FINAL

Validation Report

Maritime Facility, Northern Part of 5-11 Bank Street Pyrmont NSW

Date:
10 July 2020

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Distribution of copies:
1 x pdf – Thomas Caruana, Christie Civil Pty Ltd

Document Control

Version	Author	Reviewer	Client	Date Issued
C151008_DFT_RPT_15Jun2020	Rebecca Organo CEnvP SC	Rebecca Organo CEnvP SC	Christie Civil Pty Ltd as a Contractor to Transport for NSW	15 June 2020
C151008_RPT_10Jul2020	Rebecca Organo CEnvP SC	Rebecca Organo CEnvP SC	Christie Civil Pty Ltd as a Contractor to Transport for NSW	10 July 2020

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Executive Summary

Roads and Maritime Services (RMS), now known as Transport for NSW (TfNSW), own the Site and have undertaken a redevelopment on the Site to enable the relocation of a RMS licenced commercial operator from a property on Pyrmont Bridge Road, Glebe NSW to the Site. This relocation is required as part of the larger development of the New Sydney Fish Market. As part of this work the Site is to be utilised for temporary maritime support facilities and publicly accessible open space.

Previous investigations across the larger 5-11 Bank Street property identified the presence and potential presence of fill materials in the surface and sub-surface. These fill materials were identified, in some locations, to be contaminated and potentially contaminated with polycyclic aromatic hydrocarbons, petroleum hydrocarbons and heavy metals. No fibrous asbestos (FA) and asbestos-containing materials (ACM) have been previously identified, however, there was the potential for these materials to be present in surface and sub-surface soils. The presence of contaminated and potentially contaminated fill materials across the 5-11 Bank Street property has been more recently managed through an existing long-term environmental management plan that has enabled the 5-11 Bank Street property, including the Site, to be suitable for its recent uses for commercial, open space and recreational activities.

The planning pathway for the redevelopment of the Site commenced in 2014 and in 2015 the *Remedial Action Plan, Sydney Heritage Fleet Base, Bank Street Pyrmont*', prepared by SLR Consulting Australia Pty Ltd dated 23 April 2015 (the RAP) documented the works that would be undertaken, as part of the redevelopment, in order to ensure that the Site was suitable for its proposed land use. Subsequent to the issue of the RAP, there were significant changes in the redevelopment plans for the Site which were then ultimately consented to under the *MP11_0001 – Sydney Heritage Fleet –Modification 3 , 5-19 Bank Street Pyrmont* as consented to by Minister for Planning on 12 December 2018 (the MOD 3). The MOD 3 required that the RAP be implemented on the Site as part of the redevelopment and that a Site Auditor ultimately certify the suitability of the Site for its proposed uses.

The remediation approach set out in the RAP was for the capping, containment and management of any retained contaminated or potentially contaminated fill materials beneath the finished constructed surfaces of the then proposed redevelopment. The RAP relied on the proposed surface treatments to achieve the remediation requirements. The redevelopment plans consented to under the MOD 3 were different to those relied on in the RAP. As such an update to the RAP was required. The '*Addendum to Remediation Action Plan, Maritime Facility, 5-11 Bank Street Pyrmont NSW* prepared by CONSARA 10 September 2018 (ARAP) provided this update to the RAP and described the surface treatments to be installed in order to achieve the remediation of the Site through the capping, containment and management approach documented in the RAP.

Given that the redevelopment works comprised the installation of new surface treatments across the commercial and open space areas, the RAP and ARAP considered that the final surface treatments on the Site would provide an effective physical barrier or capping layer between any retained contaminated or potentially contaminated soils and the future users of the Site, with suitability achieved via the implementation of a 'cap and contain' and long-term management approach. The works required under the RAP and ARAP have now been implemented on the Site.

Based on the results of the remediation and validation works, the condition of the fill materials present on the Site and where retained in the sub-surface have been identified to not contain gross or significant contamination, rather the contamination is primarily limited to the presence of concentrations of PAHs in fill materials across the Site and the presence of fragments of ACM in fill materials in a limited area in the north-eastern area of the Site.

Based on the works documented in this report it is considered that the remediation and validation works required have been successfully implemented on the Site such that the remedial objectives for the Site have been achieved and that the Site is suitable for commercial/industrial and open space/recreational land uses subject to the implementation of a LTEMP for the Site.

1 Introduction

CONSARA Pty Ltd (CONSARA) has been commissioned by Christie Civil to prepare this report that documents the works undertaken to implement the '*Remedial Action Plan, Sydney Heritage Fleet Base, Bank Street Pyrmont*', prepared by SLR Consulting Australia Pty Ltd and dated 23 April 2015 (the RAP) and the '*Addendum to Remediation Action Plan, Maritime Facility, 5-11 Bank Street Pyrmont NSW* prepared by CONSARA and dated 10 September 2018 (ARAP) on a property identified as Lot 22 DP803159, Part Lot 19 DP803159, Lot 21 DP803159 and Part Lot 20 DP 803159 located within the northern part of 5-11 Bank Street, Pyrmont NSW (the Site). The location of the Site is presented in Figure 1 and the layout of the Site is presented on Figure 2.

1.1 Background

Roads and Maritime Services (RMS), now known as Transport for NSW (TfNSW), own the Site and have undertaken a redevelopment on the Site to enable the relocation of a RMS licenced commercial operator from a property on Pyrmont Bridge Road, Glebe NSW to the Site. This relocation is required as part of the larger development of the New Sydney Fish Market and the redevelopment works on the Site are being undertaken to effect the decanting of water-based operations within Blackwattle Bay and allow for a working harbour use to continue in generally the same location with similar operational parameters to its current use. As part of this work the Site is to be utilised for temporary maritime support facilities and publicly accessible open space.

Previous investigations across the larger 5-11 Bank Street property identified the presence and potential presence of fill materials in the surface and sub-surface. Where intrusive investigations were undertaken the fill materials were reported to contain ash, coke, coal tars and slag. These fill materials were identified, in some locations, to be contaminated and potentially contaminated with polycyclic aromatic hydrocarbons, petroleum hydrocarbons and heavy metals. No fibrous asbestos (FA) and asbestos-containing materials (ACM) have been previously identified, however, given the history of filling activities conducted at the Site there is the potential for these materials to be present in surface and sub-surface soils.

The presence of contaminated and potentially contaminated fill materials across the 5-11 Bank Street property has been more recently managed through the '*Long-term Environmental Management Plan 5 Banks Street Pyrmont NSW*' prepared by CDM Smith Australia Pty Ltd and 30 October 2012 (the 2012 LTEMP). The implementation of the 2012 LTEMP has enabled the 5-11 Bank Street property, including the area of the Site to be suitable for its recent uses for commercial, open space and recreational activities.

Since 2014, the plans for the redevelopment of the Site went through a number of design and purpose changes , however, the original Part 3A Development Approval that was granted for the Sydney Heritage Fleet Facilities at 5 Bank Street, Pyrmont (the MP 11_0001) in 2015 required that the suitability of the Site be demonstrated. Despite the operation of the 2012 LTEMP, the RAP was prepared to document the works that would be undertaken, as part of the redevelopment, in order to ensure that the Site was suitable for its proposed land use. Subsequent to the issue of the RAP, there were significant changes in the redevelopment plans for the Site which were then ultimately consented to under the *MP11_0001 – Sydney Heritage Fleet –Modification 3 , 5-19 Bank Street Pyrmont* as consented to by Minister for Planning on 12 December 2018 (the MOD 3).

The remediation approach set out in the RAP was for the capping, containment and management of any retained contaminated or potentially contaminated fill materials beneath the finished constructed surfaces of the then proposed redevelopment. Given that the RAP relied on the proposed surface treatments to achieve the remediation requirements and that the current redevelopment plans are different to those relied on in the RAP, it was necessary to provide an update that is consistent with the MOD 3 redevelopment plans. The ARAP served to provide this update to the RAP and described the MOD 3 redevelopment plans and the surface treatments to be installed in order to achieve the remediation of the Site through the capping, containment and management approach documented in the RAP.

In October 2019 RMS engaged Christie Civil Pty Ltd (Christie Civil) as the Construction Contractor to undertake the redevelopment works in accordance with the MOD 3 plans provided in Appendix A. The redevelopment works undertaken by Christie Civil on the Site has comprised the construction of temporary facilities and open space areas on the Site in accordance with the MOD 3 plans, including the installation of the surface treatments required to achieve the capping and containment of retained fill materials on the Site in accordance with the RAP and ARAP. It is noted that the scope of the RAP, ARAP and this report is limited to the land component of the works consented to under the MOD 3. The water components comprising the overwater wharf/marina facility was not part of the scope of Christie Civil's works and is not part of the RAP, ARAP or this report. For the purpose of this report 'the Site' comprises the area on which the temporary facilities are to be located, shown shaded in blue as the "Commercial Marina Facility", and the area on which the public open space area is to be located, as shown shaded in green as "Open Space", on Figure 2.

Given that the redevelopment works comprised the construction of new temporary buildings, installation of underground services and the installation of new surface treatments across the commercial and open space areas, the RAP and ARAP considered that the final surface coverings on the Site would provide an effective physical barrier or capping layer between any retained contaminated or potentially contaminated soils and the future users of the Site. As such the RAP and ARAP provided the mechanisms for suitability to be achieved via the implementation of a 'cap and contain' and long-term management approach. The ARAP also provided a sampling approach that sought to ensure that retained fill materials were appropriately characterised.

The RAP and ARAP was subject to review and certification as appropriate by the NSW EPA Accredited Site Auditor Mr Andrew Lau of JBS&G Pty Ltd (the Site Auditor). The Site Auditor will ultimately certify the suitability of the Site for the proposed use.

This report, referred to as the Validation Report, has been prepared to document the works undertaken on the Site and to demonstrate the suitability of the Site for commercial/industrial and open space/recreational land uses. This report has been prepared, where possible and relevant, with reference to the relevant requirements of the *National Environment Protection (Assessment of Site Contamination) Measure (NEPM) – Schedule B 1999 as Amended 2013* (ASC NEPM) National Environment Protection Council (NEPC) and the NSW Environment Protection Authority (NSW EPA, 2020) *Contaminated Land Guidelines - Consultants Reporting on Contaminated Sites* and other relevant guidance made or endorsed by NSW EPA.

1.2 Objective

The objectives of the remediation and validation works undertaken was to ensure that the Site is suitable for commercial/industrial and open space/recreational land uses.

1.3 Data Quality Objectives

To ensure that data of appropriate types and reliability were collected and assessed for the validation of the Site, the seven-step Data Quality Objective (DQO) approach was adopted, in accordance with Appendix B of Schedule B2 of the *National Environment Protection (Assessment of Site Contamination) Measure 1999* (NEPC, 2013) (the NEPM). The DQOs have set quality assurance and quality control parameters for the relevant parts of the works. The DQOs adopted for the works are presented in Appendix B. Attainment of the DQOs has been assessed by reference to the data quality indicators (DQIs) in Appendix C.

1.4 Persons referred to in this Validation Report

Within this Validation Report the following persons are referred to:

- Site Owner – Transport for NSW (TfNSW) formerly known as Roads and Maritime Services (RMS)

- Construction Contractor – Christie Civil Pty Ltd (Christie Civil) - the company contracted by TfNSW to undertake the construction of temporary facilities and open space areas on the Site in accordance with the MOD 3 plans for the land based areas;
- Environmental Consultant – CONSARA - the environmental consultant contracted by Christie Civil to undertake the validation of the works as specified in the RAP and ARAP; and
- NSW EPA Accredited Site Auditor (Site Auditor) – Mr Andrew Lau of JBS&G Pty Ltd engaged by TfNSW to certify the suitability of the Site for commercial/industrial and open space recreational land use. This Validation Report will be subject to the review and acceptance as appropriate by the Site Auditor.

1.5 Scope of Remediation and Validation Works

The scope of work that was undertaken to implement the RAP and ARAP and to achieve the objectives of the validation are as follows:

- Inspection and recording of the works completed by the Construction Contractor on the Site;
- Characterisation of the soil materials to be used in the 'cut to fill' program during the construction works and retained on the Site;
- Documentation of location and RLs of surface of retained fill materials and marker layer and finished surface treatments via Registered Survey;
- Assessment of the suitability of materials to be imported onto the Site for use during construction works;
- Completion of waste classification of materials (solid wastes) to be disposed off-site;
- Receipt and review of materials tracking and off-site disposal documentation, detail design drawings and specifications of the works completed from the Construction Contractor;
- Assessment of the reliability of the field and laboratory procedures completed according to the requirements of the RAP and ARAP;
- Assessment of the suitability of the Site for commercial/industrial and open space recreational land use; and
- Preparation of a Validation Report and subsequently, the preparation of a Long-term Environment Management Plan (LTEMP) to manage contamination that remains in the sub-surface environment on the Site.

2 Conceptual Site Model

2.1 Site Condition and Surrounding Environment

2.1.1 Site Identification

The Site is located in Pyrmont approximately 1km west of Sydney CBD and directly adjoins Blackwattle Bay. The Site consists of the northern to central section of a property known as 5-11 Bank Street, Pyrmont. The property identifiers for the Site comprise Lot 22 DP803159, Part Lot 19 DP803159, Lot 21 DP803159 and Part Lot 20 DP 803159 as shown on the survey plans provided in Appendix D. The Site has an area of approximately 3600 m^2. The Site is located within the City of Sydney Council area and is zoned RE1 Public Recreation under the *Sydney Local Environmental Plan 2012*.

Prior to the redevelopment of the Site, the larger property at 5-11 Bank Street was noted to be primarily unsealed and covered with gravels comprised of crushed sandstone and concrete. The area of the 5-11 Bank Street property to the south that is now separate to the Site has not changed since the redevelopment and remains unsealed and covered with gravels comprised of crushed sandstone and concrete. No buildings are present and a fence has been installed to divide this area of the property from the Site. It appears that the property is fenced and secured by a locked gate at Bank Street. The southern end of this property continues to be used for the storage of Dragon Boats and other TfNSW equipment. A seawall forms the boundary of the property and the Site with Blackwattle Bay.

At the time of preparation of this Validation Report the redevelopment of the Site for the temporary maritime support facilities and publicly accessible open space had been completed on the Site. The new maritime facilities are located on the southern part of the Site and comprise a concrete hardstand on which a number of demountable buildings, storage containers and other minor structures, equipment and carparking for the marina support facilities. On the northern part of the Site the public open space area has been completed and is comprised of a higher upper level at the Site's entrance from Bank Street and then a concrete ramp, footpath and stairs provide access to the lower levels that connect to the over water marina facilities established in the adjacent areas of Blackwattle Bay. The lower level of the open space areas are primarily covered with asphaltic pavement, with the concrete footpath and ramp along the southern edge and a concrete staircase on the northern edge that provides access. Gabions filled with oversize aggregate and sandstone have been placed in a terrace along the slope between the upper and lower levels with planting beds forming the upper edge of this terrace. The upper level comprises the concrete driveway from Bank Street into the Site, concrete footpaths and a large feature of terraced gabions located on the northern boundary. Some minor areas of crushed gravels/aggregate and planting beds are also located along the southern and eastern edge of the terraced gabions and at frontage to Bank Street.

The Site is secured by a 2 metre high fence with locked access from Bank Street. The temporary marina support facilities are separated from the open space area by a secured fence.

It is noted that the over water marina facility is comprised of floating pontoons and a pedestrian walkway has been installed to link the Site to the over water facilities.

2.1.2 Previous and Proposed Use

The Site was previously used for dragon boat storage but was generally vacant with no buildings or other improvements present. The Site is now to be occupied for commercial marina support facilities on the southern part with the northern part occupied by open space areas available to the public to be able to gain access from Bank Street down to the waterfront and over water marina facilities present in Blackwattle Bay at the west of the Site.

2.1.3 Surrounding Land Use

The land uses surrounding the Site are as follows:

- North –Light commercial, High Density Residential and Open Space Recreational uses;
- East – Roadways and High Density Residential
- South – The remaining area of 5-11 Bank Street and light industrial and commercial land use
- West – Blackwattle Bay

2.1.4 Topography, Surface Water, Drainage and Flood Potential

The topography of the Site is moderately sloping with an elevation of approximately 7 to 9 m Australian Height Datum (m AHD) on the level areas proximal to Bank Street and then slopes from Bank Street downwards to elevations of approximately 3 to 4 m AHD at Blackwattle Bay. Constructed seawalls form the western boundary of the land based areas of the Site with Blackwattle Bay with the exception of the ramp from the street level of the Site down to the west to the bay.

As part of the redevelopment of the Site a constructed stormwater system comprising surface pits and sub-surface pipes was installed to collect surface water runoff from the buildings and hardstand pavements on the upper parts of the Site and is understood to connect to the system present along Bank Street and stormwater present in this system is expected to discharge to Blackwattle Bay. It is understood that no constructed stormwater system is present on the lower levels of the Site proximal to the bay and given the surface coverings in this area it is unlikely that sheet flows to Blackwattle Bay would be generated.

Given that Blackwattle Bay is part of Sydney Harbour it is tidally influenced and it is considered that the risk of flooding is low to negligible.

2.1.5 Soils, Geology and Hydrogeology

The Site is located in an area that is the result of significant dredging and reclamation activities that commenced in the late 1800s. The Soils Landscapes of the Sydney 1:100000 Sheet (SCS, 2009) indicates that the natural soils on the Site have been subject to significant disturbance by human activity and that filling materials comprising rocks, building and waste materials are likely to be present. During the redevelopment, it was confirmed that the Site has been filled primarily with sandstones and crushed sandstone materials with a small amount of building and demolition wastes present in the north-eastern corner of the Site near Bank Street. Prior to filling, the soil landscape of the Site is likely to have been comprised of rugged rolling to very steep hills and rocky outcrops dominated by shallow lithosols and siliceous sands with some podzolic soils present in less exposed areas (SCS, 2009).

The fill materials and soils at the Site and surrounding area are underlain by Middle Triassic aged Hawkesbury Sandstone of the Wianamatta Group (DMR, 1991). The Hawkesbury Sandstone consists of medium to coarse-grained quartz sandstone, very minor shale, siltstone and laminite lenses.

The 1:25 000 Prospect/Parramatta River Acid Sulfate Soil Risk Map (DLWC, 1997) indicates that there is a high probability of the occurrence of acid sulfate soils within the soil profile located on the Site. Given the presence of sediments, dredged materials or similar on the Site, the ARAP considered that there was a moderate to high potential for acid sulphate soils to be present on the Site. However, it is noted that during excavation works completed for the redevelopment that extended to depths of 1 to 1.5 metres below the current ground surface, there was no evidence of sediments, dredged materials or potentially acid sulphate soils.

Regional groundwater is expected to be present at depth within the Hawkesbury Sandstone underlying the Site and is likely to be present as flow through fractures such as joints and bedding plane partings or via permeable lenses of siltstone or laminate. Thus, the transmissivity of the sandstone aquifer is dependent on the frequency, openness and orientation of the fracturing present. Groundwater present sandstone is expected to be generally of reasonable quality with low salinity, whilst groundwater present in any siltstone and laminite lenses is expected to be of higher salinity (Pells 1985). Groundwater in the local region is not known to have been extracted for any beneficial use likely due to salinity and the presence of a reticulated water system. Based on local topography and surface drainage, groundwater in the bedrock is expected to flow to the west to north-west toward Blackwattle Bay.

Previous investigations had identified that some limited groundwater was present perched within the fill materials at some locations at depths of between 2 to 4 metres below ground surface (m bgs), however, this perched groundwater was found to be very limited in its extent, had low to negligible recharge and appeared to be present within horizons of more permeable fill materials. It is noted that during excavation works completed for the redevelopment that extended to depths of 1 to 1.5 metres below the current ground surface, there was no evidence of the presence of groundwaters.

2.2 Site History

The Site is located within a local region that between the mid 1800s to the 1960s was occupied by a large range of industrial activity that included power stations, wool stores, railway yards, wharfs, abattoirs, tanneries and mills. Large scale infilling of the area now known as Wentworth Park, previously a large swamp referred to as Blackwattle Cove, commenced in the late 1870s to form Blackwattle Bay. Historical reports indicate that sediments dredged from the harbour were used as the filling materials along with waste and ballast materials.

In the vicinity of the Site it is understood that significant dredging and reclamation and infilling activities were undertaken in the late 1800s as part of the construction of the first Glebe Island Bridge with some further reclamation undertaken in the late 1980s as part of the preliminary works for the construction of the ANZAC Bridge. Historical reports indicate that the areas surrounding the bridge were primarily utilised for maritime related activities and light industrial activities.

2.3 Previous Investigations

A summary of the results of the previous investigations completed and relevant to the Site are presented in detail in the RAP. In addition, a report prepared by CONSARA for submission with the MOD 3 development application '*Assessment of Environmental Condition, Bank Street Commercial Wharf, 5-11 Bank Street Pyrmont NSW*' dated 31 May 2017 (the AEC Report) also contains a review of previous investigations completed on the Site, some of which that were not the subject of review for the RAP.

This information, along with the plans for the redevelopment, was used in the ARAP to prepare conceptual site model (CSM) for the Site. A summary of the outcomes that were provided in the RAP and ARAP is presented in Sections 2.8 and 2.9 below.

2.4 Potential Areas and Contaminants of Concern

The results previous investigations on the larger 5-11 Bank Street property, including the area of the Site, identified the presence and potential presence of fill materials in the surface and sub-surface. Where intrusive investigations have been undertaken the fill materials have been reported to contain ash, coke, coal tars and slag. These fill materials have been identified, in some locations, to be contaminated and potentially contaminated with polycyclic aromatic hydrocarbons, petroleum hydrocarbons and heavy metals. No volatile compounds were identified to be present. No fibrous asbestos (FA) and asbestos-containing materials (ACM) had been previously identified, however, given the history of filling activities conducted at the Site there was the potential for these materials to be present in surface and sub-surface soils. It is noted that during the redevelopment works, soils containing

ACM were excavated from the north-eastern area of the Site and were then placed back into this area, beneath the terraced gabion feature.

The presence of contaminated and potentially contaminated fill materials across the 5-11 Bank Street property was not considered to be of a nature that posed a risk of harm to human health under its recent uses for commercial, open space and recreational activities as its surface coverings were considered to provide an effective physical barrier between the sub- surface soils and the users of the land, subject to the implementation of the 2012 LTEMP. It is noted that the 2012 LTEMP has ensured the 5-11 Bank Street property, including the area of the Site, to be suitable for its recent uses for commercial, open space and recreational activities. It is noted that these uses continue on the area of the 5-11 Bank Street property outside of the Site and that the 2012 LTEMP will continue to be implemented on this part of the property.

Overall, the CSM considered that there was a low likelihood of gross or significant contamination or point source contamination being present on the Site, rather the contamination is likely to be present as diffuse contamination, directly related to the presence of fill materials with the nature and distribution of any contamination likely to be variable. In addition, given the history of the area it is expected that such contamination or potential for contamination is not unique to the Site and would be present underlying the properties directly surrounding the Site and is likely to extend across the majority of properties that adjoin Blackwattle Bay.

2.5 Potential Receptors

The redevelopment has enable the Site to now be occupied by commercial marina support facilities on the southern part with the northern part occupied by open space areas available to the public to be able to gain access from Bank Street down to the waterfront and over water marina facilities present in Blackwattle Bay at the west of the Site. The potential receptors for potential contaminants sourced from the Site are considered below.

2.5.1 Human Receptors

Given that the Site will be used for a mix of commercial, open space and recreational uses, with respect to human use the potential future receptors (and the associated exposure pathways) for potential contaminants sourced from the Site include the following:

- Occupiers and users (Children through to Adults) of the Site who have access to the Site's outdoor areas – inhalation of vapours (outdoors) from subsurface sources (though given previous results and the characterisation results from the remediation works, the risk of volatile compounds being present is considered to be low to negligible); dermal contact from surface soils; ingestion from surface soils or dusts generated from surface soils;
- Occupiers (Adults) of the marina support facilities buildings on the Site assuming no access to surface soils directly beneath the building– inhalation of vapours (indoors) from subsurface sources only (though given previous results and the characterisation results from the remediation works, the risk of volatile compounds being present is considered to be low to negligible);
- Workers involved in intrusive maintenance works on the Site– inhalation of vapours (outdoors) from subsurface sources (though given previous results and the characterisation results from the remediation works, the risk of volatile compounds being present is considered to be low to negligible), dermal contact from surface or sub-surface soils/perched groundwaters; ingestion from surface soils or dusts generated from surface/sub-surface soils or from perched groundwaters.

It is noted that currently and under the future use of the Site that the nearest off-site human receptors would be in commercial properties located directly to the south and residential properties located on top of the cliff face at approximately 50 metres higher than the Site on the eastern side of Bank Street. Given this setting, it is considered that there are no off-site human receptors that are at risk from potential contamination sourced from the Site.

2.5.2 Environmental Receptors

Given the location of the Site the environmental receptors (aquatic and terrestrial) for potential contaminants sourced from the Site are the groundwater aquifers present either as a perched/shallow system and/or at depth beneath the Site and the local area, which are ultimately expected to discharge to Blackwattle Bay and the aquatic marine ecosystem of Blackwattle Bay itself.

It is considered that the area of Blackwattle Bay to the west of the Site is a highly disturbed environment and has been the receiving body for historical wastes, wastewaters and discharges from domestic and industrial sources that historically occupied and currently occupy the local area. Whilst the quality of the waters and sediments in Blackwattle Bay have been demonstrated to have improved over the past few decades, mainly due to increased regulation around discharges from industrial sites and urban areas, the bay still receives significant flows of stormwater and surface water runoff from the surrounding industrial and urban areas and from over water commercial marine facilities. In addition, with respect to human use, groundwater beneath and in the local region surrounding the Site is known to be unsuitable for any beneficial purpose and is not accessed for beneficial use. The value of this groundwater resource is considered to be low.

2.6 Requirement for Remediation

The results of previous investigations have identified the presence of contaminated and potentially contaminated fill materials across the 5-11 Bank Street property. However, the results did not identify contamination or potential contamination that was considered to pose a risk of harm to human health under its uses for commercial, open space and recreational activities as its surface coverings were considered to provide an effective physical barrier between the sub- surface soils and the users of the land, subject to the implementation of the 2012 LTEMP. It is noted that the 2012 LTEMP has ensured the 5-11 Bank Street property, including the area of the Site, to be suitable for commercial, open space and recreational land uses.

Despite the presence of the 2012 LTEMP for the 5-11 Bank Street property, including the Site, that ensured its ongoing suitability for commercial and open space/recreational uses, the consent conditions in the MOD 3 required that remediation be completed on the Site in accordance with the RAP, to ensure the suitability of the Site for the same uses.

The RAP sets out that the preferred remedial option for the Site is "*in-situ capping*" and that the remediation "*will be achieved by virtue of the proposed development, which will essentially separate the future site users from the identified and assumed soil contamination with building footprints and pavements*". It was further stated that the "*capping layer that would provide a physical barrier between the contamination and the receptor will be the building, pavement and landscaped areas*" and reference was made to the plans for the then development which were provided as an appendix to the RAP. In addition, the RAP stated that "*Given that identified and assumed impacted soils is proposed to be capped and retained, a long-term environmental management plan will be prepared and implemented to minimise the risk of exposure to impacted soils*". Subsequent to the issue of the RAP, there were significant changes in the redevelopment plans for the Site as set out in the MOD 3.

Given that the RAP relied on the proposed surface treatments to achieve the remediation requirements and that the MOD3 redevelopment plans were different to those relied on in the RAP, it was necessary to provide an update that was consistent with the MOD 3 redevelopment plans. The ARAP served to provide this update to the RAP and described the MOD 3 redevelopment plans and the surface treatments to be installed in order to achieve the remediation of the Site through the capping, containment and management approach documented in the RAP. This remediation strategy is presented in further detail in Section 3 of this report.

3 Remediation and Validation Works

This section provides summary information on the remediation and validation strategy and works undertaken on the Site and then presents detailed information on the nature of the works undertaken on the Site and the condition of the Site at the time of preparation of this Validation Report that provide demonstration that the works undertaken on the Site have rendered the Site suitable for commercial/industrial and open space recreational land use.

3.1 Approach to the Remediation and Validation Works

The redevelopment of the Site for marine support facilities and publicly open space areas has comprised the construction of a range of new impermeable and permeable surface treatments, demountable buildings, ramps, stairs and sandstone and gabion landscaping features as well as planting beds, as shown on Figure 2.

Given the nature and extent of the proposed redevelopment works the RAP and ARAP considered that the presence of contaminated fill materials would not pose a risk of harm to the human health of future users of the Site as the final surface coverings were considered to be sufficient to provide an effective physical barrier or capping layer between any retained contaminated or potentially contaminated soils and the future users of the Site, subject to the implementation of a Long-term Environmental Management Plan (LT EMP). The ARAP also included the requirement for a marker layer also be installed between the surface of retained existing soils and the materials used in the landscape/permeable surface treatments. As such, the RAP and ARAP proposed that the preferred remediation option was the adoption of a capping, containment and long-term management approach for the Site. This is consistent with the approach adopted across the 5-11 Bank Street property since 2012 and that will continue to also be in place for the area of the 5-11 Bank Street property not occupied by the Site.

The RAP contemplated that 'cut to fill' works would be completed with excess fill materials generated from excavation for the redevelopment works to be placed, to the extent practicable, beneath the capping layer that would be installed. The ARAP also set out that a program of sampling and analytical works be undertaken to characterise the retained fill materials across the Site during the construction works and prior to the installation of final surface treatments/capping layer. The ARAP included a RMS 'cut to fill' earthworks plan that estimated a cut volume of 619 m^3 and a fill volume of 740 m^3, leaving a balance of 121 m^3 that would be required to be imported onto the Site.

In the early stages of the redevelopment works on the Site it was determined, by the Construction Contractor, that in order to achieve the required relative levels (RLs) and suitable sub-grade to install the required underground services, surface treatments, buildings and landscaping features, that the RMS proposed 'cut to fill' balance was not achievable and that excess materials were going to be generated that would require disposal off-site. As such during early stages of the works the opportunity for 'cut to fill' works was completed with the excess materials that were progressively generated from the continued excavation works across the Site to achieve the required RLs subsequently appropriately classified and disposed off-site.

During the 'cut to fill' works, CONSARA completed sampling of the stockpiled excavated fill materials that were to be placed and retained on the Site to provide characterisation of these materials. The results of this sampling work reported concentrations of some Polycyclic Aromatic Hydrocarbons (PAHs) in a limited number of samples, that were greater than the relevant criteria for open space and recreational use but were less than the relevant criteria for commercial/industrial land use. Fragments of Asbestos containing materials (ACM) were also identified to be present in fill materials excavated from the north-eastern corner of the Site, however, no asbestos fibres or fibrous asbestos (AF/FA) was reported to be detected. The remaining contaminants of concern were reported at concentrations that were less than the relevant criteria for commercial/industrial and open space and recreational land use. The results of these works are presented in detail in Section 5.2.

The on-site capping, containment and management of the retained presence or potential presence of contaminated soil materials has been undertaken as part of the redevelopment of the Site with the new surface

treatments designed to ensure that they provide an effective isolation and capping layer as specified in the plans provided in Appendix A.

The approach to the validation works undertaken to confirm the achievement of the objectives of the remediation works comprised the following:

- The construction of the marine support facilities and publicly open space areas in accordance with the requirements of the RAP and the ARAP;
- A program of characterisation sampling and analysis of fill materials retained in the sub-surface of the Site;
- The completion of a program of inspections and recording of the construction works on the Site by CONSARA;
- A program of validation/certification of imported materials required for the construction works;
- A program of sampling and analysis of excess soil materials that required disposal off-site (as directed by the Construction Contractor); and
- The compilation of Registered Survey, inspection results and records, materials tracking and as-constructed plans for the construction works completed.

The works undertaken and the results are documented in the following sections.

3.2 Remediation Acceptance Criteria

The Remediation Acceptance Criteria (RAC) adopted for the remediation and validation works for the Site as set out in the RAP and ARAP are provided below.

3.2.1 RAC for Establishment of Capping Layer

The Remediation Acceptance Criteria (RAC) for the capping layer is to ensure that any retained Site soils are located beneath the surface treatments that are detailed in the plans provided in Appendix A.

As such the RAC to be implemented on the Site is to ensure that the construction is conducted in accordance with the detailed plans, as presented in Appendix A, such that the required physical barrier or cap is established between the final surfaces of the Site and the retained surface and sub-surface environment.

The capping layer comprises of the following:

- Impermeable surface treatments comprised of concrete pavements, asphaltic pavements and compacted gravel surfaces; and
- Surface treatments for the landscaped areas as specified below:
    - For areas where gabions or sandstone rocks are to be placed, a geotextile marker layer is required to be placed on top of the exposed retained site soils, prior to the installation of the gabions or rock;
    - For areas were planting beds are to be installed, a geotextile marker layer is required to be placed on top of the exposed retained site soils and a 300 mm of suitable imported topsoil materials will be placed over the top;

    The geotextile marker layer must be high visibility, rot proof and chemically inert, have high tensile strength and be permeable to allow for water infiltration and must be placed so that parallel sheets are fixed together or overlap by 0.2 m.

3.2.2 RAC for Characterisation/Validation of Retained Soils

The guidelines to evaluate soil analytical results currently applied in NSW (NEPM, 2013; NSW EPA, 2017) presents a range of Health-Based Investigation Levels (HILs), Health-based Screening Levels (HSLs) and Ecological Investigation Levels (EILs) and Ecological Screening Levels (ESLs) for urban redevelopment sites in NSW.

It is noted that EILs and ESLs apply principally to contaminants in the top 2 m of soil at the finished surface/ground level which corresponds to the root zone and habitation zone of many species (NEPC, 2013). Given that in the redevelopment of the Site, the only planting is within the formed garden beds that are filled with imported growing medium (soils and mulch) and that a geotextile marker layer is present at least 300 mm below the top of the growing medium, it is considered that the EILs and ESLs, whilst included in the ARAP, are not applicable to the Site setting. Given that they were included in the ARAP the have been included in the summary tables for comparison purposes only but have not been applied to the soil analytical results for characterisation samples.

Given the redevelopment, the Site is required to be assessed for commercial/industrial and open space recreational users. As such the soil analytical results for soils sampled during the 'cut to fill' program were compared against the following criteria to allow for characterisation of the materials:

- Metals, Total PAH and Benzo(a)pyrene, Phenols, PCBs, OCPs/OPPs results:
  - Heath-based Investigation Level (HIL) C (Recreational C) and D (D Commercial/Industrial land use) (NEPC, 2013);
  - Ecological Investigation Level (EIL) Urban Residential/Open space and Commercial/Industrial land use (for As, Cu, Cr(III), naphthalene, Ni, Pb and Zn) (NEPM, 2013);
  - Ecological Screening Level (ESL) Urban Residential/Open space and Commercial/Industrial (Coarse Soil Texture) (Benzo(a)pyrene only) (NEPC, 2013);
- TPH, BTEX and Naphthalene results:
  - Health-based Screening Level (HSL) C (Recreational C) and D (D Commercial/Industrial land use) (Sand, Silt and Clay and Depth range dependant) (NEPC, 2013);
  - Ecological Screening Level (ESL) Urban Residential/Open space and Commercial/Industrial (Coarse Soil Texture) (TPH and BTEX only) (NEPC, 2013);
- Asbestos results:
  - FA and AF: 0.001 % w/w and no visible FA and/or AF in surface soils (top 100 mm of soils) (NEPC, 2013);
  - Recreational C land uses –ACM: 0.02 % w/w and no visible ACM in surface soils (top 100 mm of soils) (NEPC, 2013).

3.2.3 RAC for Imported Materials

The RAC for imported materials and the procedure for ensuring the suitability of materials for importation onto the Site is detailed below. For clarity it is noted that materials imported onto the Site by the Construction Contractor for the purposes of achieving the thickness for the capping layer, re-instatement, establishing a suitable sub-grade for pavement or landscaping or similar was required to be assessed by CONSARA to determine whether certification documentation supplied with the materials is deemed to appropriate or whether confirmation sampling and analysis was required.

Materials to be imported on the Site needed to satisfy the following criteria:

- Virgin excavated natural materials (VENM) must satisfy the criteria stated in NSW EPA (2014) and NSW EPA (2017) guidelines and be demonstrated to be:
    - Natural material (such as clay, gravel, sand, soil or rock fines);
    - Materials that has been excavated or quarried from areas that are not contaminated with manufactured chemicals or process residues, as a result of industrial, commercial, mining or agricultural activities; and
    - Materials that do not contain any sulfidic ores or soils or any other waste.
- Topsoils, growing media, mulch etc. for landscaping purposes must be visually inspected for foreign substances, suspicious staining and/or odours;
- Materials that are permitted to be brought onto the Site via an exemption issued under the POEO Act. The requirements of any such exemption, prior to, during and/or after importation of materials must be fully complied with;
- Any materials proposed to be imported to the Site must not contain any of the following:
    - Marine mud, peat, vegetation, timber, organic, soluble or perishable materials,
    - Dangerous or toxic material or material susceptible to combustion;
    - Metal, rubber, plastic or synthetic material or other forms of general rubbish; and/or
    - Construction/demolition debris.

Materials were not permitted to be imported onto the Site until CONSARA had provided to the Construction Contractor approval.

In addition, if a recycled product, such as crushed concrete or similar, was imported, then sampling of this material was required to be undertaken by the CONSARA ideally at the source site. Such materials were not to be placed onto the Site until CONSARA had provided to the Construction Contractor approval.

3.2.4 RAC for Off-site Disposal

The RAC applied to materials requiring off-site disposal is that the materials must be classified in accordance with NSW EPA (2014) *Waste Classification Guidelines. Part 1 to Part 4*.

3.3 Scope of Remediation and Validation Works

The scope of work that was undertaken during validation of the remediation work comprised the following:

- Inspection and recording of the construction works on the Site;
- Characterisation of the retained fill materials on the Site;
- Documentation of location and RLs of marker layer and finished surface treatments via Registered Survey;
- Assessment of the suitability of materials to be imported onto the Site for use during construction works;
- Completion of waste classification of materials (non-liquid and/or liquid wastes) to be disposed off-site;
- Receipt and review of materials tracking and off-site disposal documentation, detail design drawings and specifications of the works completed from the Construction Contractor;
- Preparation of a Validation Report and subsequently, the preparation of the LTEMP to manage contamination that remains in the sub-surface environment on the Site.

3.4 Remediation and Validation Works Methodology

The methodologies undertaken for the remediation and validation works are detailed below and are consistent with the requirements of the RAP and ARAP. All works required by the RAP to be undertaken by an appropriately qualified Environmental Consultant, were completed by CONSARA Principal Environmental Scientist Ms Rebecca Organo who has over 20 years experience in contaminated site assessment, remediation and management and has extensive direct experience in the inspection and supervision of remediation and validation program of works.

3.4.1 Inspection Program

Periodic inspections were undertaken by CONSARA during all stages of the constructions works, including during excavation works, utilities installation, re-grading and/or surface preparation works and construction of landscaping to provide confirmation that the works are being undertaken in accordance with the requirements of the RAP and ARAP. Specific inspections were also completed during the installation of the marker layer and when materials such as DGB, soils and mulch were imported onto the Site for placement. Record of the inspections were completed via the completion of field notes and a photographic record and are provided in Appendix E.

3.4.2 Sampling Plan

The validation monitoring and sampling program set out in the RAP was applied to the following media during the works:

- Materials generated and then placed within the Site as part of 'cut to fill' activities for Characterisation
    - The sampling was undertaken to ensure that representative samples of the fill materials that were being retained in the sub-surface of the Site were collected such that characterisation of these materials was achieved. Sampling was undertaken during the early stages of works once the majority of excavation works were completed and stockpiles of materials were generated that were to be placed back into the sub-surface of the Site as part of the 'cut to fill' program of works. Sampling was undertaken prior to the commencement of installation of any surface treatments. The ARAP proposed the collection of soil samples at a frequency of 1 in 250 m^3, however, a higher frequency was adopted as a conservative measure. The details of the results are provided in Section 5.2. The sampling locations are provided on Figure 3 and Figure 4.
- Materials to be imported onto the Site
    - Materials imported onto the Site were subject to assessment by CONSARA to determine whether confirmation sampling and analysis was required or whether documentation supplied with the materials was deemed to appropriate as follows:
        - CONSARA reviewed documentation and undertook sampling and analysis of the following materials, at their source, prior to being imported onto the Site:
            - Recovered aggregate – recycled crushed concrete and brick – 20mm aggregate;
            - Recovered aggregate – recycled sand product
        - CONSARA reviewed documentation and undertook visual inspection of the following materials, at their source, prior to being imported onto the Site and then also once imported onto the Site;
            - Recovered aggregate – recycled crushed concrete and brick – 75 to 200mm oversized aggregate;
        - CONSARA reviewed documentation prior to importation and also inspected and undertook sampling and analysis of the following materials when imported:
            - Growing medium topsoils;

- CONSARA reviewed documentation prior to importation and also inspected when imported and placed of the following materials:
  - Woodchip mulch;
- CONSARA then undertook visual inspections of all materials once imported onto the Site to confirm their suitability. It is noted that CONSARA also undertook a single check sample of bedding sand once imported to the Site.

The ARAP proposed the collection of soil samples at various frequencies depending on material type, however, generally a higher frequency was adopted as a conservative measure. The results were compared to the RAC presented in Section 3.23. The details of the results are provided in Section 5.3.

- Materials to be disposed off-site;
  - Excess materials were generated during the initial and then the later stages of excavations across the Site and were determined by the Construction Contractor to require disposal off-site. The ARAP required that materials that were to be disposed off-site to be sampled and analysed at a rate of one per 50 m^3 or as appropriately justified by CONSARA. Due to space constraints on the Site, stockpiles of the excess materials were generated during the initial excavation works and then at various stages during the later parts of construction, primarily as a result of in-ground utilities installations. As such waste classification works were completed by CONSARA on a number of occasions on an as needs basis throughout the construction works. The results were compared to the RAC presented in Section 3.2.4 to determine the waste classification for off-site disposal. The details of the results are provided in Section 5.4 and in the waste classification letters prepared throughout the works as provided in Appendix F.
  - No excess waters were generated during the works. As such no liquid was required to be disposed off-site during the works.

3.4.3 Field Methodology

Inspections

The program of inspections were conducted by CONSARA and records were kept that documented the following:

- Purpose of the Inspection and Scope of Works completed during the inspection;
- Photographs of the works being conducted and/or the area or subject of the inspection;
- Description of the conditions of the sub-surface (where exposed);
- Detailed description of works being conducted and/or the area or subject of the inspection;
- Detailed description of any identified unexpected contamination or degraded conditions; and
- Field personnel, date, time, weather conditions.

