ABN: 67 626 182 349
T: 02 8740 0494
M: Peter (0434 597 686)
M: Mahmudul (0426 267 115)
W: www.atlasgeoservice.com.au
E: info@atlasgeoservice.com.au
P: PO BOX 39,
Bonnyrigg NSW 2177

Metbuilt Pty Ltd
15 Cowper Street
Parramatta NSW 2150

Attention: Steve

Report Number: E10132-2
Report Date: 1st April 2020
Project Name: Material Classification
Site Location: 28 Lockwood Ave, Belrose NSW 2085
Material Classification: **Excavated Natural Material (ENM) – Refer Section 6 (Page 3)**

1. Introduction

Atlas Geotechnical Services Pty Ltd (AGS) was engaged by Metbuilt Pty Ltd (client) to provide a material classification certification of the onsite material located at 28 Lockwood Ave, Belrose NSW 2085. The specific site area is highlighted within the attached drawing (Figure 1). AGS was advised that the in-situ site material may be subjected to excavation up to from 9.0m for offsite disposal. This report has been compiled in continuation of a previously issued material classification report by AGS as requested by the client (E10132-1, dated 24/10/19).

The intended objective of this indicative material classification report is to determine the contaminants of potential concern (COPCs) of the underlying site material in general accordance with the following guidelines:

- EPA Excavated Natural Material Order (ENM 2014).
- NSW EPA Waste Classification Guidelines (2014).
- The Protection of the Environment Operations Act (1997).

An AGS consultant undertook a site visit on the 24th March 2020 and carried out in-situ sampling via auger drilling with the use of a trailer mounted drilling rig. In accordance with the sampling procedures outlined within the above-mentioned EPA Excavated Natural Material Order, seventeen (17) in-situ sample sets were collected at fifteen (15) select locations, each comprising of environmental, asbestos ID and foreign material samples. Site area details are outlined within Table 1 below.

Table 1 – Site Area Details

Site Area	Estimated Soil Bulk Unit Weight (γ)	Required Sample Points
5,418 m^2	18 kN/m^3	15

All onsite samples were delivered to NATA accredited laboratories for analysis for contaminants of potential concern (COPCs) and soil analytical data were assessed in general accordance with the above guidelines. A summary of the in-situ sampling depths are outlined in Table 2 below.

Table 2 – Systemic Sampling Points

Sample No.	1	2	3	4	5	6	7	8	9
Borehole No.	BH01	BH02	BH03	BH03	BH04	BH05	BH06	BH07	BH08
Sampling Depth (m)	1.2 – 1.7	1.0 – 1.5	1.0 – 1.3	2.3 – 2.6	1.3 – 1.8	1.1 – 1.5	1.1 – 1.5	1.2 – 1.7	1.0 – 1.5
Sample No.	10	11	12	13	14	15	16	17	
Borehole No.	BH08	BH09	BH10	BH11	BH12	BH13	BH14	BH15	
Sampling Depth (m)	1.8 – 2.4	1.5 – 1.8	1.0 – 1.3	1.0 – 1.3	1.4 – 1.8	1.0 – 1.5	1.1 – 1.5	1.2 – 1.6	

2. Background Information

2.1 Geological Survey

The NSW Department of Mineral Resources Geological Map of Sydney (Scale 1:100 000) indicated the general site area to be underlain by Hawkesbury Sandstone of the Triassic Period (Rh) described as *'medium to coarse-grain quartz sandstone, very minor shale and laminate lenses'*.

2.2 Acid Sulfate Soil Risk Mapping

A review of the Hornsby/Mona Vale (9130S1) Acid Sulphate Soil Risk Map (1:25,000 scale) indicates that the site lies on an area classed as "No Known Occurrence" for which acid sulphate soils are not known or expected to occur in these environments. Land management activities are not likely to be affected by acid sulphate soil materials. The typical landform types include bedrock slopes, elevated Pleistocene and Holocene dunes, and elevated alluvial plains.

2.3 Search of Protection of the Environment Operations Public Register (POEO) of Licensed and Delicensed Premises

A search of the POEO public register of licensed and delicensed premises (DECC) indicated that the subject site is not listed. Additionally, no properties listed on the register are situated within the immediate surrounding area of the site within 200m (Attachment 5).

2.5 Past Site Use

A brief desktop study was undertaken on the past use of the site via historical aerial mapping (Nearmaps). AGS was able to ascertain that the site was used for the operation of a local library, which has since been decommissioned.

3. Site Visit Summary

AGS undertook drilling investigation during our site visit and the following notes were recorded:

- The subject site area was advised to be 5,418 m^2 by the client;
- 15 systematic sample points (boreholes) were appointed by the supervising AGS consultant and their respective sampling locations were selected in general fashion within the subject site area;
- 1 sample set collected per meter depth of each drilled borehole location following the initial material classification report, from >1m below ground level (bgl);
- Each laboratory test sample was denoted with E1 to E17;
- Each borehole was drilled to practical refusal on inferred Hawkesbury Sandstone;
- The soil composition of the onsite material was assessed to be Silty SAND (>1.0 m), grey and brown, dry to moist, loose to medium dense;

- During sample collection, no visible signs of contamination such as asbestos-containing material (ACM). Slight hydrocarbon odours or and staining were observed within the natural material.

4. Soil Sampling & Soil Testing Laboratory details:

4.1 Sampling & Transportation

The samples were recovered using disposable nitrile gloves and transferred into sealed glass jars, zip-lock sealed 500mL bags (laboratory & asbestos samples) and 30L laboratory bags (foreign material samples). Onsite samples were collected in accordance with AS 1289.1.2.1 section 6.5.4 with a trailer-mounted drilling rig (Figure 2 - 3). The sealed samples were placed into a chilled esky and transported to SGS Australia and Geo-Logic Solutions under Chain of Custody (COC) procedures. A new pair of nitrile gloves were used at each sample location to prevent cross-contamination.

4.2 Laboratory Analysis

The samples were analysed for the following parameters:

- arsenic, cadmium, chromium, copper, lead, mercury, nickel and zinc (8 Heavy metals);
- Total Recoverable Hydrocarbons (TRHs);
- Polycyclic Aromatic Hydrocarbons (PAHs);
- Benzene, Toluene, Ethylbenzene, total Xylene (BTEX);
- foreign material;
- pH/EC; and
- asbestos ID.

5. Comparison of Test Results

The analytical results for the samples analysed indicated:

- analytical results for arsenic, cadmium, chromium, copper, lead, mercury, nickel and zinc (Heavy metals) were reported by the laboratory to be less than the laboratory limit of reporting or less than the absolute maximum criteria outlined in the NSW EPA Excavated Natural Material Order 2014;
- TRH, BTEX, pH, FM and EC levels were reported by the laboratory to be less than the laboratory limit of reporting or less than the absolute maximum criteria outlined in the NSW EPA Excavated Natural Material Order 2014; and
- No respirable fibers detected in all soil samples using trace analysis techniques.

6. Virgin Excavated Natural Material Assessment Criteria

A Virgin Excavated Natural Material (VENM) classification does not apply to the fill or overlying soils within the site. This material classification report aims to assess the COPCs of each systemic sampling point and the VENM classification only pertains to the natural bedrock material of the site (Hawkesbury Sandstone).

The Protection of the Environment Operations Act 1997 defines VENM as ‘natural material (such as clay, gravel, sand, soil or rock fines):

- that has been excavated or quarried from areas that are not contaminated with manufactured chemicals or process residues, as a result of industrial, mining or agricultural activities, and
- that does not contain any sulfidic ores or soils or any other waste.’ No other criteria for VENM have been approved. By definition, VENM cannot be ‘made’ from processed soils. Excavated material that has been stored or processed in any way cannot be classified as VENM.

During AGS's site visit, a suitably qualified consultant undertook a walkover of the site and took into consideration the following points where applicable:

- Description and quality of the building structure & materials;
- Current operations;
- Waste Management Practices & trade waste;
- Above and underground storage tanks;
- Odours;
- Site vegetation & sealed surfaces;
- Historical operations (if known);
- Former raw materials & transportation (if known);
- Surface water;
- Groundwater (if known); and
- Site Surrounding and their operations.

From inspection of the above details, information was gathered with regards to the property. The soil profile at the site was consistent with the Geological Survey and soil profiles (Attachment 4). Following a visual assessment of the soil profile, the materials being to be excavated within the site were observed to be grey/brown, residual sand and clay material fine gravel. It is was assessed the actual extent of the residual material varies across the site. No critical signs of contamination were observed within exposed material, including foreign materials, hydrocarbon odours or staining, asbestos containing materials or sulfidic ores. No staining or odours were visible at the time of the inspection. There was no evidence of localised oil or chemical spills on any sealed or unsealed areas and this issue does not warrant any concern. No visible fibro cement pieces were observed on the surfaces of the site that were inspected. It should be noted that foreign materials may also be present buried within the soil materials that could not be accessed as part of the inspection.

7. Conclusion

Analytical results for all samples collected from the site was reported by the laboratory to be less than the Excavated Natural Material (ENM) absolute maximum and maximum average criteria outlined in the NSW EPA Excavated Natural Material Order 2014 and NSW EPA Waste Classification Guidelines CT1 specific contaminant concentration (SCC) criteria. Field observations and laboratory test results indicated the residual material beyond 1.0m bgl may be classified as **Excavated Natural Material (ENM)**, in accordance with the NSW EPA Excavated Natural Material Order 2014 and the NSW EPA Waste Classification Guidelines (2014).

Each drilled borehole locations were terminated upon practical refusal, indicating an average bedrock depth of 1.5m bgl except borehole locations BH03 and BH08. Furthermore, since the founding depth of the underlying Hawkesbury Sandstone does not exceed 2.6m (BH03), it can be surmised that the underlying material beyond 2.6m may be classified as **VENM** under the definitions specified within 'The Protection of the Environment Operations Act (1997)'.

If any further areas of environmental concern are uncovered during the excavation process, AGS should be notified for further assessment. The requested scope of works for this material classification report pertains to the existing site material from 1.0 bgl onwards as an indicative assessment, it is not a substitution for a Phrase 1 or Phrase 2 assessment. We would be pleased to provide further information on any aspects of this report. If materials or conditions are encountered other than those that have been described, further assessment will be required.

8. Limitations

The findings presented in this report are based on chemical analysis, physical observations made during a site inspection, and anecdotal information that was made available during this investigation. Further, the classification of the onsite material was provided on the proviso that all surficial, organic and deleterious materials will be separately disposed in a suitable facility. To the best of our knowledge, these observations represent a reasonable interpretation of the general condition of the site at the time of report completion. This report has been prepared solely for the use of the client to whom it is addressed, and no other party is entitled to rely on its findings.

No warranties are made as to the information provided in this report. All conclusions and recommendations made in this report are of the professional opinions of personnel involved with the project and while normal checking of the accuracy of data has been conducted, any circumstances outside the scope of this report or which are not made known to personnel and which may impact on those opinions is not the responsibility of Atlas Geotechnical Services Pty Ltd.

