenic	mg/kg	<2	100	100	6.2	5.2	9.5	7.1
Cadmium	mg/kg	<0.4	20	-	< 0.4	< 0.4	< 0.4	< 0.4
Chromium total (Chromium VI, if relevant)	mg/kg	<5	100	400	29	22	40	30
Copper	mg/kg	<5	6000	230	19	39	210	10
Lead	mg/kg	<5	300	1100	130	110	300	110
Mercury	mg/kg	<0.1	40	-	0.3	< 0.1	1.7	0.3
Nickel	mg/kg	<5	400	560	5.5	14	6	< 5
Zinc	mg/kg	<5	7400	1300	140	300	260	67

OCP/OPP

The concentrations of aldrin, dieldrin, chlordane, DDT, DDD, DDE and heptachlor in the samples analysed were all below the laboratory LOR. All OCP concentrations were below the adopted site criteria for human and ecological health.

PCB

The concentrations of PCB were all below LOR. The LOR is less than the adopted site threshold criteria.

PAHs

The samples analysed for PAHs were generally below LOR. This is except for BH03-1_1.4m which reported PAHs as shown below.

Analyte	Units	PQL	NEPM HIL A (2013) #	NEPM EIL (2013) 'aged' (Col 2)	BH01-1 0.3M	BH02-1 0.5M	BH03-1 0.4M	BH04-1 0.2M
Acenaphthene	mg/kg	< 0.5			< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	mg/kg	< 0.5			< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	mg/kg	< 0.5			< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	mg/kg	< 0.5			< 0.5	< 0.5	1.2	< 0.5
Benzo(a)pyrene	mg/kg	< 0.5	3	0.7^	< 0.5	< 0.5	1.2	< 0.5
Benzo(a)pyrene TEQ (lower bound)*	mg/kg	< 0.5	3		< 0.5	< 0.5	1.6	< 0.5
Benzo(a)pyrene TEQ (medium bound)*	mg/kg	<0.6	3		0.6	0.6	1.9	0.6
Benzo(a)pyrene TEQ (upper bound)*	mg/kg	<1.2	3		1.2	1.2	2.1	1.2
Benzo(b&j)fluoranthene	mg/kg	< 0.5			< 0.5	< 0.5	0.8	< 0.5
Benzo(g.h.i)perylene	mg/kg	< 0.5			< 0.5	< 0.5	0.9	< 0.5
Benzo(k)fluoranthene	mg/kg	< 0.5			< 0.5	< 0.5	1.3	< 0.5
Chrysene	mg/kg	< 0.5			< 0.5	< 0.5	1	< 0.5
Dibenz(a.h)anthracene	mg/kg	< 0.5			< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	mg/kg	< 0.5			< 0.5	< 0.5	1.2	< 0.5
Fluorene	mg/kg	< 0.5			< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			< 0.5	< 0.5	0.9	< 0.5
Naphthalene	mg/kg	< 0.5			< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	mg/kg	< 0.5			< 0.5	< 0.5	0.6	< 0.5

Pyrene	mg/kg	< 0.5			< 0.5	< 0.5	1.4	< 0.5
Total PAH	mg/kg	< 0.5	**300**		< 0.5	< 0.5	10.5	< 0.5

^*NEPM Column 2 2013 EIL Criteria adopting coarse grained soils*

The results are all less than the adopted conservative ecological health reference criteria with exception to sample BH03-1_1.4m for B(a)P. This exceedance does not pose a risk due to the nature of asphaltic concrete material within the fill and having low bioavailability for phytotoxic uptake.

TRH & BTEX

The samples analysed for TRH and BTEX generally reported concentrations below LOR. The LOR is less than the adopted site threshold criteria.

Analyte	Units	PQL	NEPM HIL A (2013) #	NEPM EIL (2013) 'aged' (Col 2)	BH01-1 0.3M	BH02-1 0.5M	BH03-1 0.4M	BH04-1 0.2M
Benzene	mg/kg	< 0.1	**0.5**	**65^**	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	mg/kg	< 0.1	**55**	**125^**	< 0.1	< 0.1	< 0.1	< 0.1
o-Xylene	mg/kg	< 0.1	**40**	**45^**	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	mg/kg	< 0.1	**160**	**105^**	< 0.1	< 0.1	< 0.1	< 0.1
Naphthalene	mg/kg	< 0.5	**3**	**170**	< 0.5	< 0.5	< 0.5	< 0.5
TRH >C10-C16	mg/kg	< 50	**110**	**120^**	< 50	< 50	< 50	< 50
TRH >C16-C34	mg/kg	< 100		**1,300^**	130	210	290	< 100
TRH >C34-C40	mg/kg	< 100		**5,600^**	< 100	< 100	120	< 100
TRH C6-C10	mg/kg	< 20	**45**	**180^**	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)	mg/kg	< 20			< 20	< 20	< 20	< 20

^NEPM Table 1B(6) ESLs TPH fractions F1 – F4, BTEX and benzo(a)pyrene in soil adopting fine grained

Asbestos

Asbestos was not detected at the LOR in any of the samples.