The results of this program of inspections are provided in Appendix E.

Soil Sampling

Soil sampling conducted as part of the validation works was undertaken in accordance with the methodology set out in the table below.

Table 1: Soil Sampling Methodology

Activity	Details
Soil Sampling for Characterisation	Soil samples were collected directly from the stockpiled materials (either from the near-surface or from stockpiles or similar, but at a minimum of 10 cm below the surface) by a hand protected by nitrile gloves. A clean pair of disposable gloves were worn to collect each sample. The samples were collected into containers as follows: - Samples for chemical analysis in laboratory-supplied 150 mL glass jars with Teflon-lined lids, which will be carefully filled to minimise the amount of headspace in the sample jars; - Samples for asbestos field screening and/or analysis, one 10 L and one 0.5L samples were placed into clean buckets.
Soil Sampling of Imported Materials	Soil samples were collected directly from the stockpiled materials (either from the near-surface or from stockpiles or similar, but at a minimum of 10 cm below the surface) by a hand protected by nitrile gloves. A clean pair of disposable gloves were worn to collect each sample. The samples were collected into containers as follows: - Samples for chemical analysis in laboratory-supplied 150 mL glass jars with Teflon-lined lids, which will be carefully filled to minimise the amount of headspace in the sample jars; - Samples for asbestos field screening and/or analysis, one 10 L and one 0.5L samples were placed into clean buckets.
Soil Sampling for Off-site disposal	Samples were collected directly from stockpile materials (either from the near-surface or from stockpiles or similar, but at a minimum of 10 cm below the surface) by hand protected by a disposable nitrile glove. A clean pair of disposable gloves were worn to collect each sample. The samples were collected into containers as follows: - Samples for chemical analysis in laboratory-supplied 150 mL glass jars with Teflon-lined lids, which will be carefully filled to minimise the amount of headspace in the sample jars; - Samples for asbestos field screening and/or analysis, one 10 L and one 0.5L samples shall be placed into clean buckets.
Field Screening	**Asbestos Screening** Soil samples collected for asbestos screening and analysis included, where practicable, the collection of a 0.5 L and 10L sample from each sampling location. In accordance with the WA DoH (2009), the 10 L sample was screened manually on-site through a < 7 mm sieve. It is noted that observations during screening did not identify the potential for ACM (<7mm) and/or FA to be present in any of the samples subject to screening. As such the 10 L sample was retained and not analysed, however, the 0.5 L sample for these locations was placed into a zip-locked plastic bag and were sent to a laboratory NATA accredited for weighing and asbestos analysis. **VOC Screening** The ARAP included a requirement for VOC Screening of soil samples with calibrated (100 ± 3 parts per million (ppm) isobutylene) PID with a 10.6 eV lamp to measure the presence of total VOCs. However, given that no volatile compounds had been previously identified and that there was no evidence (visual or olefactory) of the presence of volatile contaminants (no odours or gross contamination) CONSARA considered that there was no requirement to conduct VOC Screening with a PID. It is noted that the analytical results confirmed the field observations with concentrations of volatile compounds reported at less than the laboratory detection limits

Activity	Details
Field Logging	Recording of logs for the characterisation samples collected on the Site was conducted and soils were classified in accordance with the Unified Soil Classification System (USCS), including observation of any anthropogenic material (i.e. hydrocarbon odours, unusual coloured materials, ACM etc). Descriptions were recorded on standard field log sheets for uniformity in descriptions, presentation and to aid in any future interpretations. The description of the soil sampled for the characterisation works are provided on the analytical summary tables at Tables 3 and 4.
Sample Labelling, Storage and Transport	Sample jars and bottles were clearly labelled with unique identification numbers consisting of the date, sample location and sampler's initials. In the case of field intra-laboratory and inter-laboratory duplicates, sample containers were labelled so as to not reveal their purpose or sample location to the laboratory. Samples for chemical analysis were kept chilled in an ice-filled esky prior to dispatch and during transport to the NATA registered laboratory under chain-of-custody procedures. Samples for analysis for asbestos were kept in an esky prior to dispatch and during transport to the NATA registered laboratory under chain-of-custody procedures.
Decontamination	Given that samples for chemical analysis were collected directly from stockpiles using single-use gloves and no reusable sampling equipment came into contact with the soil sampled the collection of rinsate blanks was not necessary.

3.4.4 Analytical Plan

Analytical Schedule

The following sample analysis schedule was adopted for the validation works:

- Characterisation Samples
  - 9 December 2019 – 3 Samples of materials to be retained on the Site were analysed for metals (Arsenic, Cadmium, Copper, Chromium, Nickel, Lead, Zinc and Mercury), TPH, BTEX, PAHs, OCPs, OPPs, PCBs, Total Phenolics and asbestos
  - 14 January 2020 - 8 Samples of material to be retained on the Site were analysed for metals (Arsenic, Cadmium, Copper, Chromium, Nickel, Lead, Zinc and Mercury), TPH, BTEX, PAHs, OCPs, OPPs, PCBs and Total Phenolics and 7 of the 8 Primary Samples were also analysed for asbestos. One sample of a fragment of bonded ACM was analysed for Asbestos.
- Materials Imported to the Site:
  - 6 December 2019 – 4 Samples of Recovered Aggregate (recycled bedding sand product) were analysed for metals (Arsenic, Cadmium, Copper, Chromium, Nickel, Lead, Zinc and Mercury), TPH, BTEX, PAHs, OCPs, OPPs, PCBs and asbestos;
  - 18 December 2019 – 5 samples of Recovered Aggregate (crushed concrete and brick to 20 mm– no fines) were analysed for asbestos
  - 14 January 2020 – 1 Sample of Recovered Aggregate (recycled bedding sand product) was analysed for metals (Arsenic, Cadmium, Copper, Chromium, Nickel, Lead, Zinc and Mercury), TPH, BTEX, PAHs, OCPs, OPPs, PCBs and asbestos;

- 31 January 2020 – 7 Samples of Recovered Aggregate (crushed concrete and brick to make DGB20) were analysed for asbestos and 4 of the 7 samples were analysed for metals (Arsenic, Cadmium, Copper, Chromium, Nickel, Lead, Zinc and Mercury), TPH, BTEX, PAHs, OCPs, OPPs and PCBs.
- 18 May 2020 – 5 Samples of Growing medium topsoils were for metals (Arsenic, Cadmium, Copper, Chromium, Nickel, Lead, Zinc and Mercury), TPH, BTEX, PAHs, OCPs, OPPs, PCBs and asbestos;

- Materials for off-site disposal:
  - 9 December 2019 – 5 samples of soil material to be disposed offsite were analysed for metals (Arsenic, Cadmium, Copper, Chromium, Nickel, Lead, Zinc and Mercury), TPH, BTEX, PAHs, OCPs, PCBs, Phenols, asbestos and 4 of the 5 samples were analysed for Toxicity Characteristic Leachate Procedures (TCLPs) for PAHs and metals;
  - 28 February 2020 – 3 Samples of soil material to be disposed offsite were analysed for metals (Arsenic, Cadmium, Copper, Chromium, Nickel, Lead, Zinc and Mercury), TPH, BTEX, PAHs, OCPs, PCBs, asbestos and Toxicity Characteristic Leachate Procedures (TCLPs) for PAHs and metals;
  - 18 March 2020 – 3 Samples of material to be disposed offsite were analysed for metals (Arsenic, Cadmium, Copper, Chromium, Nickel, Lead, Zinc and Mercury), TPH, BTEX, PAHs, OCPs, PCBs, asbestos and Toxicity Characteristic Leachate Procedures (TCLPs) for PAHs and metals;
  - 14 April 2020 - 3 Samples of material to be disposed offsite were analysed for metals (Arsenic, Cadmium, Copper, Chromium, Nickel, Lead, Zinc and Mercury), TPH, BTEX, PAHs, OCPs, PCBs, asbestos and Toxicity Characteristic Leachate Procedures (TCLPs) for PAHs and metals;
  - 7 May 2020 - 3 Samples of material to be disposed offsite were analysed for metals (Arsenic, Cadmium, Copper, Chromium, Nickel, Lead, Zinc and Mercury), TPH, BTEX, PAHs, OCPs, PCBs, asbestos and Toxicity Characteristic Leachate Procedures (TCLPs) for PAHs and metals;
- Field Quality Control Samples completed for characterisation and imported materials soil sampling program:
  - Intra-laboratory duplicate samples were analysed at a rate of one per ten primary samples (10%) for the suite of analytes applied to the primary samples (excludes asbestos);
  - Inter-laboratory duplicates samples were analysed at a rate of one per twenty primary samples (5%) for the suite of analytes applied to the primary samples (excludes asbestos);
  - One Trip Blank and one Trip Spike was analysed for BTEX for one batch of characterisation samples submitted to the laboratory.

Analytical Laboratory Methodology

Primary, intra-laboratory duplicate and other field quality control samples were submitted to Envirolab Laboratory (Envirolab), located at Chatswood, Sydney, a NATA registered and accredited laboratory for the analysis required (NATA accreditation number 2901). Envirolab's analytical procedures are based on established internationally-recognised procedures such as those published by the US EPA, APHA, AS and NEPM (2013). Envirolab also adopt in house procedures where required.

Inter-laboratory duplicate samples were submitted to Australian Laboratory Services (ALS), located at Smithfield Sydney, a NATA registered and accredited laboratory for the analysis required (NATA accreditation number 825). ALS's analytical procedures are based on established internationally-recognised procedures such as those published by the US EPA, APHA, AS and NEPM (2013). ALS also adopt in house procedures where required.

Laboratory analysis was conducted in accordance with the requirements of NEPM and are referenced to USEPA and APHA methods. The analytical schedule, laboratory methods, laboratory PQLs and reference methods applied

for the validation works were appropriate to meet the project DQOs and DQIs. The analytical laboratory methods adopted for the works are presented in the table below.

Table 2: Analytical Laboratory Methods

Analyte	Envirolab Practical Quantitation Limit	Reference Method	ALS Laboratory Limit of Detection	Reference Method
BTEX and Naphthalene	0.2 – 1 mg/kg	Extraction with methanol and Purge and Trap GC-MS	0.2-1 mg/kg	Extraction with methanol and Purge and Trap GC-MS
TRHs (C6-C10)	25 mg/kg	Extraction with methanol and Purge and Trap GC-MS	10 mg/kg	Extraction with methanol and Purge and Trap GC-MS
TRHs (C10-C40)	50-100 mg/kg	Extraction with Dichloromethane/Acetone and analysed by GC-FID	50-100 mg/kg	Extraction with Dichloromethane/Acetone and analysed by GC-FID
PAHs (Including Naphthalene)	0.05-0.2 mg/kg	Extraction with Dichloromethane/Acetone and analysed by GC-MS	0.5 mg/kg	Extraction with Dichloromethane/Acetone and analysed by GC-MS
Metals – Arsenic, Cadmium, Chromium, Copper, Lead, Nickel, Zinc	0.4-4 mg/kg	ICP-AES	1-5 mg/kg	ICP-AES
Mercury	0.1 mg/kg	Cold vapour AAS	0.5 mg/kg	Cold vapour AAS
OCPs/OPPs/PCBs	0.1 mg/kg	Extraction with Dichloromethane/Acetone and analysed by GC with dual ECDs	0.1 mg/kg	Extraction with Dichloromethane/Acetone and analysed by GC with dual ECDs
Phenolics	5 mg/kg	Solids are Extraction in a caustic media and analysed by segmented flow analyser (in line distillation with colourimetric finish).	0.5 mg/kg	Extraction with Dichloromethane/Acetone and analysed by Capillary GC/MS in Selective Ion Mode (SIM) and quantification is by comparison against an

Analyte	Envirolab Practical Quantitation Limit	Reference Method	ALS Laboratory Limit of Detection	Reference Method
				established 5 point calibration curve
Asbestos	mg/kg (0.001%w/w) to 0.1g/kg (0.01%w/w)	Polarised Light Microscopy and Dispersion Staining Techniques.		
TCLP		Toxicity Characteristic Leaching Procedure (TCLP) using Zero Headspace Extraction (zHE) using AS4439 and USEPA 1311		
PAHs (Including Naphthalene)	0.1-0.2 µg/L	Extraction with Dichloromethane and analysed by GC-MS		
Metals – Arsenic, Cadmium, Chromium, Copper, Lead, Nickel, Zinc	0.05-0.1 µg/L	ICP-MS		
Mercury	0.05 µg/L	Cold vapour AAS		

Notes to Table:
GC= Gas Chromatography CP-AES =Inductively Coupled Plasma Atomic Emission Spectrometry
AAS = Atomic Absorption Spectroscopy MS = Mass Spectrometry FID = Flame Ionisation Detector

4 Quality Assurance and Quality Control (QA/QC)

4.1 Data Validation

The quality assurance and quality control plan adopted for the remediation and validation works for the Site were designed to achieve pre-determined data quality indicators that have demonstrated the precision, accuracy, representativeness, completeness and comparability of the data set and that the data set is of acceptable quality to meet the objectives for the Site to be suitable for commercial/industrial and open space recreational land use.

The QA/QC program implemented for the remediation and validation works was generated as the outcome of the seven-step DQO process, as presented in Appendix B.

The achievement of the project DQOs was demonstrated by reference to the Data Quality Indicators (DQIs), precision, accuracy, representativeness, completeness and comparability. Details of the QA/QC data validation are presented in Appendix C.

4.2 Data Useability

The data validation procedure employed in the assessment of documentation, certifications, plans and drawings provided to CONSARA by the Construction Contractor and TfNSW indicated that the information provided could be relied upon for the purpose of the validation works.

The data validation procedure employed in the assessment of the field and laboratory QA/QC data indicated that the reported field and analytical results are representative of the conditions at the sample locations and that the field and analytical data can be relied upon for the purpose of the validation works. It is concluded that overall the quality of the field and analytical data produced is reliable for the purpose of the validation works.

It is concluded that the overall quality of the information provided is reliable for the purpose of demonstrating the suitability of the Site for commercial/industrial and open space recreational land use.

5 Results

The construction works for the redevelopment of the Site commenced in December 2019 and were completed in mid June 2020 at the time of preparation of this Validation Report. The results of remediation and validation works conducted on the Site are provided in detail below. Inspection photographic records of the works are provided in Appendix E.

5.1 Surface and Sub-surface Observations and Conditions

The redevelopment works completed on the Site required the removal of the existing surface gravels and crushed concrete materials and other minor asphalt and concrete surfaces and then the excavation across the majority of the Site to depths of between 0.2 to 1.5 m bgs to achieve the required levels to allow for the installation of underground services and the construction of the surface treatments, including retaining walls, concrete pavements, terraced gabions, sandstone rock beds and planting bed areas.

Where RLs allowed, materials excavated were placed back into or proximal to the area from which they were excavated. All excess excavated materials that were not able to be accommodated on the Site were then disposed off-site (see Section 5.4).

At the commencement of works on the Site, the crushed concrete and gravels that were present across the surface of the Site were discretely excavated and stockpiled for re-use as part of the required sub-grade layer beneath the areas on which concrete was to be installed. The excavation works beneath the surface layers revealed that the majority of the Site, including the lower levels were underlain by sandy to sandy clay soils that contained a high proportion of medium to large sandstone boulders and rock. Some minor gravels and concrete was noted to be present but no other building or demolition type wastes were observed in these materials (see Plates in Appendix E).

The exception was in the far north-eastern corner of the Site which was underlain by grey to dark brown sands and sandy clays that contained a range of smaller gravels, some sandstone rocks, concrete fragments and some minor building and demolition wastes, such as tile, clay pipe and some fragments of ACM were also observed to be present (see Plates in Appendix E). These materials were stockpiled separately and were then placed back into this area of the Site beneath the area where the terraced gabions were then installed.

No evidence of significant or gross contamination, odours, staining, sheens, putrescible waste, perched groundwaters or significant voids were identified in the fill materials that were observed in the walls and floor of the resultant excavations on the Site nor in the fill materials that were excavated and then placed back into the sub-surface of the Site or disposed off-site. With the exception of the fill materials in the north-eastern area of the Site that were excavated and then placed beneath the terraced gabion area, no materials potentially containing asbestos were observed in the fill materials and the results of field screening for asbestos and laboratory analysis for asbestos did not identify the presence of ACM, FA or AF in the samples subject to screening and analysis.

5.2 Characterisation of Retained Fill Materials

Soil sampling of the excavated fill materials from the surface and sub-surface of the Site that were to be placed back into the sub-surface of the Site as part of 'cut to fill' works was conducted on the 9 December 2019 and on the 14 January 2020 prior to the construction of any surface treatments. It is estimated that approximately 300 m^3 of excavated materials were subject to 'cut to fill' works. In addition, approximately 50 m^3 of oversize sandstone rocks and boulders were selectively removed from excavated fill materials and were set aside to be used in part of the terraced landscaped area between the upper and lower parts of the Site.

Three samples were collected on the 9 December 2019 from approximately 50 m^3 stockpiled excavated materials that were then placed back into the sub-surface of the Site to backfill voids along the an excavation for a retaining wall and to form part of the benching required for the formation of landscaping and stairs from the upper open space area down to the lower areas. Eight samples were collected on the 14 January 2020 from approximately

250 m^3 stockpiled excavated materials. Approximately 150 m^3 of these materials were then placed back into the sub-surface of the Site to backfill trenches in which underground services had been installed and to complete the backfilling of voids along the excavation for a retaining wall. The remaining 100m^3 of the 250 m^3 materials were present in a separate stockpile in the north-eastern corner of the Site that contained fragments ACM. These ACM materials were ultimately placed back into this area of the Site beneath and within the area where the terraced gabions were then installed.

It is noted that the handling and placement of these ACM containing soils was completed under the supervision of Alliance Geotechnical who were engaged by Christie Civil to provide asbestos supervision, air monitoring and clearance inspections. Alliance Geotechnical attended the Site on 21 January 2020 to inspect the stockpile and collect samples for chemical and asbestos analysis. The report on these works indicated analytical results that were consistent with CONSARA's results for the same stockpile and confirmed the absence of FA/AF in the stockpiled material. This report is provided in Appendix G. At the completion of the placement works Alliance Geotechnical provided a clearance report that documented the works that they undertook during the handling and placement of the ACM containing soils on the Site and confirmed that no airborne asbestos fibres were detected above the detection limits and that no visable asbestos was observed on the surface soils after placement works had been completed. The clearance report is provided in Appendix G.

The sampling locations completed on the 9 December 2019 and 14 January 2020 are provided on Figures 3 and 4 respectively. This sampling and analytical program was completed to ensure that representative samples of the fill materials present and being retained on the Site were collected such that appropriate characterisation of these materials was achieved. The sampling and analytical density achieved for these characterisation works was approximately 1 per 28 m^3 which exceeds the requirements of the ARAP.

Analytical results for the characterisation soil samples (primary and field duplicates) collected and selected for analysis are presented in Tables 3, 4 and 5. The final laboratory analytical results are provided in Appendix H. A summary of the soil analytical results when compared to the adopted RAC is provided below.

- TPH and BTEX (11 Primary Samples, 2 Intra-Laboratory Duplicates and 1 Inter-Laboratory Duplicate)
    - Concentrations of TPH reported as TRH Fractions and BTEX compounds were less than the laboratory detection limits and/or were less than the adopted RAC in all samples analysed;
- PAHs (11 Primary Samples, 2 Intra-Laboratory Duplicates and 1 Inter-Laboratory Duplicate)
    - Concentrations of PAHs were either less than the laboratory detection limits and/or were less than the adopted RAC in all samples analysed, with the exception of the following:
        - In sample SP04_01 concentrations of Carcinogenic PAH compounds, reported as Benzo(a)pyrene TEQ, were reported at 4.8 mg/kg which is greater than the adopted RAC for open space and recreational land use (HIL C) of 3mg/kg but was less than the adopted RAC for commercial/industrial land use (HIL D) of 40 mg/kg;
- Metals (11 Primary Samples, 2 Intra-Laboratory Duplicates and 1 Inter-Laboratory Duplicate)
    - Concentrations of Metals were either less than the laboratory detection limits and/or were less than the adopted RAC in all samples analysed;
- OCPs, OPPs, PCBs and Total Phenolics (11 Primary Samples, 2 Intra-Laboratory Duplicates and 1 Inter-Laboratory Duplicate)
    - Concentrations of OCPs, OPPs, PCBs and Total Phenolics were less than the laboratory detection limits and therefore were less than the adopted RAC in all samples analysed;
- Asbestos (11 Primary samples – 0.5L soil sample post sieving <7mm & 1 sample of a fragment of ACM)

- Asbestos was not detected in the soil samples analysed at greater than the laboratory detection limits in all samples analysed;
- Chrysotile asbestos was detected in the fragment of ACM sampled.

5.3 Imported Materials used on the Site

Materials imported to the Site for placement during construction works were subject to inspection, review and sampling and analytical works that confirmed their suitability for use in accordance with the RAC. The types of materials imported for placement on the Site were as follows:

- Recovered aggregates used for the establishment of sub-grade course layers for construction of hardstands – DGB20, recycled bedding sands, 75-200mm oversize recycled aggregate and 20mm recycled aggregate; and
- Growing medium topsoils and woodchip mulch used for the planting beds.

The Construction Contractor provided supplier specifications to CONSARA for review and to provide approval for the materials to be imported onto the Site. Review of the documentation from the suppliers of the recovered aggregates identified that the materials met the requirements of the relevant Recovered Aggregate Exemptions. However, as a conservative measure CONSARA requested that the recovered aggregates proposed to be imported be subject to inspection and sampling and analysis at the supplier's site prior to its importation onto the Site. These inspection and sampling works were completed to confirm that they were suitable for importation onto the Site.

It is noted that the source of the landscaped materials was ANL, whom are reputable suppliers of garden soils and other bulk landscaping materials. Review of the supplier specifications identified that the growing medium soils and woodchip mulch met the adopted RAC for imported materials. At the time of importation and placement CONSARA conducted inspections to confirm that the materials met the RAC. In addition, the growing medium soils were then sampled and analysed to confirm that they were suitable for use on the Site.

The supplier specifications for the above materials are provided in Appendix I.

Analytical results for the samples of imported materials (primary and field duplicates) collected and selected for analysis are presented in Tables 6, 7 and 8. The final laboratory analytical results are provided in Appendix H. Photographs taken at the time of sampling are included in Appendix E. A summary of the soil analytical results when compared to the adopted RAC is provided below.

- Bedding sands made from crushed recycled concrete and brick sampled from materials set aside at Benedict Industries, Belrose NSW on 6 December 2019 – (4 Primary Samples, 1 Intra-Laboratory Duplicate and 1 Inter-Laboratory Duplicate)
  - TPH and BTEX
    - Concentrations of TPH reported as TRH Fractions and BTEX compounds were less than the laboratory detection limits and therefore less than the adopted RAC in all samples analysed;
  - PAHs
    - Concentrations of PAHs were either less than the laboratory detection limits and/or were less than the adopted RAC in all samples analysed;
  - Metals
    - Concentrations of Metals were either less than the laboratory detection limits and/or were less than the adopted RAC in all samples analysed;
  - OCPs, OPPs and PCBs

- Concentrations of OCPs, OPPs and PCBs were less than the laboratory detection limits and therefore were less than the adopted RAC in all samples analysed;

  - Asbestos

    - Asbestos was not detected at greater than the laboratory detection limits in all samples analysed;

- 20mm aggregate made from crushed recycled concrete and brick sampled from stockpiled materials set aside at Concrete Recyclers, Camellia NSW on 18 December 2019 – (5 Primary Samples – Bulk 1 to 2 kg)

  - Asbestos

    - Asbestos was not detected at greater than the laboratory detection limits in all samples analysed;

- DGB20 made from crushed recycled concrete and brick sampled from stockpiled materials at Metropolitan Demolitions, St Peters NSW on 31 January 2020 (7 Primary Samples - Bulk 0.5 L for asbestos analysis and 4 of the 7 Primary Samples for chemical analysis)

  - TPH and BTEX

    - Concentrations of TPH reported as TRH Fractions and BTEX compounds were less than the laboratory detection limits and/or were less than the adopted RAC in all samples analysed;

  - PAHs

    - Concentrations of PAHs were either less than the laboratory detection limits and/or were less than the adopted RAC in all samples analysed;

  - Metals

    - Concentrations of Metals were either less than the laboratory detection limits and/or were less than the adopted RAC in all samples analysed;

  - OCPs, OPPs and PCBs

    - Concentrations of OCPs, OPPs and PCBs were less than the laboratory detection limits and therefore were less than the adopted RAC in all samples analysed;

  - Asbestos

    - Asbestos was not detected at greater than the laboratory detection limits in all samples analysed;

- Premium garden mix growing medium soils imported from ANL at Terrey Hills NSW were sampled on the Site on the 18 May 2020 (5 Primary Samples, 1 Intra-Laboratory Duplicate and 1 Inter-Laboratory Duplicate)

  - TPH and BTEX

    - Concentrations of TPH reported as TRH Fractions and BTEX compounds were less than the laboratory detection limits and/or were less than the adopted RAC in all samples analysed;

  - PAHs

    - Concentrations of PAHs were either less than the laboratory detection limits and/or were less than the adopted RAC in all samples analysed;

  - Metals

    - Concentrations of Metals were either less than the laboratory detection limits and/or were less than the adopted RAC in all samples analysed;

- OCPs, OPPs and PCBs
  - Concentrations of OCPs, OPPs and PCBs were less than the laboratory detection limits and therefore were less than the adopted RAC in all samples analysed;
- Asbestos
  - Asbestos was not detected at greater than the laboratory detection limits in all samples analysed;

In addition to the above, the materials were also subject to inspection at the source site and once delivered to the Site confirm that the materials did not contain any of the following:

- Foreign substances, suspicious staining, sheens and/or odours;
- Marine mud, peat, vegetation, timber, organic, soluble or perishable materials,
- Dangerous or toxic material or material susceptible to combustion;
- Metal, rubber, plastic or synthetic material or other forms of general rubbish;
- Materials that potentially contained asbestos; and/or
- Construction/demolition debris.

Given that the above results satisfied the RAC for importation, the materials imported for placement on the Site were as follows:

- 223.78 tonnes of bedding sands made from crushed recycled concrete and brick supplied by Benedict Industries, Belrose NSW between the 16 December 2019 and 13 March 2020
- 76.07 tonnes of 20mm aggregate made from crushed recycled concrete and brick supplied by Concrete Recyclers, Camellia NSW between the 27 March 2020 and 30 March 2020
- 223.38 tonnes of DGB20 made from crushed recycled concrete and brick supplied from Metropolitan Demolitions, St Peters NSW between 22 February 2020 and 27 March 2020
- 96 m^3 of Organic Garden Mix – Growing medium soils supplied by Australian Native Landscapes (ANL), Terrey Hills NSW between 7 May 2020 and 11 May 2020

In addition, and as a check, a sample of the bedding sands that had been imported and were present in a small stockpile on the Site on 14 January 2020 (BS-01) was collected and analysed and the results reported the following

- TPH and BTEX
  - Concentrations of TPH reported as TRH Fractions and BTEX compounds were less than the laboratory detection limits and therefore less than the adopted RAC in all samples analysed;
- PAHs
  - Concentrations of PAHs were either less than the laboratory detection limits and/or were less than the adopted RAC in all samples analysed;
- Metals
  - Concentrations of Metals were either less than the laboratory detection limits and/or were less than the adopted RAC in all samples analysed;
- OCPs, OPPs and PCBs

- Concentrations of OCPs, OPPs and PCBs were less than the laboratory detection limits and therefore were less than the adopted RAC in all samples analysed;

- Asbestos
  - Asbestos was not detected at greater than the laboratory detection limits in all samples analysed;

Two other types of materials were imported to the Site that were not considered to require sampling due to their bulk composition, but rather were inspected once delivered to the Site to confirm that they visually met the RAC as follows:

- 173.55 tonnes of 75 to 200 mm oversized aggregate supplied by Concrete Recyclers, Camellia NSW between the 21 January 2020 and 14 February 2020; and
- 30 m^3 of Forest Fines Woodchip Mulch supplied by Australian Native Landscapes (ANL), Terrey Hills NSW on the 11 May 2020

The importation dockets for the materials imported onto the Site are provided at Appendix J.

Based on the above CONSARA considers that the materials imported onto the Site were suitable for use on the Site.

Given the tonnages/volumes imported onto the Site the following sampling and analytical densities were achieved:

- Bedding Sands - 223.78 tonnes – 5 Primary Samples - 1 per 45 tonne/ 1 per 28 m^3
- 20mm aggregate - 76.07 tonnes -5 Bulk Primary Samples for asbestos analysis 1 per 15 tonne/ 1 per 30 m^3
- DGB20 - 223.38 tonnes – 4 Primary Samples for chemical analysis and 7 Primary Samples for asbestos analysis - 1 per 56 tonne/1 per 30 m^3
- Organic Garden Mix - 96 m^3 – 5 Primary Samples – 1 per 20 m^3

The sampling and analytical densities achieved are noted to exceed the requirements set out in the ARAP.

5.4 Off-site Disposal of Excavated Materials

5.4.1 Waste Classification

Fill materials that were excavated and subsequently in excess to the 'cut to fill' works were determined by the Construction Contractor to require disposal off-site and as such were subject to waste classification by CONSARA to allow for off-site disposal.

Due to space constraints on the Site, stockpiles of the excess materials were generated during the initial excavation works and then at various stages during the later parts of construction, primarily as a result of in-ground utilities installations. As such waste classification works were completed by CONSARA on a number of occasions throughout the construction works as follows:

- Samples collected 9 December 2019 – Waste Classification Letter dated 12 December 2019
  - 5 samples of stockpiled soil materials to be disposed offsite were analysed for metals (Arsenic, Cadmium, Copper, Chromium, Nickel, Lead, Zinc and Mercury), TPH, BTEX, PAHs, OCPs, PCBs, Phenols, asbestos and 4 of the 5 samples were analysed for Toxicity Characteristic Leachate Procedures (TCLPs) for PAHs and metals;

- Resultant waste classification was General Solid Waste (non-putrescible) noting that the results did not meet the CT1 thresholds for General Solid Waste listed in Table 1 of the NSW EPA (2014) *Waste Classification Guidelines* or equivalent

- Samples collected 28 February 2020 – Waste Classification Letter dated 6 March 2020
  - 3 Samples of soil material to be disposed offsite were analysed for metals (Arsenic, Cadmium, Copper, Chromium, Nickel, Lead, Zinc and Mercury), TPH, BTEX, PAHs, OCPs, PCBs, asbestos and Toxicity Characteristic Leachate Procedures (TCLPs) for PAHs and metals;
  - Resultant waste classification was General Solid Waste (non-putrescible) noting that the results did meet the CT1 thresholds for General Solid Waste listed in Table 1 of the NSW EPA (2014) *Waste Classification Guidelines* or equivalent
- Samples collected 18 March 2020 – Waste Classification Letter dated 21 March 2020
  - 3 Samples of material to be disposed offsite were analysed for metals (Arsenic, Cadmium, Copper, Chromium, Nickel, Lead, Zinc and Mercury), TPH, BTEX, PAHs, OCPs, PCBs, asbestos and Toxicity Characteristic Leachate Procedures (TCLPs) for PAHs and metals;
  - Resultant waste classification was General Solid Waste (non-putrescible) noting that the results did not meet the CT1 thresholds for General Solid Waste listed in Table 1 of the NSW EPA (2014) *Waste Classification Guidelines* or equivalent
- Samples collected 14 April 2020 – Waste Classification Letter dated 15 April 2020
  - 3 Samples of material to be disposed offsite were analysed for metals (Arsenic, Cadmium, Copper, Chromium, Nickel, Lead, Zinc and Mercury), TPH, BTEX, PAHs, OCPs, PCBs, asbestos and Toxicity Characteristic Leachate Procedures (TCLPs) for PAHs and metals;
  - Resultant waste classification was General Solid Waste (non-putrescible) noting that the results did not meet the CT1 thresholds for General Solid Waste listed in Table 1 of the NSW EPA (2014) *Waste Classification Guidelines* or equivalent
- Samples collected 7 May 2020 – Waste Classification Letter dated 13 May 2020
  - 3 Samples of material to be disposed offsite were analysed for metals (Arsenic, Cadmium, Copper, Chromium, Nickel, Lead, Zinc and Mercury), TPH, BTEX, PAHs, OCPs, PCBs, asbestos and Toxicity Characteristic Leachate Procedures (TCLPs) for PAHs and metals;
  - Resultant waste classification was General Solid Waste (non-putrescible) noting that the results did not meet the CT1 thresholds for General Solid Waste listed in Table 1 of the NSW EPA (2014) *Waste Classification Guidelines* or equivalent

The details of this sampling work and the analytical results are presented in waste classification letters that were issued to the Construction Contractor after receipt of analytical results and are included as Appendix F. These reports included the summary analytical tables and the final analytical laboratory reports for the waste classification works.

5.4.2 Off-site Disposal

The off-site disposal of the excavated soil materials was the responsibility of the Construction Contractor and was completed by a sub-contractor to the Construction Contractor, Resource Co Material Solutions Pty Ltd. The disposal dockets were provided from the Construction Contractor and are provided in Appendix K.

CONSARA's review of the disposal dockets identified that 1621.76 tonnes of soil materials were disposed from the Site to Breen Resources Pty Ltd located at 330 Captain Cook Drive Kurnell NSW.

The Environment Protection Licence (EPL) number for the disposal facility operated by Breen at this address is 4608, as listed on the disposal dockets. Review of the Public Register available on the NSW EPA website (epa.nsw.gov.au/licencing-and-regulation/public-registers) for the EPL 4608 indicated that the disposal facility is licenced to accept soils that meet the requirements of *General Solid Waste (non-putrescible)* and also that the meet the *General Solid Waste (non-putrescible)* classification with the exception of the maximum thresholds values for specified contaminants as listed under Condition L2.1 of the EPL.

Review of the disposal dockets and information provided by the Construction Contractor identified that disposal was undertaken as follows:

- 960.7 Tonnes was disposed as listed on the docket as '*Contaminated Soil -General Solid*' between17 December 2019 and 19 December 2019 – using Waste Classification Letter dated 12 December 2019
- 305.92 Tonnes was disposed as listed on the docket as '*Contaminated Soil -General Solid*' between 12 March 2020 and 13 March 2020 – using Waste Classification Letter dated 6 March 2020
- 117.12 Tonnes was disposed as listed on the docket as '*Contaminated Soil -General Solid*' between 24 March 2020 and 30 March 2020 – using Waste Classification Letter dated 21 March 2020
- 207.24 Tonnes was disposed as listed on the docket as '*Contaminated Soil -General Solid*' between 17 April 2020 and 20 April 2020– using Waste Classification Letter dated 15 April 2020
- 30.78 Tonnes was disposed as listed on the docket as '*Contaminated Soil -General Solid*' on 19 May 2020– using Waste Classification Letter dated 13 May 2020

Given the tonnages disposed and assuming a density of between 1.8 and 2 (due to the high proportion of sandstone in some of the earlier classification events) the sampling and analytical densities achieved are as follows:

- 5 Samples for Waste Classification Letter dated 12 December 2019 - 960.7 Tonnes disposed – 1 per 96 m^3
- 3 Samples for Waste Classification Letter dated 6 March 2020 - 305.92 Tonnes disposed - 1 per 50 m^3
- 3 Samples for Waste Classification Letter dated 21 March 2020 - 117.12 Tonnes disposed – 1 per 20 m^3
- 3 Samples for Waste Classification Letter dated 15 April 2020 - 207.24 Tonnes disposed – 1 per 35 m^3
- 3 Samples for Waste Classification Letter dated 13 May 2020 - 30.78 Tonnes disposed - 1 per 5 m^3

The sampling and analytical densities achieved are noted to meet or exceed the requirements set out in the ARAP, with the exception of the first classification event in which the sampling density was slightly lower as the stockpiled materials were observed to be consistent in composition with little variation in the condition of materials between sampling locations (see Waste Classification Letter dated 12 December 2019. The analytical results for these samples supported these observations with little variance between samples. As such the sampling density applied is considered to be appropriate.

Given the above information, it is considered that the soil materials disposed from the Site, as shown on the disposal dockets, have been accepted by a waste facility is appropriately licenced to accept these materials in accordance with the waste classifications completed by CONSARA.

5.5 Establishment of Capping Layer

The establishment of a capping layer on the Site was part of the remediation approach set out in the RAP and ARAP to ensure that a physical barrier was installed across all retained fill materials such that they are not readily

accessible to the future users of the Site. The construction details showing the capping layer installed and in place for the Site is detailed in the plans provided in Appendix A and comprises of the following:

- Concrete hardstand that is present across the surface of the maritime support facility area of the site;
- Asphaltic pavement across the lower surface area of the public open space area of the Site;
- Concrete driveways, footpaths, stairs and concrete ramps installed on the public open space area of the Site;
- Surface treatments for the landscaped areas as specified in the plans provided in Appendix A.

5.5.1 Installation of Surface Treatments on Non-Landscaped Areas

Surface treatments installed across the majority of the surface area of the Site are hardstand pavements comprised of the following:

- Concrete – Installed across the following areas
  - Area on which the maritime support facility demountable buildings and other facilities, including carparking have been installed;
  - Driveway into the Site from Bank Street;
  - Ramp, stairs and footpath from upper public open space area to the lower public open space area;
- Asphalt – Installed across the lower public open space area.

5.5.2 Installation of Surface Treatments in Landscaped Areas

Surface treatments installed across the landscaped areas of the Site have been completed to the finished detail specifications set out plan provided in Appendix A. The finished landscaped surface treatments are as follows:

- Planting Beds – Installed across the following areas:
  - Discrete beds at the frontages of the Site with Bank Street;
  - Discrete bed along the top of the terraced sandstone rocks between the upper and lower levels of the public space areas and to the north of the stairs;
  - Discrete beds that run along the southern side and lower northern side of the concrete ramp between the upper and lower levels of the public space areas.
- Sandstone rock terracing – Installed along the slope between the upper and lower levels of the public space area
- Gravel aggregate– Installed around the base and on top of the terraced gabions on the upper level of the public open space area;
- Rock Gabions – Installed as a terraced feature on upper level of the public open space area and as a retaining structure along base of sandstone rock terracing on lower level of the public open space area.

It is noted that a geofabric marker layer was installed directly onto the retained fill materials prior to the installation of the landscaped surface treatments as follows:

- In the planting bed located in the north-eastern area of the Site at the frontage with Bank Street the geofabric was placed on retained fill materials and then covered with imported organic garden soils and mulch to achieve a thickness of between 583 mm and 606 mm;

- In the planting beds across the remaining areas of the Site, the geofabric was placed on retained fill materials and then covered with imported organic garden soils and mulch to achieve a thickness of between 282 mm to 615 mm. It is noted that on average the thickness of clean growing medium soils placed above the geofabric exceed the 300 mm thickness required by the plans;
- Where the gravel aggregate and sandstone rock was placed, geofabric was firstly installed on the surface of the retained fill materials and then the gravels and rock were placed immediately onto the geofabric

The specifications for the marker layer used on the Site is provided in Appendix L and CONSARA confirmed that the product meets the requirements of the ARAP prior to its installation. Registered survey was conducted prior to the installation of the geofabric to document the RLs of the retained fill materials. Registered survey was also completed after the completion of the paving and after the installation of the landscape surface treatments to demonstrate that the required thickness of soils had been achieved as shown on Figure 5 and Figure 6. Figure 6 also provides the layout of the finished surface treatments and the boundary of the Site. The Registered Survey is provided in Appendix M.

The inspections conducted by CONSARA during the installation of the surface treatments identified that the above surface treatments were installed in general accordance with the detailed specifications provided in Appendix A and in accordance with the RAP and ARAP.

6 Discussion and Conclusions

RMS, now known as TfNSW, own the Site and have undertaken a redevelopment on the Site to enable the relocation of a RMS licenced commercial operator from a property on Pyrmont Bridge Road, Glebe NSW to the Site. This relocation is required as part of the larger development of the New Sydney Fish Market and the redevelopment works on the Site are being undertaken to effect the decanting of water-based operations within Blackwattle Bay and allow for a working harbour use to continue in generally the same location with similar operational parameters to its current use. As part of this work the Site is to be utilised for temporary maritime support facilities and publicly accessible open space.

Previous investigations across the larger 5-11 Bank Street property identified the presence and potential presence of fill materials in the surface and sub-surface. These fill materials were identified, in some locations, to be contaminated and potentially contaminated with polycyclic aromatic hydrocarbons, petroleum hydrocarbons and heavy metals. No fibrous asbestos (FA) and asbestos-containing materials (ACM) have been previously identified, however, given the history of filling activities conducted at the Site there is the potential for these materials to be present in surface and sub-surface soils. The presence of contaminated and potentially contaminated fill materials across the 5-11 Bank Street property has been more recently managed through the 2012 LTEMP. The implementation of the 2012 LTEMP has enabled the 5-11 Bank Street property, including the area of the Site to be suitable for its recent uses for commercial, open space and recreational activities.

The planning pathway for the redevelopment of the Site by TfNSW commenced in 2014 and in 2015 the RAP was prepared to document the works that would be undertaken, as part of the redevelopment, in order to ensure that the Site was suitable for its proposed land use. Subsequent to the issue of the RAP, there were significant changes in the redevelopment plans for the Site which were then ultimately consented to under the MOD 3. The MOD 3 required that the RAP be implemented on the Site as part of the redevelopment and that a Site Auditor ultimately certify the suitability of the Site for its proposed uses.

The remediation approach set out in the RAP was for the capping, containment and management of any retained contaminated or potentially contaminated fill materials beneath the finished constructed surfaces of the then proposed redevelopment. Given that the RAP relied on the proposed surface treatments to achieve the remediation requirements and that the redevelopment plans consented to under the MOD 3 were different to those relied on in the RAP, it was necessary to provide an update that was consistent with the MOD 3 plans. The ARAP was then prepared in 2018 to provide this update to the RAP and described the surface treatments to be installed in order to achieve the remediation of the Site through the capping, containment and management approach documented in the RAP.

Given that the redevelopment works comprised the construction of new temporary buildings, installation of underground services and the installation of new surface treatments across the commercial and open space areas, the RAP and ARAP considered that the final surface treatments on the Site would provide an effective physical barrier or capping layer between any retained contaminated or potentially contaminated soils and the future users of the Site. As such the RAP and ARAP provided the mechanisms for suitability to be achieved via the implementation of a 'cap and contain' and long-term management approach. The ARAP also provided a sampling approach that sought to ensure that retained fill materials were appropriately characterised. The works required under the RAP and ARAP have now been implemented on the Site.