Regards,

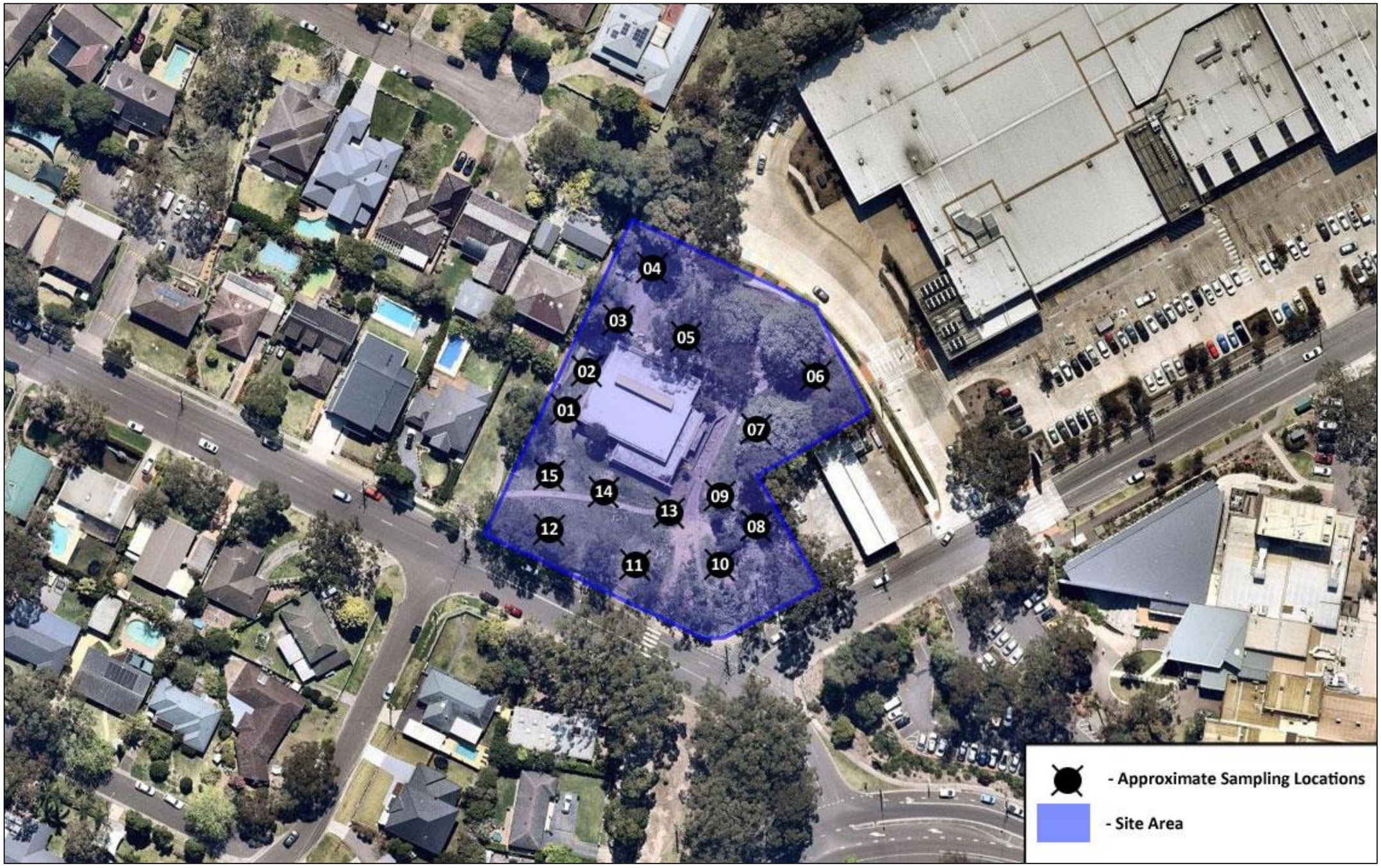
Peter Chen (Xiao Dong Chen)
Director | Geotechnical Engineer
Adv. Dip. Structural Eng, B. Eng (Civil), MIEAust
Atlas Geotechnical Services Pty Ltd

Attachments:

1) Figures
2) Results Summary Table
3) NATA Laboratory Reports and Documentation
4) Soil Profile Reports
5) POEO Register Search

ATTACHMENT 1

FIGURES



Source: Nearmaps

ATLAS Geotechnical Services On Budget. On Time. Professional Service ABN: 67 626 182 349 W: www.atlasgeoservice.com.au E: info@atlasgeoservice.com.au P: PO BOX 39, Bonnyrigg NSW 2177	Client: Metbuilt Pty Ltd	Project Name: Material Classification Project Address: 28 Lockwood Ave, Belrose NSW 2085	Report No: E10132-2 Figure Date: 31/03/19	N	Figure No: Figure 1	Figure Title: Site Area/Sampling Locations

ATLAS Geotechnical Services
On Budget. On Time. Professional Service

ABN: 67 626 182 349
W: www.atlasgeoservice.com.au
E: info@atlasgeoservice.com.au
P: PO BOX 39, Bonnyrigg NSW 2177

Client:	Project Name:	Report No:	N	Figure No:	Figure Title:
Metbuilt Pty Ltd	Material Classification	E10132-2		Figure 2	Onsite Photographs
	Project Address: 28 Lockwood Ave, Belrose NSW 2085	Figure Date: 31/03/19			

Atlas Geotechnical Services On Budget. On Time. Professional Service ABN: 67 626 182 349 W: www.atlasgeoservice.com.au E: info@atlasgeoservice.com.au P: PO BOX 39, Bonnyrigg NSW 2177	Client: Metbuilt Pty Ltd	Project Name: Material Classification Project Address: 28 Lockwood Ave, Belrose NSW 2085	Report No: E10132-2 Figure Date: 31/03/19	N	Figure No: Figure 3	Figure Title: Onsite Photographs

ATTACHMENT 2

RESULTS SUMMARY TABLE

ABN: 67 626 182 349
T: 02 8740 0494
M: Peter (0434 597 686)
M: Mahmudul (0426 267

W: www.atlasgeoservice.com.au
E: info@atlasgeoservice.com.au
P: PO BOX 39,
Bonnyrigg NSW 2177

Results Summary Table

Soil Results & Adopted Site Criteria - Heavy Metals, PAHs, TRH/BTEX, Foreign Materials & Asbestos

Site Address 28 Lockwood Ave, Belrose

Job Number E10132-2

										Reference	SE204371.001	SE204371.002	SE204371.003	SE204371.004	SE204371.005	SE204371.006	SE204371.007	SE204371.008	SE204371.009	SE204371.010	SE204371.011	SE204371.012	SE204371.013	SE204371.014	SE204371.015	SE204371.016	SE204371.017
										Sample ID	E1_1	E2_1	E3_1	E3_2	E4_1	E5_1	E6_1	E7_1	E8_1	E8_2	E9_1	E10_1	E11_1	E12_1	E13_1	E14_1	E15_1
										Date Sampled	24/03/2020	24/03/2020	24/03/2020	24/03/2020	24/03/2020	24/03/2020	24/03/2020	24/03/2020	24/03/2020	24/03/2020	24/03/2020	24/03/2020	24/03/2020	24/03/2020	24/03/2020	24/03/2020	24/03/2020
										Sample Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Group	**Analyte**	**Units**	**PQL**	**GSW Criteria CT1**	**ENM Maximum Average**	**ENM Absolute Maximum**	**DATASET AVERAGE**	**DATASET MINIMUM**	**DATASET MAXIMUM**																			
Metals	Arsenic	mg/kg	<3	**100**	**20**	**40**	**<1**	**<1**	**1**	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1
	Cadmium	mg/kg	<0.3	**20**	**0.5**	**1**	**<0.3**	**<0.3**	**<0.3**	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
	Chromium	mg/kg	<0.3	**100**	**75**	**150**	**1.1**	**0.9**	**1.3**	1.2	1	1.1	1.1	1.3	1.1	1	1.1	0.9	1.1	1.1	1.1	1.3	1.2	1.1	1.2	1.2
	Copper	mg/kg	<0.5	**NC**	**100**	**200**	**<0.5**	**<0.5**	**2.8**	<0.5	<0.5	<0.5	<0.5	2.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2.8	<0.5	<0.5	<0.5
	Lead	mg/kg	<1	**100**	**50**	**100**	**1.9**	**1**	**3**	2	2	2	2	2	2	1	2	2	2	2	2	1	2	2	3	2	2
	Mercury	mg/kg	<0.5	**4**	**0.5**	**1**	**<0.05**	**<0.05**	**<0.05**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	Nickel	mg/kg	<0.5	**40**	**30**	**60**	**0.6**	**<0.5**	**0.9**	0.6	<0.5	0.5	<0.5	0.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	0.5	<0.5	0.5	<0.5
	Zinc	mg/kg	<0.05	**NC**	**150**	**300**	**5**	**3.5**	**10**	6.5	5.8	5.9	4.5	5	10	3.8	5	3.5	6.2	5	4.5	4.2	5.3	4.2	5	5.2
PAHS	Acenaphthene	mg/kg	< 0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Acenaphthylene	mg/kg	< 0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Anthracene	mg/kg	< 0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Benzo(a)anthracene	mg/kg	< 0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Benzo(a)pyrene	mg/kg	< 0.5	**0.8**	**0.5**	**1**	**<0.1**	**<0.1**	**<0.1**	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Benzo(a)pyrene TEQ (lower bound) *	mg/kg	< 0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Benzo(a)pyrene TEQ (medium bound) *	mg/kg	0.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Benzo(a)pyrene TEQ (upper bound) *	mg/kg	1.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Benzo(b&j)fluoranthene	mg/kg	< 0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Benzo(g.h.i)perylene	mg/kg	< 0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Benzo(k)fluoranthene	mg/kg	< 0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Chrysene	mg/kg	< 0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dibenz(a.h)anthracene	mg/kg	< 0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Fluoranthene	mg/kg	< 0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Fluorene	mg/kg	< 0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Naphthalene	mg/kg	< 0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Phenanthrene	mg/kg	< 0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Pyrene	mg/kg	< 0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Total PAH*	mg/kg	< 0.5	**200**	**20**	**40**	**<0.8**	**<0.8**	**<0.8**	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
TPH/BTEX	TPH >C6-C9	mg/kg	20	**650**	-	-	**< 20**	**<20**	**<20**	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
	TPH >C10-C36	mg/kg	50	**10,000**	**Total 250**	**Total 500**	**<110**	**<110**	**<110**	<110	<110	<110	<110	<110	<110	<110	<110	<110	<110	<110	<110	<110	<110	<110	<110	<110	<110
	Benzene	mg/kg	0.1	**10**	-	**0.5**	**< 0.1**	**<0.1**	**<0.1**	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Ethylbenzene	mg/kg	0.1	**600**	-	**25**	**< 0.1**	**<0.1**	**< 0.1**	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Toluene	mg/kg	0.1	**288**	-	**65**	**< 0.1**	**<0.1**	**< 0.1**	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Xylenes - Total	mg/kg	0.3	**1000**	-	**15**	**<0.3**	**<0.3**	**<0.3**	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Physical Parameters	pH	pH units	-	-	**5 - 9**	**4.5 - 10**	**7.3**	**7.1**	**7.5**	7.1	7.1	7.1	7.3	7.3	7.3	7.4	7.5	7.3	7.4	7.4	7.3	7.4	7.3	7.1	7.2	7.2
	EC	dS/m)	-	-	**1.5**	**3**	**0.02**	**0.01**	**0.02**	0.018	0.016	0.018	0.02	0.019	0.019	0.018	0.02	0.016	0.019	0.016	0.014	0.02	0.018	0.018	0.02	0.018
Asbestos	Asbestos ID	-	-	**Detection**	**Detection**	**Detection**	**-**	**-**	**-**	No Detected	No Detected	No Detected	No Detected	No Detected	No Detected	No Detected	No Detected	No Detected	No Detected	No Detected	No Detected	No Detected	No Detected	No Detected	No Detected	No Detected
Foreign Material	Rubber, plastic, bitumen, paper, cloth, paint and wood	%			0.05	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Concentration exceeding General Solid Waste (GSW) Criteria CT1 (NSW EPA Waste Classification Guidelines)

Concentration exceeding Excavated Natural Material (ENM) Absolute Maximum Criteria (Excavated Natural Material Order 2014)

Concentration exceeding Excavated Natural Material (ENM) Maximum Average Criteria (Excavated Natural Material Order 2014)

– = **No currently available criterion**

N/A = **No TCLP analysis required**

ND = **Not calculated as all individual analytes less than the limit of reporting**

ATTACHMENT 3

NATA LABORATORY REPORTS AND DOCUMENTATION

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS		LABORATORY DETAILS	
Contact	Peter Chen	Manager	Huong Crawford
Client	ATLAS GEOTECHNICAL SERVICES PTY LTD	Laboratory	SGS Alexandria Environmental
Address	12 CHARTER STREET SADLEIR NSW 2168	Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	(Not specified)	Telephone	+61 2 8594 0400
Facsimile	(Not specified)	Facsimile	+61 2 8594 0499
Email	peter@atlasgeoservice.com.au	Email	au.environmental.sydney@sgs.com
Project	**E10132-2**	SGS Reference	**SE204371 R0**
Order Number	**E10132-2**	Date Received	25 Mar 2020
Samples	17	Date Reported	31 Mar 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.