8. DISCUSSION

Soils – Human Health

The results of the laboratory analysis indicate that the chemical concentrations of the contaminants of potential concern in soils at the sampling locations did not exceed the most conservative human health assessment criteria (HIL-A). Further, no asbestos was detected in any of the samples.

Soils – Aesthetics

The field observations of all the boreholes did not display any aesthetically unsuitable soils. No visual or olfactory contamination indicators were observed.

Soils – Ecological Environments

Generally, all reported results were less than the conservative EIL and ESLs adopted for metal and volatile compounds. At BH03-1_1.4m Benzo(a)pyrene was reported above the criteria. This is likely associated with minor asphaltic concrete material

in surface profiles. The NEPM 2013 notes that where B(a)P is present as a result of bituminous material, bioavailability of this material is low and is not considered to pose a risk to sensitive receptors.

Groundwater

Groundwater was not encountered during the field program. Groundwater monitoring was not a part of this scope of works. Based on the environmental results presented above we do not consider the requirement for groundwater investigation to be required. This report has not identified any potential significant contamination sources impacting groundwater at the site, nor the likelihood of any current or future groundwater use at the site. During further phases of investigation and remediation work at the site however, should a requirement for groundwater investigation or management be required it should be undertaken by an experienced consultant and give consideration to the results reported within this report.

9. CONCLUSION

Geotest concludes that; based on the limited desktop assessment, site walkover and field-sampling program that the site presents a low risk of contamination. The site can be considered suitable for sensitive residential land uses (HIL-A).

Further assessment of areas not previously investigated is required following the demolition of buildings at the Site.

This report should be read in conjunction with its limitations.

10. REFERENCES

- NEPM 'National Environmental Protection (Assessment of Site Contamination) Measure 1999 (April 2013), EPHC 2013, Canberra, incorporating CRC Care 2012.
- NSW EPA 2017, 'Contaminated Sites: Guidelines for the NSW Site Auditor Scheme (3rd edition)' ISBN 978 1 928088 23 8, Environmental Protection Authority NSW.

11. LIMITATIONS

Geotest Services Pty Ltd works at the site is based on a specific scope of investigation and upon the program of surface and/or subsurface screening and/or laboratory testing of samples. The findings of this report are based on site conditions existing at the time of the inspection. On this basis, Geotest Services Pty Ltd cannot provide unqualified warranties or assume liability for site conditions not observed and/or not accessible during the time of its investigation. Despite all reasonable care and diligence, the conditions encountered and concentrations of contaminants measured may not be representative of conditions between the locations sampled and investigated. On this basis, conclusions have been made from a limited number of observation points assuming that the geological and chemical conditions are representative. No other warranties are made or intended.

This report and associated document has been prepared solely for the use the engaging client and it's interested parties for the purpose of a limited environmental investigation. Any reliance assumed on this report shall be at each such party's own risk. Any ensuing liability resulting from use of the report by third parties cannot be transferred to Geotest Services Pty Ltd.

12. CLOSING

Geotest trusts this report is satisfactory to your needs. Should you require further information, please do not hesitate to contact the undersigned.

For and on behalf of Geotest Services Pty Ltd.

David Spasojevic

General Manager

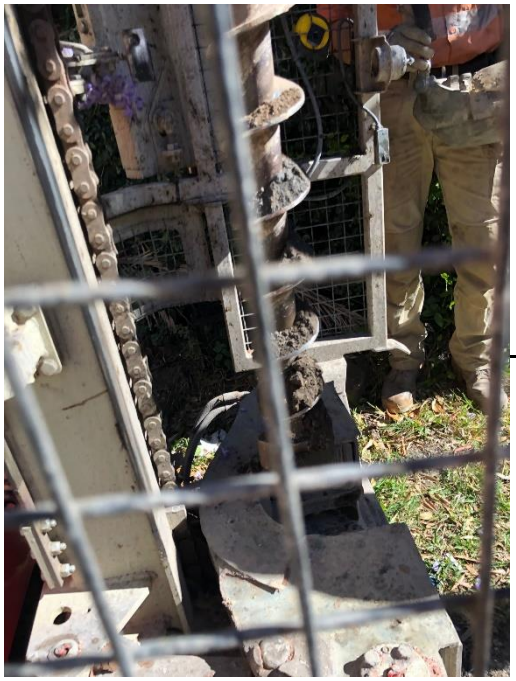
Attachments

1. Figure 1 - site locality and borehole locations
2. Site photographs
3. Eurofins Laboratory Certificate of Analysis #827443

1. FIGURE 1; SITE LOCALITY & BOREHOLE LOCATIONS



2. SITE PHOTOGRAPHS



Typical near surface topsoil/fill



Weathered shale being augered



Geoprobe drill rig at BH02

3. LABORATORY CERTIFICATE OF ANALYSIS

Geotest Services
Unit 18/24 Garling Rd
Kings Park
NSW 2148

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: **Alan Halpin CC Results/SRA/Invoices**