6.1 Discussion of Results

The results of the remediation and validation works completed on the Site have confirmed the following:

- Excavation works were completed across the Site to depths of between 0.2 to 1.5 m bgs and removed the pre-existing surfaces, surficial fill materials and some of the shallow sub-surface fill materials to allow for the installation of underground services and to create a new surface on which the new surface treatments were installed;

- RMS plans for the redevelopment of the Site adopted a 'cut to fill' earthworks program that estimated a cut volume of 619 m^3 and a fill volume of 740 m^3, leaving a balance of 121 m^3 that would be required to be imported onto the Site. However, in the early stages of the redevelopment works on the Site it was determined, by the Construction Contractor, that in order to achieve the required RLs and suitable sub-grade to install the required underground services, surface treatments, and landscaping features, that the RMS proposed 'cut to fill' balance was not achievable and that excess materials were going to be generated that would require disposal off-site. As such during early stages of the works the opportunity for 'cut to fill' works was completed with the excess materials that were progressively generated from the continued excavation works across the Site to achieve the required RLs after this time were subsequently appropriately classified and disposed off-site;
- During the 'cut to fill' stage of works, CONSARA completed sampling of the stockpiled excavated fill materials that were ultimately placed and retained on the Site to provide characterisation of these materials. It is estimated that approximately 300 m^3 of fill materials were subject to the 'cut to fill' works;
- The results of the characterisation works reported concentrations of some Polycyclic Aromatic Hydrocarbons (PAHs) in a limited number of samples, that were greater than the relevant criteria for open space and recreational use but were less than the relevant criteria for commercial/industrial land use. Fragments of Asbestos containing materials (ACM) were also identified to be present in fill materials excavated from the north-eastern corner of the Site, however, no asbestos fibres or fibrous asbestos (AF/FA) was reported to be detected in these materials. Asbestos was not identified to be present in fill materials excavated (either for placement back to the Site or for off-site disposal) across the remaining areas of the Site. The remaining contaminants of concern were reported at concentrations that were less than the relevant criteria for commercial/industrial and open space and recreational land use;
- Waste classification works for the excess fill materials excavated from the Site was completed progressively as these materials were generated and place to stockpiles. The results of the waste classification works reported a consistent waste classification of *General Solid Waste (non-putrescible)* that required the application of TCLP *results against Table 2 of the NSW EPA (2014) guidelines*. The only exception was for classification works completed on the28 February 2020 which returned results that met the *General Solid Waste (non-putrescible)* classification but also met the CT1 thresholds for General Solid Waste listed in Table 1 of the NSW EPA (2014) guidelines;
- The off-site disposal of the excavated soil materials was the responsibility of the Construction Contractor and was completed by a sub-contractor to the Construction Contractor, Resource Co Material Solutions Pty Ltd. The disposal dockets were provided from the Construction Contractor and review of the disposal dockets identified that 1621.76 tonnes of soil materials were disposed from the Site between the 17 December 2019 to 19 May 2020 to Breen Resources Pty Ltd located at 330 Captain Cook Drive Kurnell NSW which licenced under EPL 4608 to accept *General Solid Waste (non-putrescible)*. Given the above information, it is considered that the soil materials disposed from the Site, as shown on the disposal dockets, have been accepted by a waste facility is appropriately licenced to accept these materials in accordance with the waste classifications completed by CONSARA;
- Based on the results of the characterisation works and also with consideration to the results of sampling completed for waste classification, that the condition of the fill materials present on the Site and where retained in the sub-surface does not contain gross or significant contamination or point source, rather the contamination is primarily limited to the presence of concentrations of PAHs in fill materials across the Site and the presence of fragments of ACM in fill materials in a limited area in the north-eastern area of the Site. There was no evidence of the presence of volatile contaminants, putrescible or other types of wastes, perched or shallow groundwater or acid sulphate soils. These results confirm the CSM presented in the ARAP and Sections 2.4 and 2.5 of this report;

- Materials imported to the Site for placement during construction works were subject to inspection, review and sampling and analytical works, as required by CONSARA, that confirmed their suitability for use in accordance with the RAC;
- The installation of the surface treatments on the Site was completed in accordance with the specifications set out in the ARAP and as shown in Appendix A and Figure 6. These surface treatments have satisfied the requirements of the RAP and ARAP for the establishment of a suitable capping layer;
- That the works were undertaken in general accordance with the RAP and ARAP; and
- That the Site is suitable for commercial/industrial and open space/recreational land uses subject to the implementation of a LTEMP for the Site.

6.2 Conclusions

Based on the works documented in this report it is considered that the remediation and validation works required by the RAP and the ARAP have been successfully implemented on the Site such that the remedial objectives for the Site have been achieved and that the Site is suitable for commercial/industrial and open space/recreational land uses subject to the implementation of a LTEMP for the Site.

It is noted that a LTEMP has been prepared for the Site under separate cover to this report as the '*Long-term Environmental Management Plan, Maritime Facility, Northern Part of 5-11 Bank Street Pyrmont NSW*' by CONSARA for TfNSW and dated 10 July 2020. The LTEMP has been prepared in accordance with the requirements of the NSW EPA (2017) *Guidelines for the NSW Site Auditor Scheme (3rd edition)* and other relevant guidance made or approved by the NSW EPA and TfNSW is responsible for it's implementation on the Site.

7 Limitations

This report has been prepared for the sole purpose of providing a Validation Report in accordance with generally accepted consulting practice. No other warranty or guarantee, expressed or implied is made as to the advice indicated in this report.

This report should not be used for any other purpose without our prior written consent. Accordingly, neither CONSARA nor any member or employee of CONSARA accepts responsibility or liability in any way whatsoever for the use of this report for any purpose other than that for which it has been prepared.

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CONSARA has relied upon and presumed accurate information provided by Christie Civil Pty Ltd and/or any third party (or absence thereof) in making the assumptions made in this report. Nothing in this report should be taken to imply that CONSARA has verified or audited any of the information supplied to us other than as expressly stated in this report. We have assumed this information to be both adequate and accurate for the purposes of this report.

Where findings, observations and conclusions are based solely upon information provided by Christie Civil Pty Ltd and/or a third party and CONSARA do not accept, to the maximum extent permitted by law, any liability for any losses, claims, costs, expenses, damages (whether in statute, in contract or tort for negligence or otherwise) suffered or incurred by Christie Civil Pty Ltd or any third party as a result of or in connection with CONSARA's reliance on any such the information to the extent that such information is false, misleading or incomplete and CONSARA give no warranty or guarantee, express or implied as to such findings, observations and conclusions.

If further information becomes available, or additional assumptions need to be made, CONSARA reserves its right to amend any statements or opinions made in this report.

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Figures

Figure 1: Site Location

Figure 2: Site Layout

Figure 3: Characterisation Sampling Locations – 9/12/2019

Figure 4: Characterisation Sampling Locations – 14/01/2020

Figure 5: Marker Layer Location, RLs and Finished Surface RLs

Figure 6: Final Site Layout

A4

PROJECT No.	C151008
FILE NAME	F001
DATE	09/06/20
DRAWN	RR
APPROVED	RO



LEGEND

SITE BOUNDARY

CLIENT
CHRISTIE CIVIL

PROJECT
VALIDATION REPORT
MARITIME FACILITY, NORTHERN PART OF 5-11 BANK STREET
PYRMONT, NSW

TITLE
SITE LOCATION PLAN

FIGURE No.
1

CONSARA

Plotted By: ReynoldsR Plot Date: 03/07/05 - 03:20 Cad File: E:\personal_CAD R21_CONSARA\C151008_BankStreet1\FIGURES\C151008-F001.dwg

A3



PROJECT No.	**C151008**
FILE NAME	**F002**
DATE	**09.06.20**
DRAWN	**RR**
APPROVED	**RO**

LEGEND

- SITE BOUNDARY
- COMMERCIAL MARINA FACILITY
- PUBLIC OPEN SPACE

0 2 4 6 8 10
(metres)

CLIENT
CHRISTIE CIVIL

PROJECT
VALIDATION REPORT
MARITIME FACILITY, NORTHERN PART OF 5-11 BANK STREET, PYRMONT, NSW

TITLE
SITE LAYOUT

FIGURE No.
2

CONSARA

A3



PROJECT No.	**C151008**
FILE NAME	**F003**
DATE	**09.06.20**
DRAWN	**RR**
APPROVED	**RO**

LEGEND

50m³ STOCKPILE LOCATION & EST VOLUME

CS_01 CHARACTERISATION SAMPLING LOCATION 9/12/19

CS_02 WASTE CLASSIFICATION SAMPLING LOCATION 9/12/19

0 2 4 6 8 10
(metres)

CLIENT
CHRISTIE CIVIL

PROJECT
VALIDATION REPORT
MARITIME FACILITY, NORTHERN PART OF 5-11 BANK STREET, PYRMONT, NSW

TITLE
CHARACTERISATION SAMPLING LOCATION PLAN 9/12/19

FIGURE No.
3

CONSARA

A3



PROJECT No.	**C151008**
FILE NAME	**F004**
DATE	**09.06.20**
DRAWN	**RR**
APPROVED	**RO**

LEGEND

50m³ STOCKPILE LOCATION AND ESTIMATED VOLUME

SP01_01 CHARACTERISATION SAMPLING LOCATION 14/1/20

BS_01 REPORTED BEDDING SAND SAMPLE LOCATION 14/1/20

0 2 4 6 8 10
(metres)

CLIENT
CHRISTIE CIVIL

PROJECT
VALIDATION REPORT
MARITIME FACILITY, NORTHERN PART OF 5-11 BANK STREET, PYRMONT, NSW

TITLE
CHARACTERISATION SAMPLING LOCATION PLAN 14/1/20

FIGURE No.
4

CONSARA

A3

PROJECT No.	C151008
FILE NAME	F005
DATE	09.06.20
DRAWN	RR
APPROVED	RO

LEGEND

- SITE BOUNDARY
- (0.206) DENOTES THICKNESS OF SOILS OVER MARKER LAYER
- · 5.817 DENOTES MARKER LAYER LEVEL
- · 5.49 DENOTES NEW FINISHED PAVING AND SOIL LEVELS

BANK STREET

OVER WATER MARINA

OVER WATER MARINA

BLACK WATTLE BAY

(0.614) (0.669) (0.206) (0.222) (0.481) (0.449) (0.401) (0.319) (0.38)

0 2 4 6 8 10
(metres)

CLIENT
CHRISTIE CIVIL

PROJECT
VALIDATION REPORT
MARITIME FACILITY, NORTHERN PART OF 5-11 BANK STREET, PYRMONT, NSW

TITLE
MARKER LAYER LOCATION, RLs AND FINISHED SURFACE RLs

FIGURE No.
5

CONSARA

A3

PROJECT No.	**C151008**
FILE NAME	**F010**
DATE	**02.07.20**
DRAWN	**RR**
APPROVED	**RO**

LEGEND

- SITE BOUNDARY
- GABION / RETAINING WALL
- BLOCK WALL
- ASPHALT
- CONCRETE
- ROCK
- GARDEN BED
- GRAVEL
- PITS / STRUCTURES
- KERB
- TOP OF GEOFABRIC MARKER LAYER
- · 5.817 RL (m AHD)

EXTENT OF MARKER LAYER

E 332408.390
N 6250843.134
COORDINATES IN M.G.A.

E 332383.191
N 6250878.014

E 332346.068
N 6250852.885

E 332347.671
N 6250846.101

E 325459.295
N 6248332.504

E 332408.390
N 6250843.134

E 332335.839
N 6250808.149

E 332373.845
N 6250808.998

E 332370.182
N 6250798.180

E 332397.492
N 6250801.189

BANK STREET

OVER WATER MARINA

OVER WATER MARINA

BLACK WATTLE BAY

0 2 4 6 8 10
(metres)

CLIENT
CHRISTIE CIVIL

PROJECT
VALIDATION REPORT
MARITIME FACILITY, NORTHERN PART OF 5-11 BANK STREET, PYRMONT, NSW

TITLE
FINAL SITE LAYOUT

FIGURE No.
6

CONSARA

Tables

Table 3: Soil Analytical Results – Characterisation Samples - TPH, BTEX, PAHs and Metals

Table 4: Soil Analytical Results – Characterisation Samples - OCP, OPPs, PCBs, Phenols

Table 5: Soil Analytical Results – Characterisation Samples - Asbestos

Table 6: Soil Analytical Results – Imported Materials Samples - TPH, BTEX, PAHs and Metals

Table 7: Soil Analytical Results – Imported Materials Samples - OCP, OPPs, PCBs, Phenols

Table 8: Soil Analytical Results – Imported Materials Samples – Asbestos

Table 9: Soil RPDs

CONSARA contaminated sites

Table 3 - Soil Analytical Results - Characterisation Samples - BTEX, TPH, PAHs, Metals

Sample ID										CS_01	QC01 (Intra-Lab Dup of CS_01)	QC02 (Inter-Lab Dup of CS_01)	CS_07	CS_08	SP01_01	SP02_01	SP03_01	SP03_02	SP04_01	SP05_01	SP_ACM_01	SP_ACM_03	QC01 (Intra-Lab Dup of SP_ACM_03)	QC100	QC101
Description										Sandy soils, some minor clays and silts, sandstone gravels, rocks			Crushed concrete road base, sands, gravels	Crushed concrete road base, sands, gravels	Sandy soils, some minor clays and silts, sandstone gravels, rocks	Sandy soils, some minor clays and silts, sandstone gravels, rocks	Sandy soils, some minor clays and silts, sandstone gravels, rocks	Sandy soils, some minor clays and silts, sandstone gravels, rocks	Sandy soils, some minor clays and silts, sandstone gravels, rocks	Sandy soils, some minor clays and silts, sandstone gravels, rocks	Sandy soils, some minor clays, silts and gravels, some fragments of ACM	Sandy soils, some minor clays, silts and gravels, some fragments of ACM		Trip Spike	Trip Blank
Date Sampled										9/12/2019			09/12/2019	09/12/2019	14/01/2020	14/01/2020	14/01/2020	14/01/2020	14/01/2020	14/01/2020	14/01/2020	14/01/2020		09/12/2019	09/12/2019
Compounds	Units	PQL	NEPM (2013) HSL C/ HSL D (SAND 0- <1m bgs)	NEPM (2013) HSL C/ HSL D (SAND 1 to <2m bgs)	NEPM (2013) HSL C/ HSL D (SAND 2 to 4m bgs)	NEPM (2013) HSL C/ HSL D (SAND 4+ m bgs)	NEPM (2013) Soil Saturation SAND (Csat)	NEPM (2013) HIL C	NEPM (2013) HIL D																
BTEX																									
Benzene	mg/kg	1	NL/3	NL/3	NL/3	NL/3	360	-		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	90%	<0.2
Toluene	mg/kg	1	NL	NL	NL	NL	560	-		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	91%	<0.5
Ethylbenzene	mg/kg	1	NL	NL	NL	NL	64	-		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	88%	<1
Xylene (m & p)	mg/kg	2	-	-	-	-	-	-	-	<2	<2	<2	<2	<2	<2	<2	<2	<3	<2	<2	<2	<2	<2	88%	<2
Xylene (o)	mg/kg	1	-	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	90%	<1
Xylene Total	mg/kg		NL/230	NL	NL	NL	300	-		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	INTI	<3
Naphthalene	mg/kg	1	NL	NL	NL	NL	9	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	NA	NA
TPH																									
TRH C6 - C9	mg/kg	10	-	-	-	-	-	-	-	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	NA	NA
TRH C6 - C10	mg/kg	10	-	-	-	-	-	-	-	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	NA	NA
vTPH C6 - C10 less BTEX (F1)	mg/kg	10	NL/260	NL/370	NL/630	NL	950	-		<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	NA	NA
TRH C10 - C14	mg/kg	50	-	-	-	-	-	-	-	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	NA	NA
TRH C15 - C28	mg/kg	100	-	-	-	-	-	-	-	<100	<100	110	<100	<100	100	<100	<100	<100	<100	<100	<100	<100	<100	NA	NA
TRH C29 - C36	mg/kg	100	-	-	-	-	-	-	-	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	110	<100	<100	<100	NA	NA
TRH >C10-C16	mg/kg	50	-	-	-	-	-	-	-	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	NA	NA
TRH >C10 - C16 less Naphthalene (F2)	mg/kg	50	NL	NL	NL	NL	560	-	-	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	NA	NA
TRH >C16-C34	mg/kg	100	-	-	-	-	-	-	-	<100	<100	<100	160	<100	160	<100	<100	<100	<100	170	<100	<100	<100	NA	NA
TRH >C34-C40	mg/kg	100	-	-	-	-	-	-	-	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	NA	NA
Total +ve TRH (>C10-C40)	mg/kg	100	-	-	-	-	-	-	-	<50	<50	160	<50	<50	160	<50	<50	<50	<50	170	<50	<50	<50	NA	NA
PAHs																									
Naphthalene	mg/kg	0.1	NL	NL	NL	NL	9			<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NA	NA
Acenaphthylene	mg/kg	0.1	-	-	-	-	-	-	-	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NA	NA
Acenaphthene	mg/kg	0.1	-	-	-	-	-	-	-	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	0	<0.1	NA	NA
Fluorene	mg/kg	0.1	-	-	-	-	-	-	-	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NA	NA
Phenanthrene	mg/kg	0.1	-	-	-	-	-	-	-	0.8	0.7	0.8	0.1	0.4	0.4	0.1	0.2	0.2	2.4	1	1	0	0	NA	NA
Anthracene	mg/kg	0.1	-	-	-	-	-	-	-	0.1	0.2	<0.5	<0.1	0.1	<0.1	<0.1	0.2	0.3	0.5	0	0	<0.1	<0.1	NA	NA
Fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	2.1	2.0	2.8	0.4	1.0	1.7	0.5	0.7	0.8	7.6	2	3	1	1	NA	NA
Pyrene	mg/kg	0.1	-	-	-	-	-	-	-	2.0	1.8	2.7	0.4	0.9	1.7	0.5	0.7	0.8	7.6	2	3	1	1	NA	NA
Benzo(a)anthracene	mg/kg	0.1	-	-	-	-	-	-	-	1.1	1.0	1.2	0.2	0.5	0.8	0.3	0.3	0.4	3.3	1	1	0	1	NA	NA
Chrysene	mg/kg	0.1	-	-	-	-	-	-	-	1.0	1.0	1.2	0.2	0.5	0.7	0.2	0.3	0.4	2.7	1	1	0	0	NA	NA
Benzo(b,j+k)fluoranthene	mg/kg	0.2	-	-	-	-	-	-	-	2.4	2.0	2.5	0.4	1.0	1.0	0.5	0.6	0.7	6.0	1	2	1	1	NA	NA
Benzo(a)pyrene	mg/kg	0.1	-	-	-	-	-	-	-	1.4	1.2	1.4	0.3	0.6	0.9	0.3	0.4	0.4	3.3	1	1	0	1	NA	NA
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	-	-	-	-	-	-	-	0.9	0.7	1.0	0.2	0.4	0.5	0.2	0.2	0.2	1.6	0	0	0	0	NA	NA
Dibenzo(a,h)anthracene	mg/kg	0.1	-	-	-	-	-	-	-	0.2	0.2	<0.5	<0.1	0.1	0.1	<0.1	<0.1	<0.1	0.3	<0.1	0	<0.1	<0.1	NA	NA
Benzo(g,h,i)perylene	mg/kg	0.1	-	-	-	-	-	-	-	1.3	0.9	1.3	0.2	0.5	0.6	0.2	0.2	0.2	1.8	0	0	0	0	NA	NA
PAHs (Sum of Total)	mg/kg	-	-	-	-	-	-	300	4000	14.0	12.0	14.9	2.5	5.9	8.8	2.8	3.8	4.2	37.0	7	12	4	5	NA	NA
Benzo(a)pyrene TEQ calc (zero)	mg/kg	0.5	-	-	-	-	-	3	40	2.2	1.8	1.9	<0.5	0.9	1.3	<0.5	<0.5	0.5	4.8	1	1	1	1	NA	NA
Benzo(a)pyrene TEQ calc(half)	mg/kg	0.5	-	-	-	-	-	3	40	2.2	1.8	2.1	<0.5	0.9	1.3	<0.5	0.5	0.6	4.8	1	1	1	1	NA	NA
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	0.5	-	-	-	-	-	3	40	2.2	1.8	2.4	<0.5	0.9	1.3	<0.5	0.6	0.6	4.8	1	1	1	1	NA	NA
Metals																									
Arsenic	mg/kg	1	-	-	-	-	-	300	3000	6	6	8	<4	5	5	<4	<4	4	5	<4	10	7	6	NA	NA
Cadmium	mg/kg	0.1	-	-	-	-	-	90	900	<0.4	<0.4	<1	<0.4	<0.4	<0.4	<0.4	1	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	NA	NA
Chromium	mg/kg	1	-	-	-	-	-	300[1]	3600[1]	9	9	7	9	10	9	8	12	13	9	8	10	8	9	NA	NA
Copper	mg/kg	1	-	-	-	-	-	17000	240000	93	49	53	18	33	40	16	24	27	36	34	59	50	55	NA	NA
Lead	mg/kg	1	-	-	-	-	-	600	1500	300	200	369	25	82	80	38	43	39	93	110	85	82	89	NA	NA
Mercury	mg/kg	0.05	-	-	-	-	-	80	730	0.3	0.2	0.3	<0.1	0.1	<0.1	<0.1	0	<0.1	0	<0.1	0	0	1	NA	NA
Nickel	mg/kg	1	-	-	-	-	-	1200	6000	13	11	14	16	9	7	5	7	8	8	7	12	10	11	NA	NA
Zinc	mg/kg	1	-	-	-	-	-	30000	400000	120	140	170	64	130	240	65	65	66	91	120	110	99	98	NA	NA

NOTES:
< Value = Concentration less than laboratory Practical Quantitation Limit (PQL)
NC - Non Calculable
NA - Not Analysed
1. Guideline is for Chromium (VI)

Table 4 - Soil Analytical Results - Characterisation Samples - OCPs, OPPs, PCBs, Phenols

Sample ID					CS_01	QC01 (Intra-Lab Dup of CS_01)	QC02 (Inter-Lab Dup of CS_01)	CS_07	CS_08	SP01_01	SP02_01	SP03_01	SP03_02	SP04_01	SP05_01	SP_ACM_01	SP_ACM_03	QC01 (Intra-Lab Dup of SP_ACM_03)
Date Sampled					09/12/2019			09/12/2019	09/12/2019	14/01/2020	14/01/2020	14/01/2020	14/01/2020	14/01/2020	14/01/2020	14/01/2020	14/01/2020	
Compounds	Units	PQL	NEPM (2013) HIL C	NEPM (2013) HIL D														
Organochlorine Pesticides																		
HCB	mg/kg	0.1	10	80	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-BHC	mg/kg	0.1	+	+	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	0.1	+	+	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
beta-BHC	mg/kg	0.1	+	+	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	10	50	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	0.1	+	+	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	+	+	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	0.1	+	+	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	0.1	+	+	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	0.1	+	+	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	0.1	+	+	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	0.1	+	+	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.1	+	+	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	0.1	+	+	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	0.1	+	+	<0.1	<0.1	<0.05	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endosulfan II	mg/kg	0.1	+	+	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	mg/kg	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
Endrin Aldehyde	mg/kg	0.1	+	+	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	0.1	+	+	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	400	2500	<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
DDT+DDE+DDD	mg/kg		400	3600	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Aldrin + Dieldrin	mg/kg		10	45	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Endosulfan	mg/kg		340	2000	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Organophosphorous Pesticides																		
Dichlorvos	mg/kg	0.1	+	+	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	0.1	+	+	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Diazinon	mg/kg	0.1	+	+	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos-methyl	mg/kg	0.1	+	+	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	0.1	+	+	<0.1	<0.1	NA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	0.1	+	+	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Malathion	mg/kg	0.1	+	+	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos	mg/kg	0.1	250	2600	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Parathion	mg/kg	0.1	+	+	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	0.1	+	+	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	0.1	+	+	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	0.1	+	+	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCBs																		
Aroclor 1016	mg/kg	0.1	+	+	<0.1	<0.1	NA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1221	mg/kg	0.1	+	+	<0.1	<0.1	NA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1232	mg/kg	0.1	+	+	<0.1	<0.1	NA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1242	mg/kg	0.1	+	+	<0.1	<0.1	NA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1248	mg/kg	0.1	+	+	<0.1	<0.1	NA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1254	mg/kg	0.1	+	+	<0.1	<0.1	NA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1260	mg/kg	0.1	+	+	<0.1	<0.1	NA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCBs	mg/kg		1	7	NC	NC	<0.1	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Phenols																		
Total Phenolics	mg/kg	5	40000	240000	<5	<5	<0.5 to <5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5

NOTES:
< Value = Concentration less than laboratory Practical Quantitation Limit (PQL)
NC - Non Calculable
NA - Not Analysed

Table 5 - Soil Analytical Results - Characterisation Samples - Asbestos

Sample ID					CS_01	CS_07	CS_08	SP01_01	SP02_01	SP03_02	SP04_01	SP05_01	SP_ACM_01	SP_ACM_03	SP_ACM_FRAG
Date Sampled					09/12/2019	09/12/2019	09/12/2019	14/01/2020	14/01/2020	14/01/2020	14/01/2020	14/01/2020	14/01/2020	14/01/2020	14/01/2020
Parameters	**Units**	**PQL**	**NEPM (2013) HIL C**	**NEPM (2013) HIL D**											
Sample mass tested	g	--			620.05	633.21	652.11	794.33	566.97	684.24	622.96	676.81	667.47	596.14	NA
Sample Description	-	--			Grey coarse-grained soil & rocks	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks	Brown sandy soil & rocks	Brown sandy soil & rocks	Brown sandy soil & rocks	Brown sandy soil & rocks	Brown sandy soil & rocks	Brown sandy soil & rocks	Brown sandy soil & rocks	Fragment of Bonded Cement Sheet
Asbestos ID in soil	-	--			No asbestos detected at reporting limit of 0.1g/kg; Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg; Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg; Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg; Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg; Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg; Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg; Organic fibres detected:Synthetic Mineral Fibres detected	No asbestos detected at reporting limit of 0.1g/kg; Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg; Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg; Organic fibres detected	Chrysotile asbestos detected: Crocidolite asbestos detected
Trace Analysis	-	--			No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	NA
Total Asbestos g/kg	g/kg	<0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NA
Asbestos ID in soil <0.1 g/kg	-	--			No visable asbestos detected	No visable asbestos detected	No visable asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	NA
ACM >7mm Estimation	g	--			–	–	–	–	–	–	–	–	–	–	NA
FA and AF Estimation	g	--			–	–	–	–	–	–	–	–	–	–	NA
ACM >7mm Estimation %(w/w)	%	<0.01	**0.02**	**0.05**	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NA
FA and AF Estimation %(w/w)	%	<0.001	**0.001**	**0.001**	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NA
Total Asb Est w/w	%	<0.001			NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NA

NOTES:
< Value = Concentration less than laboratory Practical Quantitation Limit (PQL)
NC - Non Calculable
NA - Not Analysed

CONSARA contaminated sites

Table 6 - Soil Analytical Results - Imported Materials Samples - BTEX, TPH, PAHs, Metals

Supplier											Benedicts Materials							Metropolitan Demolitions				ANL - Growing medium topsoils						
Sample ID											IM_01	IM_02	IM_03	QC01 (Intra-Lab Dup of IM_03)	QC02 (Inter-Lab Dup of IM_03)	IM_04	BS_01	DGB-01	DGB-02	DGB-03	DGB-04	TS-01	TS-02	QC01 (Intra-Lab Dup of TS-02)	QC02 (Inter-Lab Dup of TS-02)	TS-03	TS-04	TS-05
Description											Recycled Aggregate - bedding sands	Recycled Aggregate - bedding sands	Recycled Aggregate - bedding sands			Recycled Aggregate - bedding sands	Recycled Aggregate - bedding sands imported to Site	DBG20 - Recycled Aggregate	DBG20 - Recycled Aggregate	DBG20 - Recycled Aggregate	DBG20 - Recycled Aggregate	Topsoils comprised of sands and silts	Topsoils comprised of sands and silts			Topsoils comprised of sands and silts	Topsoils comprised of sands and silts	Topsoils comprised of sands and silts
Date Sampled											6/12/2019	6/12/2019	6/13/2019			6/12/2019	14/01/2020	31/01/2020	31/01/2020	31/01/2020	31/01/2020	18/05/2020	18/05/2020			18/05/2020	18/05/2020	18/05/2020
Compounds	**Units**	**PQL**	**NEPM (2013) HSL C/ HSL D (SAND 0- <1m bgs)**	**NEPM (2013) HSL C/ HSL D (SAND 1 to <2m bgs)**	**NEPM (2013) HSL C/ HSL D (SAND 2 to 4m bgs)**	**NEPM (2013) HSL C/ HSL D (SAND 4+ m bgs)**	**NEPM (2013) Soil Saturation SAND (Csat)**	**NEPM (2013) HIL C**		**NEPM (2013) HIL D**																			
BTEX																												
Benzene	mg/kg	1	NL/3	NL/3	NL/3	NL/3	360	-			<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	1	NL	NL	NL	NL	560	-			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	1	NL	NL	NL	NL	64	-			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1
Xylene (m & p)	mg/kg	2	-	-	-	-	-	-	-	-	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<0.5	<2	<2	<2
Xylene (o)	mg/kg	1	-	-	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1	<1	<1
Xylene Total	mg/kg	-	NL/230	NL	NL	NL	300	-			<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<0.5	<3	<3	<3
Naphthalene	mg/kg	1	NL	NL	NL	NL	9	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
TPH																												
TRH C6 - C9	mg/kg	10	-	-	-	-	-	-	-	-	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<10	<25	<25	<25
TRH C6 - C10	mg/kg	10	-	-	-	-	-	-	-	-	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<10	<25	<25	<25
vTPH C6 - C10 less BTEX (F1)	mg/kg	10	NL/260	NL/370	NL/630	NL	950	-	-	-	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<10	<25	<25	<25
TRH C10 - C14	mg/kg	50	-	-	-	-	-	-	-	-	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
TRH C15 - C28	mg/kg	100	-	-	-	-	-	-	-	-	<100	<100	<100	<100	<100	110	<100	<100	140	<100	<100	110	110	130	150	360	220	130	180
TRH C29 - C36	mg/kg	100	-	-	-	-	-	-	-	-	<100	<100	<100	<100	<100	<100	<100	<100	190	160	150	160	320	390	470	590	570	390	520
TRH >C10-C16	mg/kg	50	-	-	-	-	-	-	-	-	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
TRH >C10 - C16 less Naphthalene (F2)	mg/kg	50	NL	NL	NL	NL	560	-	-	-	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
TRH >C16-C34	mg/kg	100	-	-	-	-	-	-	-	-	<100	<100	<100	<100	<100	130	<100	<100	260	180	170	200	320	400	460	710	610	400	530
TRH >C34-C40	mg/kg	100	-	-	-	-	-	-	-	-	<100	<100	<100	<100	<100	<100	<100	<100	180	170	150	190	180	250	280	530	330	240	300
Total +ve TRH (>C10-C40)	mg/kg	100	-	-	-	-	-	-	-	-	<50	<50	<50	<50	<50	130	<50	<50	450	350	330	390	500	650	740	1240	950	640	830
PAHs																												
Naphthalene	mg/kg	0.1	NL	NL	NL	NL	9	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	0
Acenaphthene	mg/kg	0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	0
Phenanthrene	mg/kg	0.1	-	-	-	-	-	-	-	-	0.1	<0.1	0.2	0.2	<0.5	0.1	0.2	0.6	0.5	0.5	0	0	0.1	0.1	<0.5	0	0	1
Anthracene	mg/kg	0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	0.2	0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	0
Fluoranthene	mg/kg	0.1	-	-	-	-	-	-	-	-	0.2	0.2	0.2	0.2	<0.5	0.2	0.2	0.7	0.7	0.8	1	0	0.2	0.2	<0.5	0	0	1
Pyrene	mg/kg	0.1	-	-	-	-	-	-	-	-	0.2	0.2	0.2	0.2	<0.5	0.1	0.2	0.8	0.7	0.8	1	0	0.2	0.2	<0.5	0	0	0
Benzo(a)anthracene	mg/kg	0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	0.1	<0.1	<0.5	<0.1	0.1	0.4	0.4	0.4	0	<0.1	0.1	0.1	<0.5	0	0	0
Chrysene	mg/kg	0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	0.1	0.1	<0.5	<0.1	<0.1	0.4	0.4	0.4	1	0	0.2	0.1	<0.5	0	0	0
Benzo(b,j+k)fluoranthene	mg/kg	0.2	-	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	0.5	0.5	0.6	1	<0.2	0.3	<0.2	<0.5	0	0	0
Benzo(a)pyrene	mg/kg	0.1	-	-	-	-	-	-	-	-	0.1	0.1	0.1	0.1	<0.5	0.1	0.1	0.4	0.4	0.4	0	0	0.2	0.1	<0.5	0	0	0
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	0.2	0.2	0.2	0	<0.1	0.1	<0.1	<0.5	0	<0.1	<0.1
Dibenz(a,h)anthracene	mg/kg	0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	0.1	<0.1	<0.5	<0.1	<0.1	0.3	0.2	0.2	0	<0.1	0.1	<0.1	<0.5	0	<0.1	<0.1
PAHs (Sum of Total)	mg/kg	0.5	-	-	-	-	-	300	4000		0.5	0.4	1.1	0.7	<0.5	0.5	0.8	4.4	4.1	4.4	4	1	1.5	1.0	<0.5	2	1	3
Benzo(a)pyrene TEQ calc (zero)	mg/kg	0.5	-	-	-	-	-	3	40		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	0.5	-	-	-	-	-	3	40		<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	0.5	0.6	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	0.5	-	-	-	-	-	3	40		<0.5	<0.5	<0.5	<0.5	1.2	<0.5	<0.5	0.6	0.6	0.6	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Metals																												
Arsenic	mg/kg	1	-	-	-	-	-	300	3000		4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	6	6	5	8	6	7	6
Cadmium	mg/kg	0.1	-	-	-	-	-	90	900		<0.4	<0.4	<0.4	<0.4	<1	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<1	<0.4	<0.4	0
Chromium	mg/kg	1	-	-	-	-	-	300[1]	3600[1]		11	13	13	11	13	12	13	9	9	10	6	12	15	13	25	14	22	14
Copper	mg/kg	1	-	-	-	-	-	17000	240000		17	20	12	38	13	13	15	17	25	18	19	79	66	50	63	68	57	77
Lead	mg/kg	1	-	-	-	-	-	600	1500		19	24	26	30	26	24	11	22	21	19	11	22	23	22	36	52	24	28
Mercury	mg/kg	0.05	-	-	-	-	-	80	730		<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
Nickel	mg/kg	1	-	-	-	-	-	1200	6000		6	7	7	7	8	8	8	5	6	5	4	7	8	7	8	9	7	8
Zinc	mg/kg	1	-	-	-	-	-	30000	400000		48	45	49	79	51	42	40	40	60	45	44	100	110	110	135	110	99	130

NOTES:
< Value = Concentration less than laboratory Practical Quantitation Limit (PQL)
NC - Non Calculable
NA - Not Analysed
1. Guideline is for Chromium (VI)

Table 7 - Soil Analytical Results - Imported Materials Samples - OCPs, OPPs, PCBs

Supplier					Benedicts Materials							Metropolitan Demolitions				ANL - Growing medium topsoils						
Sample ID					IM_01	IM_02	IM_03	QC01 (Intra-Lab Dup of IM_03)	QC02 (Inter-Lab Dup of IM_03)	IM_04	BS_01	DGB-01	DGB-02	DGB-03	DGB-04	TS-01	TS-02	QC01 (Intra-Lab Dup of TS-02)	QC02 (Inter-Lab Dup of TS-02)	TS-03	TS-04	TS-05
Date Sampled					6/12/2019	6/12/2019	6/12/2019	6/12/2019	6/12/2019	6/12/2019	14/01/2020	31/01/2020	31/01/2020	31/01/2020	31/01/2020	18/05/2020	18/05/2020	18/05/2020	18/05/2020	18/05/2020	18/05/2020	18/05/2020
Compounds	**Units**	**PQL**	**NEPM (2013) HIL C**	**NEPM (2013) HIL D**																		
Organochlorine Pesticides																						
DDT	mg/kg	0.1	10	80	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1
alpha-BHC	mg/kg	0.1	-	-	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	0.1	-	-	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1
beta-BHC	mg/kg	0.1	-	-	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1
Hexachlor	mg/kg	0.1	10	50	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1
delta-BHC	mg/kg	0.1	-	-	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	-	-	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	0.10	0.10	0.20	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	0.1	-	-	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	0.1	-	-	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	0.1	-	-	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	0.1	-	-	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1
pp-DDE	mg/kg	0.1	-	-	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.1	-	-	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1
Endrin	mg/kg	0.1	-	-	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1
pp-DDD	mg/kg	0.1	-	-	<0.1	<0.1	<0.05	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.05	<0.1	<0.2	<0.2
Endosulfan II	mg/kg	0.1	-	-	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1
pp-DDT	mg/kg	0.1	-	-	<0.1	<0.2	<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	<0.2	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	-	-	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	0.1	-	-	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	400	2500	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1
DDT+DDD+DDE	mg/kg		600	3600	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Aldrin + Dieldrin	mg/kg		10	45	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Endosulfan	mg/kg		340	2000	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Organophosphorous Pesticides																						
Dichlorvos	mg/kg	0.1	-	-	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1
Dimethoate	mg/kg	0.1	-	-	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1
Diazinon	mg/kg	0.1	-	-	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1
Chlorpyriphos-methyl	mg/kg	0.1	-	-	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1
Ronnel	mg/kg	0.1	-	-	<0.1	<0.1	NA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NA	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	0.1	-	-	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1
Malathion	mg/kg	0.1	-	-	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1
Chlorpyriphos	mg/kg	0.1	250	2000	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1
Parathion	mg/kg	0.1	-	-	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	0.1	-	-	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1
Ethion	mg/kg	0.1	-	-	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	0.1	-	-	<0.1	<0.1	<0.05	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.04	<0.1	<0.2	<0.2
PCBs																						
Aroclor 1016	mg/kg	0.1	-	-	<0.1	<0.1	NA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NA	<0.1	<0.1	<0.1
Aroclor 1221	mg/kg	0.1	-	-	<0.1	<0.1	NA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NA	<0.1	<0.1	<0.1
Aroclor 1232	mg/kg	0.1	-	-	<0.1	<0.1	NA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NA	<0.1	<0.1	<0.1
Aroclor 1242	mg/kg	0.1	-	-	<0.1	<0.1	NA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NA	<0.1	<0.1	<0.1
Aroclor 1248	mg/kg	0.1	-	-	<0.1	<0.1	NA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NA	<0.1	<0.1	<0.1
Aroclor 1254	mg/kg	0.1	-	-	<0.1	<0.1	NA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NA	<0.1	<0.1	<0.1
Aroclor 1260	mg/kg	0.1	-	-	<0.1	<0.1	NA	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NA	<0.1	<0.1	<0.1
PCBs	mg/kg		1	7	NC	NC	<0.1	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	<0.1	NC	NC	NC

NOTES:
< Value = Concentration less than laboratory Practical Quantitation Limit (PQL)
NC - Non Calculable
NA - Not Analysed

Table 8 - Soil Analytical Results - Imported Materials Samples - Asbestos

Supplier					Benedicts Materials - Bedding Sands - Recycled Aggregate					Concrete Recyclers - 20mm recycled aggregate					Metropolitan Demolitions - DBG20 Recycled Aggregate							ANL - Growing Medium Topsoils				
Sample ID					IM_01	IM_02	IM_03	IM_04	BS_01	RA-20-01	RA-20-02	RA-20-03	RA-20-04	RA-20-05	DGB-01	DGB-02	DGB-03	DGB-04	DGB-05	DGB-06	DGB-07	TS-01	TS-02	TS-03	TS-04	TS-05
Date Sampled					6/12/2019	6/12/2019	6/12/2019	6/12/2019	14/01/2020	18/12/2019	18/12/2019	18/12/2019	18/12/2019	18/12/2019	31/01/2020	31/01/2020	31/01/2020	31/01/2020	31/01/2020	31/01/2020	31/01/2020	18/05/2020	18/05/2020	18/05/2020	18/05/2020	18/05/2020
Parameters	**Units**	**PQL**	**NEPM (2013) HIL C**	**NEPM (2013) HIL D**																						
Sample mass tested	g	--			721.18	649.14	715.93	717.12	766.32	1947.10	1802.30	1112.50	1871.00	1123.20	749.36	745.14	648.08	839.68	802.24	794.90	768.83	351.74	278.59	334.95	360.85	383.30
Sample Description	-	--			Brown sandy soil & rocks & debris	Brown sandy soil & rocks & debris	Brown sandy soil & rocks & debris	Brown sandy soil & rocks & debris	Brown sandy soil & rocks	Assorted aggregate	Assorted aggregate	Assorted aggregate	Assorted aggregate	Assorted aggregate	Beige coarse-grained soil & rocks	Beige coarse-grained soil & rocks	Beige coarse-grained soil & rocks	Beige coarse-grained soil & rocks	Beige coarse-grained soil & rocks	Beige coarse-grained soil & rocks	Beige coarse-grained soil & rocks	Brown fine-grained soil & debris	Brown fine-grained soil & debris	Brown fine-grained soil & debris	Brown fine-grained soil & debris	Brown fine-grained soil & debris
Asbestos ID in soil	-	--			No asbestos detected at reporting limit of 0.1g/kg: Organic fibres detected: Synthetic mineral fibres detected	No asbestos detected at reporting limit of 0.1g/kg: Organic fibres detected: Synthetic mineral fibres detected	No asbestos detected at reporting limit of 0.1g/kg: Organic fibres detected: Synthetic mineral fibres detected	No asbestos detected at reporting limit of 0.1g/kg: Organic fibres detected: Synthetic mineral fibres detected	No asbestos detected at reporting limit of 0.1g/kg: Organic fibres detected:Synthetic Mineral Fibres detected	No asbestos detected at reporting limit of 0.1g/kg	No asbestos detected at reporting limit of 0.1g/kg	No asbestos detected at reporting limit of 0.1g/kg	No asbestos detected at reporting limit of 0.1g/kg	No asbestos detected at reporting limit of 0.1g/kg	No asbestos detected at reporting limit of 0.1g/kg: Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg: Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg: Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg: Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg: Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg: Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg: Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg: Organic fibres detected:Synthetic Mineral Fibres detected	No asbestos detected at reporting limit of 0.1g/kg: Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg: Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg: Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg: Organic fibres detected
Trace Analysis	--	--			No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos g/kg	g/kg	<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	<0.1	<0.1
Asbestos ID in soil <0.1 g/kg	-	--			No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation	g	--			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FA and AF Estimation	g	--			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ACM >7mm Estimation %(w/w)	%	<0.01	**0.02**	**0.05**	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
FA and AF Estimation %(w/w)	%	<0.001	**0.001**	**0.001**	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Total Ash Est w/w	%	<0.001			NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC

NOTES:
< Value = Concentration less than laboratory Practical Quantitation Limit (PQL)
NC - Non Calculable
NA - Not Analysed

Table 9- Soil RPD Values - TPH (heavy fraction), PAHs, Metals

Location ID			CS_01						SP_ACM_03			IM_03						TS-02					
Sample ID			CS_01	QC01 (Intra-Lab Dup of CS_01)	RPD	CS_01	QC02 (Inter-Lab Dup of CS_01)	RPD	SP_ACM_03	QC01 (Intra-Lab Dup of SP_ACM_03)	RPD	IM_03	QC01 (Intra-Lab Dup of IM_03)	RPD	IM_03	QC02 (Inter-Lab Dup of IM_03)	RPD	TS-02	QC01 (Intra-Lab Dup of TS-02)	RPD	TS-02	QC02 (Inter-Lab Dup of TS-02)	RPD
Date Sampled			9/12/2019			9/12/2019			14/01/2020			6/12/2019			6/12/2019			18/05/2020			18/05/2020		
Compounds	Units	PQL																					
TPH																							
TRH C15 - C28	mg/kg	100	<100	<100	NC	<100	110	**9.5%**	<100	<100	NC	<100	<100	NC	<100	110	**9.5%**	130	150	14.3%	130	360	**9.5%**
TRH C29 - C36	mg/kg	100	<100	<100	NC	<100	<100	NC	<100	<100	NC	<100	<100	NC	<100	<100	NC	390	470	18.6%	390	590	40.8%
TRH >C10-C16	mg/kg	50	<50	<50	NC	<50	<50	NC	<50	<50	NC	<50	<50	NC	<50	<50	NC	<50	<50	NC	<50	<50	NC
TRH >C10 - C16 less Naphthalene (F2)	mg/kg	50	<50	<50	NC	<50	<50	NC	<50	<50	NC	<50	<50	NC	<50	<50	NC	<50	<50	NC	<50	<50	NC
TRH >C16-C34	mg/kg	100	<100	<100	NC	<100	160	**46.2%**	<100	<100	NC	<100	<100	NC	<100	110	**9.5%**	400	460	14.0%	400	710	**9.5%**
TRH >C34-C40	mg/kg	100	<100	<100	NC	<100	<100	NC	<100	<100	NC	<100	<100	NC	<100	<100	NC	250	280	11.3%	250	530	71.8%
PAHs																							
Naphthalene	mg/kg	0.1	<0.1	<0.1	NC	<0.1	<0.5	NC	<0.1	<0.1	NC	<0.1	<0.1	NC	<0.1	<0.5	NC	<0.1	<0.1	NC	<0.1	<0.5	NC
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	NC	<0.1	<0.5	NC	<0.1	<0.1	NC	<0.1	<0.1	NC	<0.1	<0.5	NC	<0.1	<0.1	NC	<0.1	<0.5	NC
Acenaphthene	mg/kg	0.1	<0.1	<0.1	NC	<0.1	<0.5	NC	<0.1	<0.1	NC	<0.1	<0.1	NC	<0.1	<0.5	NC	<0.1	<0.1	NC	<0.1	<0.5	NC
Fluorene	mg/kg	0.1	<0.1	<0.1	NC	<0.1	<0.5	NC	<0.1	<0.1	NC	<0.1	<0.1	NC	<0.1	<0.5	NC	<0.1	<0.1	NC	<0.1	<0.5	NC
Phenanthrene	mg/kg	0.1	0.8	0.7	**13.3%**	0.8	0.8	**0.0%**	0.3	0.4	**28.6%**	0.2	0.2	**0.0%**	0.2	<0.5	**85.7%**	0.1	0.1	**0.0%**	0.1	<0.5	**133.3%**
Anthracene	mg/kg	0.1	0.1	0.2	**66.7%**	0.1	<0.5	133.3%	<0.1	<0.1	NC	<0.1	<0.1	NC	<0.1	<0.5	NC	<0.1	<0.1	NC	<0.1	<0.5	NC
Fluoranthene	mg/kg	0.1	2.1	2.0	**4.9%**	2.1	2.8	**28.6%**	0.8	1.0	**22.2%**	0.2	0.2	**0.0%**	0.2	<0.5	**85.7%**	0.2	0.2	**0.0%**	0.2	<0.5	**85.7%**
Pyrene	mg/kg	0.1	2.0	1.8	**10.5%**	2.0	2.7	**29.8%**	0.8	1.0	**22.2%**	0.2	0.2	**0.0%**	0.2	<0.5	**85.7%**	0.2	0.2	**0.0%**	0.2	<0.5	**85.7%**
Benzo(a)anthracene	mg/kg	0.1	1.1	1.0	**9.5%**	1.1	1.2	**8.7%**	0.4	0.5	**22.2%**	0.1	<0.1	NC	0.1	<0.5	**133.3%**	0.1	0.1	**0.0%**	0.1	<0.5	**133.3%**
Chrysene	mg/kg	0.1	1.0	1.0	**0.0%**	1.0	1.2	**18.2%**	0.4	0.4	**0.0%**	0.1	0.1	**0.0%**	0.1	<0.5	**133.3%**	0.2	0.1	**66.7%**	0.2	<0.5	**85.7%**
Benzo(b+k)fluoranthene	mg/kg	0.2	2.4	2.0	**18.2%**	2.4	2.5	**4.1%**	0.7	0.9	**25.0%**	<0.2	<0.2	NC	<0.2	<0.5	NC	0.3	<0.2	**40.0%**	0.3	<0.5	**50.0%**
Benzo(a)pyrene	mg/kg	0.1	1.4	1.2	**15.4%**	1.4	1.4	**0.0%**	0.4	0.5	**22.2%**	0.1	0.1	**0.0%**	0.1	<0.5	**133.3%**	0.2	0.1	**66.7%**	0.2	<0.5	**85.7%**
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	0.9	0.7	**25.0%**	0.9	1.0	**10.5%**	0.1	0.2	**66.7%**	<0.1	<0.1	NC	<0.1	<0.5	NC	0.1	<0.1	**0.0%**	0.1	<0.5	**133.3%**
Dibenzo(a,h)anthracene	mg/kg	0.1	0.2	0.2	**0.0%**	0.2	<0.5	**85.7%**	<0.1	<0.1	NC	<0.1	<0.1	NC	<0.1	<0.5	NC	<0.1	<0.1	NC	<0.1	<0.5	NC
Benzo(g,h,i)perylene	mg/kg	0.1	1.3	0.9	**36.4%**	1.3	1.3	**0.0%**	0.2	0.2	**0.0%**	0.1	<0.1	**0.0%**	0.1	<0.5	**133.3%**	0.1	<0.1	**0.0%**	0.1	<0.5	**133.3%**
Metals																							
Arsenic	mg/kg	1	6	6	**0.0%**	6	8	**28.6%**	7	6	**15.4%**	<4	<4	NC	<4	<5	NC	6	5	**18.2%**	6	8	**28.6%**
Cadmium	mg/kg	0.1	<0.4	<0.4	NC	<0.4	<1	NC	<0.4	<0.4	NC	<0.4	<0.4	NC	<0.4	<1	NC	<0.4	<0.4	NC	<0.4	<1	NC
Chromium	mg/kg	1	9	9	**0.0%**	9	7	**25.0%**	8	9	**11.8%**	13	11	**16.7%**	13	13	**0.0%**	15	13	**14.3%**	15	25	**50.0%**
Copper	mg/kg	1	93	49	**62.0%**	93	53	**54.8%**	50	55	**9.5%**	12	18	**40.0%**	12	13	**8.0%**	66	59	**11.2%**	66	63	**4.7%**
Lead	mg/kg	1	300	200	**40.0%**	300	369	**20.6%**	82	89	**8.2%**	26	30	**14.3%**	26	26	**0.0%**	23	22	**4.4%**	23	36	**44.1%**
Mercury	mg/kg	0.05	0.3	0.2	**40.0%**	0.3	0.3	**0.0%**	0.2	0.5	**85.7%**	<0.1	<0.1	NC	<0.1	<0.1	NC	<0.1	<0.1	NC	<0.1	0.1	NC
Nickel	mg/kg	1	13	11	**16.7%**	13	14	**7.4%**	10	11	**9.5%**	7	7	**0.0%**	7	8	**13.3%**	8	7	**13.3%**	8	8	**0.0%**
Zinc	mg/kg	1	120	140	**15.4%**	120	170	**34.5%**	99	98	**1.0%**	49	79	**46.9%**	49	51	**4.0%**	110	110	**0.0%**	110	135	**20.4%**

NOTES:

RPD result exceeding acceptance criteria for organics - 50%; inorganics - 30%

RPD results exceeding the acceptance criteria but were disregarded if primary or duplicate sample results were <5 x EQL

< Value = Concentration less than laboratory Practical Quantitation Limit (PQL)

NC - Non Calculable

NA - Not Analysed

Appendix A: Plans for the Redevelopment of the Site as constructed

Schedules

Hardworks Schedule

Code	Type	Dimensions	Supplier
Pavements			
P1	Concrete driveway - by others	to engineer's detail	
P2	Concrete footpath - by others	to engineer's detail	
P3	Crushed brick - recycled crushed brick	10-20mm aggregate	Benedict Industries or approved equivalent
P4	Site rubble - broken brick & concrete		
Walls			
W1	Gabion wall - wire baskets filled with recycled concrete rubble	baskets to engineer's detail	baskets to engineer's specification rubble from Concrete Recyclers

Irrigation

Products
General: Requirement: Provide automatically controlled, fixed irrigation systems as follows:
- System type: Integrated drip line system
- Meet statutory requirements for backflow prevention.
Irrigation controllers: Construction: Provide automatic controllers that are easily programmed and include the following:
- Manual cycle and individual control valve operation.
- Manual on/off operation of irrigation without loss of program.
- ≥ 4 on/off cycles per day.
- Day omit.
- 240 V input and 24 V output capable of operating 2 control valves simultaneously.
- ≥ 24 hour battery program backup.
- Cabinet: In external locations mount in a lockable cabinet minimum IP 54 to AS 60529
Drip systems:
- Integrated drip line systems: Tubing with integral drippers inserted into the tube during manufacture.
Fittings:
Type: Barbed fittings rated for the pressure class of the pipe, fastened with ratchet type clamps.
Valve boxes:
Requirement: Provide the following in each valve box:
- Automatic control valve.
- Isolating valve.
- Filter: 100 µm.
- Pressure-reducing valve with 170 kPa outlet pressure.
Construction: UV-resistant high impact plastic with high impact snap lock plastic cover

Execution
Drip systems:
Piping: Lay polyethylene micro-irrigation pipe on finished ground surface under planting bed mulch and anchor at 1.5 m maximum intervals with U-shaped stakes.
Air release valves: Provide at the highest point in each section to drain the system when flow stops.

Planting Preparation

G1 - New planting bed: cultivate subsoil to break up compaction– ensure the bed is free draining before installation of soil. Top up with soil mixture, specified below

G2 - Retain significant existing trees (as per the drawings). Remove nominated existing trees and replace mulch

Planting Schedule

Existing Trees

Code	Botanical Name	Common Name	Approx Height	Status	Qty
T1	*unknown*	NA	*unknown*	Retain	1
T2	*unknown*	NA	*unknown*	Remove	1
T3	*unknown*	NA	*unknown*	Remove	2
T4	*unknown*	NA	*unknown*	Remove	3

Trees

Code	Botanical Name	Common Name	Approx Height	Pot Size	Qty
Cs	*Callicoma serratifolia*	Black wattle	10m	35L	2
La	*Livistonia australis*	Cabbage Tree Palm	20m	35L	3

Shrubs

Code	Botanical Name	Common Name	Approx Height	Pot Size	Qty
Ad	*Allocasuarina distyla*	Shrubby She-oak	1-3m	tube	2
At	*Acacia terminalis*	Sunshine Wattle	6m	tube	2
Be	*Banksia ericifolia*	Heath-leaved Banksia	6m	tube	1
Ca	*Chrysocephalum apiculatum*	Yellow Buttons	0.7m	tube	115
Cc	*Conostylis candicans*	Grey Cottonheads	0.3m	tube	110
Em	*Epacris microphylla*	Coral Heath	0.6-1m	tube	67
Ey	*Myoporum 'Fine Leaf Form'*	Creeping Boobialla	0.2m	tube	376
Mp	*Myoporum parvifolium*	Creeping Boobialla	0.3m	tube	241
Ot	*Olearia tomentosa*	Toothed Daisy Bush	2m	tube	3
Od	*Ozothamnus diosmifolius*	Rice Flower	2-5m	tube	5
Pp	*Persoonia pinifolia*	Geebung	1-4m	tube	2
Pb	*Philotheca buxifolia*	Box Leaved Wax Flower	0.3m	tube	85
Ps	*Phebalium squamulosum*	Forest Phebalium	1-7m	tube	4
Sc	*Scaevola calendulacea*	Dune Fan-Flower	0.4m	tube	145

Groundcovers

Code	Botanical Name	Common Name		Pot Size	Qty
Di	*Dichondra repens*	Dichondra	0.1m	tube	560
Vh	*Viola hederacea*	Native violet	0.2m	tube	180

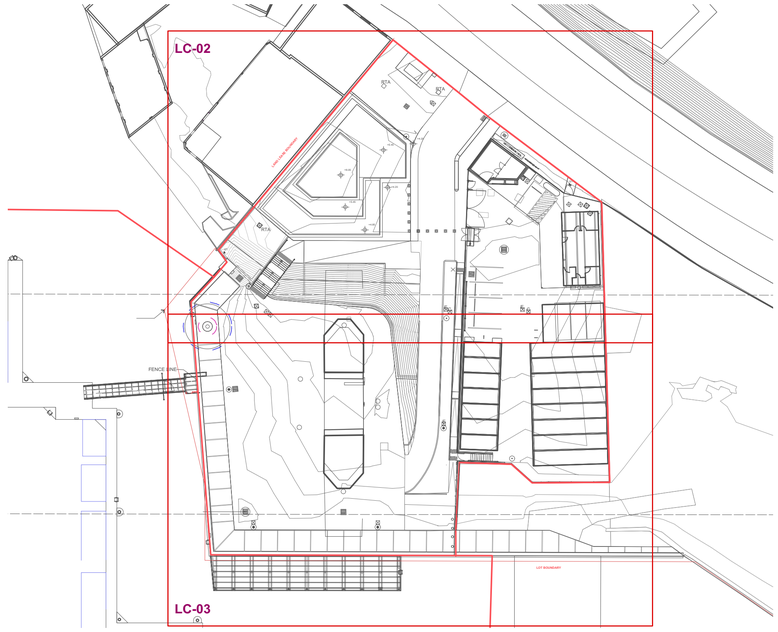
Grasses

Code	Botanical Name	Common Name		Pot Size	Qty
Dc	*Dianella caerulea*	Blue Flax Lily	0.8m	tube	680
Ll	*Lomandra longifolia*	Spiney Mat Rush	0.8m	tube	260
Pl	*Poa labillardieri 'eskdale'*	Tussock Grass	0.5m	tube	140

NOTE: PROVIDE MIN. 2 WEEKS NOTICE OF ANY PROPOSED PLANT SUBSTITUTIONS
ANY SUBSTITUTIONS ARE TO BE APPROVED BY LANDSCAPE ARCHTECT & PRINCIPAL

Drawing List

LC-01 - GENERAL ARRANGEMENT PLAN & SCHEDULES
LC-02 - LANDSCAPE PLANTING AND FINISHES PLAN 1
LC-03 - LANDSCAPE PLANTING AND FINISHES PLAN 2
LC-04 - SECTIONS & DETAILS



Specification

Tree Protection

General
Warning signs: Display in a prominent position at each entrance to the site, warning that trees and plantings are to be protected during the contract. Remove on completion.
Lettering: Road sign type sans serif letters, 100 mm high to AS 4970 Appendix C.
Protection measures: Provide before commencement of earthworks.

Trees to be retained
Extent: All trees NOT marked for removal.
Tree protection
Tree protection zone (TPZ): To AS 4970 Section 3.
Tree protective measures: To AS 4970 Section 4.
Monitoring and certification: To AS 4970 Section 5.

Work near trees
Harmful materials: Conform to the following:
- Keep the area within the dripline free of sheds and paths, construction material and debris.
- Do not place bulk materials and harmful materials under or near trees.
- Do not place spoil from excavations against tree trunks.
- Prevent wind-blown materials such as cement from harming trees and plants.

Damage: Prevent damage to tree bark. Do not attach stays, guys and the like to trees.
Work under trees: Do not remove topsoil from, or add topsoil to, the area within the dripline of the trees.
Excavation: If excavation is required near trees to be retained, give notice. Minimise period of excavation under tree canopies.
Hand methods: Use hand methods to locate, expose and cleanly remove the roots on the line of excavation. If it is necessary to excavate within the drip line, use hand methods so that root systems are intact and undamaged.
Roots: Do not cut tree roots exceeding 50 mm diameter. Where it is necessary to cut tree roots, use cutting methods that do not excessively disturb the remaining root system. Immediately after cutting, water the tree and apply a liquid rooting hormone to stimulate the growth of new roots.
Backfilling: Backfill excavations around tree roots. Place the backfill in layers of 300 mm maximum depth and compacted to a dry density similar to that of the original or surrounding soil. Do not backfill around tree trunks to a height greater than 200 mm above the original ground surface. Immediately after backfilling, thoroughly water the root zone surrounding the tree.
Backfill material:
- Mix proportions (topsoil:well-rotted composts) by volume: 3:1.
- Neutral pH value.
- Free from weed growth and harmful materials.

Compacted ground: Do not compact the ground or use skid-steel vehicles under the tree dripline. If compaction occurs, give notice.
Compaction protection: Protect areas adjacent the tree dripline. Submit proposals for an elevated platform to suit the proposed earthworks machinery.
Watering: Water trees as necessary, including where roots are exposed at ambient temperature more than 35°C.
Mulching: Spread 100 mm thick organic mulch to the whole of the area covered by the drip line of all protected trees.X

Plants and Planting

General
Statements: Submit statements from suppliers of plants and other materials, giving the following, where applicable:
- Particulars of the supplier's experience in the required type of work.
- Production caxerial of the required type, sizes and quantity.
- Lead times for delivery of the material to the site.

Plants
Characteristics: Provide plants with the following characteristics:
- Large healthy root systems, with no evidence of root curl, restriction or damage.
- Vigorous, well established, free from disease and pests, of good form consistent with the species or variety.
- Hardened off, not soft or forced, and suitable for planting in the natural climatic conditions prevailing at the site.

Trees: Provide trees which, unless required to be multi-stemmed, have a single leading shoot.
Replacement: Replace damaged or failed plants with plants of the same type and size.

Plant schedule
See above schedule
Labelling
Tag: Label at least one plant of each species or variety in a batch with a durable, readable tag.
Storage
Timing: Deliver plant material to the site on a day to day basis, and plant immediately after delivery.
Mulch
General: Provide mulch which is free of deleterious and extraneous matter such as soil, weeds and sticks.
Standard: To AS4454.
Organic mulches: Free of stones.
Organic mulch
Location - To all garden beds

Weed eradication
Herbicide: Eradicate weeds using environmentally acceptable methods, such as a non-residual glyphosate herbicide in any of its registered formulae, at the recommended maximum rate.
Removal: Regularly remove, by hand, rubbish and weed growth throughout, planted and mulched areas. Continue eradication throughout the course of the works and during the planting establishment period.
Vegetative spoil
Disposal: Remove vegetative spoil from site. Do not burn.
Planting
Locations
General: If it appears necessary to vary plant locations and spacings to avoid service lines, or to cover the area uniformly, or for other reasons, give notice.
Planting conditions
Weather: Do not plant in unsuitable weather conditions such as extreme heat, cold, wind or rain. In other than sandy soils, suspend excavation when the soil is wet, or during frost periods.
Watering
Timing: Thoroughly water the plants before planting, immediately after planting, and as required to maintain growth rates free of stress.

Placing
Method: Remove the plant from the container with minimum disturbance to the root ball, ensure that the root ball is moist and place it in its final position, in the centre of the hole and plumb, and with the top soil level of the plant root ball level with the finished surface of the surrounding soil.
Fertilising
Pellets: In planting beds and individual plantings, place fertiliser pellets around the plants at the time of planting.
Backfilling
General: Backfill with topsoil mixture. Lightly tamp and water to eliminate air pockets. Ensure that topsoil is not placed over the top of the root ball, so that the plant stem remains the same height above ground as it was in the container.

Mulching
Placing mulch
General: Place mulch to the required depth, clear of plant stems, and rake to an even surface flush with the surrounding finished levels. Spread and roll mulch so that after settling, or after rolling, it is smooth and evenly graded between design surface levels sloped towards the base of plant stems in plantation beds, and not closer to the stem than 50mm.
In mass planted areas: Place after the preparation of the planting bed but before planting and other work.
In smaller areas (e.g. planter boxes): Place after the preparation of the planting bed, planting and other work.
Material: Re-mulch (not composted) SUPPLIER: Australian Native Landscapes
Depths: Spread mulch to a depth of 50 - 75mm

Planting establishment
Period
Commencement: The planting establishment period commences at the date of practical completion.
Required period: 13 weeks
Recurrent works
General: Throughout the planting establishment period, carry out maintenance work including, watering, weeding, rubbish removal, fertilising, pest and disease control, reseeding, returfing, staking and tying, replanting, cultivating, pruning, hedge clipping, aerating, reinstatement of mulch, renovating, top dressing, and keeping the site neat and tidy.
Replacements
Plants: Continue to replace failed, damaged or stolen plants.
Grassed areas
Maintenance: Commence grass maintenance works at the completion of sowing, hydroseeding and turfing. Maintain healthy weed-free growth.
Log book
Records: Keep a log book recording when and what maintenance work has been done and what materials, including toxic materials, have been used. Make the log book available for inspection on request.

Completion
Product warranty
Certification: Submit the supplier's written statement certifying that plants are true to the required species and type, and are free from diseases, pests and weeds.
Maintenance manual
General: Submit recommendations for maintenance of plants.
Cleaning
Stakes and ties: Remove those no longer required at the end of the planting establishment period.
Temporary fences: Remove temporary protective fences at the end of the planting establishment

General

Soil
For excavated planting beds - use imported recycled topsoil.
Excavate to bring the subsoil to at least 300mm below finished design levels. Shape the subsoil to fall to subsoil drains where applicable. Break up the subsoil to a further depth of 100mm.
For all planting beds
Placing topsoil
General: Spread the topsoil on the prepared subsoil and grade evenly, making the necessary allowances to permit the following:
- Required finished levels and contours may be achieved after light compaction.

Consolidation
General: Compact lightly and uniformly in 150mm layers. Avoid differential subsidence and excess compaction and produce a finished topsoil surface which has the following characteristics:
- Finished to design levels.
- Smooth and free from stones or lumps of soil.
- Graded to drain freely, without ponding, to catchment points.
- Graded evenly into adjoining ground surfaces.
- Ready for planting.

Soil mix
Site topsoil– soil which contains organic matter, supports plant life, is free from unwanted matter such as stones over 25mm diameter, clay lumps, weeds, tree roots, sticks, rubbish, material toxic to plant growth and the like and conforms to the fine to medium texture classification of AS4419.
Imported topsoil - Imported topsoil: Similar to naturally occurring local topsoil, suitable for the establishment and ongoing viability of the selected vegetation, free of weed propagules and of contaminants, and classified by texture to AS 4419 Appendix 1

Marker Layer
Provide marker layer of open weave geotextile fabric under cultivated soil

Issue	Description	Date	By
C	REVISED FOR CONSTRUCTION	5/2/20	HM
B	ISSUED FOR CONSTRUCTION	16/12/19	DH
A	ISSUED FOR TENDER	11/9/19	DH

- Dimension in millimetres.
- Confirm all dimensions and levels on site prior to commencing work.
- Use figured dimensions only.
- Do not scale.
- Comply with relevant authorities requirements, the Building Code of Australia and all relevant Australian Standards when executing works described in this drawing.

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CLIENT
Roads and Maritime Services

PROJECT TITLE
Bank St Commercial Wharf
5-11 Bank Street
Pyrmont

DRAWING TITLE
Plan & Schedules

Scale @ A1
1:500

Job No
180404

Drawing Status
CONSTRUCTION

Drawing No
LC-01

Issue
C

Drafted By: LC
Drafting Checked: JI

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A1

NOTES

REFER TO ARCHITECT'S DRAWINGS FOR SETOUT
REFER TO ENGINEERING DRAWINGS FOR ALL LEVELS AND GRADING
REFER TO ENGINEERING DRAWINGS FOR PIT LOCATIONS

LAND LEASE BOUNDARY

Ad x 2
At x 2
Pp x 2
Od x 2
Cs x 1
RTA
H
Cs x 1
RTA
E
G1
Ps x 1
Ot x 3
Ca x 115
Cc x 110
Em x 67
Mp x 85
Pb x 85
50 degree angle security berm
+4.20
+5.45
+6.05
+4.20
+5.45
+4.85
Dc x 150
Ll x 150
Cs x 3
La x 3
RTA
Ps x 3
EC
existing concrete pavement
Existing concrete pavement
T1
G2
T2
Od x 1
Be x 1
Dc x 100
Ll x 110
Pl x 110
Sc x 100
JOINS LC-03
P1
P2
P3
P4
W1
G1
My x 200
Mp x 170
My x 28
Mp x 16
T3
2
refer to LC-03 for plant numbers in this bed
JOINS LC-03

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C	REVISED FOR CONSTRUCTION	5/2/20	HM
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CLIENT
Roads and Maritime Services

PROJECT TITLE
Bank St Commercial Wharf
5-11 Bank Street
Pyrmont

DRAWING TITLE
Planting + Finishes Plan 1

Scale @ A1
1:100

Job No
180404

Drawing Status
CONSTRUCTION

Drawing No
LC-02

Issue
C

Drafted By: DH
Drafting Checked: JI

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A1

JOINS LC-02

FENCE LINE

ASPHALT SURFACE BY OTHERS

P4

P1

W1

G1

P2

3

Dc x 430

H

Pl x 90
Sc x 90

E

JOINS LC-02

T4

My x 70

Od x 3

ASPHALT SURFACE BY OTHERS

Existing concrete pavement

LOT BOUNDARY

NOTES

REFER TO ARCHITECT'S DRAWINGS FOR SETOUT
REFER TO ENGINEERING DRAWINGS FOR ALL LEVELS AND GRADING
REFER TO ENGINEERING DRAWINGS FOR PIT LOCATIONS

Issue	Description	Date	By
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CLIENT
Roads and Maritime Services

PROJECT TITLE
Bank St Commercial Wharf
5-11 Bank Street
Pyrmont

DRAWING TITLE
Planting + Finishes Plan 2

Scale @ A1
1:100

Job No
180404

Drawing Status
CONSTRUCTION

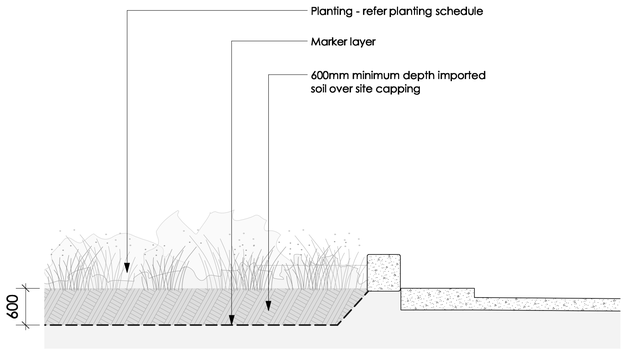
Drawing No
LC-03

Issue
C

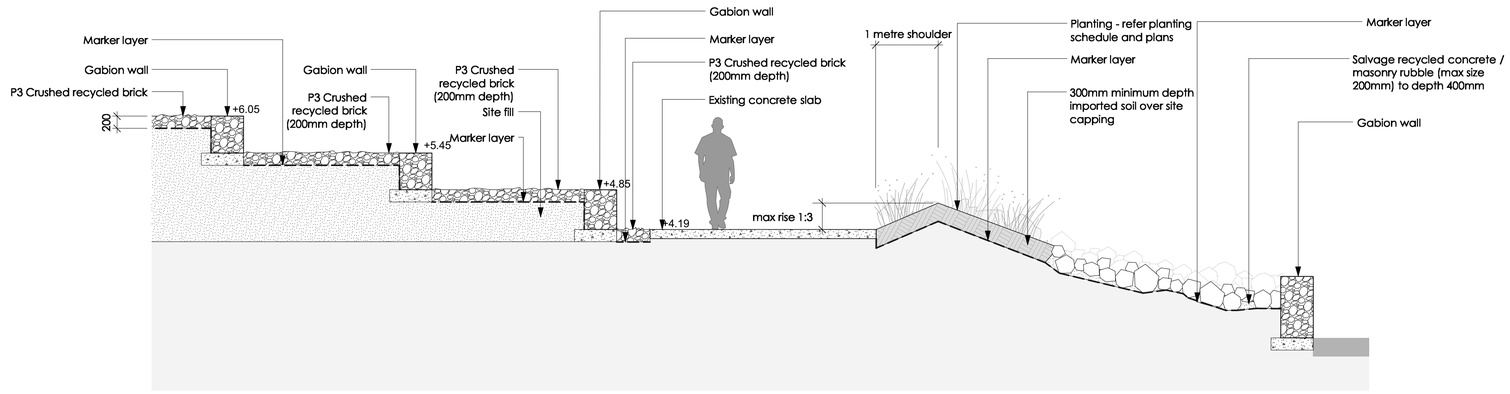
Drafted By: LC

Drafting Checked: JI

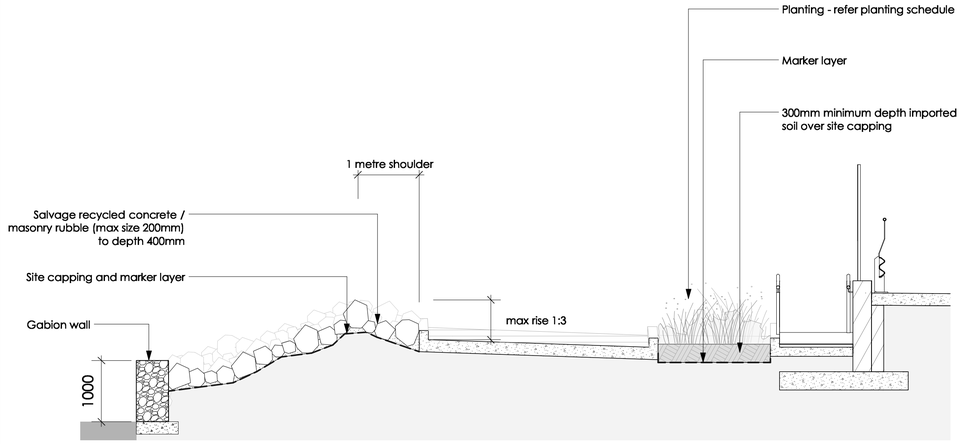
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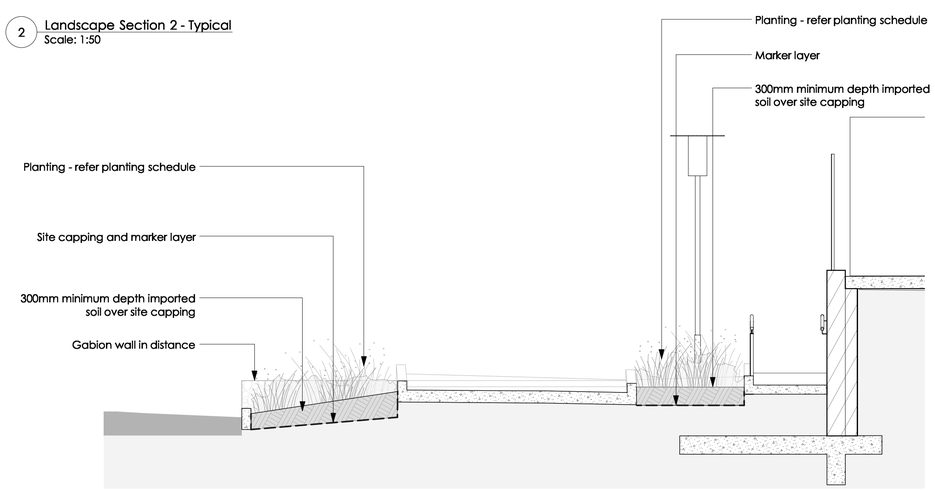
1 Landscape Section 1
Scale: 1:50



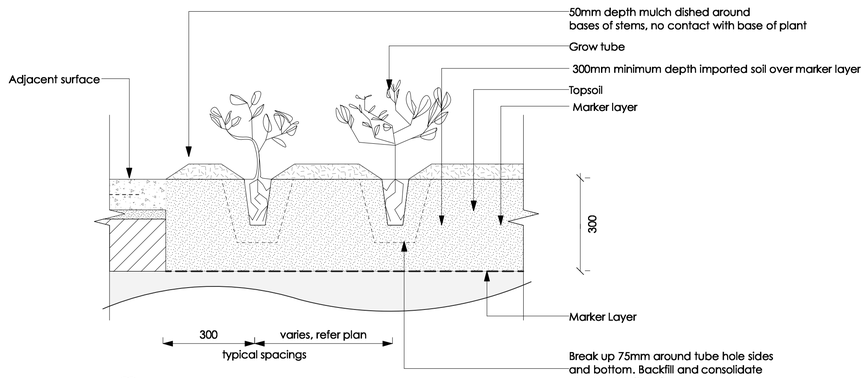
4 Landscape Section 4 - Typical
Scale: 1:50



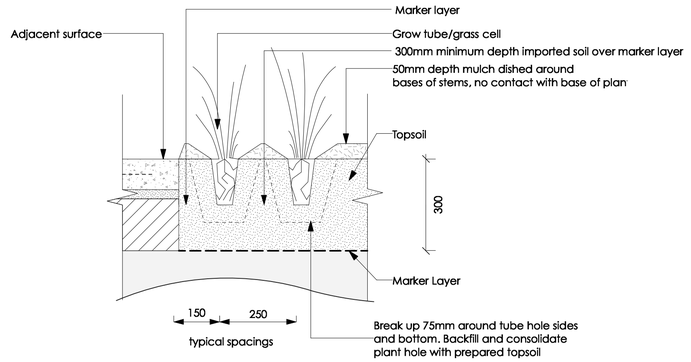
2 Landscape Section 2 - Typical
Scale: 1:50



3 Landscape Section 3
Scale: 1:50



5 Typical Detail - Shrub & Groundcover Planting
Scale: 1:10



6 Typical Detail - Grass Planting
Scale: 1:10

Issue	Description	Date	By
C	REVISED FOR CONSTRUCTION	5/2/20	HM
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CLIENT
Roads and Maritime Services

PROJECT TITLE
Bank St Commercial Wharf
5-11 Bank Street
Pyrmont

DRAWING TITLE
Sections & Details

Scale @ A1
AS SHOWN

Job No
180404

Drawing Status
CONSTRUCTION

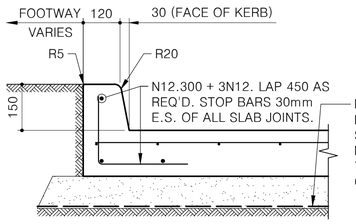
Drawing No
LC-04

Issue
C

Drafted By: LC

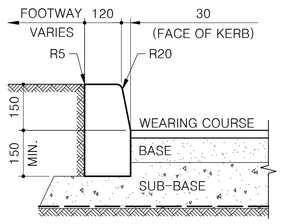
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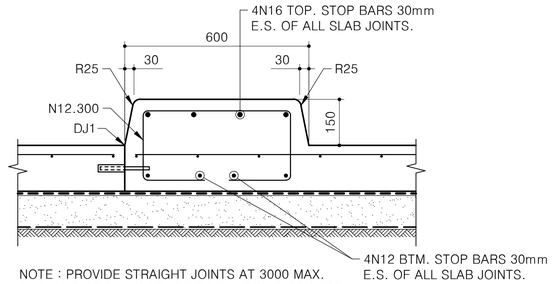
NOTE : PROVIDE STRAIGHT JOINTS AT 3000 MAX. CTS. AND AT ALL SLAB JOINT LOCATIONS. PROVIDE 10 THICK 'JOINTEX' IN KERB AT THESE LOCATIONS.

INTEGRAL KERB 'K1' 150 WD. DETAIL



NOTE : PROVIDE STRAIGHT JOINTS AT 3000 MAX. CENTRES UNO. PROVIDE 10 THICK 'JOINTEX' IN KERB AT THESE LOCATIONS.

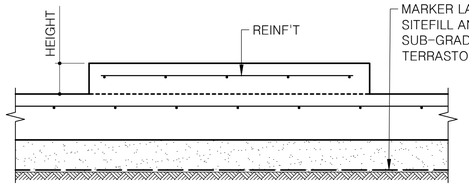
ISOLATED KERB 'KO'



NOTE : PROVIDE STRAIGHT JOINTS AT 3000 MAX. CTS. AND AT ALL SLAB JOINT LOCATIONS. PROVIDE 10 THICK 'JOINTEX' IN KERB AT THESE LOCATIONS.

ISLAND KERB 'K2' DETAIL

SCALE 1:10
TYPICAL KERB & GUTTER DETAILS



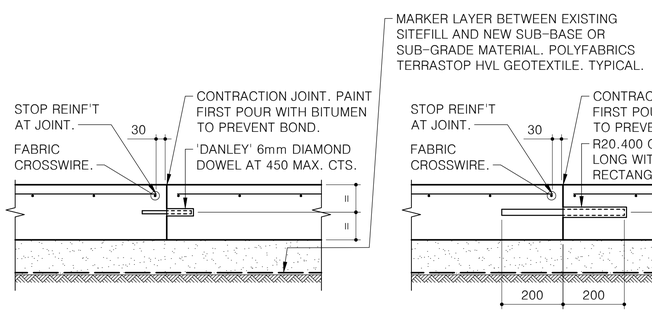
SCALE 1:10
TYPICAL PLINTH DETAIL
NOTE : PLINTHS ARE NOT TO CROSS JOINTS IN SLAB.

PLINTH SCHEDULE

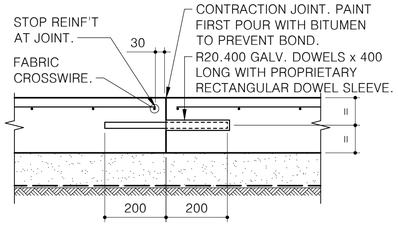
MARK	HEIGHT (mm)	CONCRETE STRENGTH	TOP REINF'T.	TOP COVER
PL1	100	40MPa	SL92	45
PL2	150	40MPa	SL92	45

SLAB ON GROUND SCHEDULE

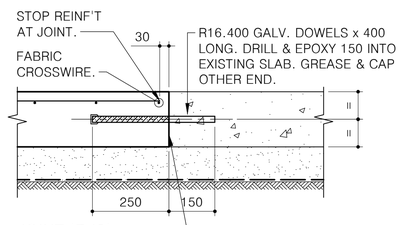
TYPE	SLAB				SUB-BASE THICKNESS	SAWN JOINT DEPTH (mm)
	THICKNESS (mm)	CONCRETE (MPa)	REINF'T (TOP UNO.)	COVER (TOP UNO.)	CRUSHED SANDSTONE OR DGB 20	
S1	120	40	SL72	45	75	30
S2	120	40	N12.300 E.W.	45	75	30
S3	170	40	SL82	45	150	40
S4	180	40	SL82	45	150	50
S5	200	40	SL82 TOP SL102 BTM	45 TOP 40 BTM	150	50
S6	200 MIN. (OR TO MATCH EXISTING)	50	SL102 TOP & BTM	50 TOP & BTM	100	–



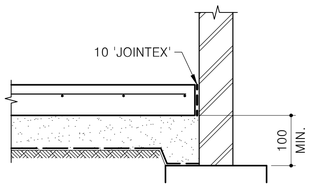
JOINT 'DJ1'



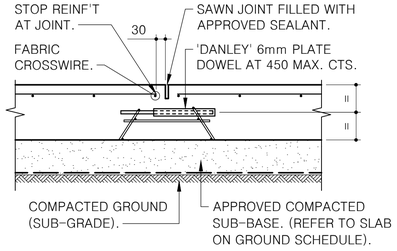
JOINT 'DJ1' ALTERNATIVE



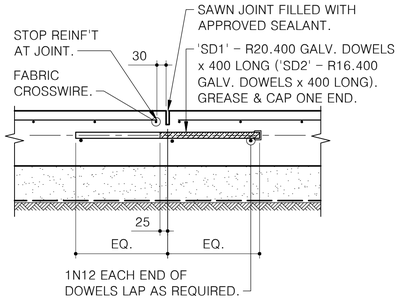
JOINT 'DJ2'



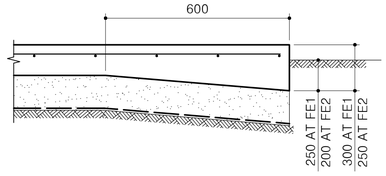
STRAIGHT JOINT 'SJ'



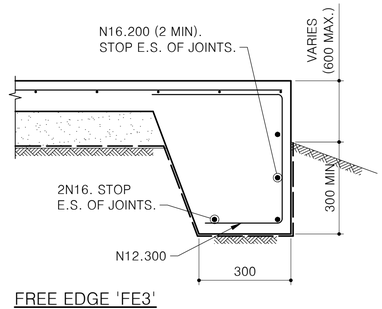
JOINT 'SD1' & 'SD2'



JOINT 'SD1' & 'SD2' ALTERNATIVE



FREE EDGE 'FE1/FE2'



FREE EDGE 'FE3'

SCALE 1:10
TYPICAL SLAB ON GROUND DETAILS

0 20mm 40mm 60mm 80mm 100mm

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REFER TO DWG. No. S0010 & S0011 FOR CONSTRUCTION NOTES.