Asbestos analysed by Approved Identifier Ravee Sivasubramaniam.

SIGNATORIES

Dong LIANG
Metals/Inorganics Team Leader

Kamrul AHSAN
Senior Chemist

Ly Kim HA
Organic Section Head

Ravee SIVASUBRAMANIAM
Hygiene Team Leader

Shane MCDERMOTT
Inorganic/Metals Chemist

Parameter	Units	LOR	Sample Number: SE204371.001 Sample Matrix: Soil Sample Date: 24 Mar 2020 Sample Name: E1_1	SE204371.002 Soil 24 Mar 2020 E2_1	SE204371.003 Soil 24 Mar 2020 E3_1	SE204371.004 Soil 24 Mar 2020 E3_2
VOC's in Soil Method: AN433 Tested: 27/3/2020						
Monocyclic Aromatic Hydrocarbons						
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Polycyclic VOCs						
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Surrogates						
d4-1,2-dichloroethane (Surrogate)	%	-	**107**	**105**	**106**	**109**
d8-toluene (Surrogate)	%	-	**111**	**109**	**109**	**112**
Bromofluorobenzene (Surrogate)	%	-	**97**	**94**	**96**	**97**
Totals						
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6
Volatile Petroleum Hydrocarbons in Soil Method: AN433 Tested: 27/3/2020						
TRH C6-C10	mg/kg	25	<25	<25	<25	<25
TRH C6-C9	mg/kg	20	<20	<20	<20	<20
Surrogates						
d4-1,2-dichloroethane (Surrogate)	%	-	**107**	**105**	**106**	**109**
d8-toluene (Surrogate)	%	-	**111**	**109**	**109**	**112**
Bromofluorobenzene (Surrogate)	%	-	**97**	**94**	**96**	**97**
VPH F Bands						
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25

Parameter	Units	LOR	Sample Number: SE204371.001 Sample Matrix: Soil Sample Date: 24 Mar 2020 Sample Name: E1_1	SE204371.002 Soil 24 Mar 2020 E2_1	SE204371.003 Soil 24 Mar 2020 E3_1	SE204371.004 Soil 24 Mar 2020 E3_2
TRH (Total Recoverable Hydrocarbons) in Soil Method: AN403 Tested: 27/3/2020						
TRH C10-C14	mg/kg	20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210
TRH F Bands						
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120
PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: AN420 Tested: 27/3/2020						
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8
Surrogates						
d5-nitrobenzene (Surrogate)	%	-	**82**	**76**	**78**	**72**
2-fluorobiphenyl (Surrogate)	%	-	**84**	**82**	**98**	**84**
d14-p-terphenyl (Surrogate)	%	-	**87**	**97**	**99**	**95**
pH in soil (1:5) Method: AN101 Tested: 30/3/2020						
pH	pH Units	0.1	**7.1**	**7.1**	**7.1**	**7.3**
Conductivity and TDS by Calculation - Soil Method: AN106 Tested: 30/3/2020						
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	**18**	**16**	**18**	**20**

Parameter	Units	LOR	Sample Number: SE204371.001 Sample Matrix: Soil Sample Date: 24 Mar 2020 Sample Name: E1_1	SE204371.002 Soil 24 Mar 2020 E2_1	SE204371.003 Soil 24 Mar 2020 E3_1	SE204371.004 Soil 24 Mar 2020 E3_2
Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES Method: AN040/AN320 Tested: 27/3/2020						
Arsenic, As	mg/kg	1	**1**	<1	<1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	**1.2**	**1.0**	**1.1**	**1.1**
Copper, Cu	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
Nickel, Ni	mg/kg	0.5	**0.6**	<0.5	**0.5**	<0.5
Lead, Pb	mg/kg	1	**2**	**2**	**2**	**2**
Zinc, Zn	mg/kg	0.5	**6.5**	**5.8**	**5.9**	**4.5**
Mercury in Soil Method: AN312 Tested: 27/3/2020						
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05
Moisture Content Method: AN002 Tested: 27/3/2020						
% Moisture	%w/w	1	**4.4**	**4.6**	**5.4**	**4.6**
Fibre Identification in soil Method: AN602 Tested: 30/3/2020						
FibreID						
Asbestos Detected	No unit	-	No	No	No	No
SemiQuant						
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01

Parameter	Units	LOR	Sample Number: SE204371.005 Sample Matrix: Soil Sample Date: 24 Mar 2020 Sample Name: E4_1	SE204371.006 Soil 24 Mar 2020 E5_1	SE204371.007 Soil 24 Mar 2020 E6_1	SE204371.008 Soil 24 Mar 2020 E7_1
VOC's in Soil Method: AN433 Tested: 27/3/2020						
Monocyclic Aromatic Hydrocarbons						
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Polycyclic VOCs						
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Surrogates						
d4-1,2-dichloroethane (Surrogate)	%	-	**95**	**109**	**98**	**129**
d8-toluene (Surrogate)	%	-	**98**	**111**	**101**	**112**
Bromofluorobenzene (Surrogate)	%	-	**82**	**97**	**86**	**97**
Totals						
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6
Volatile Petroleum Hydrocarbons in Soil Method: AN433 Tested: 27/3/2020						
TRH C6-C10	mg/kg	25	<25	<25	<25	<25
TRH C6-C9	mg/kg	20	<20	<20	<20	<20
Surrogates						
d4-1,2-dichloroethane (Surrogate)	%	-	**95**	**109**	**98**	**129**
d8-toluene (Surrogate)	%	-	**98**	**111**	**101**	**112**
Bromofluorobenzene (Surrogate)	%	-	**82**	**97**	**86**	**97**
VPH F Bands						
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25

Parameter	Units	LOR	Sample Number: SE204371.005 Sample Matrix: Soil Sample Date: 24 Mar 2020 Sample Name: E4_1	SE204371.006 Soil 24 Mar 2020 E5_1	SE204371.007 Soil 24 Mar 2020 E6_1	SE204371.008 Soil 24 Mar 2020 E7_1
TRH (Total Recoverable Hydrocarbons) in Soil Method: AN403 Tested: 27/3/2020						
TRH C10-C14	mg/kg	20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210
TRH F Bands						
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120
PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: AN420 Tested: 27/3/2020						
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.1**
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.1**
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8
Surrogates						
d5-nitrobenzene (Surrogate)	%	-	**74**	**68**	**72**	**78**
2-fluorobiphenyl (Surrogate)	%	-	**79**	**98**	**71**	**82**
d14-p-terphenyl (Surrogate)	%	-	**93**	**93**	**90**	**84**
pH in soil (1:5) Method: AN101 Tested: 30/3/2020						
pH	pH Units	0.1	**7.3**	**7.3**	**7.4**	**7.5**
Conductivity and TDS by Calculation - Soil Method: AN106 Tested: 30/3/2020						
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	**19**	**19**	**18**	**20**

Parameter	Units	LOR	Sample Number: SE204371.005 Sample Matrix: Soil Sample Date: 24 Mar 2020 Sample Name: E4_1	SE204371.006 Soil 24 Mar 2020 E5_1	SE204371.007 Soil 24 Mar 2020 E6_1	SE204371.008 Soil 24 Mar 2020 E7_1
Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES Method: AN040/AN320 Tested: 27/3/2020						
Arsenic, As	mg/kg	1	<1	<1	<1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	**1.3**	**1.1**	**1.0**	**1.1**
Copper, Cu	mg/kg	0.5	**2.2**	<0.5	<0.5	<0.5
Nickel, Ni	mg/kg	0.5	**0.9**	<0.5	<0.5	<0.5
Lead, Pb	mg/kg	1	**2**	**2**	**1**	**2**
Zinc, Zn	mg/kg	0.5	**5.0**	**10**	**3.8**	**5.0**
Mercury in Soil Method: AN312 Tested: 27/3/2020						
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05
Moisture Content Method: AN002 Tested: 27/3/2020						
% Moisture	%w/w	1	**4.5**	**6.2**	**4.5**	**4.5**
Fibre Identification in soil Method: AN602 Tested: 30/3/2020						
FibreID						
Asbestos Detected	No unit	-	No	No	No	No
SemiQuant						
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name SE204371.009 Soil 24 Mar 2020 E8_1	SE204371.010 Soil 24 Mar 2020 E8_2	SE204371.011 Soil 24 Mar 2020 E9_1	SE204371.012 Soil 24 Mar 2020 E10_1
VOC's in Soil Method: AN433 Tested: 27/3/2020						
Monocyclic Aromatic Hydrocarbons						
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Polycyclic VOCs						
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Surrogates						
d4-1,2-dichloroethane (Surrogate)	%	-	**108**	**106**	**105**	**110**
d8-toluene (Surrogate)	%	-	**111**	**109**	**107**	**113**
Bromofluorobenzene (Surrogate)	%	-	**95**	**94**	**91**	**95**
Totals						
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6
Volatile Petroleum Hydrocarbons in Soil Method: AN433 Tested: 27/3/2020						
TRH C6-C10	mg/kg	25	<25	<25	<25	<25
TRH C6-C9	mg/kg	20	<20	<20	<20	<20
Surrogates						
d4-1,2-dichloroethane (Surrogate)	%	-	**108**	**106**	**105**	**110**
d8-toluene (Surrogate)	%	-	**111**	**109**	**107**	**113**
Bromofluorobenzene (Surrogate)	%	-	**95**	**94**	**91**	**95**
VPH F Bands						
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25

Parameter	Units	LOR	Sample Number: SE204371.009 Sample Matrix: Soil Sample Date: 24 Mar 2020 Sample Name: E8_1	SE204371.010 Soil 24 Mar 2020 E8_2	SE204371.011 Soil 24 Mar 2020 E9_1	SE204371.012 Soil 24 Mar 2020 E10_1
TRH (Total Recoverable Hydrocarbons) in Soil Method: AN403 Tested: 27/3/2020						
TRH C10-C14	mg/kg	20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210
TRH F Bands						
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120
PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: AN420 Tested: 27/3/2020						
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8
Surrogates						
d5-nitrobenzene (Surrogate)	%	-	**74**	**76**	**74**	**68**
2-fluorobiphenyl (Surrogate)	%	-	**104**	**90**	**84**	**80**
d14-p-terphenyl (Surrogate)	%	-	**83**	**94**	**93**	**94**
pH in soil (1:5) Method: AN101 Tested: 30/3/2020						
pH	pH Units	0.1	**7.3**	**7.4**	**7.4**	**7.3**
Conductivity and TDS by Calculation - Soil Method: AN106 Tested: 30/3/2020						
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	**16**	**19**	**16**	**14**