Report **827443-S**
Project name COWMAN 2 WILSON ST CHATSWOOD
Project ID 33465-2
Received Date Sep 24, 2021

Client Sample ID			**BH01-1 0.3M**	**BH02-1 0.5M**	**BH03-1 0.4M**	**BH04-1 0.2M**
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S21-Se52112**	**S21-Se52113**	**S21-Se52114**	**S21-Se52115**
Date Sampled			**Sep 24, 2021**	**Sep 24, 2021**	**Sep 24, 2021**	**Sep 24, 2021**
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	77	120	180	69
TRH C29-C36	50	mg/kg	110	140	180	< 50
TRH C10-C36 (Total)	50	mg/kg	187	260	360	69
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	130	210	290	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	120	< 100
TRH >C10-C40 (total)*	100	mg/kg	130	210	410	< 100
BTEX						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	61	84	79	89
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	1.6	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	1.9	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	2.1	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	1.2	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	1.2	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	< 0.5	0.8	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	0.9	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	1.3	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	1.0	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			BH01-1 0.3M	BH02-1 0.5M	BH03-1 0.4M	BH04-1 0.2M
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S21-Se52112	S21-Se52113	S21-Se52114	S21-Se52115
Date Sampled			Sep 24, 2021	Sep 24, 2021	Sep 24, 2021	Sep 24, 2021
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	1.2	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	0.9	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	0.6	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	1.4	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	10.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	72	57	70	82
p-Terphenyl-d14 (surr.)	1	%	66	50	64	82
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
a-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
d-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Toxaphene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	59	50	60	87
Tetrachloro-m-xylene (surr.)	1	%	71	53	66	81
Polychlorinated Biphenyls						
Aroclor-1016	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1232	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1242	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1248	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1254	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1260	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Total PCB*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	59	50	60	87
Tetrachloro-m-xylene (surr.)	1	%	71	53	66	81

Client Sample ID			BH01-1 0.3M	BH02-1 0.5M	BH03-1 0.4M	BH04-1 0.2M
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S21-Se52112	S21-Se52113	S21-Se52114	S21-Se52115
Date Sampled			Sep 24, 2021	Sep 24, 2021	Sep 24, 2021	Sep 24, 2021
Test/Reference	LOR	Unit				
Heavy Metals						
Arsenic	2	mg/kg	6.2	5.2	9.5	7.1
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	29	22	40	30
Copper	5	mg/kg	19	39	210	10
Lead	5	mg/kg	130	110	300	110
Mercury	0.1	mg/kg	0.3	< 0.1	1.7	0.3
Nickel	5	mg/kg	5.5	14	6.0	< 5
Zinc	5	mg/kg	140	300	260	67
% Moisture	1	%	14	12	22	23

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
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Sydney	Sep 30, 2021	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Sep 30, 2021	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Sep 30, 2021	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Sydney	Sep 30, 2021	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Sydney	Sep 30, 2021	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Metals M8	Sydney	Sep 30, 2021	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Organochlorine Pesticides	Sydney	Sep 30, 2021	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Polychlorinated Biphenyls	Sydney	Sep 30, 2021	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
% Moisture	Sydney	Sep 27, 2021	14 Days
- Method: LTM-GEN-7080 Moisture			

eurofins | Environment Testing

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

Eurofins Environment Testing Australia Pty Ltd
ABN: 50 005 085 521

Melbourne
6 Monterey Road
Dandenong South VIC 3175
Phone : +61 3 8564 5000
NATA # 1261 Site # 1254

Sydney
Unit F3, Building F
16 Mars Road
Lane Cove West NSW 2066
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

Brisbane
1/21 Smallwood Place
Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Newcastle
4/52 Industrial Drive
Mayfield East NSW 2304
PO Box 60 Wickham 2293
Phone : +61 2 4968 8448
NATA # 1261 Site # 25079

Eurofins ARL Pty Ltd
ABN: 91 05 0159 898

Perth
46-48 Banksia Road
Welshpool WA 6106
Phone : +61 8 6253 4444
NATA # 2377 Site # 2370

Eurofins Environment Testing NZ Limited
NZBN: 9429046024954

Auckland
35 O'Rorke Road
Penrose, Auckland 1061
Phone : +64 9 526 45 51
IANZ # 1327

Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Company Name: Geotest Services
Address: Unit 18/24 Garling Rd
Kings Park
NSW 2148

Project Name: COWMAN 2 WILSON ST CHATSWOOD
Project ID: 33465-2

Order No.:
Report #: 827443
Phone: 02 9671 4443
Fax: 02 9671 4343

Received: Sep 24, 2021 2:39 PM
Due: Oct 1, 2021
Priority: 5 Day
Contact Name: Alan Halpin CC