Rev.	Date	Description	Drawn	Design
A	11.04.18	PRELIMINARY ISSUE	RS	MB
B	19.04.18	PRELIMINARY ISSUE	AC	MB
1	26.04.18	CONSTRUCTION ISSUE	WO'B	MB
2	03.05.18	REVISIONS AS CLOUDED.	WO'B	MB
3	10.05.18	REVISIONS AS CLOUDED.	WO'B	MB
4	21.08.18	MARKER LAYER ADDED.	DF	MB
5	06.09.19	REISSUED FOR CONSTRUCTION	RS	MB
6	18.09.19	REISSUED FOR TENDER	DF	MB
7	17.10.19	ISSUED FOR CONSTRUCTION	BQ	MB

FOR CONSTRUCTION

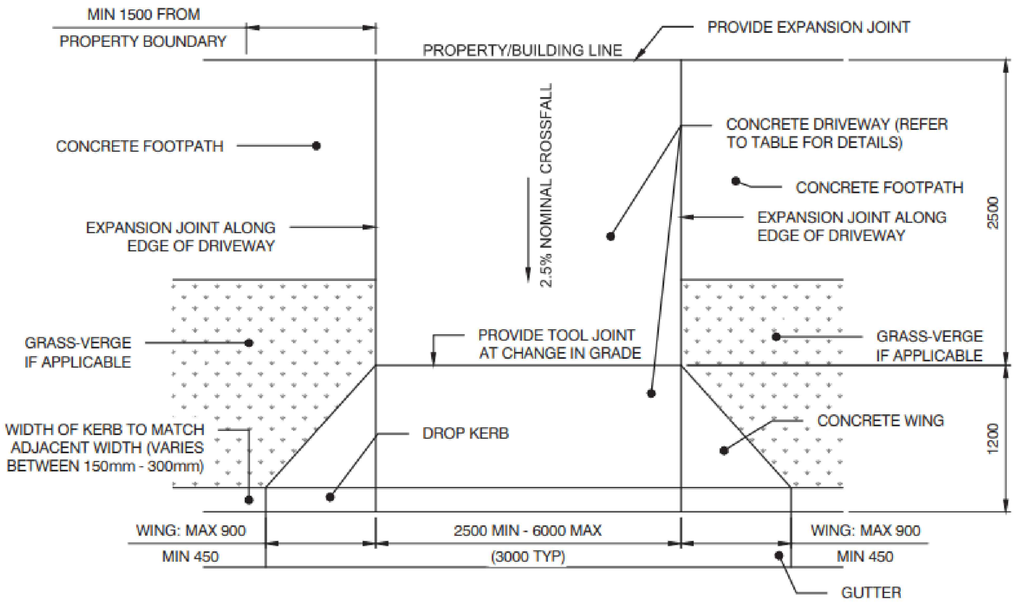
CLIENT :
TRANSPORT ROADS AND MARITIME SERVICES

tonkin
tonkin.com.au
LEVEL 6, 1 JAMES PLACE,
NORTH SYDNEY, NSW 2060
TEL. (02) 9409 3300
FAX. (02) 9929 6667

BANK STREET PYRMONT
COMMERCIAL MARINA
DRY WORKS

SITE DETAILS – SHEET 1

Principal	M. Baker	Project No.	17033
Sheet Size	A1	Dwg. No.	S1201
Scales	As Indicated	Rev. No.	7

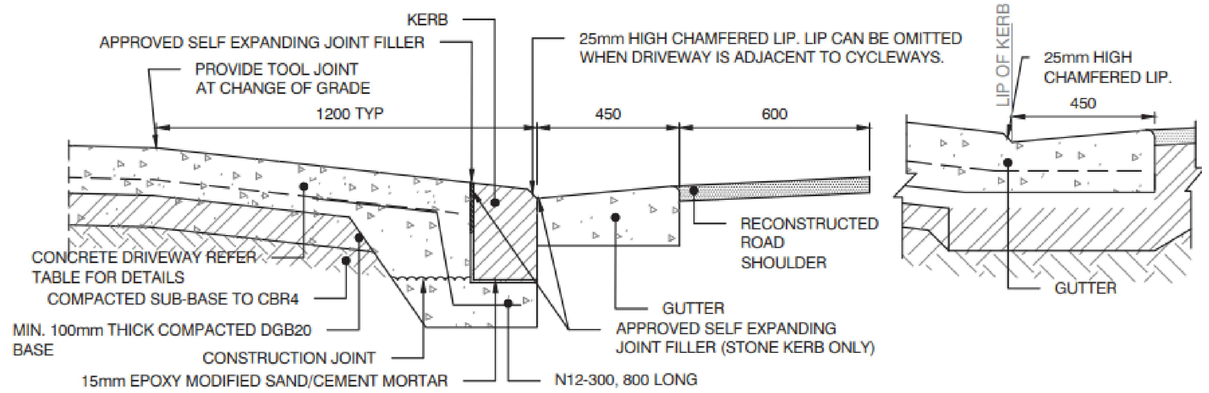


NOTES:

1. DRIVEWAY TO BE GENERALLY PERPENDICULAR TO KERB LINE, UNLESS APPROVED OTHERWISE.
2. VERTICAL AND HORIZONTAL CLEARANCE SHALL BE CHECKED BY THE DESIGNER IN ACCORDANCE WITH AS2890.1.
3. FOR NARROW FOOTPATHS LENGTH OF RAMP TO BE AS SHORT AS POSSIBLE, OR LAYBACK ONLY TO BE USED IN APPROVED APPLICATIONS.
4. FOR DRIVEWAYS WIDER THAN 6.0m A TOOL JOINT SHALL BE PROVIDED ALONG THE CENTRE OF THE DRIVEWAY.
5. DRIVEWAY CONCRETE SHALL BE WOOD FLOAT FINISHED.

VEHICULAR CROSSING PLAN

NOT TO SCALE



SECTION (STONE KERB)
1:20

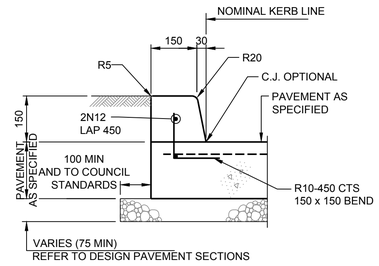
SECTION (CONCRETE KERB)
1:20

DRIVEWAY SPECIFICATIONS			
DRIVEWAY USE	CONCRETE STRENGTH	THICKNESS	REINFORCEMENT
SINGLE RESIDENTIAL	32MPa	150mm	SL82
MULTI RESIDENTIAL	32MPa	200mm	SL82
COMMERCIAL/ INDUSTRIAL	32MPa	250mm	TWO LAYERS SL82

NOTE: ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE STATED

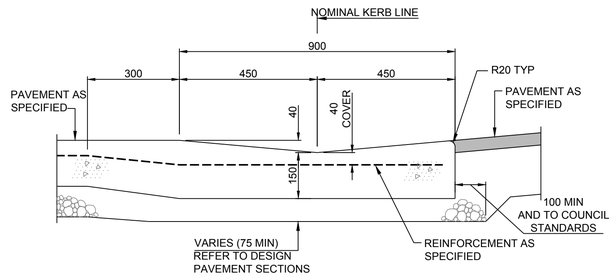
VEHICULAR CROSSING SECTION

NOT TO SCALE



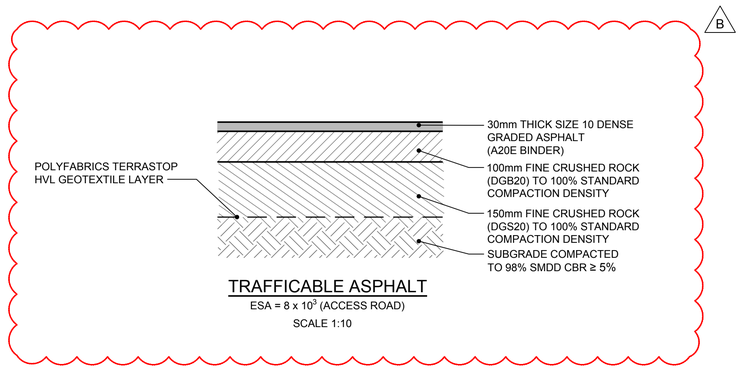
INTEGRAL KERB (IK)

SCALE 1:10



INTEGRAL DISH DRAIN (IDD)

SCALE 1:10



TRAFFICABLE ASPHALT

ESA = 8 x 10^3 (ACCESS ROAD)

SCALE 1:10

ISSUED FOR CONSTRUCTION

DO NOT SCALE FROM DRAWINGS, CHECK & VERIFY ALL DIMENSIONS & LEVELS BEFORE COMMENCEMENT OF ANY WORK.

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100 0 100 200 300 400 500mm
PLAN SCALE 1:10 A1 SHEET

200 0 200 400 600 800 1000mm
PLAN SCALE 1:20 A1 SHEET

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150
SHEET SIZE: A1

REVISION	AMENDMENT	DATE	REVISION	AMENDMENT	DATE
1	50% TENDER ISSUE	10/04/18			
2	90% TENDER ISSUE	18/04/18			
3	CIVIL 100% TENDER ISSUE	26/04/18			
4	CIVIL TENDER ISSUE	04/05/18			
A	ISSUE FOR CONSTRUCTION	05/11/19			
B	RE-ISSUE FOR CONSTRUCTION - RFI 1	15/11/19			

CLIENT: CHRISTIE CIVIL

PROJECT: BANK ST, PYRMONT

PREPARED BY

Warren Smith & Partners

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TITLE: SITEWORKS DETAILS

SCALE	DRAWN	DESIGNED	CHECKED	APPROVED
AS SHOWN	S.E.	D.B.	M.C	M.C.

JOB No.	DRAWING No.	ISSUE
5721000	C4.05	B

DATE: MAR 2018

STATUS: CIVIL ISSUE FOR CONSTRUCTION

Xref: X-5721000-TB_A1H_DA, X-5721000-TB_A1H_1050MM
Pcd Date: 15.11.2019@09:53:07 Cad File: T:\5721000\Drawings\AutoCAD\Civil\Design\Civil 2D\100% Main Works\C4.05 Siteworks Details dwg.dwg
Login Name: dbarsal
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Appendix B: Data Quality Objectives

In determining the type, quantity and quality of data needed to support decisions relating to the validation of the works completed on the Site, the seven-step DQO approach has been undertaken in accordance with Appendix B of Schedule B2 of the *National Environment Protection (Assessment of Site Contamination) Measure 1999* (NEPC, 2013) (the NEPM). The DQO's are presented below.

Step 1 State the Problem

TfNSW are undertaking a redevelopment on the Site to enable the relocation of a RMS licenced commercial operator from a property on Pyrmont Bridge Road, Glebe NSW to the Site to enable the development of the New Sydney Fish Market. As part of this work the Site is to be utilised for temporary maritime support facilities and publicly accessible open space.

The redevelopment plans for the Site comprises the construction of temporary facilities, open space areas and the location of wharf/marina facility as presented on the figures included as Appendix A. This Addendum to the RAP has been required due to the changes in the redevelopment plans for the Site that have occurred since the preparation of the RAP. The RAP was prepared as part of the original Part 3A approval that was granted for the Sydney Heritage Fleet Facilities at 5 Bank Street, Pyrmont (the MP 11_0001) and comprised a different configuration of buildings, surface treatments and land uses than the current redevelopment plan.

The results of intrusive investigations on the Site have identified the presence fill materials in the sub-surface of the Site that are contaminated and potentially contaminated with polycyclic aromatic hydrocarbons, petroleum hydrocarbons and heavy metals. No fibrous asbestos (FA) and asbestos-containing materials (ACM) has been previously identified, however, given the history of filling activities conducted at the Site there is the potential for these materials to be present in surface and sub-surface soils. Consequently, in order to for the Site to be made suitable for the proposed redevelopment a remediation strategy was required to be developed.

The remediation strategy for the Site has been prepared with reference to the requirements of the NSW EPA Site Remediation Policy, and, adopts a cap and contain approach, that does not require any active remediation works to be undertaken but rather can be achieved through the redevelopment of the Site for the temporary maritime support facilities and publicly accessible open space. The capping and containing approach ultimately utilises the proposed surface treatments and landscaping to provide the required capping layer to prevent exposure of future users of the Site to the fill materials present in the surface and sub-surface of the Site.

The adoption of a cap and contain strategy will require long-term maintenance and management, the requirements of which will be set out in a Long-term Environmental Management Plan (LT EMP) for the Site. Given that at the completion of these remediation and redevelopment works there will be an ongoing presence of contaminated fill materials in the sub-surface environment on the Site, the LT EMP will provide measures to ensure the adequate protection of the health of future users of the Site and the ongoing suitability of the Site for commercial/industrial and open space recreational land uses.

The construction of the maritime support facilities and publicly accessible open space and consequently the establishment of the cap across the Site are to be undertaken in accordance with the plans provided as Appendix A to this report. Validation is required to confirm that the construction has been undertaken in accordance with the RAP and this report and these plans such that an appropriate cap has been established across the Site that prevents exposure of users of the Site to the underlying retained fill materials. The purpose of this validation plan is to set out the requirements to validate the successful implementation of the remediation strategy for the Site.

Step 2 Identify the Decisions

The decisions to be made in order to validate the works on the Site are as follows:

- Confirm that the works have been undertaken in general accordance with the RAP and this Addendum to the RAP, in particular confirm that the construction works have been completed in accordance with the design specifications and plans provided in Appendix A;
- Confirm the requirement, if any, for additional data to determine and support validation;
- Assess the success of the remediation works, including the validation of the physical measures installed; and
- Confirm whether the validation field and analytical results meet the validation criteria (RAC), where required.

Step 3 Identify Inputs to the Decisions

The inputs required to make the above decisions are as follows:

- Appropriate guidelines endorsed by NSW EPA or as set out in the RAP and ARAP;
- Land use;
- Remediation objectives;
- Records of inspections conducted during the works;
- Collection of soil samples of materials subject to the 'cut to fill program' works to provide more adequate characterisation of the retained fill materials;
- Collection of soil samples from any imported materials for analysis to determine suitability for importation and use on the Site;
- Collection and analysis of soil samples of any excess soil materials generated during construction works to determine requirements for off-site disposal;
- Results of Registered Survey works;
- As-built descriptions and drawings; and
- Determination of whether the remediation works have been successfully completed by demonstrated satisfaction of the remediation objectives.

Step 4 Define the boundaries

The boundaries of the validation works have been identified as follows:

- Spatial boundaries –the boundary of the Site as defined by the footprint set out in the plans in Appendix A;
- Vertical boundaries –the depth to where existing fill materials are present;
- Temporal boundaries – the temporal boundary is limited to the data collected during the remediation works and validation works, however, the results of the previous investigations will be referred to and utilised where relevant; and
- Constraints within the study boundaries – The following issues present limitations upon the validation strategy for the Site:
    - Unexpected finds during the remediation works.

Step 5 Develop a Decision Rule

The decision rules for the validation of the remediation works are as follows:

- The as-built descriptions, drawings and survey plans of the constructed maritime support facilities and publicly accessible open space are required to meet the specifications set out in the plans provided as Appendix A (capping layer thickness must be met for 95% of Site area or as otherwise justified) If the construction works are not completed in accordance with the requirements of these documents, as identified by the Project Manager, the Environmental Consultant or other relevant persons, the Construction Contractor will be required to rectify to ensure compliance with the requirements of these documents;
- The results of any sampling, analysis, monitoring and/or other data collection must meet the requirements of the RAP and this Addendum to the RAP;
- If the validation works do not meet the criteria set out in the RAP and the ARAP, the requirement for contingency works will be considered in accordance with the requirements of the RAP.

Step 6 Specify Limits on Decision Errors

The minimum acceptable limits on decision errors to be applied in the validation works and the manner of addressing possible decision errors have been developed based on the Data Quality Indicators (DQIs) of precision, accuracy, representativeness, comparability and completeness and are presented in Appendix C of this report.

The potential for significant decision errors are to be minimised by:

- Completing an assessment of the constructed development to determine whether the decisions set out in Step 3 for these measures have been met;
- Completing a robust QA/QC assessment of the validation data and application of the probability that 95% of data will satisfy the DQIs, therefore a limit on the decision error will be 5% that a conclusive statement may be incorrect;
- Ensuring that, where required, an appropriate inspection, monitoring, sampling and analytical density is applied for the purposes of demonstrating required outcomes; and
- Ensuring that the criteria set for the validation works are appropriate.

The potential for significant decision errors are to be minimised by completing a robust QA/QC program and by completing a validation program that has an appropriate inspection, monitoring and sampling and analytical frequency for the purposes of the validation works.

Step 7 Develop the Plan for Validation

The design of the validation plan is based on satisfying the remediation objectives. The validation works are required to confirm that the remediation works set out in the RAP and ARAP have been completed successfully. This report details the works undertake in order to demonstrate satisfaction of the remediation objectives.

Appendix C: Data Validation

C1 Quality Assurance and Quality Control Plan

The field and laboratory quality assurance and quality control plan implemented for the remediation and validation works has been designed to achieve pre-determined data quality indicators that demonstrate the precision, accuracy, representativeness, completeness and comparability of the data set and that the data set is of acceptable quality to meet the objectives of the works.

The specific quality assurance and quality control plan adopted for the field and laboratory components of the works were developed based on with Appendix B of Schedule B2 of the NEPM and are detailed below.

C1.1 Data Quality Indicators

The project DQIs have been established to set acceptance limits on field and laboratory data collected as part of these ESA works. For both field and laboratory procedures, acceptance limits are set at different levels for different projects and by the laboratories.

Non-compliances with acceptance limits are documented and discussed further below.

The DQIs are as follows:

DQI	Field	Laboratory	Acceptability Limits
Precision	Sampling methodologies appropriate and complied with. Collection of intra-laboratory duplicate and inter-laboratory duplicate samples	Analysis of: Field intra-laboratory duplicate samples (1 in 10 samples) Field inter-laboratory duplicate samples (1 in 20 samples) Laboratory duplicate samples Laboratory prepared trip spikes (single representative batch only – not required by ARAP) Laboratory prepared trip blank (single representative batch only – not required by ARAP)	 RPD of < 50% RPD of < 50% RPD of < 50% Recovery >90% Non-detect for CoC

DQI	Field	Laboratory	Acceptability Limits
Accuracy	Sampling methodologies appropriate and complied with. Collection of rinsate blanks	Analysis of: Rinsate blanks (1/day) Method blanks Matrix spikes Matrix spike duplicates Laboratory control samples Surrogate spikes Reference Materials	 Non-detect for CoC Non-detect for CoC 70 to 130% RPD of <50% 70 to 130 % 70 to 130% Varies
Representativeness	Appropriate media sampled according to CONSARA methodologies All media identified in the methodology section sampled.	All samples analysed according to Section 3.8.5.6 of ARAP	All samples analysed according to the laboratory methodologies.
Comparability	Same sampling methodologies used on each day of sampling Experienced sampler Climatic conditions Same types of samples collected	Same analytical methods used (including clean-up) Sample laboratory detection limits (justify/quantify if different) Same laboratories (NATA accredited) Same units	As per NEPC (2013) < nominated criteria where applicable
Completeness	All critical locations and media sampled All samples collected Sampling methodologies appropriate and complied with Experienced sampler Documentation correct	All critical samples analysed and all analytes analysed according to Section 3.8.5.6 of the ARAP. Appropriate methods Appropriate laboratory detection limits Sample documentation complete Sample holding times complied with	 As per NEPC (2013) < nominated criteria where applicable As per NEPC (2013)

C1.2 Field QA/QC

C1.2.1 Soil Sample Collection

The soil sampling works were undertaken by appropriately qualified and experience field scientists and the sampling methods followed the procedures and methodology set out in below and were conducted with reference to the relevant guidelines endorsed by NSW EPA.

Boreholes were completed using a hand auger and sampling locations for waste classification were advanced by a hand trowel.

Soil samples were collected directly from stockpile materials by a hand protected by nitrile gloves. New nitrile gloves were used for the collection of each sample.

Samples for chemical analysis were collected into laboratory-supplied 150 mL glass jars with Teflon-lined lids, which were carefully filled to minimise the amount of headspace in the jar.

Samples for asbestos field screening and/or analysis were collected from the sample depths using hand trowels (surface or near surface samples) or were collected directly from the hand auger. One 10 L sample and one 0.5L sample, were collected directly by hand protected by nitrile gloves and were directly placed into clean buckets.

Field intra-laboratory duplicates of the soil samples for chemical analysis were prepared in the field by collecting separate samples from the push tubes from the same depth. The duplicates of the soil samples were prepared in the field by splitting the sample. Samples were not mixed or homogenised during collection or splitting. Samples for duplicate analyses were selected from sampling locations showing the high probability of containing contaminants of concern, i.e., samples containing visual evidence of contamination noting no odours were present in any samples collected.

Soil samples collected for asbestos screening and analysis included, where practicable, the collection of a 0.5 L and 10L sample from each sampling location. In accordance with the WA DoH (2009), the 10 L sample was screened manually on-site through a < 7 mm sieve (recommended for Friable Asbestos (FA) or Asbestos Fines (AF)). It is noted that observations during screening did not identify the potential for ACM (<7mm) and FA to be present in any of the samples subject to screening. As such the 10 L sample was retained and not analysed, however, the 0.5 L sample for these locations was placed into a zip-locked plastic bag and were sent to a laboratory NATA accredited for weighing and asbestos analysis.

C1.2.2 Sample Labelling, Handling and Preservation

During sampling, a new pair of disposable nitrile sampling gloves was donned between each sampling location. Samples were placed immediately into a laboratory prepared and supplied containers in accordance with the methodology described in Section C1.2.1 above.

All sample containers were clearly labelled with unique sample identification numbers consisting of the date, sample location and samplers initials. In the case of field intra-laboratory and inter-laboratory duplicates and other field quality control samples, the sample containers were labelled so as to not reveal their purpose or sample location to the laboratory. All samples will be kept chilled in an ice-filled esky immediately after sampling and during transport to the nominated laboratories under chain-of-custody procedures. Soils samples for asbestos analysis were secured in an esky or similar between sampling and analysis. By prior arrangement with the laboratories, samples were analysed as soon as practicable after receipt by the laboratories.

Samples were preserved for the various contaminants of concern in accordance with the requirements of NEPC (2013) as detailed in the table below:

Matrix	Analyte	Container	Preservation
Soil	All chemical analytes	150 mL glass screw top jar	Unpreserved, 4 ^{0}C
	Asbestos	Sealed plastic bag	Unpreserved. No requirement for chilling

Sample numbers, depths, preservation and analytical requirements were recorded on the chain-of-custody documentation (signed copies provided with the laboratory reports in Appendix H), which accompanied the samples to the laboratory.

C1.2.3 Intra-laboratory and Inter-laboratory Duplicate Samples

The purpose of field duplicate samples is to estimate the variability of a given characteristic or contaminant associated with a population. Intra-laboratory duplicate samples were collected and analysed at a rate of at least one in ten primary samples.

The field duplicated soil samples were obtained from similar soils immediately adjacent to the primary sample by placing approximately equal portions of the primary sample into two sample containers. The field duplicated groundwater samples were obtained from the same monitoring well as the primary sample and were collected as discrete samples. All duplicate samples were labelled to conceal their relationship to the primary sample from the laboratory and the key to the duplicate samples was recorded in the field note book.

It is common that significant variation in duplicate results is often observed (particularly for solid matrix samples) due to sample heterogeneity or low reported concentrations near the laboratory PQL. The overall precision of field duplicates, laboratory split samples and laboratory duplicates is generally assessed by their Relative Percent Difference (RPD), given by:

$$\text{RPD} = \frac{(D1-D2)}{\frac{(D1+D2)}{2}} \text{X } 100$$

where D1 is the primary sample measurement

D2 is the duplicate sample measurement

It is expected that RPD's would be less than 50% for organic compounds and 30% for inorganic compounds, and if not, liaison with the laboratory will be undertaken and samples will be reanalysed, if required.

A summary of the calculations for soil RPDs for medium to heavy fraction TPH, PAHs and metals are presented in Table 9. RPD calculations were not completed for BTEX, Light fraction TPHs, OCPs, OPPs, PCBs and Total Phenolics as concentrations in the primary and duplicate pairs were less than the laboratory detection limits for all compounds.

It is noted that there were RPD exceedances relative to the RPD criteria only in a number of primary and intra-lab duplicate pairs and inter-laboratory duplicate pairs for chromium, copper, lead, mercury and zinc. The variability in concentrations may be due to the heterogeneity of the fill materials (where relevant) sampled. It is considered that the RPD exceedances do not affect the reliance on the data set.

The actual intra-laboratory and inter-laboratory duplicate sample frequency for the soil investigation exceeded the DQI criteria.

C1.2.4 Decontamination and Rinsate Blanks

Given that samples for chemical analysis were collected directly from the stockpiles using single-use gloves and no-reuseable sampling equipment came into contact with the soil sampled the collection of rinsate blanks was not necessary.

C1.2.5 Trip Spike

A trip spike assesses for the potential of loss of volatile constituents from soil samples whilst in transit from the investigation site to the laboratory. The spike sample is prepared by the laboratory, transported to the investigation site under COC protocol and returned to the laboratory with the primary samples being submitted for analysis.

One soil trip spike was utilised during collection, storage and transport of a representative batch of soil samples collected on 9 December 2019. The trip spike was then blindly labelled and submitted to the laboratory for analysis for the spike constituents, being BTEX compounds. The results of the trip spike recoveries is provided in Table 3 and indicated excellent recovery and where within the acceptance criteria.

The results indicate that there was no significant loss or gain of volatile constituents from the soil samples while in transit from the Site to the laboratory. It is noted that given that volatile compounds were not reported in samples of materials from the Site in previous investigations or in the results from this batch that it was considered that trip spikes were not relevant for use in future sampling events. It is noted that the use of trip spikes was not required by the ARAP.

A1.1 Trip Blank

A trip blank assesses for the potential transfer of volatile constituents from samples whilst in transit from the site to the laboratory. The blank sample is prepared by the laboratory, transported to the site under COC protocol and returned to the laboratory with the primary samples being submitted for analysis. The acceptance criteria is concentrations of analytes to be less than the laboratory detection limits.

One soil trip blank was utilised during collection, storage and transport of soil samples of a representative batch of soil samples collected on 9 December 2019. The trip blank was blindly labelled and submitted to the laboratory for analysis for volatile constituents, being BTEX compounds. The results of the trip blank is provided in Table 3 and reported concentrations that were less than the laboratory detection limits.

The results indicate that there was no transfer of volatile constituents from the soil samples while in transit from the Site to the laboratory. It is noted that given that volatile compounds were not reported in samples of materials from the Site in previous investigations or in the results from this batch that it was considered that trip blanks were not relevant for use in future sampling events. It is noted that the use of trip blanks was not required by the ARAP.

C1.3 Laboratory QA/QC

C1.3.1 Analytical Laboratory

Samples were submitted to the Envirolab, Chatswood, NSW - (primary laboratory) Report No.223637– Soil Analysis. Envirolab is a NATA-accredited laboratory (accreditation number is 2901), and its analytical procedures are based on established internationally-recognised procedures such as those published by the US EPA, APHA, AS and NEPM (2013). Envirolab also adopt in house procedures where required.

Samples were submitted to the ALS, Smithfield, NSW - (secondary laboratory) Report no: ES1925440– Soil Analysis. The ALS NATA accreditation number is 825, and its analytical procedures are based on methods referenced from published sources including the US EPA APHA, AS and NEPM (2013).

A1.2 Analytical Methods

The laboratory analysis methods are provided on the laboratory certificates in Appendix H and summarised below:

Analytical Laboratory Methods

Analyte	Envirolab Practical Quantitation Limit	Reference Method	ALS Laboratory Limit of Detection	Reference Method
BTEX and Naphthalene	0.2 – 1 mg/kg	Extraction with methanol and Purge and Trap GC-MS	0.2-1 mg/kg	Extraction with methanol and Purge and Trap GC-MS
TRHs (C6-C10)	25 mg/kg	Extraction with methanol and Purge and Trap GC-MS	10 mg/kg	Extraction with methanol and Purge and Trap GC-MS
TRHs (C10-C40)	50-100 mg/kg	Extraction with Dichloromethane/Acetone and analysed by GC-FID	50-100 mg/kg	Extraction with Dichloromethane/Acetone and analysed by GC-FID
PAHs (Including Naphthalene)	0.05-0.2 mg/kg	Extraction with Dichloromethane/Acetone and analysed by GC-MS	0.5 mg/kg	Extraction with Dichloromethane/Acetone and analysed by GC-MS
Metals – Arsenic, Cadmium, Chromium, Copper, Lead, Nickel, Zinc	0.4-4 mg/kg	ICP-AES	1-5 mg/kg	ICP-AES
Mercury	0.1 mg/kg	Cold vapour AAS	0.5 mg/kg	Cold vapour AAS
OCPs/OPPs/PCBs	0.1 mg/kg	Extraction with Dichloromethane/Acetone and analysed by GC with dual ECDs	0.1 mg/kg	Extraction with Dichloromethane/Acetone and analysed by GC with dual ECDs
Phenolics	5 mg/kg	Solids are Extraction in a caustic media and analysed by segmented flow analyser (in line distillation with colourimetric finish).	0.5 mg/kg	Extraction with Dichloromethane/Acetone and analysed by Capillary GC/MS in Selective Ion Mode (SIM) and quantification is by comparison against an

Analyte	Envirolab Practical Quantitation Limit	Reference Method	ALS Laboratory Limit of Detection	Reference Method
				established 5 point calibration curve
Asbestos	mg/kg (0.001%w/w) to 0.1g/kg (0.01%w/w)	Polarised Light Microscopy and Dispersion Staining Techniques.		
TCLP		Toxicity Characteristic Leaching Procedure (TCLP) using Zero Headspace Extraction (zHE) using AS4439 and USEPA 1311		
PAHs (Including Naphthalene)	0.1-0.2 µg/L	Extraction with Dichloromethane and analysed by GC-MS		
Metals – Arsenic, Cadmium, Chromium, Copper, Lead, Nickel, Zinc	0.05-0.1 µg/L	ICP-MS		
Mercury	0.05 µg/L	Cold vapour AAS		

Notes to Table:
GC= Gas Chromatography CP-AES =Inductively Coupled Plasma Atomic Emission Spectrometry
AAS = Atomic Absorption Spectroscopy MS = Mass Spectrometry FID = Flame Ionisation Detector

C1.3.2 Laboratory (Method) Blanks

Laboratory or control blanks consist of reagents specific to each individual analytical method and are prepared and analysed by laboratories in the same manner as regular samples. The preparation and analysis of laboratory blanks enables the measurement of contamination within the laboratory.

Laboratory blanks are typically analysed at a frequency of 1 in 10, with a minimum of one analysed per batch.

Review of laboratory QA/QC reports indicated that the results for all method blanks for soil were below the laboratory PQLs.

C1.3.3 Laboratory Duplicates

Laboratory duplicate samples are prepared in the laboratory by splitting a field sample and analysing it as two independent samples. The analysis of laboratory duplicate samples provides an indication of analytical precision and may be influenced by sample heterogeneity. The laboratory duplicate RPDs are used to assess laboratory precision.

Laboratory duplicates are typically analysed at a frequency of 1 in 10, with a minimum of one analysed per batch.

Review of the laboratory QA/QC reports identified exceedances for laboratory duplicate samples relative to the assessment criteria (results ranged from 0-3 % RPD), but the laboratory deemed the results acceptable based on the non-homogeneous nature of the samples.

C1.3.4 Matrix Spikes

Matrix spikes are samples prepared within the laboratory by dividing a field sample into two aliquots, then spiking each with identical concentrations of the analytes. The matrix spike and matrix spike duplicate are then analysed separately and the results compared to determine the effects of the sample matrix on the accuracy and precision of the analytes. Accuracy is assessed by the calculation of the percent recovery.

Review of the laboratory QA/QC reports indicated that the percent recoveries for matrix spike samples, where tested, reported results for soil that were within the acceptance criteria.

C1.3.5 Surrogates

Surrogates are compounds which are similar to the organic analytes of interest in chemical composition, extraction, and chromatographic behaviour, but which are not normally found in field samples.

Surrogates are generally spiked into all sample aliquots prior to preparation and analysis by chromatogaphic methods. Percent recoveries are calculated for each surrogate, providing an indication of analytical accuracy. US EPA methodology (SW – 846) requires that surrogate testing be performed whenever analysing by Gas Chromatography or HPLC.

Review of the laboratory QA/QC reports indicated that the percent recoveries for surrogates for soil that were within the acceptance criteria for the laboratory.

C1.3.6 Holding Times

NEPC (1999), APHA 20th Edition and AS2031.1-1986 present recommended holding times for various analyses (under specified conditions, for example below 4°C in an airtight container), which must be met in order to consider the results valid. The holding times may vary slightly depending on the document referenced.

Analyte	Matrix	Recommended Maximum Holding Time
TPH (C6-C36)	Soil	14 days
BTEX	Soil	14 days
PAHs	Soil	14 days
Metals	Soil	6 months
Mercury	Soil	28 days

Analyte	Matrix	Recommended Maximum Holding Time
OCPs/OPPs	Soil	14 days
PCBs/Phenolics	Soil	28 days
Asbestos	Soil	N/A

Review of the chain-of-custody documentation and the laboratory reports indicated that for the analyses, the holding times met the standard holding times set out in the table above for all analytes tested.

C1.4 Data Validation

The overall assessment of the quality of the data obtained during the validation works is discussed below in terms of the data quality indicators provided above.

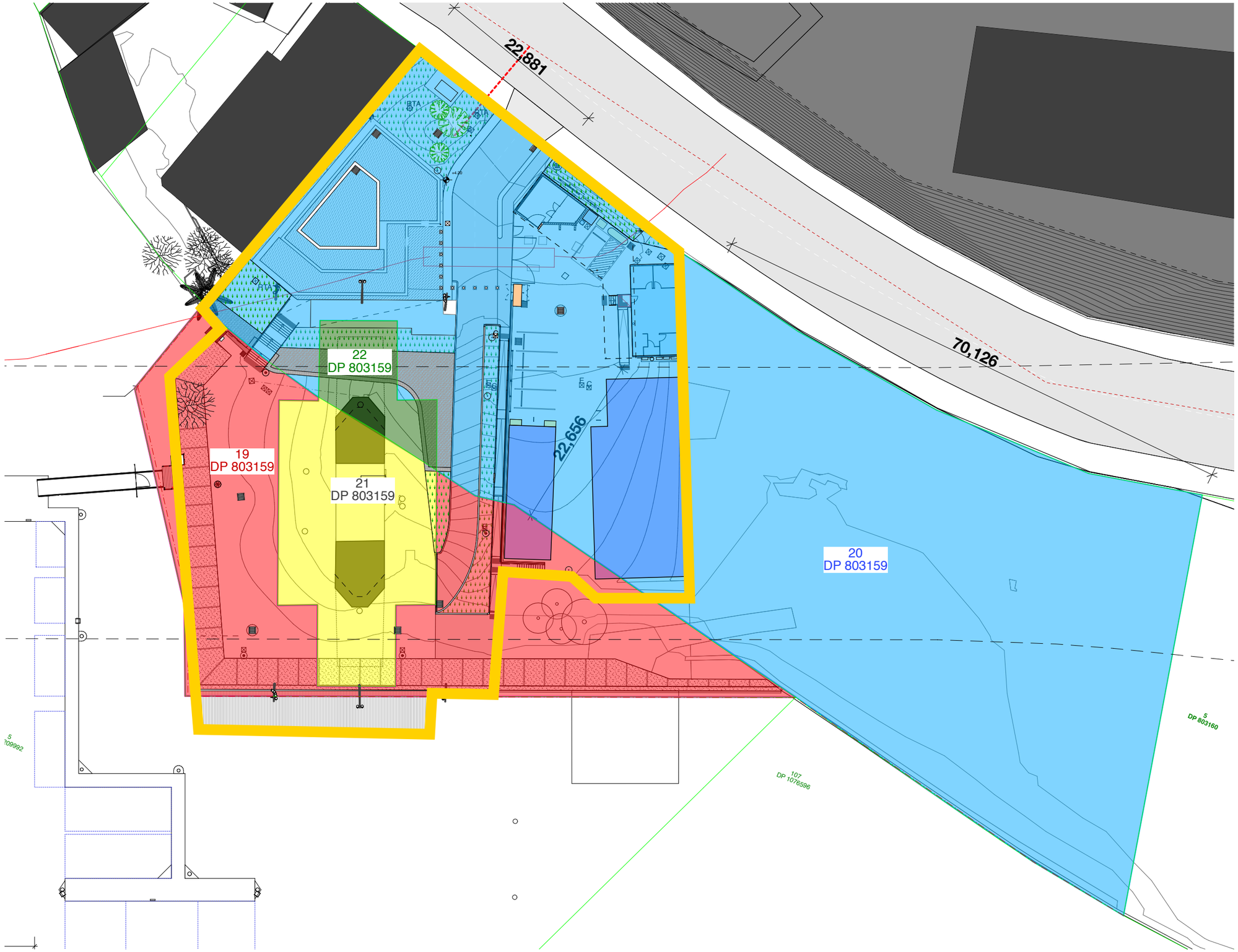
Non-compliances have been documented and discussed in the report. The DQIs are as follows:

DQI	Description	Compliance
Precision	Precision is a quantitative measure of the variability (or reproducibility) of data.	Precision or variability of the data was assessed by determining RPDs between the original and duplicate samples analysed. Based on results discussed above, CONSARA considers that the precision of the data is sufficient for the purposes of the validation.
Accuracy	Accuracy is a quantitative measure of the closeness of reported data to the true value.	Accuracy of the data was mainly assessed through review of the laboratory QA/QC results. From the laboratory QA/QC results, CONSARA considers that the accuracy of the data is sufficient for the purposes of the validation
Representativeness	Representativeness is the confidence (expressed qualitatively) that data are representative of each media present on the site.	Representativeness expresses the degree to which sample data accurately and precisely represent a characteristic of parameter variations at sampling points or environmental conditions. Sample representativeness is controlled through selecting sampling locations that exemplify site conditions and obtaining suitable samples from these sites. Sample selection and analysis was conducted in order to meet the specific objectives of the project. Analysis for the contaminants of concern was selectively conducted on samples collected as indicated in analytical tables. Based on the sampling and analytical regime undertaken by CONSARA, the results obtained are considered to be sufficiently representative of the subsurface conditions at the locations tested.

DQI	Description	Compliance
Completeness	Completeness is a measure of the amount of usable data (expressed as %) from a data collection activity.	The completeness of data is defined as the percentage of analytical results that are considered valid. Valid chemical data are values that have been identified as acceptable or acceptable as qualified during the data validation process. The completeness is a comparison of the total number of samples accepted against the total number of samples, calculated as a percentage. The project goal for completeness is 95%. Completeness also includes checking that all entries in the data tables are correct, properly entered, and that any typographical errors are corrected and the data are re-entered properly, as required. Some of the samples collected and analysed did not comply with the stated DQIs. However, the data that did comply with the DQOs and DQIs, is considered to be sufficiently quantitative and complete for the purposes of the validation (i.e. >95%)
Comparability	Comparability is the confidence (expressed qualitatively) that data may be considered to be equivalent for each sampling and analytical event.	Comparability expresses the confidence with which one data set can be compared with another. In order to assess comparability, field sampling procedures, laboratory sample preparation procedures, analytical procedures, and reporting units must be known and similar to established protocols, as was the case during this investigation. Qualitatively, data subjected to strict QA/QC procedures will be deemed more reliable, and therefore more comparable, than other data. Each analyte was analysed by the same analytical laboratory using identical methods, and laboratory EQLs were consistent over each laboratory batch. Additionally, a check laboratory was used to assess variability between laboratories. Based on the above, the data obtained throughout the validation works is considered to be suitably comparable.

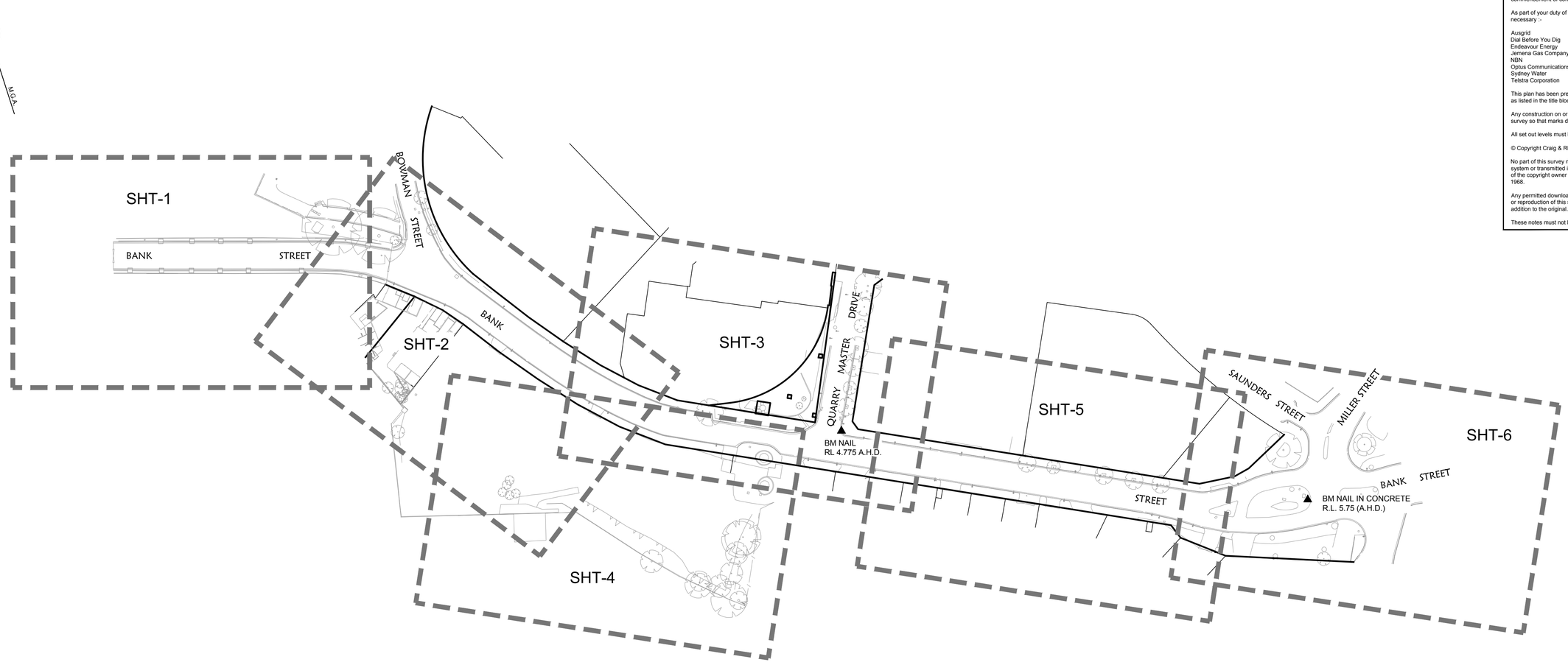
Based on the assessment of field and laboratory QA/QC data, the reported field and analytical results are considered to be of a quality that can be relied upon for the purposes of the validation.