Parameter	Units	LOR	Sample Number: SE204371.009 Sample Matrix: Soil Sample Date: 24 Mar 2020 Sample Name: E8_1	SE204371.010 Soil 24 Mar 2020 E8_2	SE204371.011 Soil 24 Mar 2020 E9_1	SE204371.012 Soil 24 Mar 2020 E10_1
Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES Method: AN040/AN320 Tested: 27/3/2020						
Arsenic, As	mg/kg	1	<1	<1	<1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	**0.9**	**1.1**	**1.1**	**1.1**
Copper, Cu	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
Nickel, Ni	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
Lead, Pb	mg/kg	1	**2**	**2**	**2**	**1**
Zinc, Zn	mg/kg	0.5	**3.5**	**6.2**	**5.0**	**4.5**
Mercury in Soil Method: AN312 Tested: 27/3/2020						
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05
Moisture Content Method: AN002 Tested: 27/3/2020						
% Moisture	%w/w	1	**4.4**	**4.2**	**4.4**	**4.8**
Fibre Identification in soil Method: AN602 Tested: 30/3/2020						
FibreID						
Asbestos Detected	No unit	-	No	No	No	No
SemiQuant						
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01

Parameter	Units	LOR	Sample Number: SE204371.013 Sample Matrix: Soil Sample Date: 24 Mar 2020 Sample Name: E11_1	SE204371.014 Soil 24 Mar 2020 E12_1	SE204371.015 Soil 24 Mar 2020 E13_1	SE204371.016 Soil 24 Mar 2020 E14_1
VOC's in Soil Method: AN433 Tested: 27/3/2020						
Monocyclic Aromatic Hydrocarbons						
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Polycyclic VOCs						
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Surrogates						
d4-1,2-dichloroethane (Surrogate)	%	-	**111**	**104**	**109**	**106**
d8-toluene (Surrogate)	%	-	**114**	**107**	**111**	**109**
Bromofluorobenzene (Surrogate)	%	-	**98**	**91**	**95**	**94**
Totals						
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6
Volatile Petroleum Hydrocarbons in Soil Method: AN433 Tested: 27/3/2020						
TRH C6-C10	mg/kg	25	<25	<25	<25	<25
TRH C6-C9	mg/kg	20	<20	<20	<20	<20
Surrogates						
d4-1,2-dichloroethane (Surrogate)	%	-	**111**	**104**	**109**	**106**
d8-toluene (Surrogate)	%	-	**114**	**107**	**111**	**109**
Bromofluorobenzene (Surrogate)	%	-	**98**	**91**	**95**	**94**
VPH F Bands						
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25

Parameter	Units	LOR	Sample Number: SE204371.013 Sample Matrix: Soil Sample Date: 24 Mar 2020 Sample Name: E11_1	SE204371.014 Soil 24 Mar 2020 E12_1	SE204371.015 Soil 24 Mar 2020 E13_1	SE204371.016 Soil 24 Mar 2020 E14_1
TRH (Total Recoverable Hydrocarbons) in Soil Method: AN403 Tested: 27/3/2020						
TRH C10-C14	mg/kg	20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210
TRH F Bands						
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120
PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: AN420 Tested: 27/3/2020						
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8
Surrogates						
d5-nitrobenzene (Surrogate)	%	-	**66**	**72**	**64**	**64**
2-fluorobiphenyl (Surrogate)	%	-	**83**	**73**	**84**	**82**
d14-p-terphenyl (Surrogate)	%	-	**85**	**83**	**87**	**94**
pH in soil (1:5) Method: AN101 Tested: 30/3/2020						
pH	pH Units	0.1	**7.4**	**7.3**	**7.1**	**7.2**
Conductivity and TDS by Calculation - Soil Method: AN106 Tested: 30/3/2020						
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	**20**	**18**	**18**	**20**

Parameter	Units	LOR	Sample Number: SE204371.013 Sample Matrix: Soil Sample Date: 24 Mar 2020 Sample Name: E11_1	SE204371.014 Soil 24 Mar 2020 E12_1	SE204371.015 Soil 24 Mar 2020 E13_1	SE204371.016 Soil 24 Mar 2020 E14_1
Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES Method: AN040/AN320 Tested: 27/3/2020						
Arsenic, As	mg/kg	1	<1	<1	<1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	**1.3**	**1.2**	**1.1**	**1.2**
Copper, Cu	mg/kg	0.5	<0.5	**2.8**	<0.5	<0.5
Nickel, Ni	mg/kg	0.5	**0.5**	**0.5**	<0.5	**0.5**
Lead, Pb	mg/kg	1	**2**	**2**	**3**	**2**
Zinc, Zn	mg/kg	0.5	**4.2**	**5.3**	**4.2**	**5.0**
Mercury in Soil Method: AN312 Tested: 27/3/2020						
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05
Moisture Content Method: AN002 Tested: 27/3/2020						
% Moisture	%w/w	1	**4.5**	**4.3**	**4.8**	**4.6**
Fibre Identification in soil Method: AN602 Tested: 30/3/2020						
FibreID						
Asbestos Detected	No unit	-	No	No	No	No
SemiQuant						
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01

Parameter	Units	LOR	Sample Number: SE204371.017 Sample Matrix: Soil Sample Date: 24 Mar 2020 Sample Name: E15_1
VOC's in Soil Method: AN433 Tested: 27/3/2020			
Monocyclic Aromatic Hydrocarbons			
Benzene	mg/kg	0.1	<0.1
Toluene	mg/kg	0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2
o-xylene	mg/kg	0.1	<0.1
Polycyclic VOCs			
Naphthalene	mg/kg	0.1	<0.1
Surrogates			
d4-1,2-dichloroethane (Surrogate)	%	-	**107**
d8-toluene (Surrogate)	%	-	**108**
Bromofluorobenzene (Surrogate)	%	-	**92**
Totals			
Total Xylenes	mg/kg	0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6
Volatile Petroleum Hydrocarbons in Soil Method: AN433 Tested: 27/3/2020			
TRH C6-C10	mg/kg	25	<25
TRH C6-C9	mg/kg	20	<20
Surrogates			
d4-1,2-dichloroethane (Surrogate)	%	-	**107**
d8-toluene (Surrogate)	%	-	**108**
Bromofluorobenzene (Surrogate)	%	-	**92**

Parameter	Units	LOR	Sample Number SE204371.017 Sample Matrix Soil Sample Date 24 Mar 2020 Sample Name E15_1
Volatile Petroleum Hydrocarbons in Soil Method: AN433 Tested: 27/3/2020 (continued)			
VPH F Bands			
Benzene (F0)	mg/kg	0.1	<0.1
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25
TRH (Total Recoverable Hydrocarbons) in Soil Method: AN403 Tested: 27/3/2020			
TRH C10-C14	mg/kg	20	<20
TRH C15-C28	mg/kg	45	<45
TRH C29-C36	mg/kg	45	<45
TRH C37-C40	mg/kg	100	<100
TRH C10-C36 Total	mg/kg	110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210
TRH F Bands			
TRH >C10-C16	mg/kg	25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120
PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: AN420 Tested: 27/3/2020			
Naphthalene	mg/kg	0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1
Fluorene	mg/kg	0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1
Anthracene	mg/kg	0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1
Pyrene	mg/kg	0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1
Chrysene	mg/kg	0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8

Parameter	Units	LOR	Sample Number: SE204371.017 Sample Matrix: Soil Sample Date: 24 Mar 2020 Sample Name: E15_1
PAH (Polynuclear Aromatic Hydrocarbons) in Soil Method: AN420 Tested: 27/3/2020 (continued)			
Surrogates			
d5-nitrobenzene (Surrogate)	%	-	**78**
2-fluorobiphenyl (Surrogate)	%	-	**81**
d14-p-terphenyl (Surrogate)	%	-	**78**
pH in soil (1:5) Method: AN101 Tested: 30/3/2020			
pH	pH Units	0.1	**7.2**
Conductivity and TDS by Calculation - Soil Method: AN106 Tested: 30/3/2020			
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	**18**
Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES Method: AN040/AN320 Tested: 27/3/2020			
Arsenic, As	mg/kg	1	**1**
Cadmium, Cd	mg/kg	0.3	<0.3
Chromium, Cr	mg/kg	0.5	**1.2**
Copper, Cu	mg/kg	0.5	<0.5
Nickel, Ni	mg/kg	0.5	<0.5
Lead, Pb	mg/kg	1	**2**
Zinc, Zn	mg/kg	0.5	**5.2**
Mercury in Soil Method: AN312 Tested: 27/3/2020			
Mercury	mg/kg	0.05	<0.05

Parameter	Units	LOR	Sample Number: SE204371.017 Sample Matrix: Soil Sample Date: 24 Mar 2020 Sample Name: E15_1
Moisture Content Method: AN002 Tested: 27/3/2020			
% Moisture	%w/w	1	**4.3**
Fibre Identification in soil Method: AN602 Tested: 30/3/2020			
FibreID			
Asbestos Detected	No unit	-	No
SemiQuant			
Estimated Fibres*	%w/w	0.01	<0.01

QC SUMMARY

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Conductivity and TDS by Calculation - Soil **Method: ME-(AU)-[ENV]AN106**

Parameter	QC Reference	Units	LOR	DUP %RPD	LCS %Recovery
Conductivity of Extract (1:5 dry sample basis)	LB196245	µS/cm	1	4 - 18%	98%

Mercury in Soil **Method: ME-(AU)-[ENV]AN312**

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Mercury	LB196044	mg/kg	0.05	<0.05	0%	94%	93%

Moisture Content **Method: ME-(AU)-[ENV]AN002**

Parameter	QC Reference	Units	LOR	DUP %RPD
% Moisture	LB196014	%w/w	1	0 - 6%

PAH (Polynuclear Aromatic Hydrocarbons) in Soil **Method: ME-(AU)-[ENV]AN420**

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Naphthalene	LB196013	mg/kg	0.1	<0.1	0%	103%	102%
2-methylnaphthalene	LB196013	mg/kg	0.1	<0.1	0%	NA	NA
1-methylnaphthalene	LB196013	mg/kg	0.1	<0.1	0%	NA	NA
Acenaphthylene	LB196013	mg/kg	0.1	<0.1	0%	106%	101%
Acenaphthene	LB196013	mg/kg	0.1	<0.1	0%	109%	108%
Fluorene	LB196013	mg/kg	0.1	<0.1	0%	NA	NA
Phenanthrene	LB196013	mg/kg	0.1	<0.1	0%	106%	99%
Anthracene	LB196013	mg/kg	0.1	<0.1	0%	109%	103%
Fluoranthene	LB196013	mg/kg	0.1	<0.1	0%	100%	89%
Pyrene	LB196013	mg/kg	0.1	<0.1	0%	105%	96%
Benzo(a)anthracene	LB196013	mg/kg	0.1	<0.1	0%	NA	NA
Chrysene	LB196013	mg/kg	0.1	<0.1	0%	NA	NA
Benzo(b&j)fluoranthene	LB196013	mg/kg	0.1	<0.1	0%	NA	NA
Benzo(k)fluoranthene	LB196013	mg/kg	0.1	<0.1	0%	NA	NA
Benzo(a)pyrene	LB196013	mg/kg	0.1	<0.1	0%	102%	95%
Indeno(1,2,3-cd)pyrene	LB196013	mg/kg	0.1	<0.1	0%	NA	NA
Dibenzo(ah)anthracene	LB196013	mg/kg	0.1	<0.1	0%	NA	NA
Benzo(ghi)perylene	LB196013	mg/kg	0.1	<0.1	0%	NA	NA
Carcinogenic PAHs, BaP TEQ <LOR=0	LB196013	TEQ (mg/kg)	0.2	<0.2	0%	NA	NA
Carcinogenic PAHs, BaP TEQ <LOR=LOR	LB196013	TEQ (mg/kg)	0.3	<0.3	0%	NA	NA
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	LB196013	TEQ (mg/kg)	0.2	<0.2	0%	NA	NA
Total PAH (18)	LB196013	mg/kg	0.8	<0.8	0%	NA	NA
Total PAH (NEPM/WHO 16)	LB196013	mg/kg	0.8	<0.8			