Eurofins Analytical Services Manager : Andrew Black

Sample Detail						Asbestos - AS4964	HOLD	Suite B13: OCP/PCB	Moisture Set	Eurofins Suite B7
Melbourne Laboratory - NATA # 1261 Site # 1254										
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794										
Mayfield Laboratory - NATA # 1261 Site # 25079										
Perth Laboratory - NATA # 2377 Site # 2370										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	BH01-1 0.3M	Sep 24, 2021		Soil	S21-Se52112	X		X	X	X
2	BH02-1 0.5M	Sep 24, 2021		Soil	S21-Se52113	X		X	X	X
3	BH03-1 0.4M	Sep 24, 2021		Soil	S21-Se52114	X		X	X	X
4	BH04-1 0.2M	Sep 24, 2021		Soil	S21-Se52115	X		X	X	X
5	BH01-2 0.7M	Sep 24, 2021		Soil	S21-Se52116		X			
6	BH02-2 1.0M	Sep 24, 2021		Soil	S21-Se52117		X			
7	BH03-2 0.8M	Sep 24, 2021		Soil	S21-Se52118		X			
8	BH04-2 0.5M	Sep 24, 2021		Soil	S21-Se52119		X			
Test Counts						4	4	4	4	4

Internal Quality Control Review and Glossary

General

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

Holding Times

Please refer to '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 prior to sample receipt deadlines as stated on the SRA.

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

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

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

Units

mg/kg: milligrams per kilogram
mg/L: milligrams per litre
ug/L: micrograms per litre
ppm: Parts per million
ppb: Parts per billion
%: Percentage
org/100mL: Organisms per 100 millilitres
NTU: Nephelometric Turbidity Units
MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - 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.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient
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 be used as a guide only 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% Phenols & 50-150% PFASs..

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM where no positive PFAS results have been reported have been reviewed and no data was affected.