Appendix D: Survey Plan showing Lot and DPs


22,881
70,126
22,656
22
DP 803159
19
DP 803159
21
DP 803159
20
DP 803159
5
709992
107
DP 1076596
5
DP 803160

A1

MGA



Survey Notes:-

Location of structures approximate only.

The levels and details on this plan have been determined by stadia methods and are within the general accepted accuracies for such surveys. All set out levels must be referred to the bench mark.

Bearings and Distances are by deed only and are subject to Final Survey. Except where shown by dimension, the relationship of improvements to boundaries is diagrammatic only. The true positions are subject to Final Survey.

Tree sizes are estimates and indicative only.

Services and utilities shown have been located by physical evidence and/or by reference to service plans from the relevant authorities. Subsurface utility information shown in accordance with AS5488-2013 QL-D. Pits may not have been opened to verify the type of utility. Excavation has not been carried out to confirm underground location. Service details should be confirmed with the relevant service authority during design and prior to commencement of construction.

As part of your duty of care, please contact the following where necessary :-

Ausgrid	Ph. 131535
Dial Before You Dig	Ph. 1100
Endeavour Energy	Ph. 131081
Jemena Gas Company	Ph. 131245
NBN	Ph. 1800 881 816
Optus Communications	Ph. 1800 505 777
Sydney Water	Ph. 132092
Telstra Corporation	Ph. 132203

This plan has been prepared for the exclusive use of the principal as listed in the title block.

Any construction on or near the boundaries will require further survey so that marks defining boundaries can be placed.

All set out levels must be referred to the bench mark.

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ORIGIN OF LEVELS: SSM 32843 RL5.36 A.H.D. VIDE SCIMS DATED 28/7/2015

50 40 30 20 10 0 50

1:1000 @ A1

AMEND. No.: 09	DATE: 24/11/2016	DETAILS:	JETTY DELETED
AMEND. No.: 08	DATE: 15/11/2016	DETAILS:	DRAFTING OF ADDITIONAL INFORMATION COMPLETED
AMEND. No.: 07	DATE: 14/11/2016	DETAILS:	ADDITIONAL INFORMATION ADDED
AMEND. No.: 6	DATE: 20/05/2016	DETAILS:	INTERNAL WALLS ADDED FOR 5 BUILDING (B.M. & S.E.)

DIAL 1100 BEFORE YOU DIG

Project:
DETAIL SURVEY OVER
LOTS 1 & 2 D.P.1089643, LOTS 5, 6, 12, 13, Pt.14, 19, 20, 21 & 22 D.P.803159
BANK STREET, QUARRY MASTER DRIVE, BOWMAN STREET
& MILLER STREET, PYRMONT

Principal: URBAN GROWTH

Scale 1:1000	Date 5/8/2015	Council Ref.	
	Datum A.H.D.	L.G.A. SYDNEY	
Calc's L.H., L.E., B.M., S.T	Drawn. A.P	Proj.Man. D.J.S	Client Ref:

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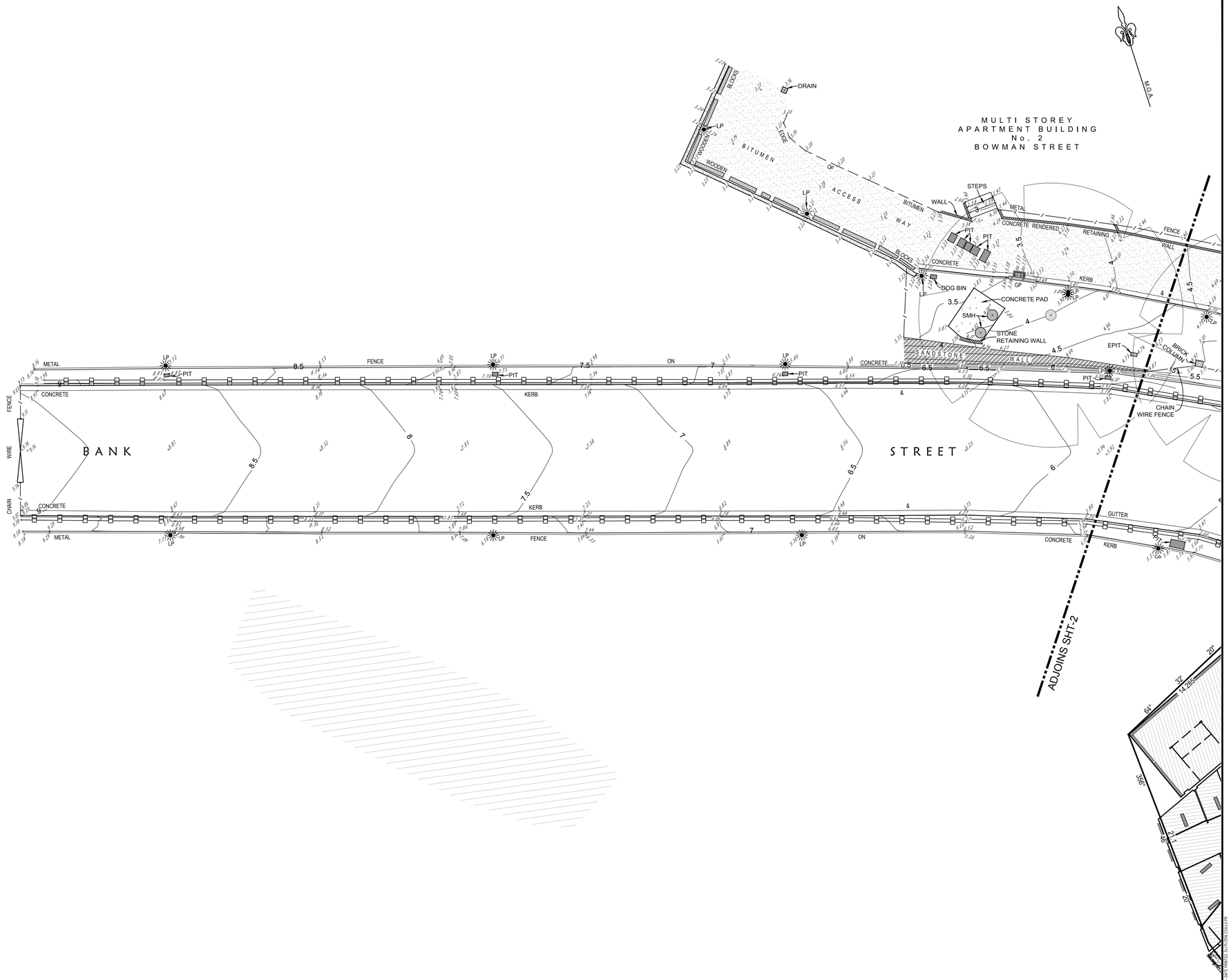
Our Ref. 102-15

Dwg File Ref. [Rev] - Sheet Ref.

102-15G T02 [09] - COVER SHEET

C:\USERS\CRAIG\DESKTOP\102-15G T02 [09] - COVER SHEET - L.H., L.E., B.M., S.T - A1 - D.J.S - DATE PRINTED 24/11/2016 2:03:37 PM

A1



LEGEND

AHD		AUSTRALIAN HEIGHT DATUM
	BM	BENCH MARK
	TC	TELECOMMUNICATIONS PIT
	EPIT	ELECTRICAL PIT
	EP	ELECTRICAL PILLAR
	EBOX	ELECTRICAL BOX
	GP	GULLY PIT
	HYD	HYDRANT
	SMH	SEWER MAINTENANCE HOLE
	SV	STOP VALVE
	LP	LIGHT POLE
	SWP	STORMWATER PIT
	WM	WATER METER
	SS	STREET SIGN
	TL	TRAFFIC LIGHT
		BOLLARD (Ø265 mm)
		GATE
		FENCE
		RAIL
		METAL GUARD RAIL
		ROCK WALL
		TREE

COM	APPROXIMATE LOCATION OF UNDERGROUND TELECOMMUNICATION CABLES (TELSTRA, OPTUS, VOCUS & NEXTGEN) VIDE DBYD
T	APPROXIMATE LOCATION OF UNDERGROUND TELSTRA CABLE VIDE DBYD
O	APPROXIMATE LOCATION OF UNDERGROUND OPTUS CABLE VIDE DBYD
W	APPROXIMATE LOCATION OF WATER MAINS VIDE DBYD
S	APPROXIMATE LOCATION OF SEWER MAINS VIDE DBYD
G	APPROXIMATE LOCATION OF GAS MAINS VIDE DBYD
A	APPROXIMATE LOCATION OF UNDERGROUND AAPT CABLE VIDE DBYD
E	APPROXIMATE LOCATION OF UNDERGROUND ELECTRICAL DUCTS VIDE DBYD
V	APPROXIMATE LOCATION OF UNDERGROUND VERIZON DUCTS VIDE DBYD
SW	APPROXIMATE LOCATION OF STORMWATER PIPES VIDE DBYD

ORIGIN OF LEVELS: SSM 32843 RL5.36 A.H.D. VIDE SCIMS DATED 28/7/2015

5 4 3 2 1 0 5 10
1:200 @ A1

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Principal: URBAN GROWTH

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Our Ref. 102-15

Dwg File Ref. [Rev] - Sheet Ref.

102-15G T02 [09] - 1 OF 7

C:\USERS\...\102-15G.DGN_PLANS\102-15G T02.DWG - 1:0.7 - LH, LE, B.M., S.T. - A.P. - D.J.S - LAST PRINTED 21/11/2016 2:54:13 PM

A1

'A' - EASEMENT FOR WATER SUPPLY 1.8 WIDE (D.P.882897) LIMITED IN STRATUM
'B' - EASEMENT TO DRAIN WATER VARIABLE WIDTH (D.P.882897) LIMITED IN STRATUM
'C' - EASEMENT FOR MAINTENANCE VARIABLE WIDTH (D.P.1041963)
'D' - EASEMENT TO DRAIN WATER 3 WIDE (D.P.1041963) LIMITED IN STRATUM
'E' - EASEMENT FOR ELECTRICITY 3 & 4.265 WIDE (D.P.1041963) LIMITED IN STRATUM
'F' - EASEMENT TO DRAIN WATER 1.735 WIDE (D.P.1041963) LIMITED IN STRATUM
'G' - EASEMENT TO DRAIN WATER 1.735 WIDE (D.P.8301160) LIMITED IN STRATUM
'H' - EASEMENT FOR FOOTINGS & SUPPORT (D.P.8031160) LIMITED IN STRATUM
'I' - PROPOSED EASEMENT FOR ELECTRICITY & OTHER PURPOSES OVER EXISTING LINE OF PIPE (APPROXIMATE POSITION) (D.P.120299)
'J' - EASEMENT FOR ELECTRICITY & OTHER PURPOSES 5 & 6.5 WIDE (D.P.120299)

NOTE:
* FULL DIMENSIONS & AREAS ARE NOT AVAILABLE FOR ALL LOTS.
ANY WORKS ON LANDS HEREIN MAY NECESSITATE THE LODGMENT OF A PLAN OF SURVEY.

SCHEDULE of LINES

No.	BEARING	DISTANCE
1	137°30'10"	0.27
2	16°15'30"	0.505
3	148°49'50"	0.485
4	55°56'30"	1.15

BOWMAN STREET
BANK STREET
QUARRY MASTER DRIVE
MILLER STREET
SSM 32843 RL 5.36 A.H.D.
BRICK BUILDING No.1 BANK STREET
TOTAL AREA 1324m² *
SEE BUILDINGS INTERNAL DETAIL ON SHEET 7
1 2 D.P.1089643
1 D.P.439245 0.9m²
19 D.P.803159 1601m²
20 D.P.803159 5612m²
21 D.P.803159
22 D.P.803159
92 D.P.1182887
SP46801
ADJOINS SHT-1
ADJOINS SHT-3
ADJOINS SHT-6
ADJOINS

LEGEND

AHD AUSTRALIAN HEIGHT DATUM
BM BENCH MARK
TC TELECOMMUNICATIONS PIT
EPIT ELECTRICAL PIT
EP ELECTRICAL PILLAR
EBOX ELECTRICAL BOX
GP GULLY PIT
HYD HYDRANT
SMH SEWER MAINTENANCE HOLE
SV STOP VALVE
LP LIGHT POLE
SWP STORMWATER PIT
WM WATER METER
SS STREET SIGN
TL TRAFFIC LIGHT
BOLLARD (Ø265 mm)
GATE
FENCE
RAIL
METAL GUARD RAIL
ROCK WALL
TREE
COM APPROXIMATE LOCATION OF UNDERGROUND TELECOMMUNICATION CABLES (TELSTRA, OPTUS, VOCUS & NEXTGEN) VIDE DBYD
T APPROXIMATE LOCATION OF UNDERGROUND TELSTRA CABLE VIDE DBYD
O APPROXIMATE LOCATION OF UNDERGROUND OPTUS CABLE VIDE DBYD
W APPROXIMATE LOCATION OF WATER MAINS VIDE DBYD
S APPROXIMATE LOCATION OF SEWER MAINS VIDE DBYD
G APPROXIMATE LOCATION OF GAS MAINS VIDE DBYD
A APPROXIMATE LOCATION OF UNDERGROUND AAPT CABLE VIDE DBYD
E APPROXIMATE LOCATION OF UNDERGROUND ELECTRICAL DUCTS VIDE DBYD
V APPROXIMATE LOCATION OF UNDERGROUND VERIZON DUCTS VIDE DBYD
SW APPROXIMATE LOCATION OF STORMWATER PIPES VIDE DBYD
BOUNDARY OF LOT 22 D.P.803159 ABOVE
BOUNDARY OF LOT 21 D.P.803159 ABOVE

ORIGIN OF LEVELS: SSM 32843 RL5.36 A.H.D. VIDE SCIMS DATED 28/7/2015

5 4 3 2 1 0 5 10
1:200 @ A1

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Principal: URBAN GROWTH
Scale 1:200 | Date 5/8/2015 | Council Ref.
Datum A.H.D. | L.G.A. SYDNEY
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Our Ref. 102-15
Dwg File Ref. [Rev] - Sheet Ref.
102-15G T02 [09] - 2 OF 7

DATE/TIME: 21/07/2016 3:58:28 PM - DWG: 102-15G T02 [09] - 2 OF 7 - LH, LE, BM, ST - AP - D.J.S - DATE PRINTED: 21/7/2016 3:58:28 PM

A1

'A' - EASEMENT FOR WATER SUPPLY 1.8 WIDE (D.P.882897) LIMITED IN STRATUM
'B' - EASEMENT TO DRAIN WATER VARIABLE WIDTH (D.P.882897) LIMITED IN STRATUM
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'G' - EASEMENT TO DRAIN WATER 1.735 WIDE (D.P.830160) LIMITED IN STRATUM
'H' - EASEMENT FOR FOOTINGS & SUPPORT (D.P.803160) LIMITED IN STRATUM
'I' - PROPOSED EASEMENT FOR ELECTRICITY & OTHER PURPOSES OVER EXISTING LINE OF PIPE (APPROXIMATE POSITION) (D.P.120299)
'J' - EASEMENT FOR ELECTRICITY & OTHER PURPOSES 5 & 6.5 WIDE (D.P.120299)

LEGEND

- AHD AUSTRALIAN HEIGHT DATUM
- BM BENCH MARK
- TC TELECOMMUNICATIONS PIT
- EPIT ELECTRICAL PIT
- EP ELECTRICAL PILLAR
- EBOX ELECTRICAL BOX
- GP GULLY PIT
- HYD HYDRANT
- SMH SEWER MAINTENANCE HOLE
- SV STOP VALVE
- LP LIGHT POLE
- SWP STORMWATER PIT
- WM WATER METER
- SS STREET SIGN
- TL TRAFFIC LIGHT
- BOLLARD (Ø265 mm)
- GATE
- FENCE
- RAIL
- METAL GUARD RAIL
- ROCK WALL
- TREE
- COM APPROXIMATE LOCATION OF UNDERGROUND TELECOMMUNICATION CABLES (TELSTRA, OPTUS, VOCUS & NEXTGEN) VIDE DBYD
- T APPROXIMATE LOCATION OF UNDERGROUND TELSTRA CABLE VIDE DBYD
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- A APPROXIMATE LOCATION OF UNDERGROUND AAPT CABLE VIDE DBYD
- E APPROXIMATE LOCATION OF UNDERGROUND ELECTRICAL DUCTS VIDE DBYD
- V APPROXIMATE LOCATION OF UNDERGROUND VERIZON DUCTS VIDE DBYD
- SW APPROXIMATE LOCATION OF STORMWATER PIPES VIDE DBYD

SP46801

ADJOINS SHT-4

ADJOINS SHT-2

ADJOINS SHT-5

ORIGIN OF LEVELS: SSM 32843 RL5.36 A.H.D. VIDE SCIMS DATED 28/7/2015

5 4 3 2 1 0 5 10
1:200 @ A1

AMEND. No.: 09	DATE: 24/11/2016	DETAILS:	JETTY DELETED
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AMEND. No.: 07	DATE: 14/11/2016	DETAILS:	ADDITIONAL INFORMATION ADDED
AMEND. No.: 6	DATE: 20/05/2016	DETAILS:	INTERNAL WALLS ADDED FOR 5 BUILDING (B.M. & S.E.)

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Principal: URBAN GROWTH

Scale 1:200	Date 5/8/2015	Council Ref.	
	Datum A.H.D.	L.G.A. SYDNEY	
Calc's L.H., L.E., B.M., S.T.	Drawn. A.P	Proj.Man. D.J.S	Client Ref:

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Our Ref. 102-15

Dwg File Ref. [Rev] - Sheet Ref.

102-15G T02 [09] - 3 OF 7

A1

ADJOINS SHT-3

ADJOINS SHT-7

BANK STREET

D.P.803159

LEGEND

AHD		AUSTRALIAN HEIGHT DATUM
▲	BM	BENCH MARK
▭	TC	TELECOMMUNICATIONS PIT
▭	EPIT	ELECTRICAL PIT
▭	EP	ELECTRICAL PILLAR
▭	EBOX	ELECTRICAL BOX
▭	GP	GULLY PIT
▭	HYD	HYDRANT
○	SMH	SEWER MAINTENANCE HOLE
○	SV	STOP VALVE
✳	LP	LIGHT POLE
▭	SWP	STORMWATER PIT
⊸	WM	WATER METER
●	SS	STREET SIGN
●	TL	TRAFFIC LIGHT
○		BOLLARD (Ø265 mm)
		GATE
		FENCE
		RAIL
		METAL GUARD RAIL
		ROCK WALL
		TREE

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T	APPROXIMATE LOCATION OF UNDERGROUND TELSTRA CABLE VIDE DBYD
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W	APPROXIMATE LOCATION OF WATER MAINS VIDE DBYD
S	APPROXIMATE LOCATION OF SEWER MAINS VIDE DBYD
G	APPROXIMATE LOCATION OF GAS MAINS VIDE DBYD
A	APPROXIMATE LOCATION OF UNDERGROUND AAPT CABLE VIDE DBYD
E	APPROXIMATE LOCATION OF UNDERGROUND ELECTRICAL DUCTS VIDE DBYD
V	APPROXIMATE LOCATION OF UNDERGROUND VERIZON DUCTS VIDE DBYD
SW	APPROXIMATE LOCATION OF STORMWATER PIPES VIDE DBYD
	BOUNDARY OF LOT 22 D.P.803159 ABOVE
	BOUNDARY OF LOT 21 D.P.803159 ABOVE
	BOUNDARY OF LOT 12 D.P.803160 ABOVE
	BOUNDARY OF LOT 13 D.P.803160 ABOVE

'A' - EASEMENT FOR WATER SUPPLY 1.8 WIDE (D.P.882897) LIMITED IN STRATUM
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ORIGIN OF LEVELS: SSM 32843 RL5.36 A.H.D. VIDE SCIMS DATED 28/7/2015

1:200 @ A1

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Principal: URBAN GROWTH
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Our Ref. 102-15

Dwg File Ref. [Rev] - Sheet Ref.

102-15G T02 [09] - 4 OF 7

CAD REF: Z:\102-15\G_PLANS\102-15G T02 [09].DWG - 4.0 T - LH, LE, BM, ST - A1* - D15 - DATE PRINTED: 24/11/2016 2:59:13 PM

A1

MGA

ADJOINS SHT-3

ADJOINS SHT-6

102
D.P.853704

102
D.P.853704

101
D.P.853704

101
D.P.853704

1
D.P.820577

2
D.P.1064339

BRICK BUILDING

BRICK WALL

BRICK BUILDING

BITUMEN DRIVEWAY

PATH

BITUMEN

AWNING OVER

PARKING METER

SANDSTONE

KERB

PLANTER

BITUMEN DRIVEWAY

GAS

OPTUS PIT

RAIL

GUTTER

CONCRETE DRIVEWAY

CONCRETE TRAFFIC ISLAND

STREET

BANK

STREET

PARKING METER

GUTTER

SANDSTONE

KERB

BITUMEN

PATH

CONCRETE DRIVEWAY

BITUMEN

PATH

POLE

CONCRETE DRIVEWAY

CONCRETE DRIVEWAY

METER

CONCRETE DRIVEWAY

BITUMEN

PATH

GUTTER

CONCRETE

WALL

METAL

FENCE

FENCE

METAL FENCE

METAL

GARDEN

Ø100 TIMBER BOLLARDS

CONCRETE DRIVEWAY

CONCRETE PYLON

BOOSTER

WATER METER

LOW CONCRETE WALL

POLES

POLE

BOOSTER

10

11

20

21

22

24

25

PT23
D.P.811844

PT28
D.P.815847

PT29
D.P.815847

D.P.803160

'POULOS BROS'

D.P.811844

D.P.815847

LEGEND

AHD		AUSTRALIAN HEIGHT DATUM
▲	BM	BENCH MARK
	TC	TELECOMMUNICATIONS PIT
	EPIT	ELECTRICAL PIT
	EP	ELECTRICAL PILLAR
	EBOX	ELECTRICAL BOX
	GP	GULLY PIT
	HYD	HYDRANT
	SMH	SEWER MAINTENANCE HOLE
	SV	STOP VALVE
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		BOLLARD (Ø265 mm)
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A	APPROXIMATE LOCATION OF UNDERGROUND AAPT CABLE VIDE DBYD
E	APPROXIMATE LOCATION OF UNDERGROUND ELECTRICAL DUCTS VIDE DBYD
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SW	APPROXIMATE LOCATION OF STORMWATER PIPES VIDE DBYD

5 4 3 2 1 0 5 10

1:200 @ A1

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BANK STREET, QUARRY MASTER DRIVE, BOWMAN STREET
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ORIGIN OF LEVELS: SSM 32843 RL5.36 A.H.D. VIDE SCIMS DATED 28/7/2015

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APPROVED COMPANY ISO 9001 Quality Management Systems QMS Certificate Number

Our Ref. 102-15

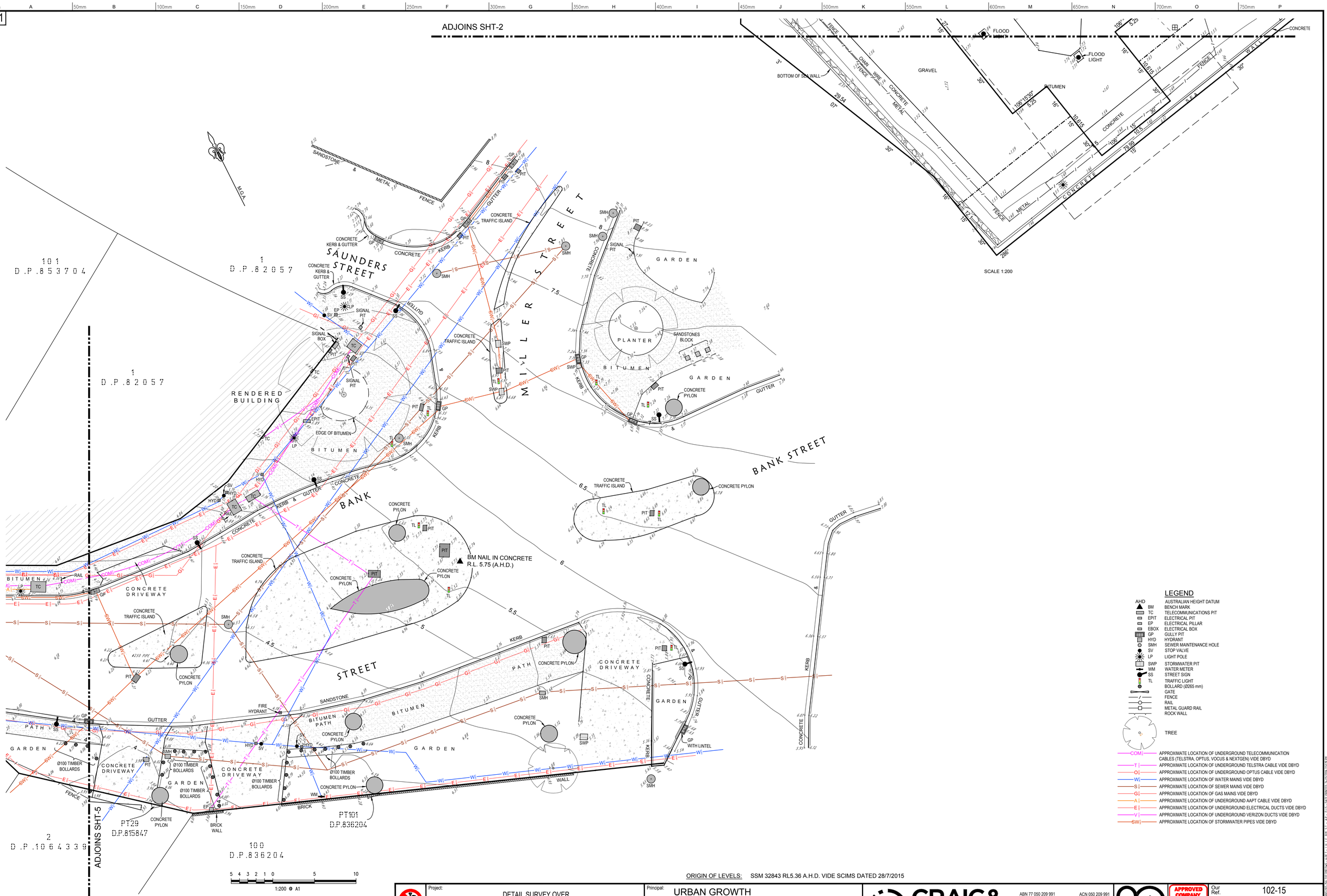
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102-15G T02 [09] - 5 OF 7

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A1

ADJOINS SHT-2



SCALE 1:200

LEGEND

AHD	AUSTRALIAN HEIGHT DATUM
BM	BENCH MARK
TC	TELECOMMUNICATIONS PIT
EPIT	ELECTRICAL PIT
EP	ELECTRICAL PILLAR
EBOX	ELECTRICAL BOX
GP	GULLY PIT
HYD	HYDRANT
SMH	SEWER MAINTENANCE HOLE
SV	STOP VALVE
LP	LIGHT POLE
SWP	STORMWATER PIT
WM	WATER METER
SS	STREET SIGN
TL	TRAFFIC LIGHT
	BOLLARD (Ø265 mm)
	GATE
	FENCE
	RAIL
	METAL GUARD RAIL
	ROCK WALL
	TREE
COMi	APPROXIMATE LOCATION OF UNDERGROUND TELECOMMUNICATION CABLES (TELSTRA, OPTUS, VOCUS & NEXTGEN) VIDE DBYD
Ti	APPROXIMATE LOCATION OF UNDERGROUND TELSTRA CABLE VIDE DBYD
Oi	APPROXIMATE LOCATION OF UNDERGROUND OPTUS CABLE VIDE DBYD
Wi	APPROXIMATE LOCATION OF WATER MAINS VIDE DBYD
Si	APPROXIMATE LOCATION OF SEWER MAINS VIDE DBYD
Gi	APPROXIMATE LOCATION OF GAS MAINS VIDE DBYD
Ai	APPROXIMATE LOCATION OF UNDERGROUND AAPT CABLE VIDE DBYD
Ei	APPROXIMATE LOCATION OF UNDERGROUND ELECTRICAL DUCTS VIDE DBYD
Vi	APPROXIMATE LOCATION OF UNDERGROUND VERIZON DUCTS VIDE DBYD
SWi	APPROXIMATE LOCATION OF STORMWATER PIPES VIDE DBYD

5 4 3 2 1 0 5 10

1:200 @ A1

ORIGIN OF LEVELS: SSM 32843 RL5.36 A.H.D. VIDE SCIMS DATED 28/7/2015

AMEND. No.:	DATE:	DETAILS:
09	24/11/2016	JETTY DELETED
08	15/11/2016	DRAFTING OF ADDITIONAL INFORMATION COMPLETED
07	14/11/2016	ADDITIONAL INFORMATION ADDED
6	20/05/2016	INTERNAL WALLS ADDED FOR 5 BUILDING (B.M. & S.E.)

DIAL 1100 BEFORE YOU DIG

Project:
DETAIL SURVEY OVER
LOTS 1 & 2 D.P.1089643, LOTS 5, 6, 12, 13, Pt.14, 19, 20, 21 & 22 D.P.803159
BANK STREET, QUARRY MASTER DRIVE, BOWMAN STREET
& MILLER STREET, PYRMONT

Principal: URBAN GROWTH

Scale	1:200	Date	5/8/2015	Council Ref.	
		Datum	A.H.D.	L.G.A.	SYDNEY
Calc's	L.H, L.E., B.M., S.T	Drawn.	A.P	Proj.Man.	D.J.S

Client Ref:

CRAIG & RHODES

ABN 77 050 209 991
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PO Box 233
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APPROVED COMPANY ISO 9001 Quality Management Systems QMS Certification Services

Our Ref. 102-15

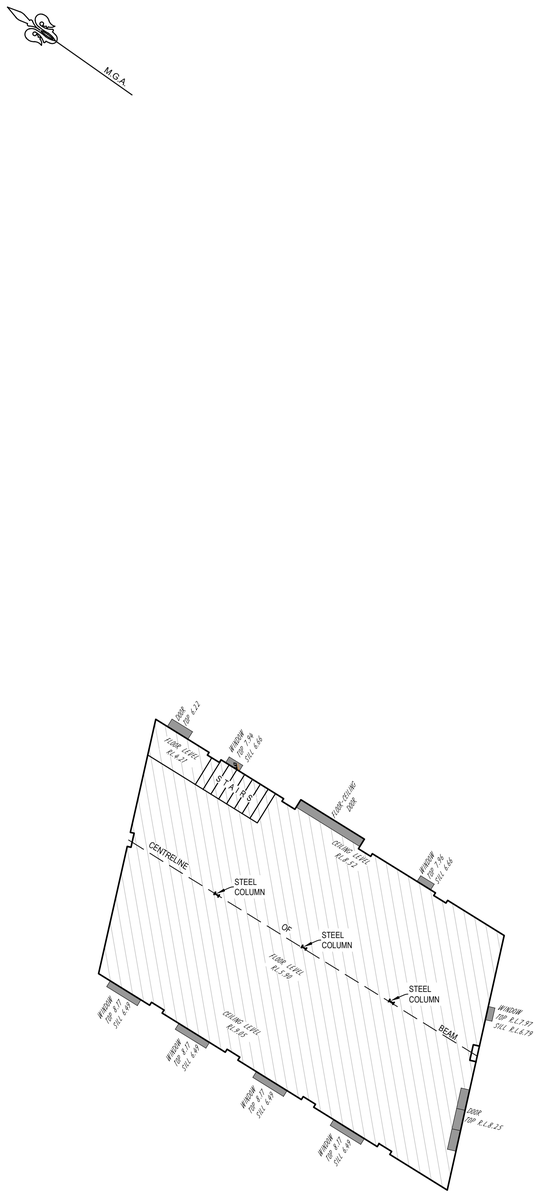
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102-15G T02 [09] - 6 OF 7

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ADJOINS SHT-5

A1



GROUND FLOOR DIAGRAM
SCALE 1:100



BUILDINGS INTERNAL DETAIL
SCALE 1:100

NOTE:
* FULL DIMENSIONS & AREAS ARE NOT AVAILABLE FOR ALL LOTS.
ANY WORKS ON LANDS HEREIN MAY NECESSITATE THE LODGMENT OF A PLAN OF SURVEY.

ORIGIN OF LEVELS: SSM 32843 RL5.36 A.H.D. VIDE SCIMS DATED 28/7/2015

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1:100 @ A1

AMEND. No.		DATE:		DETAILS:
AMEND. No.	09	DATE:	24/11/2016	DETAILS: JETTY DELETED
AMEND. No.	08	DATE:	15/11/2016	DETAILS: DRAFTING OF ADDITIONAL INFORMATION COMPLETED
AMEND. No.	07	DATE:	14/11/2016	DETAILS: ADDITIONAL INFORMATION ADDED
AMEND. No.	6	DATE:	20/05/2016	DETAILS: INTERNAL WALLS ADDED FOR 5 BUILDING (B.M. & S.E.)

DIAL 1100 BEFORE YOU DIG

Project:
DETAIL SURVEY OVER
LOTS 1 & 2 D.P.1089643, LOTS 5, 6, 12, 13, Pt.14, 19, 20, 21 & 22 D.P.803159
BANK STREET, QUARRY MASTER DRIVE, BOWMAN STREET
& MILLER STREET, PYRMONT

Principal: URBAN GROWTH

Scale	1:200 1:100	Date	5/8/2015	Council Ref.	
		Datum	A.H.D.	L.G.A.	SYDNEY
Calc's	L.H., L.E., B.M., S.T.	Drawn.	A.P	Proj.Man.	D.J.S	Client Ref:

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Our Ref. 102-15

Dwg File Ref. [Rev] - Sheet Ref.

102-15G T02 [09] - 7 OF 7

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Appendix E: Site Inspection Records

SITE INSEPCTION RECORD – REMEDIATION AND VALIDATION
NORTHERN PART OF 5-11 BANK STREET, PYRMONT NSW

TIME AND DATE: 2:00PM 9 December 2019

CONSARA PERSONNEL: Rebecca Organo

WEATHER CONDITIONS: Partly cloudy, 25 Degrees

WORKS BEING CONDUCTED:

- Excavation through central area of Site for retaining wall and ramp
- Excavation for underground services in upper area of Site, primarily stripping of surface materials;
- Majority of stockpiles of excavated materials identified for disposal off-site and waste classification required.
- Separate stockpiled excavated materials identified for retention on Site
- Walls of excavations and excavated materials comprise sands and crushed sandstones, larger sandstone rocks and boulders.

PHOTOS:

View of excavation through central part of Site looking west



View of excavated wall and base through central area of Site



View of stockpiled materials excavated from the adjacent excavation



View of excavation through central part of Site looking east



View of stockpiled materials excavated from central excavation adjacent



View of walls of excavation



View of walls of excavation



View of excavated stockpiled materials



View of lower area of Site, with small excavation present



View of stockpile of materials excavated from across the surface of the Site



SITE INSEPCTION RECORD – REMEDIATION AND VALIDATION
NORTHERN PART OF 5-11 BANK STREET, PYRMONT NSW

TIME AND DATE: 8.00AM 18 December 2019

CONSARA PERSONNEL: Rebecca Organo

WEATHER CONDITIONS: Partly cloudy, 25 Degrees

WORKS BEING CONDUCTED:

- Excavation through central area of the Site completed with formwork and concrete for retaining wall construction
- Further surficial excavation of lower area of Site and preperation for excavation work for installation of underground services in this area
- Some of the excavated stockpiled materials present during previous inspection now disposed off-site
- Stockpile of materials excavated from surfaces across Site present on north-eastern area of the Site during previous inspection now placed down slope between upper and lower areas to form terraces for installation of landscaping and stairs

PHOTOS:

View of commencement of construction of retaining wall and services through central area of Site



View of lower area of Site, minor surface excavation and preparation for in-ground services



View of placed excavated materials from surfaces of the Site to form terraces between upper and lower levels of Site along northern boundary



View of excavation of surfaces on upper level of Site



View of formwork and construction for retaining wall through central area of stockpile and excess excavated materials not taken from Site and to be used in backfilling



SITE INSEPCTION RECORD – REMEDIATION AND VALIDATION
NORTHERN PART OF 5-11 BANK STREET, PYRMONT NSW

TIME AND DATE: 3.30PM 14 January 2020

CONSARA PERSONNEL: Rebecca Organo

WEATHER CONDITIONS: Partly cloudy, 25 Degrees

WORKS BEING CONDUCTED:

- Retaining wall continuing to be constructed through central area of Site
- Shallow excavations and installation of underground services in lower area of Site;
- Excavations within north-eastern area identified presence of ACM in fill materials and this material stockpiled separately in north-eastern area of Site for placement beneath the terraced gabions to be installed in this area;
- Stockpiled materials present to be placed back into the Site – no requirements for waste classification.

PHOTOS:

View of ongoing construction of retaining wall and services through central area of Site



View of ongoing construction of retaining wall and ramp through central area of Site



View of excavations and installation of underground services on lower area of Site



View of excavations and stockpiled excavated materials on lower area of Site



View of stockpiled excavated materials from surfaces on upper area of Site



View of stockpile of excavated materials and recycled bedding sands imported from Benedicts



View of stockpile of excavated materials that contain ACM in background covered. In foreground separate sandstone rocks and boulders from excavated materials elsewhere on the Site for use in landscaping



View of excavated materials containing ACM from north-eastern area of Site, stockpiled in north-eastern area of Site and covered.



SITE INSEPCTION RECORD – REMEDIATION AND VALIDATION
NORTHERN PART OF 5-11 BANK STREET, PYRMONT NSW

TIME AND DATE: 1.30PM 21 February 2020

CONSARA PERSONNEL: Rebecca Organo

WEATHER CONDITIONS: Cloudy, 28 Degrees

WORKS BEING CONDUCTED:

- Construction of Retaining wall completed through central area of Site
- Shallow excavations and installation of underground services in lower area of Site;
- Construction of terraced gabion feature is well underway with placement of fill materials containing ACM beneath and in central areas of the gabions, with geofabric marker layer being installed between gabions and placed fill materials;
- Placement of excavated fill materials from Site along slope between upper and lower levels for landscaping and geofabric marker layer being installed
- Various shallow excavations across upper area of the Site and ongoing installation of underground services;

PHOTOS:

View of north-eastern corner of Site



View of construction of terraced gabion walls with ACM containing soils placed beneath and in central area. Geofabric can be seen being installed between edge of gabions and placed soils.



View of upper area of construction of terraced gabion walls with ACM containing soils being placed in central area



View of construction of terraced gabion walls with ACM containing soils being placed in central area



View of construction of terraced gabion walls with ACM containing soils being placed in central area



View along northern boundary of Site and construction of terraced gabion walls with ACM containing soils being placed in central area



View of placed excavated materials from Site to form terraced landscaped area between upper and lower levels of the Site



View of formation of area for construction of ramp and landscaping



View of stockpiled materials excavated from the lower areas of the SIte



View of shallow excavations across lower levels of the Site



View of sandstone rocks and boulders sorted from excavated materials for use in landscaping



View of imported 20 mm recycled aggregate from Concrete Recyclers



View of excavation and installation of underground services in upper levels of Site



View of excavation and installation of underground services in upper levels of Site



SITE INSEPCTION RECORD – REMEDIATION AND VALIDATION
NORTHERN PART OF 5-11 BANK STREET, PYRMONT NSW

TIME AND DATE: 3.30PM 28 February 2020

CONSARA PERSONNEL: Rebecca Organo

WEATHER CONDITIONS: Partly Cloudy, 26 Degrees

WORKS BEING CONDUCTED:

- Shallow excavations and installation of underground services in lower area of Site;
- Construction of terraced gabion feature ongoing
- Construction and placement of materials ready for installation of stairs and landscaping along slope between upper and lower levels;
- Stockpiles of excess materials generated from lower levels of the Site and excavations for services in upper area of the Site present

PHOTOS:

View of lower level of Site and up to upper level and north-eastern area of Site – terraced gabion construction ongoing and landscaping features and preparation for construction of stairs



View of stockpile of excess materials excavated from surface and near surface across lower area of Site



View of stockpile of excess materials excavated from surface and near surface across lower area of Site



View of geofabric marker layer being installed over placed fill materials and commencement of placement of sandstone rocks from the Site



SITE INSEPCTION RECORD – REMEDIATION AND VALIDATION
NORTHERN PART OF 5-11 BANK STREET, PYRMONT NSW

TIME AND DATE: 2.30PM 6 March 2020

CONSARA PERSONNEL: Rebecca Organo

WEATHER CONDITIONS: Partly Cloudy, 25 Degrees

WORKS BEING CONDUCTED:

- Shallow excavations and installation of underground services in lower area of Site;
- Construction of terraced gabion feature ongoing
- Construction and placement of materials completed and geofabric marker layer being installed;
- Installation of stairs between upper and lower levels completed

PHOTOS:

View of geofabric marker layer being installed across placed fill materials adjacent to stairs



View of geofabric marker layer being installed across placed fill materials along slope between upper and lower levels



SITE INSEPCTION RECORD – REMEDIATION AND VALIDATION
NORTHERN PART OF 5-11 BANK STREET, PYRMONT NSW

TIME AND DATE: 7.00AM 18 March 2020

CONSARA PERSONNEL: Rebecca Organo

WEATHER CONDITIONS: Partly Cloudy, 25 Degrees

WORKS BEING CONDUCTED:

- Ongoing installation of underground services in upper level of Site
- Concrete pavement installed across Maritime facility area of the Site
- Shallow excavations and installation of underground services in upper area of Site;
- Construction of terraced gabion feature ongoing
- Construction and placement of materials completed and geofabric marker layer being installed;

PHOTOS:

View of excavation and installation of services in upper central area of the Site



View of stockpile of excavated materials from excavation for installation of services in upper central area of the Site



View of concrete pavement installed across Marina Facility area of the Site



View of edge of concrete pavement where it meets retaining wall



View of shallow excavations at frontage of Site with Bank Street for underground services



View of stockpile of excess excavated materials from Site



View of ongoing filling and erection of terraced gabion wall and marker layer



View of terraced sandstone rocks on marker layer across slope between upper and lower



View of placed fill materials as part of forming RLs for landscaping



View of north-western lower area of the Site



View of terraced gabion feature walls



SITE INSEPCTION RECORD – REMEDIATION AND VALIDATION
NORTHERN PART OF 5-11 BANK STREET, PYRMONT NSW

TIME AND DATE: 2.00PM 27 March 2020

CONSARA PERSONNEL: Rebecca Organo

WEATHER CONDITIONS: Partly Cloudy, 25 Degrees

WORKS BEING CONDUCTED:

- Ongoing installation of underground services in upper level of Site
- Installation of underground services in lower area of Site;
- Construction of terraced gabion feature nearing completion with placement of finished marker layer prior to placement of 20mm aggregate

PHOTOS:

View of excavation and installation of services in upper central area of the Site



View of excavation and installation of services in upper central area of the Site



SITE INSEPCTION RECORD – REMEDIATION AND VALIDATION
NORTHERN PART OF 5-11 BANK STREET, PYRMONT NSW

TIME AND DATE: 7.00AM 14 April 2020

CONSARA PERSONNEL: Rebecca Organo

WEATHER CONDITIONS: Partly Cloudy, 16 Degrees

WORKS BEING CONDUCTED:

- Ongoing installation of underground services in upper level of Site
- Concrete pavement completed across Maritime facility area of the Site
- Placement of compacted DGB across lower surfaces of site
- Concrete ramp installed;
- Construction of terraced gabion feature completed
- Installation of landscaping ongoing
- Commencement of block work structure and placement of demountable buildings on maritime facility

PHOTOS:

View of concrete footpath installed between terraced gabions and edge of upper level of SIte



View of ongoing construction of landscaping and placement of marker layer near stairs on northern area of Site



View of ongoing construction of landscaping and placement of marker layer near stairs on northern area of Site



View of finished terraced gabions with 20mm aggregate placed across surfaces to finish.