Surrogates

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
d5-nitrobenzene (Surrogate)	LB196013	%	-	84%	5 - 14%	80%	78%
2-fluorobiphenyl (Surrogate)	LB196013	%	-	82%	9%	88%	99%
d14-p-terphenyl (Surrogate)	LB196013	%	-	88%	3 - 23%	81%	77%

QC SUMMARY

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

pH in soil (1:5) **Method: ME-(AU)-[ENV]AN101**

Parameter	QC Reference	Units	LOR	DUP %RPD	LCS %Recovery
pH	LB196245	pH Units	0.1	0%	100%

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES **Method: ME-(AU)-[ENV]AN040/AN320**

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Arsenic, As	LB196039	mg/kg	1	<1	0 - 1%	105%	94%
Cadmium, Cd	LB196039	mg/kg	0.3	<0.3	0%	94%	87%
Chromium, Cr	LB196039	mg/kg	0.5	<0.5	5 - 7%	99%	95%
Copper, Cu	LB196039	mg/kg	0.5	<0.5	0%	105%	94%
Nickel, Ni	LB196039	mg/kg	0.5	<0.5	0%	103%	96%
Lead, Pb	LB196039	mg/kg	1	<1	0 - 15%	107%	95%
Zinc, Zn	LB196039	mg/kg	0.5	<0.5	23 - 28%	103%	91%

TRH (Total Recoverable Hydrocarbons) in Soil **Method: ME-(AU)-[ENV]AN403**

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
TRH C10-C14	LB196013	mg/kg	20	<20	0%	88%	85%
TRH C15-C28	LB196013	mg/kg	45	<45	0%	78%	88%
TRH C29-C36	LB196013	mg/kg	45	<45	0%	75%	100%
TRH C37-C40	LB196013	mg/kg	100	<100	0%	NA	NA
TRH C10-C36 Total	LB196013	mg/kg	110	<110	0%	NA	NA
TRH >C10-C40 Total (F bands)	LB196013	mg/kg	210	<210	0%	NA	NA

TRH F Bands

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
TRH >C10-C16	LB196013	mg/kg	25	<25	0%	83%	80%
TRH >C10-C16 - Naphthalene (F2)	LB196013	mg/kg	25	<25	0%	NA	NA
TRH >C16-C34 (F3)	LB196013	mg/kg	90	<90	0%	78%	98%
TRH >C34-C40 (F4)	LB196013	mg/kg	120	<120	0%	75%	NA

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

VOC's in Soil Method: ME-(AU)-[ENV]AN433

Monocyclic Aromatic Hydrocarbons

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Benzene	LB196012	mg/kg	0.1	<0.1	0%	107%	92%
Toluene	LB196012	mg/kg	0.1	<0.1	0%	103%	90%
Ethylbenzene	LB196012	mg/kg	0.1	<0.1	0%	104%	90%
m/p-xylene	LB196012	mg/kg	0.2	<0.2	0%	104%	91%
o-xylene	LB196012	mg/kg	0.1	<0.1	0%	103%	91%

Polycyclic VOCs

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Naphthalene	LB196012	mg/kg	0.1	<0.1	0%	NA	NA

Surrogates

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
d4-1,2-dichloroethane (Surrogate)	LB196012	%	-	110%	2 - 18%	118%	103%
d8-toluene (Surrogate)	LB196012	%	-	114%	2 - 3%	124%	108%
Bromofluorobenzene (Surrogate)	LB196012	%	-	97%	0 - 4%	111%	95%

Totals

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Total Xylenes	LB196012	mg/kg	0.3	<0.3	0%	NA	NA
Total BTEX	LB196012	mg/kg	0.6	<0.6	0%	NA	NA

Volatile Petroleum Hydrocarbons in Soil Method: ME-(AU)-[ENV]AN433

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
TRH C6-C10	LB196012	mg/kg	25	<25	0%	97%	79%
TRH C6-C9	LB196012	mg/kg	20	<20	0%	98%	81%

Surrogates

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
d4-1,2-dichloroethane (Surrogate)	LB196012	%	-	110%	2 - 18%	118%	103%
d8-toluene (Surrogate)	LB196012	%	-	114%	2 - 3%	124%	108%
Bromofluorobenzene (Surrogate)	LB196012	%	-	97%	0 - 4%	111%	95%

VPH F Bands

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Benzene (F0)	LB196012	mg/kg	0.1	<0.1	0%	NA	NA
TRH C6-C10 minus BTEX (F1)	LB196012	mg/kg	25	<25	0%	93%	72%

METHOD SUMMARY

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN101	pH in Soil Sludge Sediment and Water: pH is measured electrometrically using a combination electrode and is calibrated against 3 buffers purchased commercially. For soils, sediments and sludges, an extract with water (or 0.01M CaCl2) is made at a ratio of 1:5 and the pH determined and reported on the extract. Reference APHA 4500-H+.
AN106	Conductivity and TDS by Calculation: Conductivity is measured by meter with temperature compensation and is calibrated against a standard solution of potassium chloride. Conductivity is generally reported as µmhos/cm or µS/cm @ 25°C. For soils, an extract with water is made at a ratio of 1:5 and the EC determined and reported on the extract, or calculated back to the as-received sample. Salinity can be estimated from conductivity using a conversion factor, which for natural waters, is in the range 0.55 to 0.75. Reference APHA 2510 B.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid, mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents .
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	Carcinogenic PAHs may be expressed as Benzo(a)pyrene equivalents by applying the BaP toxicity equivalence factor (NEPM 1999, June 2013, B7). These can be reported as the individual PAHs and as a sum of carcinogenic PAHs. The sum is reported three ways, the first assuming all <LOR results are zero, the second assuming all < LOR results are half the LOR and the third assuming all <LOR results are the LOR.

METHOD SUMMARY

METHOD	METHODOLOGY SUMMARY
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples , Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable ’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.

FOOTNOTES

IS	Insufficient sample for analysis.	LOR	Limit of Reporting
LNR	Sample listed, but not received.	↑↓	Raised or Lowered Limit of Reporting
*	NATA accreditation does not cover the performance of this service.	QFH	QC result is above the upper tolerance
		QFL	QC result is below the lower tolerance
**	Indicative data, theoretical holding time exceeded.	-	The sample was not analysed for this analyte
		NVL	Not Validated

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calcuated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	Peter Chen
Client	ATLAS GEOTECHNICAL SERVICES PTY LTD
Address	12 CHARTER STREET SADLEIR NSW 2168
Telephone	(Not specified)
Facsimile	(Not specified)
Email	peter@atlasgeoservice.com.au
Project	**E10132-2**
Order Number	**E10132-2**
Samples	17

LABORATORY DETAILS

Manager	Huong Crawford
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE204371 R0**
Date Received	25 Mar 2020
Date Reported	31 Mar 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.

Asbestos analysed by Approved Identifier Ravee Sivasubramaniam.

SIGNATORIES

Dong LIANG
Metals/Inorganics Team Leader

Kamrul AHSAN
Senior Chemist

Ly Kim HA
Organic Section Head

Ravee SIVASUBRAMANIAM
Hygiene Team Leader

Shane MCDERMOTT
Inorganic/Metals Chemist

RESULTS

Fibre Identification in soil — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE204371.001	E1_1	Soil	172g Clay,Plant Matter	24 Mar 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE204371.002	E2_1	Soil	150g Clay,Plant Matter	24 Mar 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE204371.003	E3_1	Soil	137g Clay,Plant Matter	24 Mar 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE204371.004	E3_2	Soil	163g Sand,Plant Matter	24 Mar 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE204371.005	E4_1	Soil	149g Sand,Plant Matter	24 Mar 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE204371.006	E5_1	Soil	157g Sand,Plant Matter	24 Mar 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE204371.007	E6_1	Soil	185g Sand,Plant Matter	24 Mar 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE204371.008	E7_1	Soil	165g Sand,Plant Matter	24 Mar 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE204371.009	E8_1	Soil	141g Sand,Plant Matter	24 Mar 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE204371.010	E8_2	Soil	152g Sand,Plant Matter	24 Mar 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE204371.011	E9_1	Soil	179g Sand,Plant Matter	24 Mar 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE204371.012	E10_1	Soil	169g Sand,Plant Matter	24 Mar 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE204371.013	E11_1	Soil	153g Sand,Plant Matter	24 Mar 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE204371.014	E12_1	Soil	137g Sand,Plant Matter	24 Mar 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE204371.015	E13_1	Soil	156g Sand,Plant Matter	24 Mar 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE204371.016	E14_1	Soil	169g Sand,Plant Matter	24 Mar 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE204371.017	E15_1	Soil	155g Sand,Plant Matter	24 Mar 2020	No Asbestos Found Organic Fibres Detected	<0.01

METHOD SUMMARY

SE204371 R0

METHOD	METHODOLOGY SUMMARY
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples , Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable ’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.

FOOTNOTES

Amosite	-	Brown Asbestos	NA	-	Not Analysed
Chrysotile	-	White Asbestos	LNR	-	Listed, Not Required
Crocidolite	-	Blue Asbestos	*	-	NATA accreditation does not cover the performance of this service .
Amphiboles	-	Amosite and/or Crocidolite	**	-	Indicative data, theoretical holding time exceeded.

(In reference to soil samples only) This report does not comply with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment and Remediation and Management of Asbestos Contaminated sites in Western Australia - May 2009.

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.

Where reported: 'Asbestos Detected': Asbestos detected by polarised light microscopy, including dispersion staining.
Where reported: 'No Asbestos Found': No Asbestos Found by polarised light microscopy , including dispersion staining.
Where reported: 'UMF Detected': Mineral fibres of unknown type detected by polarised light microscopy, including dispersion staining. Confirmation by another independent analytical technique may be necessary.

Even after disintegration it can be very difficult, or impossible, to detect the presence of asbestos in some asbestos -containing bulk materials using polarised light microscopy. This is due to the low grade or small length or diameter of asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety .

Geo-Logic Solutions
Geotechnical & Environmental Testing

Unit 3 /112 Fairfield Street, Fairfield East NSW 2165
www.geo-logic.com.au
ABN: 57 621 548 294
PH: 0402 597 452
Email: samer@geo-logic.com.au

FOREIGN MATERIALS CONTENT TEST REPORT

METHOD RMS: T276

Client:	**Atlas Geotechnical Services P/L**
Project :	**Materials Testing**
Location:	**28 Lockwood Ave, Belrose NSW**
Project No.	**L373**
Date Reported:	**27/03/2020**
Report No.	**L373-R1**
TEST METHOD	**RMS T276** Test Date: 27/03/2020

Sample Number	E1-1	E2-1	E3-1	E3-2	E4-1
Date Sampled	24/03/2020	24/03/2020	24/03/2020	24/03/2020	24/03/2020
Sample Location / Source	Sampled by Client	Sampled by Client	Sampled by Client	Sampled by Client	Sampled by Client
Material Description	Gravelly Silty Sand - Grey/ brown- Some clay	Gravelly Silty Sand - Grey	Gravelly Silty Sand - Grey	Gravelly Sand - Grey/ brown	Gravelly Silty Sand - Grey/ brown
Foreign Material Type	**Percentage Retained (%)**				
TYPE 1 Metal, Glass, Asphalt,Stone, Ceramics and Slag (other than blast furnace slag)	8.4	0.2	0.9	0.2	0.5
TYPE 2 Plaster, Clay lumps and other Friable Material	14.8	0.0	0.0	0.0	0.0
TYPE 3 Rubber, Plastic, Bitumen, Paper, Cloth, Paint, Wood and other Vegetable Matter	0.0	0.0	0.0	0.0	0.0

NOTES:

Type 1 only

Only Stone, no other foreign material

Type 2 only

Only Clay Lumps, no other foreign material

NATA
WORLD RECOGNISED ACCREDITATION

Accredited for compliance with ISO/IEC 17025- Testing

Accreditation No: 20097

Approved Signatory:
Samer Ghanem
Date:
27/03/2020
Sign:

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Geotechnical & Environmental Testing

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FOREIGN MATERIALS CONTENT TEST REPORT

METHOD RMS: T276

Client:	**Atlas Geotechnical Services P/L**
Project :	**Materials Testing**
Location:	**28 Lockwood Ave, Belrose NSW**
Project No.	**L373**
Date Reported:	**27/03/2020**
Report No.	**L373-R1**
TEST METHOD	**RMS T276** Test Date: 27/03/2020

Sample Number	E5-1	E6-1	E7-1	E8-1	E8-2
Date Sampled	24/03/2020	24/03/2020	24/03/2020	24/03/2020	24/03/2020
Sample Location / Source	Sampled by Client	Sampled by Client	Sampled by Client	Sampled by Client	Sampled by Client
Material Description	Gravelly Silty Sand - Grey/ Brown	Gravelly Silty Sand - Grey	Gravelly Clayey Sand - Grey/ brown- Some Clay	Gravelly Silty Sand - Grey	Gravelly Silty Sand - Grey/ brown
Foreign Material Type	**Percentage Retained (%)**				
TYPE 1 Metal, Glass, Asphalt,Stone, Ceramics and Slag (other than blast furnace slag)	0.5	5.9	24.6	3.8	8.1
TYPE 2 Plaster, Clay lumps and other Friable Material	0.0	0.0	14.5	0.0	0.0
TYPE 3 Rubber, Plastic, Bitumen, Paper, Cloth, Paint, Wood and other Vegetable Matter	0.0	0.0	0.0	0.0	0.0

NOTES:

Type 1 only

Only Stone, no other foreign material

Type 2 only

Only Clay Lumps, no other foreign material

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FOREIGN MATERIALS CONTENT TEST REPORT

METHOD RMS: T276

Client:	**Atlas Geotechnical Services P/L**
Project :	**Materials Testing**
Location:	**28 Lockwood Ave, Belrose NSW**
Project No.	**L373**
Date Reported:	**27/03/2020**
Report No.	**L373-R1**
TEST METHOD	**RMS T276** Test Date: 27/03/2020

Sample Number	E9-1	E10-1	E11-1	E12-1	E13-1
Date Sampled	24/03/2020	24/03/2020	24/03/2020	24/03/2020	24/03/2020
Sample Location / Source	Sampled by Client	Sampled by Client	Sampled by Client	Sampled by Client	Sampled by Client
Material Description	Gravelly Silty Sand - Grey	Gravelly Silty Sand - Grey/ brown- Some Clay	Gravelly Silty Sand - Grey	Gravelly Silty Sand - Grey/ brown- Some clay	Gravelly Silty Sand - Grey
Foreign Material Type	**Percentage Retained (%)**				
TYPE 1 Metal, Glass, Asphalt,Stone, Ceramics and Slag (other than blast furnace slag)	8.2	8.5	22.9	18.3	24.1
TYPE 2 Plaster, Clay lumps and other Friable Material	0.0	4.9	0.0	8.8	0.0
TYPE 3 Rubber, Plastic, Bitumen, Paper, Cloth, Paint, Wood and other Vegetable Matter	0.0	0.0	0.0	0.0	0.0

NOTES:

Type 1 only

Only Stone, no other foreign material

Type 2 only

Only Clay Lumps, no other foreign material

NATA
WORLD RECOGNISED ACCREDITATION

Accredited for compliance with ISO/IEC 17025- Testing

Accreditation No: 20097

Approved Signatory:
Samer Ghanem
Date:
27/03/2020
Sign:

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FOREIGN MATERIALS CONTENT TEST REPORT

METHOD RMS: T276

Client:	**Atlas Geotechnical Services P/L**
Project :	**Materials Testing**
Location:	**28 Lockwood Ave, Belrose NSW**
Project No.	**L373**
Date Reported:	**27/03/2020**
Report No.	**L373-R1**
TEST METHOD	**RMS T276** Test Date: 27/03/2020

Sample Number	E14-1	E15-1			
Date Sampled	24/03/2020	24/03/2020			
Sample Location / Source	Sampled by Client	Sampled by Client			
Material Description	Gravelly Silty Sand - Grey	Gravelly clayey Sand - Grey/ brown- Some Clay			
Foreign Material Type	**Percentage Retained (%)**				
TYPE 1 Metal, Glass, Asphalt,Stone, Ceramics and Slag (other than blast furnace slag)	8.1	24.9			
TYPE 2 Plaster, Clay lumps and other Friable Material	0.0	5.2			
TYPE 3 Rubber, Plastic, Bitumen, Paper, Cloth, Paint, Wood and other Vegetable Matter	0.0	0.0			

NOTES:

Type 1 only

Only Stone, no other foreign material

Type 2 only

Only Clay Lumps, no other foreign material

NATA
WORLD RECOGNISED ACCREDITATION

Accredited for compliance with ISO/IEC 17025- Testing

Accreditation No: 20097

Approved Signatory:
Samer Ghanem
Date:
27/03/2020
Sign:

ATTACHMENT 4

SOIL PROFILE REPORTS

NSW SOIL AND LAND INFORMATION SYSTEM

Soil Essentials Report

SITE DETAILS

Site Location:	BELROSE CEMETRY F.F.
Map Reference:	MGA Grid Reference: Zone 56, 333704E, 6265390N. 9130 SYDNEY (1:100000) map sheet.
Profile Details:	Soil Landscapes of the Sydney 1:100 000 Sheet Survey (1000236), Profile 825, collected by Mr Greg Chapman on 18 April, 1986
Physiography:	dry sclerophyll forest on sandstone-quartz lithology and used for timber/scrub/unused. Slope 3% (measured), aspect south. Surface condition is soft, profile drainage is well drained, and no salting evident
Soil Type:	Yellow Earth (GSG), Gn2.21 (PPF)
Base of observation:	
Profile Field Notes:	Hakea Drive, down hill 20m from sub-station. Roadside erosion. Faunal castesUnderstorey disturbed. Additional veg: tall stringybarks to 20m

SOIL DESCRIPTION

Layer 0

Layer 1

0.00 - 0.10 m A Horizon	colour not recorded coarse sandy loam with massive structure (earthy), field pH is 3.5. Coarse fragments are not evident, pans are not evident, segregations are very few (< 2%), medium (2-6 mm), coarse (6-20 mm), organic; smooth gradual (50-100 mm) boundary to ...

Layer 2

0.10 - 0.50 m B1 Horizon	colour not recorded coarse clayey sand with massive structure (earthy), field pH is 3.5. Coarse fragments are not evident, pans are not evident, segregations are very few (< 2%), medium (2-6 mm), coarse (6-20 mm), organic; smooth diffuse (>100 mm) boundary to ...

Layer 3

0.50 - 1.00 m B2 Horizon	colour not recorded fine sandy clay loam with massive structure (earthy), field pH is 3.5. Coarse fragments are not evident, pans are not evident, segregations are very few (< 2%), medium (2-6 mm), coarse (6-20 mm), organic; clear (20-50 mm) boundary to ...

Layer 4

1.00 - 1.10 m C Horizon	light grey (greyish yellow) (2.5Y 7/2) [moist] sandy clay loam with massive structure (earthy). Coarse fragments are not evident, pans are not evident, segregations are very few (< 2%), medium (2-6 mm), coarse (6-20 mm), organic. Layer notes are: *** Layer depth given as "adj". Lower depth printed here is nominal. ***Lower depth recorded was same as upper depth for this layer, layer depth given is nominal***

Layer 99

LABORATORY TESTS

None available

For information on laboratory test data and units of measure, please see: Soil survey standard test methods

Report generated on 01/04/2020 at 10:22 AM

To contact us, email: soils@environment.nsw.gov.au

NSW SOIL AND LAND INFORMATION SYSTEM

Soil Profile Report

SITE DETAILS

Site Location:	BELROSE CEMETRY F.F.
Profile Details:	Soil Landscapes of the Sydney 1:100 000 Sheet Survey (1000236), Profile 825, collected from a batter by Mr Greg Chapman on 18 April, 1986
Map Reference:	MGA Grid Reference: Zone 56, 333704E, 6265390N. 9130 SYDNEY (1:100000) map sheet.
Physiography:	dry sclerophyll forest on sandstone-quartz lithology and used for timber/scrub/unused. Slope 3.0% (measured), aspect south. Surface condition is soft, profile is well drained, and no salting evident
Vegetation/Land Use:	limited clearing at the site, used for timber/scrub/unused, with urban in the general area
Surface Condition:	soft when described, ground cover is 100%
Erosion/Land Degradation:	wind erosion at site is none; sheet erosion at site is minor, active; gully erosion at site is minor gully <1.5 m depth; scald erosion at site is active; no salting evident
Soil Hydrology:	profile is well drained, free water at 1.00 m , run on is low and runoff is low
Soil Type:	Yellow Earth (GSG), Gn2.21 (PPF)
Base of observation:	
Profile Field Notes:	Hakea Drive, down hill 20m from sub-station. Roadside erosion. Faunal castesUnderstorey disturbed. Additional veg: tall stringybarks to 20m

SOIL DESCRIPTION

Layer 0

0.00 - 0.00 m

Layer 1	Horizon: A	
0.00 - 0.10 m	Texture:	coarse sandy loam
	Colour:	colour not recorded with no recorded mottles
	Structure:	massive (fabric is earthy), ped coatings are none
	Coarse Fragments:	not evident,
	Pans:	not evident
	Segregations:	very few (< 2%), organic, medium (2-6 mm), coarse (6-20 mm),
	Soil fauna:	Activity is nil
	Cracks/Macropores:	Cracks are nil, macropores are nil