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QC Data General Comments

1. Where a result is reported as a 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 is 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							
Total Recoverable Hydrocarbons							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
BTEX							
Benzene	mg/kg	< 0.1			0.1	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Xylenes - Total*	mg/kg	< 0.3			0.3	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-HCH	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-HCH	mg/kg	< 0.05			0.05	Pass	
d-HCH	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Endrin aldehyde	mg/kg	< 0.05			0.05	Pass	
Endrin ketone	mg/kg	< 0.05			0.05	Pass	
g-HCH (Lindane)	mg/kg	< 0.05			0.05	Pass	
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.05			0.05	Pass	
Toxaphene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Polychlorinated Biphenyls							
Aroclor-1016	mg/kg	< 0.1			0.1	Pass	
Aroclor-1221	mg/kg	< 0.1			0.1	Pass	
Aroclor-1232	mg/kg	< 0.1			0.1	Pass	
Aroclor-1242	mg/kg	< 0.1			0.1	Pass	
Aroclor-1248	mg/kg	< 0.1			0.1	Pass	
Aroclor-1254	mg/kg	< 0.1			0.1	Pass	
Aroclor-1260	mg/kg	< 0.1			0.1	Pass	
Total PCB*	mg/kg	< 0.1			0.1	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							
Total Recoverable Hydrocarbons							
TRH C6-C9	%	102			70-130	Pass	
TRH C10-C14	%	100			70-130	Pass	
Naphthalene	%	106			70-130	Pass	
TRH C6-C10	%	100			70-130	Pass	
TRH >C10-C16	%	98			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	107			70-130	Pass	
Toluene	%	101			70-130	Pass	
Ethylbenzene	%	105			70-130	Pass	
m&p-Xylenes	%	106			70-130	Pass	
o-Xylene	%	106			70-130	Pass	
Xylenes - Total*	%	106			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	95			70-130	Pass	
Acenaphthylene	%	107			70-130	Pass	
Anthracene	%	95			70-130	Pass	
Benz(a)anthracene	%	95			70-130	Pass	
Benzo(a)pyrene	%	97			70-130	Pass	
Benzo(b&j)fluoranthene	%	98			70-130	Pass	
Benzo(g.h.i)perylene	%	130			70-130	Pass	
Benzo(k)fluoranthene	%	102			70-130	Pass	
Chrysene	%	97			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Dibenz(a.h)anthracene	%	125			70-130	Pass	
Fluoranthene	%	91			70-130	Pass	
Fluorene	%	98			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	122			70-130	Pass	
Naphthalene	%	98			70-130	Pass	
Phenanthrene	%	92			70-130	Pass	
Pyrene	%	93			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	101			70-130	Pass	
4.4'-DDD	%	117			70-130	Pass	
4.4'-DDE	%	93			70-130	Pass	
4.4'-DDT	%	100			70-130	Pass	
a-HCH	%	106			70-130	Pass	
Aldrin	%	94			70-130	Pass	
b-HCH	%	113			70-130	Pass	
d-HCH	%	108			70-130	Pass	
Dieldrin	%	113			70-130	Pass	
Endosulfan I	%	109			70-130	Pass	
Endosulfan II	%	121			70-130	Pass	
Endosulfan sulphate	%	73			70-130	Pass	
Endrin	%	82			70-130	Pass	
Endrin aldehyde	%	100			70-130	Pass	
Endrin ketone	%	88			70-130	Pass	
g-HCH (Lindane)	%	113			70-130	Pass	
Heptachlor	%	82			70-130	Pass	
Heptachlor epoxide	%	107			70-130	Pass	
Hexachlorobenzene	%	89			70-130	Pass	
Methoxychlor	%	102			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1016	%	83			70-130	Pass	
Aroclor-1260	%	100			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	99			80-120	Pass	
Cadmium	%	99			80-120	Pass	
Chromium	%	100			80-120	Pass	
Copper	%	99			80-120	Pass	
Lead	%	100			80-120	Pass	
Mercury	%	97			80-120	Pass	
Nickel	%	100			80-120	Pass	
Zinc	%	99			80-120	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Total Recoverable Hydrocarbons				Result 1					
TRH C6-C9	S21-Se61600	NCP	%	95			70-130	Pass	
Naphthalene	S21-Se61600	NCP	%	94			70-130	Pass	
TRH C6-C10	S21-Se61600	NCP	%	94			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	S21-Se61600	NCP	%	102			70-130	Pass	
Toluene	S21-Se61600	NCP	%	95			70-130	Pass	
Ethylbenzene	S21-Se61600	NCP	%	99			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
m&p-Xylenes	S21-Se61600	NCP	%	100			70-130	Pass	
o-Xylene	S21-Se61600	NCP	%	100			70-130	Pass	
Xylenes - Total*	S21-Se61600	NCP	%	100			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	S21-Se49974	NCP	%	72			70-130	Pass	
Acenaphthylene	S21-Se49974	NCP	%	76			70-130	Pass	
Anthracene	S21-Se50880	NCP	%	96			70-130	Pass	
Benz(a)anthracene	S21-Se50880	NCP	%	97			70-130	Pass	
Benzo(a)pyrene	S21-Se50880	NCP	%	100			70-130	Pass	
Benzo(b&j)fluoranthene	S21-Se50880	NCP	%	104			70-130	Pass	
Benzo(g.h.i)perylene	S21-Se49974	NCP	%	74			70-130	Pass	
Benzo(k)fluoranthene	S21-Se49974	NCP	%	73			70-130	Pass	
Chrysene	S21-Se49974	NCP	%	76			70-130	Pass	
Dibenz(a.h)anthracene	S21-Se50880	NCP	%	122			70-130	Pass	
Fluoranthene	S21-Se50880	NCP	%	92			70-130	Pass	
Fluorene	S21-Se50880	NCP	%	101			70-130	Pass	
Indeno(1.2.3-cd)pyrene	S21-Se49974	NCP	%	70			70-130	Pass	
Naphthalene	S21-Se49974	NCP	%	79			70-130	Pass	
Phenanthrene	S21-Se50880	NCP	%	99			70-130	Pass	
Pyrene	S21-Se50880	NCP	%	94			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Chlordanes - Total	S21-Se49974	NCP	%	80			70-130	Pass	
4.4'-DDD	S21-Se49974	NCP	%	78			70-130	Pass	
4.4'-DDE	S21-Se50880	NCP	%	87			70-130	Pass	
4.4'-DDT	S21-Se50880	NCP	%	83			70-130	Pass	
a-HCH	S21-Se50880	NCP	%	98			70-130	Pass	
Aldrin	S21-Se50880	NCP	%	84			70-130	Pass	
b-HCH	S21-Se50880	NCP	%	107			70-130	Pass	
d-HCH	S21-Se50880	NCP	%	105			70-130	Pass	
Dieldrin	S21-Se50880	NCP	%	116			70-130	Pass	
Endosulfan I	S21-Se50880	NCP	%	98			70-130	Pass	
Endosulfan II	S21-Se50880	NCP	%	114			70-130	Pass	
Endosulfan sulphate	S21-Se56583	NCP	%	70			70-130	Pass	
Endrin	S21-Se50880	NCP	%	73			70-130	Pass	