View of northern boundary of Site along edge of terraced gabion



View of north-western lower area of SIte



View of landscaping works ongoing between upper and lower areas of the SIte



View of lower area of Site with placed DBG on surface and underground service installation nearing completion



View of lower area of Site behind pylons with placed DBG on surface



View of lower area of Site along southern side of pylons with placed DBG on surface



View of concrete ramp and area to be landscaped next to ramp



View of finished concrete slab at frontage of Site with Bank Street and demountable building installed



View of blockwork structure at front of Site



View of ongoing service installation in north-eastern corner of Site



View of excess fill materials removed from across the Site



SITE INSEPCTION RECORD – REMEDIATION AND VALIDATION
NORTHERN PART OF 5-11 BANK STREET, PYRMONT NSW

TIME AND DATE: 2.30PM 11 May 2020

CONSARA PERSONNEL: Rebecca Organo

WEATHER CONDITIONS: Partly Cloudy, 12 Degrees

WORKS BEING CONDUCTED:

- Commencement of placement of imported soils across marker layer in planting beds on the Site
- Ongoing installation of underground services in upper level of Site
- Installation of landscaping ongoing
- Ongoing construction of block work structure and placement of demountable buildings on maritime facility

PHOTOS:

View of marker layer and placement of imported growing medium soils on north-eastern area of Site



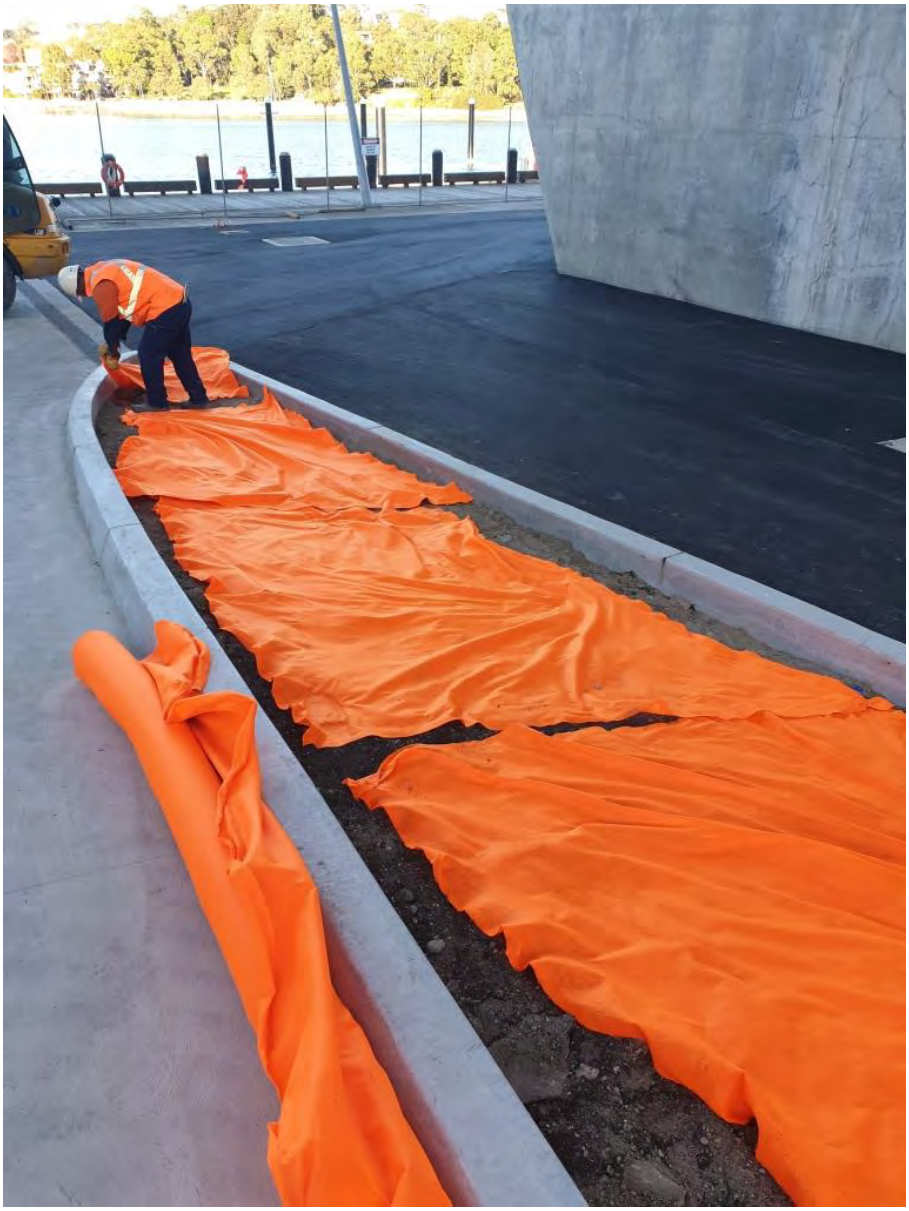
View of marker layer and placement of imported growing medium soils on north-eastern area of Site



View of marker layer and placement of imported growing medium soils on area between upper and lower area of Site



View of marker layer and placement of imported growing medium soils on planting beds area next to concrete ramp between upper and lower area of Site



SITE INSEPCTION RECORD – REMEDIATION AND VALIDATION
NORTHERN PART OF 5-11 BANK STREET, PYRMONT NSW

TIME AND DATE: 7.30AM 21 May 2020

CONSARA PERSONNEL: Rebecca Organo

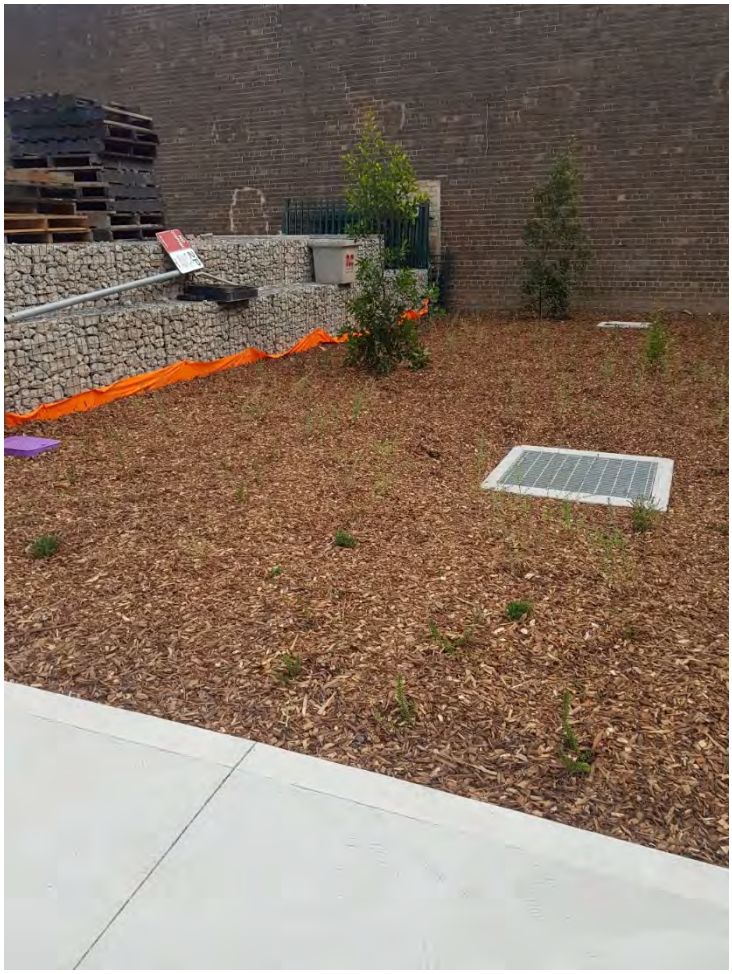
WEATHER CONDITIONS: Partly Cloudy, 12 Degrees

WORKS BEING CONDUCTED:

- Construction and landscaping works nearing completion on the Site
- Mulch and planting in planting beds across Site
- Ongoing installation of underground services near Bank Street – sewer works

PHOTOS:

View of landscaping nearing completion of planting beds in north-eastern corner of Site



View of landscaping nearing completion of planting beds in north-eastern corner of Site – waiting on completion of sewer installation works



View of finished concrete driveway, footpaths and terraced gabions



View of concrete footpaths, driveways, fenceline between maritime facility and open space area



View of boundary of maritime facility with driveway into Site



View of area next to terraced gabions being completed



View of landscaped planting bed at frontage of maritime facility



View of completed landscaped planting beds on upper level



View of completed landscaping



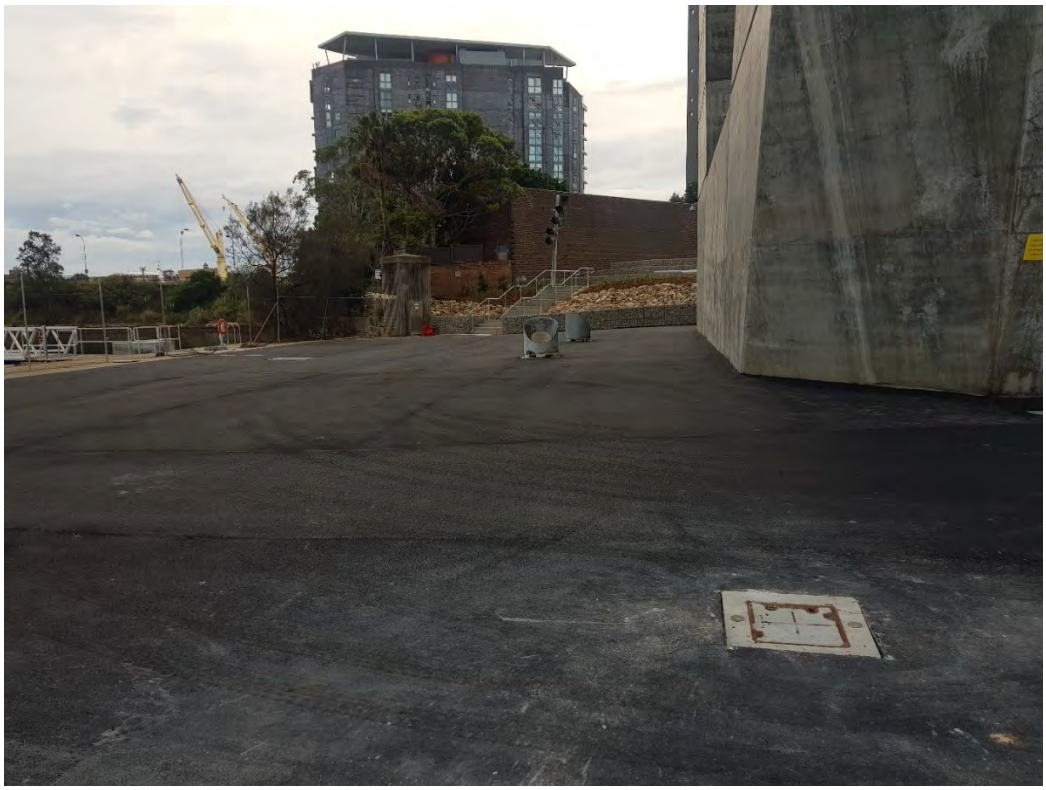
View of completed landscaping



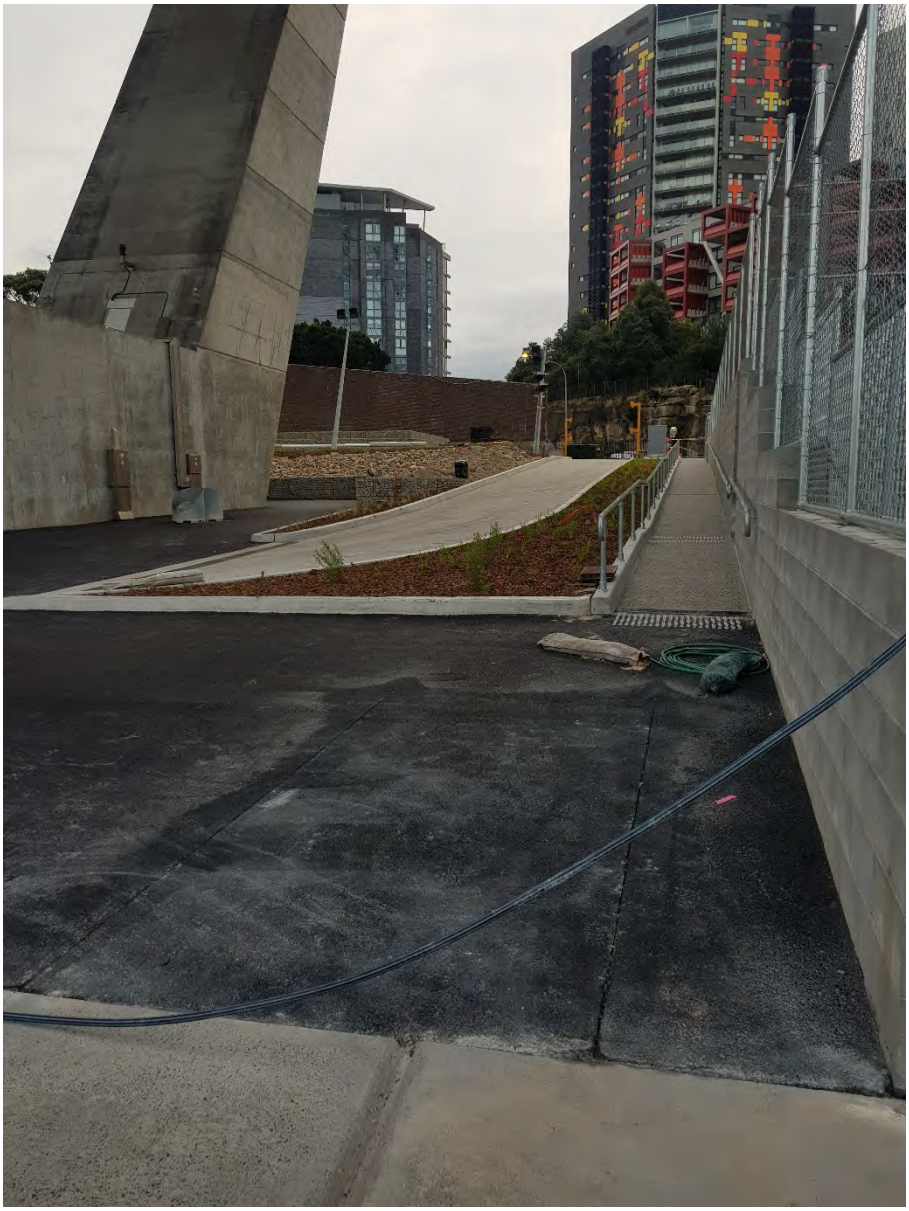
View of completed landscaping



View of asphaltic pavement across lower level of Site



View of concrete ramp and landscaping



View of stairs between lower and upper level and finished surfaces



View of planting beds and terraced gabions finished on upper level of Site



View of finished terraced gabions



View of northern boundary of Site and finished terraced gabions



View of area near concrete driveway to have bollards installed and View of Maritime facility nearing completion



SITE INSEPCTION RECORD – REMEDIATION AND VALIDATION
NORTHERN PART OF 5-11 BANK STREET, PYRMONT NSW

TIME AND DATE: 4.30PM 12 June 2020

CONSARA PERSONNEL: Rebecca Organo

WEATHER CONDITIONS: Raining, Cloudy, 12 Degrees

WORKS BEING CONDUCTED:

- Construction and landscaping works nearing completion on the Site – Sewer at front of Site only remaining area

PHOTOS:

View of completed Maritime facility



View of carparking area in western part of Maritime Facility



View of plant and support building on Maritime Facility



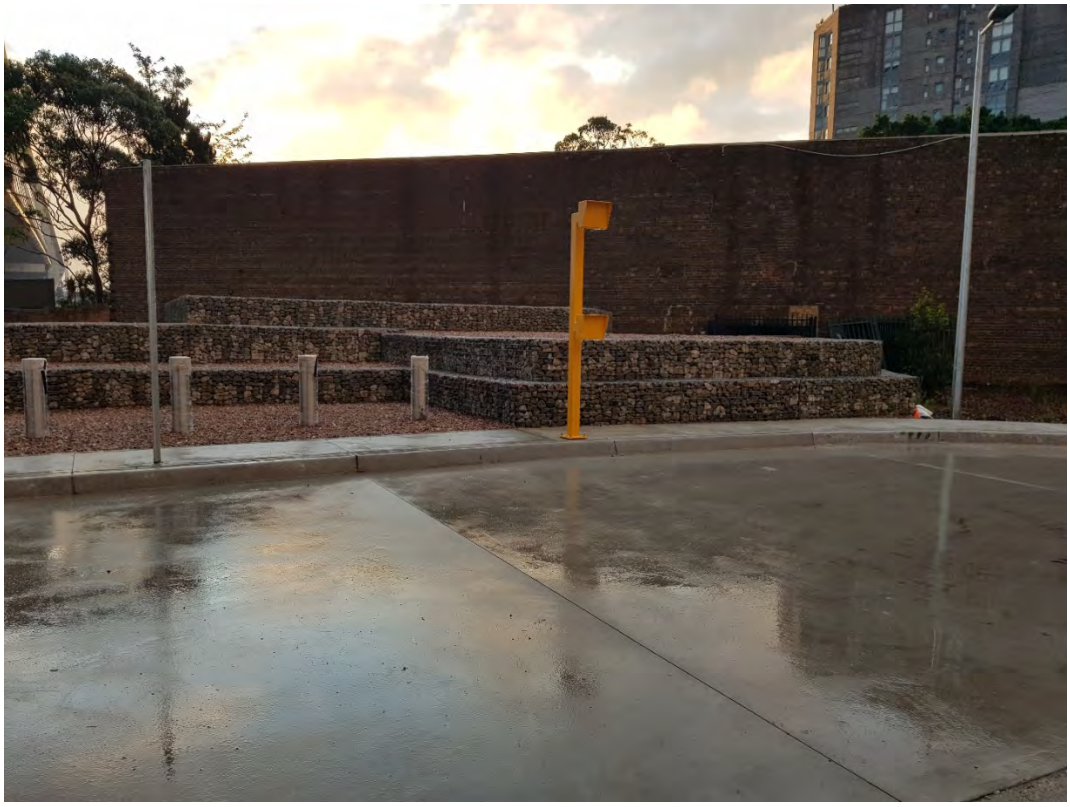
View of eastern boundary of Maritime Facility looking east



View of demountable buildings installed for Maritime Facility



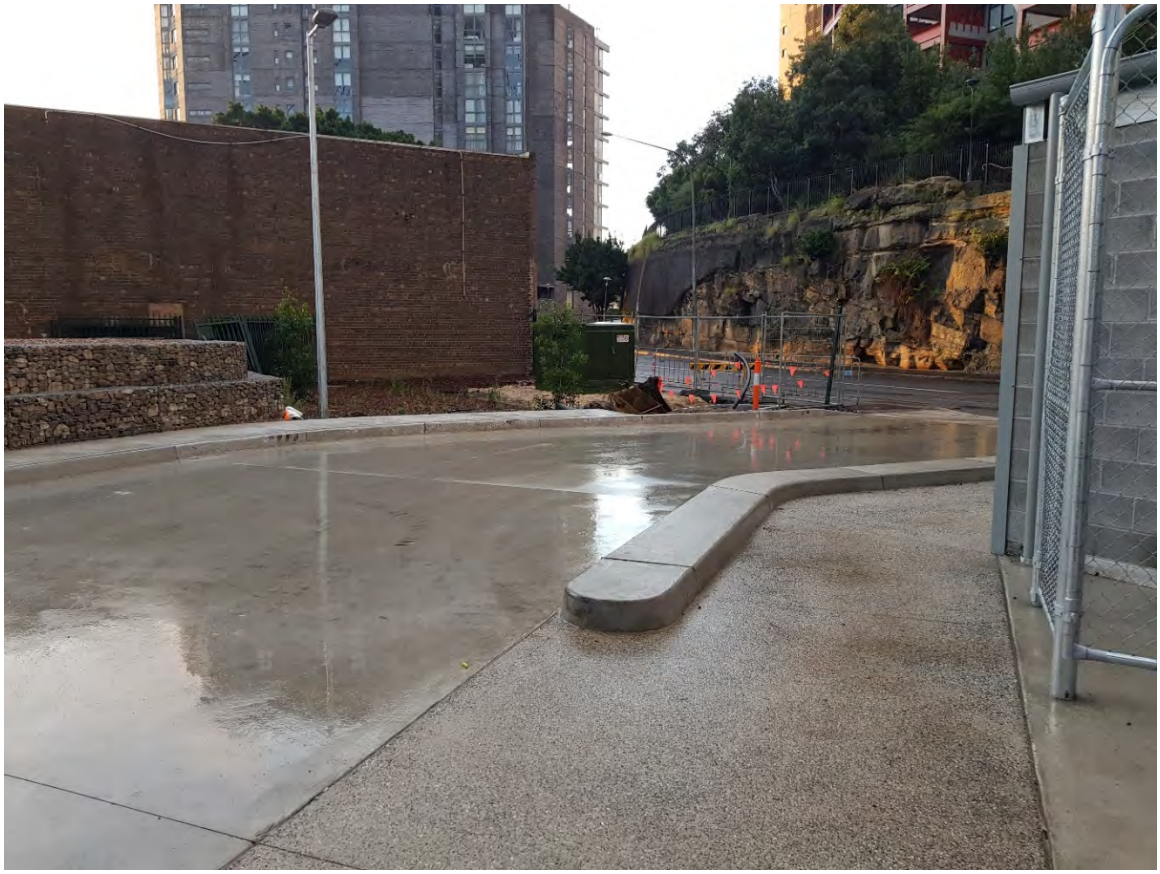
View of finished installation of bollards in upper level of Site



View of finished surfaces on upper level of Site



View of driveway into Site from Bank Street



View of ongoing sewer installation works at frontage of Site



View of finished surfaces on upper level of Site



View of finished surfaces on upper level of Site



View of finished surfaces on upper and lower levels of Site



View of finished surfaces on upper and lower levels of Site



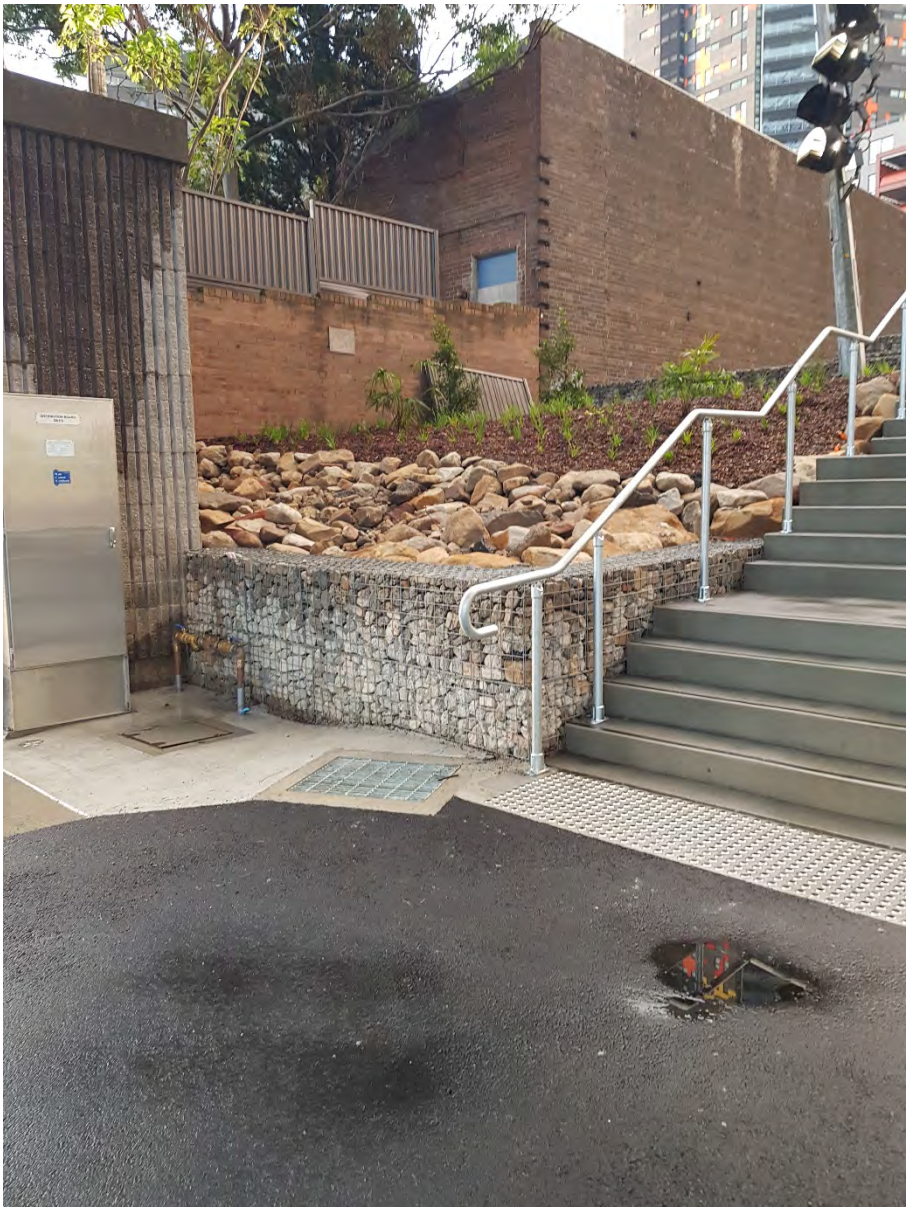
View of finished surfaces on upper and lower levels of Site



View of finished surfaces on lower levels of Site



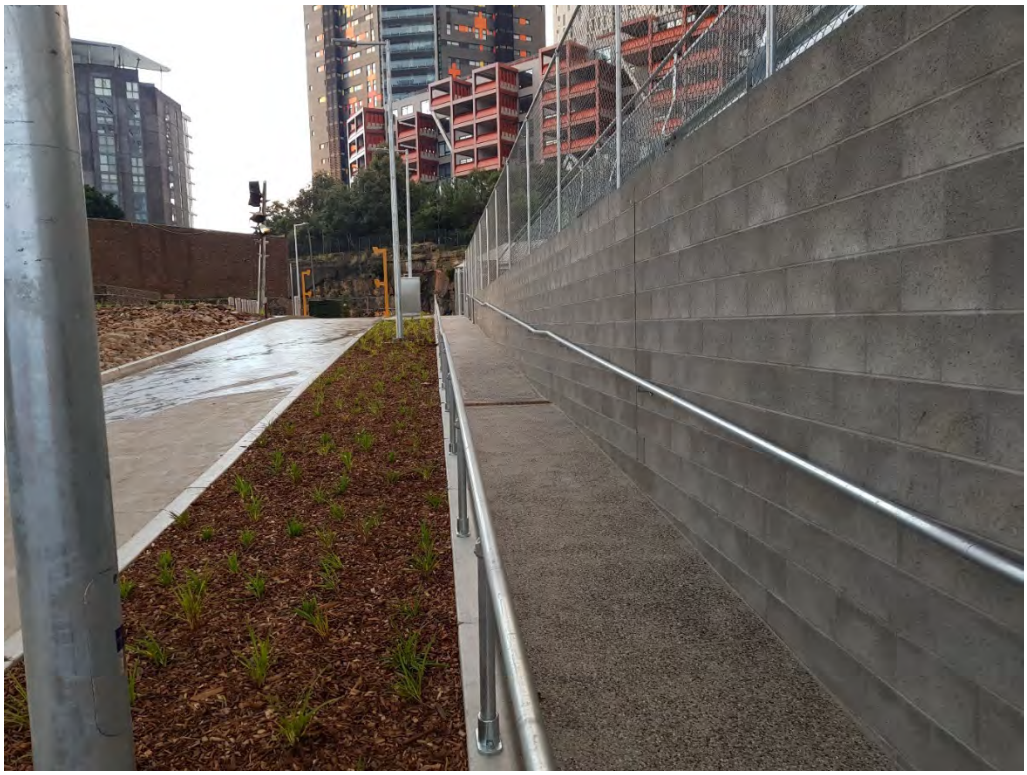
View of finished surfaces on upper and lower levels of Site



View of finished surfaces on lower levels of Site



View of finished surfaces on upper and lower levels of Site



SITE INSEPCTION RECORD – REMEDIATION AND VALIDATION
NORTHERN PART OF 5-11 BANK STREET, PYRMONT NSW

TIME AND DATE: 4.30PM 29 June 2020

CONSARA PERSONNEL: Rebecca Organo

WEATHER CONDITIONS: Cloudy, 15 Degrees

WORKS BEING CONDUCTED:

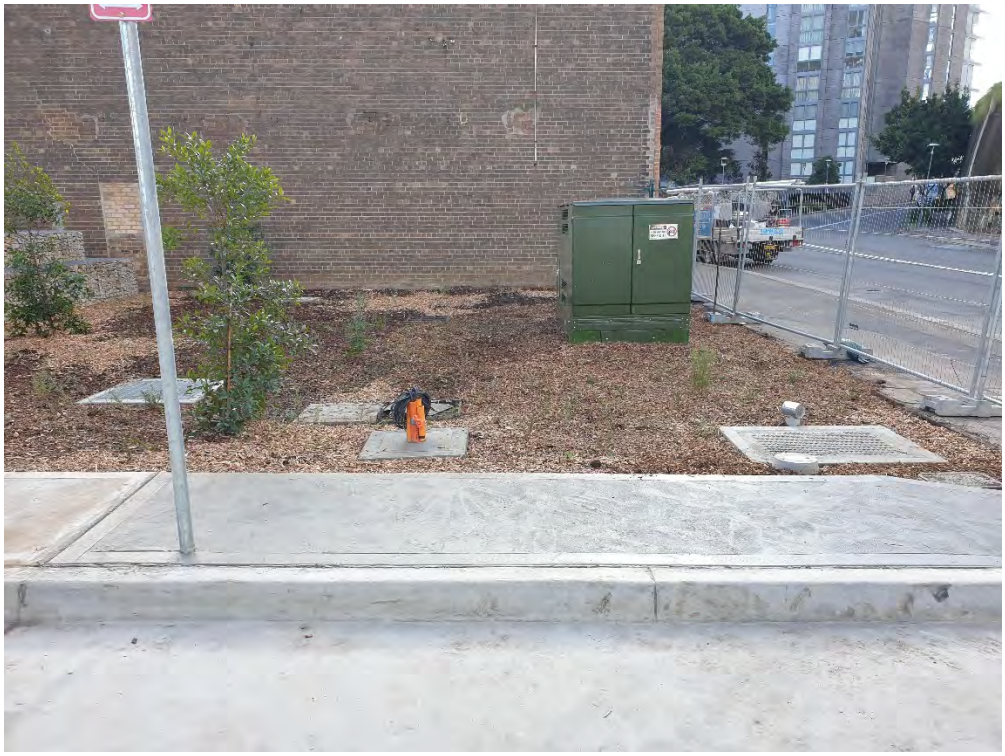
- Construction and landscaping works now completed at frontage of Site
- No further works Site completed

PHOTOS:

View of completed north-eastern area of the Maritime facility



View of completed north-eastern area of the Maritime facility



View of completed north-eastern area of the Maritime facility



SITE INSEPCTION RECORD – IMPORTED MATERIALS INSPECTION RECORDS

REMEDIATION AND VALIDATION OF MARITIME FACILITY
NORTHERN PART OF 5-11 BANK STREET, PYRMONT NSW

TIME AND DATE: 3:30PM 6 December 2019

CONSARA PERSONNEL: Rebecca Organo

WEATHER CONDITIONS: Partly cloudy, 25 Degrees

WORKS BEING CONDUCTED:

- Inspection and Sampling of Recycled Bedding Sands at Benedicts Materials located at Challenger Drive Belrose NSW

PHOTOS:

View of stockpile of recycled bedding sands



SITE INSEPCTION RECORD – IMPORTED MATERIALS INSPECTION RECORDS

REMEDIATION AND VALIDATION OF MARITIME FACILITY
NORTHERN PART OF 5-11 BANK STREET, PYRMONT NSW

View of stockpile of recycled bedding sands





SITE INSEPCTION RECORD – IMPORTED MATERIALS INSPECTION RECORDS

REMEDIATION AND VALIDATION OF MARITIME FACILITY
NORTHERN PART OF 5-11 BANK STREET, PYRMONT NSW

TIME AND DATE: 9.00AM 18 December 2019

CONSARA PERSONNEL: Rebecca Organo

WEATHER CONDITIONS: Partly cloudy, 25 Degrees

WORKS BEING CONDUCTED:

- Inspection and sampling of 20 mm Recycled Aggregate at Concrete Recyclers, Camellia NSW

PHOTOS:

View of stockpiled recycled 20 mm aggregate



Close up view of stockpiled 20 mm recycled aggregate



Close up view of stockpiled 20 mm recycled aggregate



SITE INSEPCTION RECORD – IMPORTED MATERIALS INSPECTION RECORDS

REMEDIATION AND VALIDATION OF MARITIME FACILITY
NORTHERN PART OF 5-11 BANK STREET, PYRMONT NSW

TIME AND DATE: 7.00AM 31 January 2020

CONSARA PERSONNEL: Rebecca Organo

WEATHER CONDITIONS: Partly cloudy, 25 Degrees

WORKS BEING CONDUCTED:

- Inspection and sampling of DGB20 Recycled Product at Metropolitan Demolitions, St Peters NSW

PHOTOS:

View of stockpiled DGB20 recycled material



View of stockpiled DGB20 recycled material



View of stockpiled DGB20 recycled material



Appendix F: Waste Classification Letters

F1 Letter dated 12 December 2019

Thomas Caruana
Project Manager
Christie Civil
Unit 4, 7-29 Bridge Road
Stanmore NSW

12 December 2019

Dear Thomas

RE: Waste Classification – Stockpiled Excavated Materials, Northern Area of 5-11 Bank Street Pyrmont NSW

1. INTRODUCTION

CONSARA Pty Ltd (CONSARA) was engaged by Christie Civil to undertake waste classification works of surface and sub-surface soils that had been excavated and stockpiled and will require off-site disposal as part of redevelopment works being conducted on a property located within the northern part of 5-11 Bank Street 5 Bank Street, Pyrmont NSW (the Site).

The Site is currently being redeveloped by Roads and Maritime Services (RMS) to enable the relocation of a RMS licenced commercial operator from a property on Pyrmont Bridge Road, Glebe NSW to the Site to enable the development of the New Sydney Fish Market. The redevelopment plans for the Site comprises the construction of temporary facilities, open space areas and the location of wharf/marina facility. The location and layout of the Site is shown on the Figure 1.

The sampling for these classification works was conducted on the 9 December 2019 by Ms Rebecca Organo who is a Principal Environmental Scientist and is a Certified Practitioner – Site Contamination Specialist. This waste classification has been undertaken in accordance with the relevant requirements of the following:

- NSW EPA *Waste Classification Guidelines* (2014); and
- *Protection of the Environment Operations* (POEO) Act 1997.

2. SCOPE OF WORK

The scope of work undertaken for this classification was as follows:

- Completion of inspection and sampling of the materials excavated and present in stockpiles on the Site; and
- Assessment of the results of the inspection and sampling works and preparation of this letter report.

3. RESULTS

The results of the inspections identified the following:

- Excavation works had been undertaken along the central part of the Site to enable the construction of a retaining wall and associated structures;
- The excavation works had been completed to approximately depths of 0.5 metre to 1.5 metres below the existing ground surface level;
- The excavated materials had been placed into stockpiles on either side of the resultant excavation;
- The excavated materials primarily were comprised of orange to brown coarse sandy soils that contained some small sandstone and other gravels and also some larger sandstone boulders. The stockpiled materials were not observed to have staining, odours, significant demolition waste or asbestos containing materials in the stockpiled materials or in the locations where samples were collected. No evidence of potential acid sulphate soils was present. It was noted that the stockpiled materials were consistent in composition and that there was little variation in the condition of materials between sampling locations.

Photographs of the excavation and stockpiled excavated materials are provided on Attachment 1. It is estimated that approximately 250 m^3 of the stockpiled excavated materials will require off-site disposal.

Samples from the stockpiled materials were collected as discrete samples directly from the stockpile of the material (either from the near-surface or from stockpiles at a minimum of 10 cm below the surface) by hand protected by a disposable nitrile glove. New nitrile gloves were used for the collection of each sample. Samples for chemical analysis were collected as discrete samples into laboratory-supplied 150 mL glass jars with Teflon-lined lids, which were carefully filled to minimise the amount of headspace in the jar. Samples for asbestos comprised the collection of a 0.5 L and 10L sample from each sampling location. The 10 L sample was screened manually on-site through a < 7 mm sieve. No asbestos (either bonded or friable) or potential asbestos(either bonded or friable) was identified through the screening process. The 0.5L samples were collected into a sealed plastic bag.

Sample identification for the samples collected from the excavated stockpiled materials to be disposed off-site were CS_02, CS_03, CS_04, CS-05 and CS_06 and the stockpile locations and sampling locations are shown on Figure 2.

Samples were kept chilled in an ice-filled esky prior to dispatch and during transport to the NATA registered laboratory under chain-of-custody procedures. Four samples were submitted for analysis of metals (Arsenic, Cadmium, Copper, Chromium, Nickel, Lead, Zinc and Mercury), TPH, BTEX, PAHs, OCPs, OPPs, PCBs and Phenolics and TCLPs for metals and TCLPs for PAHs and five samples were submitted for asbestos analysis. The analytical laboratory report for the samples collected and analysed for this waste classification is provided as Attachment 2 to this letter.

3.1. Waste Classification Assessment

The analytical results presented in Table 1 and Attachment 2 to this letter have reported concentrations that require the application of the SCC1 and TCLP1 limits set out in Table 2 of the NSW EPA (2014) *Waste Classification Guidelines.* The results of the application of these criteria has identified that the concentrations present result in a classification as ***General Solid Waste (non-putrescible).***

The results of the inspection and sampling works undertaken by CONSARA have identified that stockpiled excavated soil materials on the Site are classified for the purposes of off-site disposal as ***General Solid Waste (non-putrescible).***

4. CONCLUSION

The excavation works on the Site as part of the redevelopment works have resulted in the generation of excess materials that require disposal off-site. The results of this waste classification works have identified that these excavated stockpiled soil materials are required to be transported and transferred to an appropriate acceptor as soils classified as ***General Solid Waste (non-putrescible)*** in accordance with the requirements of the NSW EPA (2014) *Waste Classification Guidelines* and the relevant requirements of POEO Act and its associated regulations.

This soil classification has required chemical assessment and is not a pre-classified waste. In addition, the soils MUST only be disposed to a waste facility licenced to accepted soils classified as *General Solid Waste (non-putrescible)*. These soils are NOT classified as soils that meet the CT1 thresholds for General Solid Waste listed in Table 1 of the NSW EPA (2014) *Waste Classification Guidelines* or equivalent.

It is noted that any materials that are excavated and removed from the Site are required to be transported and transferred to an appropriate acceptor of the materials in accordance with its waste classification and the relevant requirements of POEO Act and its associated regulations. Section 143 of the POEO Act states that if the waste is transported to a place that cannot lawfully be used as a waste facility for that waste, then the transporter and owner of the waste are each guilty of an offence. The transporter and owner of the waste have a duty to ensure that the waste is disposed in an appropriate manner.

If you have any questions or would like to further discuss any aspect of the information presented, please contact the undersigned.