	Moisture/Consistence:	slightly sticky, texture modifier test result was no change, disruptive test result was very weak force, shearing test result was crumbly,
	Field chemical tests:	Field pH is 3.5 (Raupach),
	Lower Boundary:	smooth gradual (50-100 mm) boundary to ...
Layer 2	Horizon: B1	
0.10 - 0.50 m	Texture:	coarse clayey sand
	Colour:	colour not recorded with 10% - 20% prominent unspecified grey mottles
	Structure:	massive (fabric is earthy), ped coatings are none
	Coarse Fragments:	not evident,
	Pans:	not evident
	Segregations:	very few (< 2%), organic, medium (2-6 mm), coarse (6-20 mm),
	Soil fauna:	Activity is nil
	Cracks/Macropores:	Cracks are nil, macropores are nil
	Moisture/Consistence:	slightly sticky, texture modifier test result was no change, disruptive test result was moderately weak force, shearing test result was crumbly,
	Field chemical tests:	Field pH is 3.5 (Raupach),
	Lower Boundary:	smooth diffuse (>100 mm) boundary to ...
Layer 3	Horizon: B2	
0.50 - 1.00 m	Texture:	fine sandy clay loam
	Colour:	colour not recorded with 10% - 20% unspecified gley mottles
	Structure:	massive (fabric is earthy), ped coatings are none
	Coarse Fragments:	not evident,
	Pans:	not evident
	Segregations:	very few (< 2%), organic, medium (2-6 mm), coarse (6-20 mm),
	Soil fauna:	Activity is nil
	Cracks/Macropores:	Cracks are nil, macropores are nil
	Moisture/Consistence:	slightly sticky, texture modifier test result was no change, disruptive test result was moderately weak force, shearing test result was crumbly,
	Field chemical tests:	Field pH is 3.5 (Raupach),
Layer 4	Horizon: C	
1.00 - 1.10 m	Texture:	sandy clay loam
	Colour:	light grey (greyish yellow) (2.5Y 7/2) [moist] with 10% - 20% unspecified gley mottles
	Structure:	massive (fabric is earthy), ped coatings are none
	Coarse Fragments:	not evident,
	Pans:	not evident
	Segregations:	very few (< 2%), organic, medium (2-6 mm), coarse (6-20 mm),
	Soil fauna:	Activity is nil
	Cracks/Macropores:	Cracks are nil, macropores are nil
	Moisture/Consistence:	disruptive test result was moderately weak force, shearing test result was crumbly,

Layer Notes:	*** Layer depth given as "adj". Lower depth printed here is nominal. ***Lower depth recorded was same as upper depth for this layer, layer depth given is nominal***

LABORATORY TESTS

None available

For information on laboratory test data and units of measure, please see: Soil survey standard test methods

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NSW SOIL AND LAND INFORMATION SYSTEM

Soil Technical Report

SITE DETAILS:

Survey:	Soil Landscapes of the Sydney 1:100 000 Sheet (1000236)
Profile:	825
Location:	BELROSE CEMETRY F.F.

PROFILE MAP DETAILS:

1:100,000 Mapsheet:	SYDNEY (9130)	Locational Accuracy:	1:100 000
MGA Easting:	333704	MGA Northing:	6265390
MGA Zone:	56		

PROFILE DETAILS:

Described by:	Mr Greg Chapman	Profile Date:	18 April, 1986
Nature of Exposure:	batter	Photo Taken:	
Base of observation:		No of Layers:	6

SOIL AND MAP CODES:

Geology Map Code:		Soil Map Code:	hv
Aust. Soil Classification:			
Great Soil Group:	Yellow Earth	Northcote PPF:	Gn2.21
Soil Taxonomy:		Atlas(Northcote) Code:	
Atlas (A&M) Code:			

TOPOGRAPHY:

Slope:	3% (measured)		
Elevation:		Aspect:	south

LANDFORM:

Site Morphology:	upper slope	Site Process:	
Slope Morphology:		Local Relief:	
Landform Pattern:		Landform Element:	
Plan Curvature:		Position in Landform Element:	
Microrelief:		Microrelief depth:	

Microrelief extent:

LITHOLOGY:

Solum PM:	sandstone-quartz	Substrate:	sandstone-quartz
Rock Outcrop:	> 50%	Rock Outcrop (BSAL):	
Outcrop Same As:		Substrate Strength:	strong
Weathering & Alteration:			
Discontinuities:			
Fragment Amount:			

VEGETATION:

Vegetation Formation:	dry sclerophyll forest
Vegetation Community:	
Growth Form(s):	
Crown Separation Ratio:	
Upper Stratum Height:	

SITE CONDITION:

Ground Cover %:	100.00	Site Disturbance:	limited clearing
Current Condition:	soft	Expected Dry Condition:	
Expected Wet Condition:		Estimated Effective Rooting Depth:	

LAND USE:

Site:	timber/scrub/unused	General Area:	urban
Land Use Vegetation Species:		Prior Land Use:	

HYDROLOGY:

Presence of Free Water:		Free Water Depth:	1.00
Run-on:	low	Runoff:	low
Permeability:		Profile Drainage:	well drained
Free Water pH:		Free Water EC:	

EROSION:

Wind Erosion:	none
Sheet Erosion:	minor, active

Gully Erosion: minor, <1.5 m depth.

Wind exposure:

Erosion Hazard:

SALINITY:

Salinity: no salting evident

Salt Outbreak Mapping:

Salt Outbreak Vegetation Species:

EM Measurement 1 Type:

EM Measurement 1 horizontal:

EM Measurement 1 vertical:

EM Measurement 2 Type:

EM Measurement 2 horizontal:

EM Measurement 2 vertical:

FIELD NOTES: Hakea Drive, down hill 20m from sub-station. Roadside erosion. Faunal castesUnderstorey disturbed. Additional veg: tall stringybarks to 20m

---

LAYER 0

Depth: 0.00 - 0.00 m

Layer Notes:

Vesicles:

Ped porosity:

LAYER 1 A horizon

Depth: 0.00 - 0.10 m

Layer Notes:

TEXTURE: coarse sandy loam

FIELD CHEMICAL TESTS:

pH: 3.5 (Raupach)

Field EC:

HCl:

H2O2:

AgNO3:

STRUCTURE:

Grade of Pedality: massive

Fabric: earthy

Dominant Peds:

Subdominant Peds:

Artificial Aggregates:

SOILpak score:

Vesicles:

Ped porosity: porous

COARSE FRAGMENTS:

Type: not evident

Amount:

Distribution:

Orientation:

Weathering:		Shape:	
Size:			

PANS:

Type:	not evident	Cementation:	
Continuity:		Structure:	

SEGREGATIONS:

Type:	organic	Amount:	very few (< 2%)
Strength:		Form:	
Size:	medium (2-6 mm), coarse (6-20 mm)		

CONSISTENCE:

Degree of Plasticity:		Stickiness:	slightly sticky
Texture Modifier:	no change	Disruptive Test:	very weak force
Shearing Test:	crumbly	Toughness:	

BOUNDARY:

Distinctiveness:	gradual (50-100 mm)	Shape:	smooth

LAYER 2	B1 horizon
Depth:	0.10 - 0.50 m
Layer Notes:	

TEXTURE: coarse clayey sand

MOTTLES:

Dominant Mottles:

Type:	unspecified	Colour:	grey
Contrast:	prominent	Abundance:	10% - 20%

FIELD CHEMICAL TESTS:

pH:	3.5 (Raupach)	Field EC:	
HCl:		H_2O_2:	
$AgNO_3$:			

STRUCTURE:

Grade of Pedality:	massive	Fabric:	earthy
Dominant Peds:		Subdominant Peds:	
Artificial Aggregates:		SOILpak score:	
Vesicles:		Ped porosity:	porous

COARSE FRAGMENTS:

Type:	not evident	Amount:	
Distribution:		Orientation:	
Weathering:		Shape:	

Size:			

PANS:

Type:	not evident	Cementation:	
Continuity:		Structure:	

SEGREGATIONS:

Type:	organic	Amount:	very few (< 2%)
Strength:		Form:	
Size:	medium (2-6 mm), coarse (6-20 mm)		

CONSISTENCE:

Degree of Plasticity:		Stickiness:	slightly sticky
Texture Modifier:	no change	Disruptive Test:	moderately weak force
Shearing Test:	crumbly	Toughness:	

BOUNDARY:

Distinctiveness:	diffuse (>100 mm)	Shape:	smooth

LAYER 3	B2 horizon
Depth:	0.50 - 1.00 m
Layer Notes:	

TEXTURE: fine sandy clay loam

MOTTLES:

Dominant Mottles:			
Type:	unspecified	Colour:	gley
Contrast:		Abundance:	10% - 20%

FIELD CHEMICAL TESTS:

pH:	3.5 (Raupach)	Field EC:	
HCl:		H2O2:	
AgNO3:			

STRUCTURE:

Grade of Pedality:	massive	Fabric:	earthy
Dominant Peds:		Subdominant Peds:	
Artificial Aggregates:		SOILpak score:	
Vesicles:		Ped porosity:	porous

COARSE FRAGMENTS:

Type:	not evident	Amount:	
Distribution:		Orientation:	
Weathering:		Shape:	
Size:			

PANS:

Type:	not evident	Cementation:	
Continuity:		Structure:	

SEGREGATIONS:

Type:	organic	Amount:	very few (< 2%)
Strength:		Form:	
Size:	medium (2-6 mm), coarse (6-20 mm)		

CONSISTENCE:

Degree of Plasticity:		Stickiness:	slightly sticky
Texture Modifier:	no change	Disruptive Test:	moderately weak force
Shearing Test:	crumbly	Toughness:	

BOUNDARY:

Distinctiveness:	clear (20-50 mm)	Shape:	

LAYER 4	C horizon
Depth:	1.00 - 1.10 m
Layer Notes:	*** Layer depth given as "adj". Lower depth printed here is nominal. ***Lower depth recorded was same as upper depth for this layer, layer depth given is nominal***

TEXTURE: sandy clay loam

COLOUR:

Moist: light grey (greyish yellow) (2.5Y 7/2)

MOTTLES:

Dominant Mottles:

Type:	unspecified	Colour:	gley
Contrast:		Abundance:	10% - 20%

STRUCTURE:

Grade of Pedality:	massive	Fabric:	earthy
Dominant Peds:		Subdominant Peds:	
Artificial Aggregates:		SOILpak score:	
Vesicles:		Ped porosity:	porous

COARSE FRAGMENTS:

Type:	not evident	Amount:	
Distribution:		Orientation:	
Weathering:		Shape:	
Size:			

PANS:

Type:	not evident	Cementation:	

Continuity:		Structure:	

SEGREGATIONS:

Type:	organic	Amount:	very few (< 2%)
Strength:		Form:	
Size:	medium (2-6 mm), coarse (6-20 mm)		

CONSISTENCE:

Degree of Plasticity:		Stickiness:	
Texture Modifier:		Disruptive Test:	moderately weak force
Shearing Test:	crumbly	Toughness:	

LAYER 99

Layer Notes:

Vesicles:	Ped porosity:

LABORATORY TESTS

None available

For information on laboratory test data and units of measure, please see: Soil survey standard test methods