Endrin aldehyde	S21-Se49974	NCP	%	112			70-130	Pass	
Endrin ketone	S21-Se50880	NCP	%	72			70-130	Pass	
g-HCH (Lindane)	S21-Se49974	NCP	%	84			70-130	Pass	
Heptachlor	S21-Se50880	NCP	%	79			70-130	Pass	
Heptachlor epoxide	S21-Se49974	NCP	%	80			70-130	Pass	
Hexachlorobenzene	S21-Se49974	NCP	%	71			70-130	Pass	
Methoxychlor	S21-Se49974	NCP	%	78			70-130	Pass	
Spike - % Recovery									
Polychlorinated Biphenyls				Result 1					
Aroclor-1016	S21-Se49974	NCP	%	85			70-130	Pass	
Aroclor-1260	S21-Se49974	NCP	%	91			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S21-Se50896	NCP	%	93			75-125	Pass	
Cadmium	S21-Se50896	NCP	%	93			75-125	Pass	
Chromium	S21-Se50896	NCP	%	85			75-125	Pass	
Copper	S21-Se50896	NCP	%	91			75-125	Pass	
Lead	S21-Se50896	NCP	%	98			75-125	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Mercury	S21-Se50896	NCP	%	93			75-125	Pass	
Nickel	S21-Se50896	NCP	%	88			75-125	Pass	
Zinc	S21-Se50896	NCP	%	95			75-125	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C6-C9	S21-Se61595	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
Naphthalene	S21-Se61595	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	S21-Se61595	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S21-Se61595	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	S21-Se61595	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	S21-Se61595	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	S21-Se61595	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	S21-Se61595	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total*	S21-Se61595	NCP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Toxaphene	S21-Se50879	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S21-Se50895	NCP	mg/kg	10	7.4	29	30%	Pass	
Cadmium	S21-Se50895	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	S21-Se50895	NCP	mg/kg	23	17	29	30%	Pass	
Copper	S21-Se50895	NCP	mg/kg	110	99	9.0	30%	Pass	
Lead	S21-Se50895	NCP	mg/kg	38	35	8.0	30%	Pass	
Mercury	S21-Se50895	NCP	mg/kg	0.2	0.2	14	30%	Pass	
Nickel	S21-Se50895	NCP	mg/kg	8.5	8.3	2.0	30%	Pass	
Zinc	S21-Se50895	NCP	mg/kg	180	180	1.0	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C10-C14	S21-Se52114	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	S21-Se52114	CP	mg/kg	180	230	20	30%	Pass	
TRH C29-C36	S21-Se52114	CP	mg/kg	180	190	9.0	30%	Pass	
TRH >C10-C16	S21-Se52114	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	S21-Se52114	CP	mg/kg	290	350	17	30%	Pass	
TRH >C34-C40	S21-Se52114	CP	mg/kg	120	120	4.0	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	S21-Se52114	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	S21-Se52114	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	S21-Se52114	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	S21-Se52114	CP	mg/kg	1.2	1.7	39	30%	Fail	Q15
Benzo(a)pyrene	S21-Se52114	CP	mg/kg	1.2	1.7	33	30%	Fail	Q15
Benzo(b&j)fluoranthene	S21-Se52114	CP	mg/kg	0.8	1.1	34	30%	Fail	Q15
Benzo(g.h.i)perylene	S21-Se52114	CP	mg/kg	0.9	1.2	34	30%	Fail	Q15
Benzo(k)fluoranthene	S21-Se52114	CP	mg/kg	1.3	1.8	34	30%	Fail	Q15
Chrysene	S21-Se52114	CP	mg/kg	1.0	1.5	38	30%	Fail	Q15
Dibenz(a.h)anthracene	S21-Se52114	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	S21-Se52114	CP	mg/kg	1.2	2.2	61	30%	Fail	Q15
Fluorene	S21-Se52114	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	S21-Se52114	CP	mg/kg	0.9	1.2	33	30%	Fail	Q15
Naphthalene	S21-Se52114	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Phenanthrene	S21-Se52114	CP	mg/kg	0.6	1.4	73	30%	Fail	Q15
Pyrene	S21-Se52114	CP	mg/kg	1.4	2.2	47	30%	Fail	Q15
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	S21-Se52114	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	S21-Se52114	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	S21-Se52114	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	S21-Se52114	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-HCH	S21-Se52114	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	S21-Se52114	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-HCH	S21-Se52114	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-HCH	S21-Se52114	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	S21-Se52114	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	S21-Se52114	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	S21-Se52114	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	S21-Se52114	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	S21-Se52114	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	S21-Se52114	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	S21-Se52114	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-HCH (Lindane)	S21-Se52114	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	S21-Se52114	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	S21-Se52114	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	S21-Se52114	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	S21-Se52114	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	S21-Se52114	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1221	S21-Se52114	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1232	S21-Se52114	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1242	S21-Se52114	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1248	S21-Se52114	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1254	S21-Se52114	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1260	S21-Se52114	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Total PCB*	S21-Se52114	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	S21-Se52114	CP	%	22	25	12	30%	Pass	

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
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
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:

Andrew Black	Analytical Services Manager
Andrew Sullivan	Senior Analyst-Organic (NSW)
John Nguyen	Senior Analyst-Metal (NSW)
Roopesh Rangarajan	Senior Analyst-Volatile (NSW)



Glenn Jackson
General Manager

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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Certificate of Analysis

Environment Testing

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.

Geotest Services
Unit 18/24 Garling Rd
Kings Park
NSW 2148

Attention:	Alan Halpin CC Results/SRA/Invoices
Report	827443-AID
Project Name	COWMAN 2 WILSON ST CHATSWOOD
Project ID	33465-2
Received Date	Sep 24, 2021
Date Reported	Oct 05, 2021

Methodology:

Asbestos Fibre Identification	Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples 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.*
Unknown Mineral Fibres	Mineral fibres of unknown type, as determined by PLM with DS, may require another analytical technique, such as Electron Microscopy, to confirm unequivocal identity. *NOTE: While Actinolite, Anthophyllite and Tremolite asbestos may be detected by PLM with DS, due to variability in the optical properties of these materials, AS4964 requires that these are reported as UMF unless confirmed by an independent technique.*
Subsampling Soil Samples	The whole sample submitted is first dried and then passed through a 10mm sieve followed by a 2mm sieve. All fibrous matter greater than 10mm, greater than 2mm as well as the material passing through the 2mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 to 60g then a sub-sampling routine based on ISO 3082:2009(E) is employed. *NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be sub-sampled for trace analysis, in accordance with AS 4964-2004.*
Bonded asbestos-containing material (ACM)	The material is first examined and any fibres 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 4964 - 2004. *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	The performance limitation of the AS 4964 (2004) 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 (LOR), per se. Examination of a 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 4964 and hence NATA Accreditation does not cover the performance of this service (non-NATA results shown with an asterisk). *NOTE: NATA News March 2014, p.7, states in relation to AS 4964: "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.*

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.

Project Name COWMAN 2 WILSON ST CHATSWOOD
Project ID 33465-2
Date Sampled Sep 24, 2021
Report 827443-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
BH01-1 0.3M	21-Se52112	Sep 24, 2021	Approximate Sample 46g Sample consisted of: Brown coarse-grained clayey-sandy soil, organic debris and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
BH02-1 0.5M	21-Se52113	Sep 24, 2021	Approximate Sample 99g Sample consisted of: Brown coarse-grained clayey-sandy soil, coal, bitumen and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
BH03-1 0.4M	21-Se52114	Sep 24, 2021	Approximate Sample 101g Sample consisted of: Brown coarse-grained clayey-sandy soil, coal, bitumen and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
BH04-1 0.2M	21-Se52115	Sep 24, 2021	Approximate Sample 116g Sample consisted of: Brown coarse-grained clayey soil, bitumen and rocks	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	Sep 27, 2021	Indefinite

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

Eurofins Environment Testing Australia Pty Ltd
ABN: 50 005 085 521

Melbourne
6 Monterey Road
Dandenong South VIC 3175
Phone : +61 3 8564 5000
NATA # 1261 Site # 1254

Sydney
Unit F3, Building F
16 Mars Road
Lane Cove West NSW 2066
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

Brisbane
1/21 Smallwood Place
Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Newcastle
4/52 Industrial Drive
Mayfield East NSW 2304
PO Box 60 Wickham 2293
Phone : +61 2 4968 8448
NATA # 1261 Site # 25079

Eurofins ARL Pty Ltd
ABN: 91 05 0159 898

Perth
46-48 Banksia Road
Welshpool WA 6106
Phone : +61 8 6253 4444
NATA # 2377 Site # 2370

Eurofins Environment Testing NZ Limited
NZBN: 9429046024954

Auckland
35 O'Rorke Road
Penrose, Auckland 1061
Phone : +64 9 526 45 51
IANZ # 1327

Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Company Name: Geotest Services
Address: Unit 18/24 Garling Rd
Kings Park
NSW 2148

Project Name: COWMAN 2 WILSON ST CHATSWOOD
Project ID: 33465-2

Order No.:
Report #: 827443
Phone: 02 9671 4443
Fax: 02 9671 4343

Received: Sep 24, 2021 2:39 PM
Due: Oct 1, 2021
Priority: 5 Day
Contact Name: Alan Halpin CC

Eurofins Analytical Services Manager : Andrew Black

Sample Detail						Asbestos - AS4964	HOLD	Suite B13: OCP/PCB	Moisture Set	Eurofins Suite B7
Melbourne Laboratory - NATA # 1261 Site # 1254										
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794										
Mayfield Laboratory - NATA # 1261 Site # 25079										
Perth Laboratory - NATA # 2377 Site # 2370										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	BH01-1 0.3M	Sep 24, 2021		Soil	S21-Se52112	X		X	X	X
2	BH02-1 0.5M	Sep 24, 2021		Soil	S21-Se52113	X		X	X	X
3	BH03-1 0.4M	Sep 24, 2021		Soil	S21-Se52114	X		X	X	X
4	BH04-1 0.2M	Sep 24, 2021		Soil	S21-Se52115	X		X	X	X
5	BH01-2 0.7M	Sep 24, 2021		Soil	S21-Se52116		X			
6	BH02-2 1.0M	Sep 24, 2021		Soil	S21-Se52117		X			
7	BH03-2 0.8M	Sep 24, 2021		Soil	S21-Se52118		X			
8	BH04-2 0.5M	Sep 24, 2021		Soil	S21-Se52119		X			
Test Counts						4	4	4	4	4

Internal Quality Control Review and Glossary

General

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

Holding Times

Please refer to '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 prior to sample receipt deadlines as stated on the Sample Receipt Advice.