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ATTACHMENT 5

POEO REGISTER SEARCH

Search results

Your search for: **General Search** with the following criteria

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Number	Name	Location	Type	Status	Issued date
5180	EDL LFG (NSW) PTY LTD	CROZIER RD, BELROSE, NSW 2085	POEO licence	Issued	10 Feb 2000
1123740	EDL LFG (NSW) PTY LTD	CROZIER RD, BELROSE, NSW 2085	s.58 Licence Variation	Issued	21 Jan 2011
1519633	EDL LFG (NSW) PTY LTD	CROZIER RD, BELROSE, NSW 2085	s.58 Licence Variation	Issued	29 May 2014
1531599	EDL LFG (NSW) PTY LTD	CROZIER RD, BELROSE, NSW 2085	s.58 Licence Variation	Issued	06 Jul 2015
1570153	EDL LFG (NSW) PTY LTD	CROZIER RD, BELROSE, NSW 2085	s.58 Licence Variation	Issued	08 Oct 2018
1015534	EDL OPERATIONS (BELROSE) PTY LTD	CROZIER RD, BELROSE, NSW 2085	s.58 Licence Variation	Issued	14 Oct 2003
3085766292	SCOTT ROBERT GREENWOOD	9994 MONA VALE ROAD, BELROSE, NSW 2085	Penalty Notice	Withdrawn	
3085770335	SCOTT ROBERT GREENWOOD	9994 MONA VALE ROAD, BELROSE, NSW 2085	Penalty Notice	Court Elected	
3085774790	SCOTT ROBERT GREENWOOD	9994 MONA VALE ROAD, BELROSE, NSW 2085	Penalty Notice	Court Elected	
4669	SCOTT ROBERT GREENWOOD	9994 MONA VALE ROAD, BELROSE, NSW 2085	POEO licence	Issued	14 Nov 2000
1029755	SCOTT ROBERT GREENWOOD	9994 MONA VALE ROAD, BELROSE, NSW 2085	s.58 Licence Variation	Issued	26 Aug 2003
1054184	SCOTT ROBERT GREENWOOD	9994 MONA VALE ROAD, BELROSE, NSW 2085	s.58 Licence Variation	Issued	29 May 2006
1063022	SCOTT ROBERT GREENWOOD	9994 MONA VALE ROAD, BELROSE, NSW 2085	s.58 Licence Variation	Issued	23 Oct 2006
1083249	SCOTT ROBERT GREENWOOD	9994 MONA VALE ROAD, BELROSE, NSW 2085	s.58 Licence Variation	Issued	31 Mar 2008
1096689	SCOTT ROBERT GREENWOOD	9994 MONA VALE ROAD, BELROSE, NSW 2085	s.58 Licence Variation	Issued	19 Jan 2009
1107498	SCOTT ROBERT GREENWOOD	9994 MONA VALE ROAD, BELROSE, NSW 2085	s.96 Prevention Notice	Issued	28 Oct 2009
1108158	SCOTT ROBERT GREENWOOD	9994 MONA VALE ROAD, BELROSE, NSW 2085	s.110 Variation of Prevention Notice	Issued	29 Oct 2009
1108028	SCOTT ROBERT GREENWOOD	9994 MONA VALE ROAD, BELROSE, NSW 2085	s.58 Licence Variation	Issued	09 Nov 2009
1108347	SCOTT ROBERT GREENWOOD	9994 MONA VALE ROAD, BELROSE, NSW 2085	s.110 Revocation of Prevention Notice	Issued	10 Nov 2009
1116423	SCOTT ROBERT GREENWOOD	9994 MONA VALE ROAD, BELROSE, NSW 2085	s.58 Licence Variation	Issued	17 Sep 2010

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Number	Name	Location	Type	Status	Issued date
1500665	SCOTT ROBERT GREENWOOD	9994 MONA VALE ROAD, BELROSE, NSW 2085	s.58 Licence Variation	Issued	17 Aug 2011
1504213	SCOTT ROBERT GREENWOOD	9994 MONA VALE ROAD, BELROSE, NSW 2085	s.58 Licence Variation	Issued	02 Nov 2012
1513616	SCOTT ROBERT GREENWOOD	9994 MONA VALE ROAD, BELROSE, NSW 2085	Compliance Audit	Complete	17 Apr 2013
3085778356	SCOTT ROBERT GREENWOOD	9994 MONA VALE ROAD, BELROSE, NSW 2085	Penalty Notice	Issued	15 Feb 2016
3173524934	SCOTT ROBERT GREENWOOD	9994 MONA VALE ROAD, BELROSE, NSW 2085	Penalty Notice	Issued	22 Feb 2018
1562158	SCOTT ROBERT GREENWOOD	9994 MONA VALE ROAD, BELROSE, NSW 2085	s.96 Prevention Notice	Issued	26 Mar 2018
13312	SUEZ RECYCLING & RECOVERY PTY LTD	CROZIER ROAD, BELROSE, NSW 2085	POEO licence	Issued	30 Sep 2010
1129102	SUEZ RECYCLING & RECOVERY PTY LTD	CROZIER ROAD, BELROSE, NSW 2085	s.58 Licence Variation	Issued	08 Jun 2011
1501905	SUEZ RECYCLING & RECOVERY PTY LTD	CROZIER ROAD, BELROSE, NSW 2085	s.58 Licence Variation	Issued	03 Nov 2011
1515238	SUEZ RECYCLING & RECOVERY PTY LTD	CROZIER ROAD, BELROSE, NSW 2085	s.58 Licence Variation	Issued	09 Oct 2015
1535445	SUEZ RECYCLING & RECOVERY PTY LTD	CROZIER ROAD, BELROSE, NSW 2085	s.58 Licence Variation	Issued	30 Nov 2015
1562927	SUEZ RECYCLING & RECOVERY PTY LTD	CROZIER ROAD, BELROSE, NSW 2085	s.58 Licence Variation	Issued	30 May 2018
4504	WARRINGAH GRAVEL & STONE SUPPLIES PTY LTD	END OF CHALLENGER DRIVE, BELROSE, NSW 2085	POEO licence	Issued	10 Feb 2000
1010196	WARRINGAH GRAVEL & STONE SUPPLIES PTY LTD	END OF CHALLENGER DRIVE, BELROSE, NSW 2085	s.58 Licence Variation	Issued	13 May 2003
1028258	WARRINGAH GRAVEL & STONE SUPPLIES PTY LTD	END OF CHALLENGER DRIVE, BELROSE, NSW 2085	s.58 Licence Variation	Issued	18 Jun 2003
1047999	WARRINGAH GRAVEL & STONE SUPPLIES PTY LTD	END OF CHALLENGER DRIVE, BELROSE, NSW 2085	s.58 Licence Variation	Issued	12 Aug 2005
1504673	WARRINGAH GRAVEL & STONE SUPPLIES PTY LTD	END OF CHALLENGER DRIVE, BELROSE, NSW 2085	s.58 Licence Variation	Issued	05 Nov 2012
1515087	WARRINGAH GRAVEL & STONE SUPPLIES PTY LTD	END OF CHALLENGER DRIVE, BELROSE, NSW 2085	s.58 Licence Variation	Issued	22 Jul 2013
1532409	WARRINGAH GRAVEL & STONE SUPPLIES PTY LTD	END OF CHALLENGER DRIVE, BELROSE, NSW 2085	s.58 Licence Variation	Issued	13 Oct 2015
1537502	WARRINGAH GRAVEL & STONE SUPPLIES PTY LTD	END OF CHALLENGER DRIVE, BELROSE, NSW 2085	s.58 Licence Variation	Issued	08 Feb 2016

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Number	Name	Location	Type	Status	Issued date
1557479	WARRINGAH GRAVEL & STONE SUPPLIES PTY LTD	END OF CHALLENGER DRIVE, BELROSE, NSW 2085	s.58 Licence Variation	Issued	09 Oct 2017
1566217	WARRINGAH GRAVEL & STONE SUPPLIES PTY LTD	END OF CHALLENGER DRIVE, BELROSE, NSW 2085	s.96 Prevention Notice	Issued	30 Jul 2018
3173526355	WARRINGAH GRAVEL & STONE SUPPLIES PTY LTD	END OF CHALLENGER DRIVE, BELROSE, NSW 2085	Penalty Notice	Issued	28 Sep 2018
1585792	WARRINGAH GRAVEL & STONE SUPPLIES PTY LTD	END OF CHALLENGER DRIVE, BELROSE, NSW 2085	s.96 Prevention Notice	Issued	24 Sep 2019
4807	WASTE ASSETS MANAGEMENT CORPORATION	CROZIER ROAD, BELROSE, NSW 2085	POEO licence	Surrendered	12 Apr 2001
1024182	WASTE ASSETS MANAGEMENT CORPORATION	CROZIER ROAD, BELROSE, NSW 2085	s.58 Licence Variation	Issued	14 Apr 2003
1030040	WASTE ASSETS MANAGEMENT CORPORATION	CROZIER ROAD, BELROSE, NSW 2085	s.58 Licence Variation	Issued	15 Aug 2003
1031754	WASTE ASSETS MANAGEMENT CORPORATION	CROZIER ROAD, BELROSE, NSW 2085	s.58 Licence Variation	Issued	20 Oct 2003
1034194	WASTE ASSETS MANAGEMENT CORPORATION	CROZIER ROAD, BELROSE, NSW 2085	s.58 Licence Variation	Issued	25 Feb 2004
1036925	WASTE ASSETS MANAGEMENT CORPORATION	CROZIER ROAD, BELROSE, NSW 2085	s.58 Licence Variation	Issued	17 Jun 2004
1041727	WASTE ASSETS MANAGEMENT CORPORATION	CROZIER ROAD, BELROSE, NSW 2085	s.58 Licence Variation	Issued	22 Oct 2004
1041873	WASTE ASSETS MANAGEMENT CORPORATION	CROZIER ROAD, BELROSE, NSW 2085	s.58 Licence Variation	Issued	08 Mar 2005
1049900	WASTE ASSETS MANAGEMENT CORPORATION	CROZIER ROAD, BELROSE, NSW 2085	s.58 Licence Variation	Issued	15 Aug 2006
1074979	WASTE ASSETS MANAGEMENT CORPORATION	CROZIER ROAD, BELROSE, NSW 2085	s.58 Licence Variation	Issued	08 Oct 2007
1095393	WASTE ASSETS MANAGEMENT CORPORATION	CROZIER ROAD, BELROSE, NSW 2085	s.58 Licence Variation	Issued	19 Dec 2008
1106000	WASTE ASSETS MANAGEMENT CORPORATION	CROZIER ROAD, BELROSE, NSW 2085	s.58 Licence Variation	Issued	19 Nov 2009
1112399	WASTE ASSETS MANAGEMENT CORPORATION	CROZIER ROAD, BELROSE, NSW 2085	s.58 Licence Variation	Issued	26 Mar 2010
1118337	WASTE ASSETS MANAGEMENT CORPORATION	CROZIER ROAD, BELROSE, NSW 2085	s.58 Licence Variation	Issued	30 Sep 2010
1121927	WASTE ASSETS MANAGEMENT CORPORATION	CROZIER ROAD, BELROSE, NSW 2085	s.91 Clean Up Notice	Issued	24 Nov 2010
1126544	WASTE ASSETS MANAGEMENT CORPORATION	CROZIER ROAD, BELROSE, NSW 2085	s.91 Clean Up Notice	Issued	04 Apr 2011

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Number	Name	Location	Type	Status	Issued date
1515782	WASTE ASSETS MANAGEMENT CORPORATION	CROZIER ROAD, BELROSE, NSW 2085	s.58 Licence Variation	Issued	13 Sep 2013
1521654	WASTE ASSETS MANAGEMENT CORPORATION	CROZIER ROAD, BELROSE, NSW 2085	s.58 Licence Variation	Issued	09 May 2014
1528013	WASTE ASSETS MANAGEMENT CORPORATION	CROZIER ROAD, BELROSE, NSW 2085	s.58 Licence Variation	Issued	27 Jan 2015
1546008	WASTE ASSETS MANAGEMENT CORPORATION	CROZIER ROAD, BELROSE, NSW 2085	s.80 Surrender of a Licence	Issued	16 Oct 2017
1120517	WSN ENVIRONMENTAL SOLUTIONS PTY LIMITED	CROZIER ROAD, BELROSE, NSW 2085	s.58 Licence Variation	Issued	15 Oct 2010

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01 April 2020