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

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

Units

% w/w: weight for weight basis	grams per kilogram
Filter loading:	fibres/100 graticule areas
Reported Concentration:	fibres/mL
Flowrate:	L/min

Terms

Dry	Sample is dried by heating prior to analysis
LOR	Limit of Reporting
COC	Chain of Custody
SRA	Sample Receipt Advice
ISO	International Standards Organisation
AS	Australian Standards
WA DOH	Reference document for the NEPM. Government of Western Australia, Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia (2009), including supporting document Recommended Procedures for Laboratory Analysis of Asbestos in Soil (2011)
NEPM	National Environment Protection (Assessment of Site Contamination) Measure, 2013 (as amended)
ACM	Asbestos Containing Materials. Asbestos contained within a non-asbestos matrix, typically presented in bonded and/or sound condition. For the purposes of the NEPM, ACM is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
AF	Asbestos Fines. Asbestos containing materials, including friable, weathered and bonded materials, able to pass a 7mm x 7mm sieve. Considered under the NEPM as equivalent to “non-bonded / friable”.
FA	Fibrous Asbestos. Asbestos containing materials in a friable and/or severely weathered condition. For the purposes of the NEPM, FA is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
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 degree of friability.
Trace Analysis	Analytical procedure used to detect the presence of respirable fibres in the matrix.

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
N/A	Not applicable

Asbestos Counter/Identifier:

Sayeed Abu	Senior Analyst-Asbestos (NSW)

Authorised by:

Chamath JHM Annakkage	Senior Analyst-Asbestos (NSW)



Glenn Jackson
General Manager

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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☑ **Sydney**
Unit F3 - 6 Building F, 16 Mars Road, Lane Cove
Phone: +612 9900 8400
Email: enviro.syd@mgtlabmark.com.au

☐ **Brisbane**
Unit 1-21 Smallwood Place, Murrarie
Phone: +617 3902 4600
Email: enviro.bris@mgtlabmark.com.au

☐ **Melbourne**
2 Kingston Town Close, Oakleigh, VIC 3166
Phone: +613 8564 5000 Fax: +613 8564 5090
Email: enquiries.melb@mgtlabmark.com.au

CHAIN OF CUSTODY RECORD

CLIENT DETAILS

Company Name : GEOTEST SERVICES PTY LTD	**Contact Name :** Alan Halpin	**Purchase Order :**	**COC Number :**
Office Address : 18/24 GARLING ROAD	**Project Manager :**	**PROJECT Number :** 33465-2	**Eurofins | mgt quote ID :** 180326GEO
KINGS PARK, N.S.W. 2148	**Email for results :** admin@geotestservices.com.au	**PROJECT Name :** Cowman, 2 Wilson St, Chatswood	**Data output format:**
PH: 9671 4443 FAX: 9671 4343			

Special Directions & Comments :

Eurofins | mgt DI water batch number:

	Sample ID	Date	Matrix	SUITE B7*1	SUITE B13	ASBESTOS IDENTIFICATION	HOLD
1	BH01-1, 0.3m	24/09/2021	Soil	X	X	X	
2	BH01-2, 0.7m	24/09/2021	Soil				X
3	BH02-1, 0.5m	24/09/2021	Soil	X	X	X	
4	BH02-2, 1.0m	24/09/2021	Soil				X
5	BH03-1, 0.4m	24/09/2021	Soil	X	X	X	
6	BH03-2, 0.8m	24/09/2021	Soil				X
7	BH04-1, 0.2m	24/09/2021	Soil	X	X	X	
8	BH04-2, 0.5m	24/09/2021	Soil				X
9							
10							
11							
12							
13							
14							
15							
16							

Analytes

Some common holding times (with correct preservation).
For further information contact the lab

Waters		Soils	
BTEX, MAH, VOC	14 days	BTEX, MAH, VOC	14 days
TRH, PAH, Phenols, Pesticides	7 days	TRH, PAH, Phenols, Pesticides	14 days
Heavy Metals	6 months	Heavy Metals	6 months
Mercury, CrVI	28 days	Mercury, CrVI	28 days
Microbiological testing	24 hours	Microbiological testing	72 hours
BOD, Nitrate, Nitrite, Total N	2 days	Anions	28 days
Solids - TSS, TDS etc	7 days	SPOCAS, pH Field and FOX, CrS	24 hours
Ferrous iron	7 days	ASLP, TCLP	7 days

Containers:

1LP	250P	125P	1LA	40mL vial	125mL A	Jar	ZIP.BAG
						X	X
						X	
						X	X
						X	
						X	X
						X	
						X	X
						X	

Sample comments:

Laboratory Staff

Relinquished By: S.Penfold
Date & Time : 24/09/21
Signature:

Received By:
Date & Time: 24/9/21 - 2:39 PM
Signature:

Turn around time

1 DAY ☐ 2 DAY ☐ 3 DAY ☐
5 DAY ☑ 10 DAY ☐ Other:

Method Of Shipment

☐ Courier
☑ Hand Delivered
☐ Postal
Courier Consignment # :

Temperature on arrival: 7.1 °C

Report number: 827443