Regards,

Rebecca Organo
Principal Environmental Scientist, CEnvP SC

Encl.
Figure 1 – Site Location Plan
Figure 2 -Sampling Locations
Table 1 – Soil Analytical Results Table
Attachment 1: Photographs of the Site at the time of sampling
Attachment 2: Final Analytical Laboratory Reports

Figures



Figure 1: Site Location Plan
Project: Waste Classification 5-11 Bank Street Pyrmont NSW

—— Approximate Site Boundary

CONSARA
contaminated sites

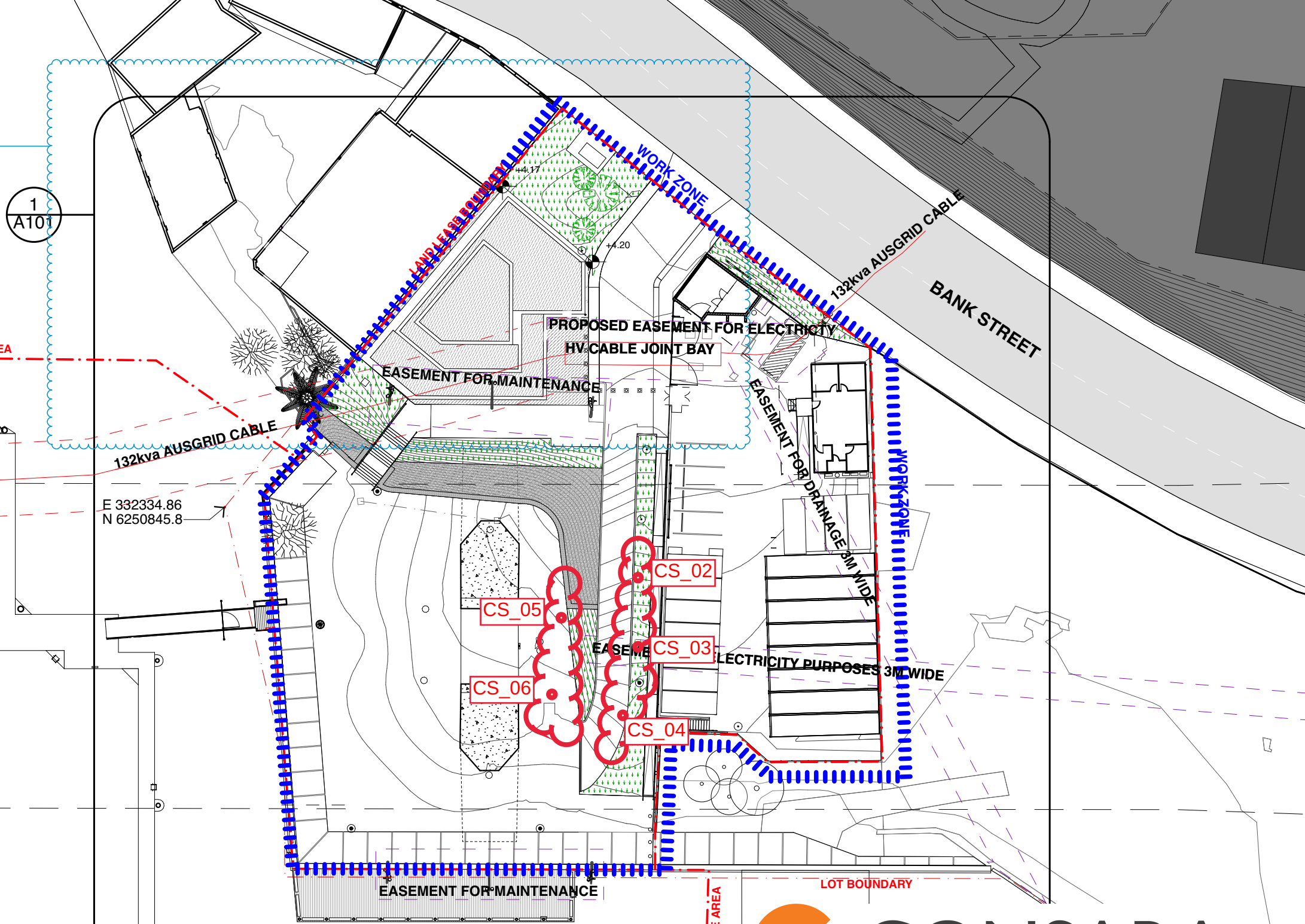


Figure 2 - Stockpile Sampling Location Plan

CONSARA
contaminated sites

CONSARA
contaminated sites

Table 1 - Soil Analytical Results - Waste Classification Stockpiled Materials

Sample ID											CS_02		CS_03		CS_04		CS_05	CS_06	
Date Sampled											09/12/2019		09/12/2019		09/12/2019		09/12/2019	09/12/2019	
Compounds	Unit for Totals	EQL	Unit for TCLP	EQL	General Solid Waste (NSW EPA, 2014) Contaminant Threshold Without Leaching (TCLP) CT1 (mg/kg)	Leachable Concentration TCLP1 (mg/L)	Specific Contaminant Concentration SCC1 (mg/kg)	Restricted Solid Waste Contaminant Threshold Without Leaching (TCLP) CT2 (mg/kg)	Leachable Concentration TCLP2 (mg/L)	Specific Contaminant Concentration SCC2 (mg/kg)	Totals (mg/kg)	TCLP (mg/L)	Totals (mg/kg)	TCLP (mg/L)	Totals (mg/kg)	TCLP (mg/L)	Totals (mg/kg)	Totals (mg/kg)	TCLP (mg/L)
TRHs																			
C6 - C9 Fraction	mg/kg	25			N/A	N/A	650	N/A	N/A	2,600	<25	NA	<25	NA	<25	NA	NA	<25	NA
C10 - C14 Fraction	mg/kg	50			-	-	-	-	-	-	<50	NA	<50	NA	<50	NA	NA	<50	NA
C15 - C28 Fraction	mg/kg	100			-	-	-	-	-	-	<100	NA	<100	NA	<100	NA	NA	<100	NA
C29 - C36 Fraction	mg/kg	100			-	-	-	-	-	-	<100	NA	<100	NA	<100	NA	NA	<100	NA
C10 - C36 Fraction (sum)	mg/kg	--			N/A	N/A	10,000	N/A	N/A	40,000	NC	NA	NC	NA	NC	NA	NA	NC	NA
C6 - C10 Fraction	mg/kg	25			-	-	-	-	-	-	<25	NA	<25	NA	<25	NA	NA	<25	NA
C6 - C10 Fraction minus BTEX (F1)	mg/kg	25			-	-	-	-	-	-	<25	NA	<25	NA	<25	NA	NA	<25	NA
>C10 - C16 Fraction	mg/kg	50			-	-	-	-	-	-	<50	NA	<50	NA	<50	NA	NA	<50	NA
>C16 - C34 Fraction	mg/kg	100			-	-	-	-	-	-	<100	NA	<100	NA	<100	NA	NA	<100	NA
>C34 - C40 Fraction	mg/kg	100			-	-	-	-	-	-	<100	NA	<100	NA	<100	NA	NA	<100	NA
>C10 - C40 Fraction (sum)	mg/kg	50			-	-	-	-	-	-	<50	NA	<50	NA	<50	NA	NA	<50	NA
>C10 - C16 Fraction minus Naphthalene (F2)	mg/kg	50			-	-	-	-	-	-	<50	NA	<50	NA	<50	NA	NA	<50	NA
BTEX																			
Benzene	mg/kg	0.2			10	0.5	18	40	2	72	<0.5	NA	<0.5	NA	<0.5	NA	NA	<0.5	NA
Ethylbenzene	mg/kg	1			600	30	1,080	2400	120	4,320	<1	NA	<1	NA	<1	NA	NA	<1	NA
Toluene	mg/kg	0.5			288	-	-	1,152	-	-	<0.5	NA	<0.5	NA	<0.5	NA	NA	<0.5	NA
Xylene (m & p)	mg/kg	2			-	-	-	-	-	-	<2	NA	<2	NA	<2	NA	NA	<2	NA
Xylene (o)	mg/kg	1			-	-	-	-	-	-	<1	NA	<1	NA	<1	NA	NA	<1	NA
Xylene Total	mg/kg	3			1,000	50	1800	4,000	200	7200	<3	NA	<3	NA	<3	NA	NA	<3	NA
PAHs																			
Naphthalene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-	<0.1	<0.001	<0.1	<0.001	<0.1	<0.001	NA	<0.1	<0.001
Acenaphthylene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-	<0.1	<0.001	<0.1	<0.001	<0.1	<0.001	NA	<0.1	<0.001
Acenaphthene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-	<0.1	<0.001	<0.1	<0.001	<0.1	<0.001	NA	<0.1	<0.001
Fluorene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-	<0.1	<0.001	<0.1	<0.001	<0.1	<0.001	NA	<0.1	<0.001
Phenanthrene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-	0.2	<0.001	0.5	<0.001	0.3	<0.001	NA	0.5	<0.001
Anthracene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-	0.1	<0.001	0.1	<0.001	<0.1	<0.001	NA	0.2	<0.001
Fluoranthene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-	1	<0.001	1.3	<0.001	0.9	<0.001	NA	2.1	<0.001
Pyrene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-	1	<0.001	1.2	<0.001	0.8	<0.001	NA	2	<0.001
Benzo(a)anthracene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-	0.5	<0.001	0.6	<0.001	0.4	<0.001	NA	0.9	<0.001
Chrysene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-	0.5	<0.001	0.5	<0.001	0.4	<0.001	NA	0.8	<0.001
Benzo(b,j+k)fluoranthene	mg/kg	0.2	mg/L	0.002	-	-	-	-	-	-	2	<0.002	1	<0.002	1	<0.002	NA	2	<0.002
Benzo(a)pyrene	mg/kg	0.05	mg/L	0.001	0.8	0.04	10	3	0.16	23	0.95	<0.001	0.69	<0.001	0.57	<0.001	NA	1.1	<0.001
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-	0.7	<0.001	0.4	<0.001	0.4	<0.001	NA	0.6	<0.001
Dibenz(a,h)anthracene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-	0.2	<0.001	0.1	<0.001	0.1	<0.001	NA	0.2	<0.001
Benzo(g,h,i)perylene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-	1.1	<0.001	0.6	<0.001	0.5	<0.001	NA	0.9	<0.001
Total +vePAH's	mg/kg	0.05	mg/L		N/A	N/A	200	-	-	800	7.9	NIL (+)VE	7.2	NIL (+)VE	5.4	NIL (+)VE	NA	11	NIL (+)VE
Benzo(a)pyrene TEQ calc (zero)	mg/kg	0.5			-	-	-	-	-	-	1.4	NA	1	NA	0.9	NA	NA	1.6	NA
Benzo(a)pyrene TEQ calc(half)	mg/kg	0.5			-	-	-	-	-	-	1.4	NA	1	NA	0.9	NA	NA	1.6	NA
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	0.5			-	-	-	-	-	-	1.4	NA	1	NA	0.9	NA	NA	1.6	NA
OCPs																			
alpha-BHC	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA	NA	<0.1	NA
HCB	mg/kg	0.1			-	-	-				<0.1	NA	<0.1	NA	<0.1	NA	NA	<0.1	NA
beta-BHC	mg/kg	0.1			-	-	-				<0.1	NA	<0.1	NA	<0.1	NA	NA	<0.1	NA
gamma-BHC	mg/kg	0.1			-	-	-				<0.1	NA	<0.1	NA	<0.1	NA	NA	<0.1	NA
Heptachlor	mg/kg	0.1			-	-	-				<0.1	NA	<0.1	NA	<0.1	NA	NA	<0.1	NA
delta-BHC	mg/kg	0.1			-	-	-				<0.1	NA	<0.1	NA	<0.1	NA	NA	<0.1	NA
Aldrin	mg/kg	0.1			-	-	-				<0.1	NA	<0.1	NA	<0.1	NA	NA	<0.1	NA
Heptachlor Epoxide	mg/kg	0.1			-	-	-				<0.1	NA	<0.1	NA	<0.1	NA	NA	<0.1	NA
gamma-Chlordane	mg/kg	0.1			-	-	-				<0.1	NA	<0.1	NA	<0.1	NA	NA	<0.1	NA
alpha-chlordane	mg/kg	0.1			-	-	-				<0.1	NA	<0.1	NA	<0.1	NA	NA	<0.1	NA
Endosulfan I	mg/kg	0.1			-	-	-				<0.1	NA	<0.1	NA	<0.1	NA	NA	<0.1	NA
pp-DDE	mg/kg	0.1			-	-	-				<0.1	NA	<0.1	NA	<0.1	NA	NA	<0.1	NA
Dieldrin	mg/kg	0.1			-	-	-				<0.1	NA	<0.1	NA	<0.1	NA	NA	<0.1	NA
Endrin	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA	NA	<0.1	NA
Endosulfan II	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA	NA	<0.1	NA
pp-DDD	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA	NA	<0.1	NA
Endrin Aldehyde	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA	NA	<0.1	NA
pp-DDT	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA	NA	<0.1	NA
Endosulfan Sulphate	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA	NA	<0.1	NA
Methoxychlor	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA	NA	<0.1	NA
Total +ve DDT+DDD+DDE	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA	NA	<0.1	NA
OPPs																			
Dichlorvos	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA	NA	<0.1	NA
Dimethoate	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA	NA	<0.1	NA
Diazinon	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA	NA	<0.1	NA
Chlorpyriphos-methyl	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA	NA	<0.1	NA
Ronnel	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA	NA	<0.1	NA
Fenitrothion	mg/kg	0.1									<0.1	NA	<0.1	NA	<0.1	NA	NA	<0.1	NA
Malathion	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA	NA	<0.1	NA
Chlorpyriphos	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA	NA	<0.1	NA
Parathion	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA	NA	<0.1	NA
Bromophos-ethyl	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA	NA	<0.1	NA
Ethion	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA	NA	<0.1	NA
Azinphos-methyl (Guthion)	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA	NA	<0.1	NA
Phenols																			
Total Phenolics	mg/kg	5			288	14.4	518	-	-	-	<5	NA	<5	NA	<5	NA	NA	<5	NA
Polychlorinated Biphenyls																			
Aroclor 1016	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA	NA	<0.1	NA
Aroclor 1221	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA	NA	<0.1	NA
Aroclor 1232	mg/kg	0.1			-	-	-				<0.1	NA	<0.1	NA	<0.1	NA	NA	<0.1	NA
Aroclor 1242	mg/kg	0.1			-	-	-				<0.1	NA	<0.1	NA	<0.1	NA	NA	<0.1	NA
Aroclor 1248	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA	NA	<0.1	NA
Aroclor 1254	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA	NA	<0.1	NA
Aroclor 1260	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA	NA	<0.1	NA
Total +ve PCBs (1016-1260)	mg/kg	0.1			<50	-	<50	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA	NA	<0.1	NA
Metals																			
Arsenic	mg/kg	5	mg/L	0.05	100	5	500	400	20	2,000	<4	<0.05	25	<0.05	6	<0.05	NA	<4	<0.05
Cadmium	mg/kg	1	mg/L	0.01	20	1	100	80	4	400	<0.4	<0.01	<0.4	<0.01	<0.4	<0.01	NA	<0.4	<0.01
Chromium	mg/kg	2	mg/L	0.01	-	-	-	-	-	-	6	<0.01	8	<0.01	8	<0.01	NA	7	<0.01
Copper	mg/kg	5			-	-	-	-	-	-	16	NA	41	NA	59	NA	NA	29	NA
Lead	mg/kg	5	mg/L	0.03	100	5	1,500	400	20	6,000	38	0.04	58	0.04	110	0.07	NA	40	0.2
Mercury	mg/kg	0.1	mg/L	0.0005	4	0.2	50	16	0.8	200	<0.1	<0.0005	<0.1	<0.0005	0.2	<0.0005	NA	<0.1	<0.0005
Nickel	mg/kg	2	mg/L	0.02	40	2	1,050	160	8	4,200	5	<0.02	7	<0.02	10	<0.02	NA	6	0.02
Zinc	mg/kg	5			-	-	-	-	-	-	48	NA	100	NA	95	NA	NA	72	NA
Asbestos																			
Sample mass tested	g	--			-	-	-				552.52	NA	797.18	NA	667.88	NA	720.18	639.15	NA
Sample Description	-	--			-	-	-				Brown coarse-grained soil & rocks	NA	Brown coarse-grained soil & rocks	NA	Brown coarse-grained soil & rocks	NA	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks	NA
Asbestos ID in soil	-	--			-	-	-				No asbestos detected at reporting limit of 0.1g/kg: Organic fibres detected	NA	No asbestos detected at reporting limit of 0.1g/kg: Organic fibres detected	NA	No asbestos detected at reporting limit of 0.1g/kg: Organic fibres detected	NA	No asbestos detected at reporting limit of 0.1g/kg: Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg: Organic fibres detected	NA
Trace Analysis	-	--			-	-	-				No asbestos detected	NA	No asbestos detected	NA	No asbestos detected	NA	No asbestos detected	No asbestos detected	NA
Total Asbestos g/kg	g/kg	<0.1			-	-	-				<0.1	NA	<0.1	NA	<0.1	NA	<0.1	<0.1	NA
Asbestos ID in soil <0.1 g/kg	-	--			-	-	-				No visible asbestos detected	NA	No visible asbestos detected	NA	No visible asbestos detected	NA	No visible asbestos detected	No visible asbestos detected	NA
ACM >7mm Estimation	g	--			-	-	-				--	NA	--	NA	--	NA	--	--	NA
FA and AF Estimation	g	--			-	-	-				--	NA	--	NA	--	NA	--	--	NA
ACM >7mm Estimation %(w/w)	%	<0.01			-	-	-				<0.01	NA	<0.01	NA	<0.01	NA	<0.01	<0.01	NA
FA and AF Estimation %(w/w)	%	<0.001			-	-	-				<0.001	NA	<0.001	NA	<0.001	NA	<0.001	<0.001	NA
Total Asb Est w/w	%	<0.001			-	-	-				NC	NA	NC	NA	NC	NA	NC	NC	NA

NOTES
All concentrations are in mg/kg
"-" indicates that the criteria is not applicable for these analytes
< Value = Concentration less than laboratory EQL

Attachment 1: Photographs of Stockpiles and Excavation



Plate 1: View of excavated stockpiled materials located on eastern side of excavation



Plate 2: View of excavated stockpiled materials located on eastern side of excavation



Plate 3: View of excavation



Plate 4: View of excavated stockpiled materials located on western side of excavation

Attachment 2: Final Analytical Laboratory Report

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CERTIFICATE OF ANALYSIS 232681

Client Details

Client	Consara Pty Ltd
Attention	Rebecca Organo
Address	PO Box 7360, Warringah Mall, NSW, 2100

Sample Details

Your Reference	**C151008, Bank St**
Number of Samples	11 Soil
Date samples received	09/12/2019
Date completed instructions received	09/12/2019

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Please refer to the last page of this report for any comments relating to the results.

Report Details

Date results requested by	11/12/2019
Date of Issue	11/12/2019

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Analysed by Asbestos Approved Identifier: Lucy Zhu
Authorised by Asbestos Approved Signatory: Lucy Zhu

Results Approved By
Diego Bigolin, Team Leader, Inorganics
Jaimie Loa-Kum-Cheung, Metals Supervisor
Josh Williams, Senior Chemist
Lucy Zhu, Senior Asbestos Analyst
Steven Luong, Organics Supervisor

Authorised By



Nancy Zhang, Laboratory Manager

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		232681-1	232681-2	232681-3	232681-4	232681-6
Your Reference	UNITS	CS_01	CS_02	CS_03	CS_04	CS_06
Date Sampled		09/12/2019	09/12/2019	09/12/2019	09/12/2019	09/12/2019
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Date analysed	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<3	<3	<3	<3	<3
Surrogate aaa-Trifluorotoluene	%	128	116	132	126	122

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		232681-7	232681-8	232681-9	232681-10	232681-11
Your Reference	UNITS	CS_07	CS_08	QC01	QC100	QC101
Date Sampled		09/12/2019	09/12/2019	09/12/2019	09/12/2019	09/12/2019
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Date analysed	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
TRH C_6 - C_9	mg/kg	<25	<25	<25	[NA]	[NA]
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	[NA]	[NA]
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	[NA]	[NA]
Benzene	mg/kg	<0.2	<0.2	<0.2	90%	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	91%	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	88%	<1
m+p-xylene	mg/kg	<2	<2	<2	88%	<2
o-Xylene	mg/kg	<1	<1	<1	90%	<1
naphthalene	mg/kg	<1	<1	<1	[NA]	[NA]
Total +ve Xylenes	mg/kg	<3	<3	<3	[NA]	<3
Surrogate aaa-Trifluorotoluene	%	122	118	123	91	121

svTRH (C10-C40) in Soil						
Our Reference		232681-1	232681-2	232681-3	232681-4	232681-6
Your Reference	UNITS	CS_01	CS_02	CS_03	CS_04	CS_06
Date Sampled		09/12/2019	09/12/2019	09/12/2019	09/12/2019	09/12/2019
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Date analysed	-	11/12/2019	11/12/2019	11/12/2019	11/12/2019	11/12/2019
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	84	78	77	86	80

svTRH (C10-C40) in Soil				
Our Reference		232681-7	232681-8	232681-9
Your Reference	UNITS	CS_07	CS_08	QC01
Date Sampled		09/12/2019	09/12/2019	09/12/2019
Type of sample		Soil	Soil	Soil
Date extracted	-	10/12/2019	10/12/2019	10/12/2019
Date analysed	-	11/12/2019	11/12/2019	11/12/2019
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50
Surrogate o-Terphenyl	%	74	76	75

PAHs in Soil						
Our Reference		232681-1	232681-2	232681-3	232681-4	232681-6
Your Reference	UNITS	CS_01	CS_02	CS_03	CS_04	CS_06
Date Sampled		09/12/2019	09/12/2019	09/12/2019	09/12/2019	09/12/2019
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Date analysed	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Naphthalene	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	0.8	0.2	0.5	0.3	0.5
Anthracene	mg/kg	0.1	0.1	0.1	<0.1	0.2
Fluoranthene	mg/kg	2.1	1.0	1.3	0.9	2.1
Pyrene	mg/kg	2.0	1	1.2	0.8	2.0
Benzo(a)anthracene	mg/kg	1.1	0.5	0.6	0.4	0.9
Chrysene	mg/kg	1.0	0.5	0.5	0.4	0.8
Benzo(b,j+k)fluoranthene	mg/kg	2.4	2	1	1	2
Benzo(a)pyrene	mg/kg	1.4	0.95	0.69	0.57	1.1
Indeno(1,2,3-c,d)pyrene	mg/kg	0.9	0.7	0.4	0.4	0.6
Dibenzo(a,h)anthracene	mg/kg	0.2	0.2	0.1	0.1	0.2
Benzo(g,h,i)perylene	mg/kg	1.3	1.1	0.6	0.5	0.9
Total +ve PAH's	mg/kg	14	7.9	7.2	5.4	11
Benzo(a)pyrene TEQ calc (zero)	mg/kg	2.2	1.4	1.0	0.9	1.6
Benzo(a)pyrene TEQ calc(half)	mg/kg	2.2	1.4	1.0	0.9	1.6
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	2.2	1.4	1.0	0.9	1.6
Surrogate p-Terphenyl-d14	%	124	98	100	100	98

PAHs in Soil				
Our Reference		232681-7	232681-8	232681-9
Your Reference	UNITS	CS_07	CS_08	QC01
Date Sampled		09/12/2019	09/12/2019	09/12/2019
Type of sample		Soil	Soil	Soil
Date extracted	-	10/12/2019	10/12/2019	10/12/2019
Date analysed	-	10/12/2019	10/12/2019	10/12/2019
Naphthalene	mg/kg	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	0.4	0.7
Anthracene	mg/kg	<0.1	0.1	0.2
Fluoranthene	mg/kg	0.4	1	2.0
Pyrene	mg/kg	0.4	0.9	1.8
Benzo(a)anthracene	mg/kg	0.2	0.5	1
Chrysene	mg/kg	0.2	0.5	1
Benzo(b,j+k)fluoranthene	mg/kg	0.4	1	2.0
Benzo(a)pyrene	mg/kg	0.3	0.60	1.2
Indeno(1,2,3-c,d)pyrene	mg/kg	0.2	0.4	0.7
Dibenzo(a,h)anthracene	mg/kg	<0.1	0.1	0.2
Benzo(g,h,i)perylene	mg/kg	0.2	0.5	0.9
Total +ve PAH's	mg/kg	2.5	5.9	12
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	0.9	1.8
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	0.9	1.8
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	0.9	1.8
Surrogate p-Terphenyl-d14	%	101	102	98

Organochlorine Pesticides in soil						
Our Reference		232681-1	232681-2	232681-3	232681-4	232681-6
Your Reference	UNITS	CS_01	CS_02	CS_03	CS_04	CS_06
Date Sampled		09/12/2019	09/12/2019	09/12/2019	09/12/2019	09/12/2019
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Date analysed	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
HCB	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	120	93	93	94	93

Organochlorine Pesticides in soil				
Our Reference		232681-7	232681-8	232681-9
Your Reference	UNITS	CS_07	CS_08	QC01
Date Sampled		09/12/2019	09/12/2019	09/12/2019
Type of sample		Soil	Soil	Soil
Date extracted	-	10/12/2019	10/12/2019	10/12/2019
Date analysed	-	10/12/2019	10/12/2019	10/12/2019
alpha-BHC	mg/kg	<0.1	<0.1	<0.1
HCB	mg/kg	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1	<0.1
Surrogate TCMX	%	94	93	92

Organophosphorus Pesticides in Soil						
Our Reference		232681-1	232681-2	232681-3	232681-4	232681-6
Your Reference	UNITS	CS_01	CS_02	CS_03	CS_04	CS_06
Date Sampled		09/12/2019	09/12/2019	09/12/2019	09/12/2019	09/12/2019
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Date analysed	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Dichlorvos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	120	93	93	94	93

Organophosphorus Pesticides in Soil				
Our Reference		232681-7	232681-8	232681-9
Your Reference	UNITS	CS_07	CS_08	QC01
Date Sampled		09/12/2019	09/12/2019	09/12/2019
Type of sample		Soil	Soil	Soil
Date extracted	-	10/12/2019	10/12/2019	10/12/2019
Date analysed	-	10/12/2019	10/12/2019	10/12/2019
Dichlorvos	mg/kg	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1
Surrogate TCMX	%	94	93	92

Misc Soil - Inorg						
Our Reference		232681-1	232681-2	232681-3	232681-4	232681-6
Your Reference	UNITS	CS_01	CS_02	CS_03	CS_04	CS_06
Date Sampled		09/12/2019	09/12/2019	09/12/2019	09/12/2019	09/12/2019
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Date analysed	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Total Phenolics (as Phenol)	mg/kg	<5	<5	<5	<5	<5

Misc Soil - Inorg				
Our Reference		232681-7	232681-8	232681-9
Your Reference	UNITS	CS_07	CS_08	QC01
Date Sampled		09/12/2019	09/12/2019	09/12/2019
Type of sample		Soil	Soil	Soil
Date prepared	-	10/12/2019	10/12/2019	10/12/2019
Date analysed	-	10/12/2019	10/12/2019	10/12/2019
Total Phenolics (as Phenol)	mg/kg	<5	<5	<5

PCBs in Soil						
Our Reference		232681-1	232681-2	232681-3	232681-4	232681-6
Your Reference	UNITS	CS_01	CS_02	CS_03	CS_04	CS_06
Date Sampled		09/12/2019	09/12/2019	09/12/2019	09/12/2019	09/12/2019
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Date analysed	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Aroclor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	120	93	93	94	93

PCBs in Soil				
Our Reference		232681-7	232681-8	232681-9
Your Reference	UNITS	CS_07	CS_08	QC01
Date Sampled		09/12/2019	09/12/2019	09/12/2019
Type of sample		Soil	Soil	Soil
Date extracted	-	10/12/2019	10/12/2019	10/12/2019
Date analysed	-	10/12/2019	10/12/2019	10/12/2019
Aroclor 1016	mg/kg	<0.1	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1	<0.1	<0.1
Surrogate TCMX	%	94	93	92

Acid Extractable metals in soil						
Our Reference		232681-1	232681-2	232681-3	232681-4	232681-6
Your Reference	UNITS	CS_01	CS_02	CS_03	CS_04	CS_06
Date Sampled		09/12/2019	09/12/2019	09/12/2019	09/12/2019	09/12/2019
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Date analysed	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Arsenic	mg/kg	6	<4	25	6	<4
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	9	6	8	8	7
Copper	mg/kg	93	16	41	59	29
Lead	mg/kg	300	38	58	110	40
Mercury	mg/kg	0.3	<0.1	<0.1	0.2	<0.1
Nickel	mg/kg	13	5	7	10	6
Zinc	mg/kg	120	48	100	95	72

Acid Extractable metals in soil					
Our Reference		232681-7	232681-8	232681-9	232681-12
Your Reference	UNITS	CS_07	CS_08	QC01	CS_01 - [TRIPLICATE]
Date Sampled		09/12/2019	09/12/2019	09/12/2019	09/12/2019
Type of sample		Soil	Soil	Soil	Soil
Date prepared	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Date analysed	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Arsenic	mg/kg	<4	5	6	6
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	9	10	9	8
Copper	mg/kg	18	33	49	43
Lead	mg/kg	25	82	200	140
Mercury	mg/kg	<0.1	0.1	0.2	0.3
Nickel	mg/kg	16	9	11	9
Zinc	mg/kg	64	130	140	100

Moisture						
Our Reference		232681-1	232681-2	232681-3	232681-4	232681-6
Your Reference	UNITS	CS_01	CS_02	CS_03	CS_04	CS_06
Date Sampled		09/12/2019	09/12/2019	09/12/2019	09/12/2019	09/12/2019
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Date analysed	-	11/12/2019	11/12/2019	11/12/2019	11/12/2019	11/12/2019
Moisture	%	9.2	5.9	5.2	6.1	8.2

Moisture				
Our Reference		232681-7	232681-8	232681-9
Your Reference	UNITS	CS_07	CS_08	QC01
Date Sampled		09/12/2019	09/12/2019	09/12/2019
Type of sample		Soil	Soil	Soil
Date prepared	-	10/12/2019	10/12/2019	10/12/2019
Date analysed	-	11/12/2019	11/12/2019	11/12/2019
Moisture	%	4.8	3.0	7.6

Asbestos ID - soils NEPM - ASB-001						
Our Reference	UNITS	232681-1	232681-2	232681-3	232681-4	232681-5
Your Reference		CS_01	CS_02	CS_03	CS_04	CS_05
Date Sampled		09/12/2019	09/12/2019	09/12/2019	09/12/2019	09/12/2019
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Sample mass tested	g	620.05	552.52	797.18	667.88	720.18
Sample Description	-	Grey coarse-grained soil & rocks	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos[#1]	g/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	–	–	–	–	–
FA and AF Estimation*	g	–	–	–	–	–
ACM >7mm Estimation*	%(w/w)	<0.01	<0.01	<0.01	<0.01	<0.01
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	<0.001	<0.001	<0.001

Asbestos ID - soils NEPM - ASB-001				
Our Reference		232681-6	232681-7	232681-8
Your Reference	UNITS	CS_06	CS_07	CS_08
Date Sampled		09/12/2019	09/12/2019	09/12/2019
Type of sample		Soil	Soil	Soil
Date analysed	-	10/12/2019	10/12/2019	10/12/2019
Sample mass tested	g	639.15	633.21	652.11
Sample Description	-	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos#1	g/kg	<0.1	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	–	–	–
FA and AF Estimation*	g	–	–	–
ACM >7mm Estimation*	%(w/w)	<0.01	<0.01	<0.01
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	<0.001

Metals in TCLP USEPA1311					
Our Reference		232681-2	232681-3	232681-4	232681-6
Your Reference	UNITS	CS_02	CS_03	CS_04	CS_06
Date Sampled		09/12/2019	09/12/2019	09/12/2019	09/12/2019
Type of sample		Soil	Soil	Soil	Soil
Date extracted	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Date analysed	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019
pH of soil for fluid# determ.	pH units	9.2	9.4	9.3	9.3
pH of soil TCLP (after HCl)	pH units	1.7	1.7	1.8	1.7
Extraction fluid used	-	1	1	1	1
pH of final Leachate	pH units	5.2	5.3	5.2	5.0
Arsenic in TCLP	mg/L	<0.05	<0.05	<0.05	<0.05
Cadmium in TCLP	mg/L	<0.01	<0.01	<0.01	<0.01
Chromium in TCLP	mg/L	<0.01	<0.01	<0.01	<0.01
Lead in TCLP	mg/L	0.04	0.04	0.07	0.2
Mercury in TCLP	mg/L	<0.0005	<0.0005	<0.0005	<0.0005
Nickel in TCLP	mg/L	<0.02	<0.02	<0.02	0.02

PAHs in TCLP (USEPA 1311)					
Our Reference		232681-2	232681-3	232681-4	232681-6
Your Reference	UNITS	CS_02	CS_03	CS_04	CS_06
Date Sampled		09/12/2019	09/12/2019	09/12/2019	09/12/2019
Type of sample		Soil	Soil	Soil	Soil
Date extracted	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Date analysed	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Naphthalene in TCLP	mg/L	<0.001	<0.001	<0.001	<0.001
Acenaphthylene in TCLP	mg/L	<0.001	<0.001	<0.001	<0.001
Acenaphthene in TCLP	mg/L	<0.001	<0.001	<0.001	<0.001
Fluorene in TCLP	mg/L	<0.001	<0.001	<0.001	<0.001
Phenanthrene in TCLP	mg/L	<0.001	<0.001	<0.001	<0.001
Anthracene in TCLP	mg/L	<0.001	<0.001	<0.001	<0.001
Fluoranthene in TCLP	mg/L	<0.001	<0.001	<0.001	<0.001
Pyrene in TCLP	mg/L	<0.001	<0.001	<0.001	<0.001
Benzo(a)anthracene in TCLP	mg/L	<0.001	<0.001	<0.001	<0.001
Chrysene in TCLP	mg/L	<0.001	<0.001	<0.001	<0.001
Benzo(bjk)fluoranthene in TCLP	mg/L	<0.002	<0.002	<0.002	<0.002
Benzo(a)pyrene in TCLP	mg/L	<0.001	<0.001	<0.001	<0.001
Indeno(1,2,3-c,d)pyrene - TCLP	mg/L	<0.001	<0.001	<0.001	<0.001
Dibenzo(a,h)anthracene in TCLP	mg/L	<0.001	<0.001	<0.001	<0.001
Benzo(g,h,i)perylene in TCLP	mg/L	<0.001	<0.001	<0.001	<0.001
Total +ve PAH's	mg/L	NIL (+)VE	NIL (+)VE	NIL (+)VE	NIL (+)VE
Surrogate p-Terphenyl-d14	%	89	114	111	94

Method ID	Methodology Summary
ASB-001	Asbestos ID - Qualitative identification of asbestos in bulk samples using Polarised Light Microscopy and Dispersion Staining Techniques including Synthetic Mineral Fibre and Organic Fibre as per Australian Standard 4964-2004.
ASB-001	Asbestos ID - Identification of asbestos in soil samples using Polarised Light Microscopy and Dispersion Staining Techniques. Minimum 500mL soil sample was analysed as recommended by "National Environment Protection (Assessment of site contamination) Measure, Schedule B1 and "The Guidelines from the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia - May 2009" with a reporting limit of 0.1g/kg (0.01% w/w) as per Australian Standard AS4964-2004. Results reported denoted with * are outside our scope of NATA accreditation. **NOTE** #1 Total Asbestos g/kg was analysed and reported as per Australian Standard AS4964 (This is the sum of ACM >7mm, <7mm and FA/AF) **NOTE** #2 The screening level of 0.001% w/w asbestos in soil for FA and AF only applies where the FA and AF are able to be quantified by gravimetric procedures. This screening level is not applicable to free fibres. Estimation = Estimated asbestos weight Results reported with "--" is equivalent to no visible asbestos identified using Polarised Light microscopy and Dispersion Staining Techniques.
AT-008	Determination of VOCs sampled onto coconut shell charcoal sorbent tubes, that can be desorbed using carbon disulphide, and analysed by GC-MS.
EXTRACT.7	Toxicity Characteristic Leaching Procedure (TCLP) using Zero Headspace Extraction (zHE) using AS4439 and USEPA 1311.
Inorg-001	pH - Measured using pH meter and electrode in accordance with APHA latest edition, 4500-H+. Please note that the results for water analyses are indicative only, as analysis outside of the APHA storage times.
Inorg-004	Toxicity Characteristic Leaching Procedure (TCLP) using in house method INORG-004. Please note that the mass used may be scaled down from the default based on sample mass available.
Inorg-008	Moisture content determined by heating at 105+/-5 °C for a minimum of 12 hours.
Inorg-031	Total Phenolics by segmented flow analyser (in line distillation with colourimetric finish). Solids are extracted in a caustic media prior to analysis.
Metals-020	Determination of various metals by ICP-AES.
Metals-020 ICP-AES	Determination of various metals by ICP-AES.
Metals-021	Determination of Mercury by Cold Vapour AAS.
Metals-021 CV-AAS	Determination of Mercury by Cold Vapour AAS.

Method ID	Methodology Summary
Org-003	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.
Org-003	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis. Note, the Total +ve TRH PQL is reflective of the lowest individual PQL and is therefore "Total +ve TRH" is simply a sum of the positive individual TRH fractions (>C10-C40).
Org-006	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD.
Org-006	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD. Note, the Total +ve PCBs PQL is reflective of the lowest individual PQL and is therefore" Total +ve PCBs" is simply a sum of the positive individual PCBs.
Org-012/017	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS and/or GC-MS/MS.
Org-012/017	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-MS and/or GC-MS/MS. Note, the Total +ve reported DDD+DDE+DDT PQL is reflective of the lowest individual PQL and is therefore simply a sum of the positive individually report DDD+DDE+DDT.
Org-012/017	Leachates are extracted with Dichloromethane and analysed by GC-MS and/or GC-MS/MS.
Org-012/017	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS and/or GC-MS/MS. Benzo(a)pyrene TEQ as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater - 2013. For soil results:- 1. 'EQ PQL'values are assuming all contributing PAHs reported as <PQL are actually at the PQL. This is the most conservative approach and can give false positive TEQs given that PAHs that contribute to the TEQ calculation may not be present. 2. 'EQ zero'values are assuming all contributing PAHs reported as <PQL are zero. This is the least conservative approach and is more susceptible to false negative TEQs when PAHs that contribute to the TEQ calculation are present but below PQL. 3. 'EQ half PQL'values are assuming all contributing PAHs reported as <PQL are half the stipulated PQL. Hence a mid-point between the most and least conservative approaches above. Note, the Total +ve PAHs PQL is reflective of the lowest individual PQL and is therefore "Total +ve PAHs" is simply a sum of the positive individual PAHs.
Org-014	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS.
Org-016	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.

Method ID	Methodology Summary
Org-016	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater. Note, the Total +ve Xylene PQL is reflective of the lowest individual PQL and is therefore "Total +ve Xylenes" is simply a sum of the positive individual Xylenes.

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	232681-2
Date extracted	-			10/12/2019	1	10/12/2019	10/12/2019		10/12/2019	10/12/2019
Date analysed	-			10/12/2019	1	10/12/2019	10/12/2019		10/12/2019	10/12/2019
TRH C_6 - C_9	mg/kg	25	Org-016	<25	1	<25	<25	0	124	105
TRH C_6 - C_{10}	mg/kg	25	Org-016	<25	1	<25	<25	0	124	105
Benzene	mg/kg	0.2	Org-016	<0.2	1	<0.2	<0.2	0	124	106
Toluene	mg/kg	0.5	Org-016	<0.5	1	<0.5	<0.5	0	123	103
Ethylbenzene	mg/kg	1	Org-016	<1	1	<1	<1	0	123	103
m+p-xylene	mg/kg	2	Org-016	<2	1	<2	<2	0	126	106
o-Xylene	mg/kg	1	Org-016	<1	1	<1	<1	0	123	103
naphthalene	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-016	133	1	128	116	10	127	109

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	9	10/12/2019	10/12/2019		[NT]	[NT]
Date analysed	-			[NT]	9	10/12/2019	10/12/2019		[NT]	[NT]
TRH C_6 - C_9	mg/kg	25	Org-016	[NT]	9	<25	<25	0	[NT]	[NT]
TRH C_6 - C_{10}	mg/kg	25	Org-016	[NT]	9	<25	<25	0	[NT]	[NT]
Benzene	mg/kg	0.2	Org-016	[NT]	9	<0.2	<0.2	0	[NT]	[NT]
Toluene	mg/kg	0.5	Org-016	[NT]	9	<0.5	<0.5	0	[NT]	[NT]
Ethylbenzene	mg/kg	1	Org-016	[NT]	9	<1	<1	0	[NT]	[NT]
m+p-xylene	mg/kg	2	Org-016	[NT]	9	<2	<2	0	[NT]	[NT]
o-Xylene	mg/kg	1	Org-016	[NT]	9	<1	<1	0	[NT]	[NT]
naphthalene	mg/kg	1	Org-014	[NT]	9	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-016	[NT]	9	123	123	0	[NT]	[NT]

QUALITY CONTROL: svTRH (C10-C40) in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	232681-2
Date extracted	-			10/12/2019	1	10/12/2019	10/12/2019		10/12/2019	10/12/2019
Date analysed	-			10/12/2019	1	11/12/2019	11/12/2019		11/12/2019	11/12/2019
TRH C_{10} - C_{14}	mg/kg	50	Org-003	<50	1	<50	<50	0	102	97
TRH C_{15} - C_{28}	mg/kg	100	Org-003	<100	1	<100	<100	0	119	115
TRH C_{29} - C_{36}	mg/kg	100	Org-003	<100	1	<100	<100	0	92	86
TRH >C_{10} -C_{16}	mg/kg	50	Org-003	<50	1	<50	<50	0	102	97
TRH >C_{16} -C_{34}	mg/kg	100	Org-003	<100	1	<100	<100	0	119	115
TRH >C_{34} -C_{40}	mg/kg	100	Org-003	<100	1	<100	<100	0	92	86
Surrogate o-Terphenyl	%		Org-003	82	1	84	86	2	91	78

QUALITY CONTROL: svTRH (C10-C40) in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	9	10/12/2019	10/12/2019		[NT]	[NT]
Date analysed	-			[NT]	9	11/12/2019	11/12/2019		[NT]	[NT]
TRH C_{10} - C_{14}	mg/kg	50	Org-003	[NT]	9	<50	<50	0	[NT]	[NT]
TRH C_{15} - C_{28}	mg/kg	100	Org-003	[NT]	9	<100	<100	0	[NT]	[NT]
TRH C_{29} - C_{36}	mg/kg	100	Org-003	[NT]	9	<100	<100	0	[NT]	[NT]
TRH >C_{10} -C_{16}	mg/kg	50	Org-003	[NT]	9	<50	<50	0	[NT]	[NT]
TRH >C_{16} -C_{34}	mg/kg	100	Org-003	[NT]	9	<100	<100	0	[NT]	[NT]
TRH >C_{34} -C_{40}	mg/kg	100	Org-003	[NT]	9	<100	<100	0	[NT]	[NT]
Surrogate o-Terphenyl	%		Org-003	[NT]	9	75	76	1	[NT]	[NT]

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	232681-2
Date extracted	-			10/12/2019	1	10/12/2019	10/12/2019		10/12/2019	10/12/2019
Date analysed	-			10/12/2019	1	10/12/2019	10/12/2019		10/12/2019	10/12/2019
Naphthalene	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	114	116
Acenaphthylene	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Fluorene	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	124	116
Phenanthrene	mg/kg	0.1	Org-012/017	<0.1	1	0.8	0.5	46	134	122
Anthracene	mg/kg	0.1	Org-012/017	<0.1	1	0.1	0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-012/017	<0.1	1	2.1	1.3	47	124	124
Pyrene	mg/kg	0.1	Org-012/017	<0.1	1	2.0	1.3	42	120	125
Benzo(a)anthracene	mg/kg	0.1	Org-012/017	<0.1	1	1.1	0.6	59	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-012/017	<0.1	1	1.0	0.6	50	118	120
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-012/017	<0.2	1	2.4	1	82	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-012/017	<0.05	1	1.4	0.80	55	138	107
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-012/017	<0.1	1	0.9	0.5	57	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-012/017	<0.1	1	0.2	0.2	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-012/017	<0.1	1	1.3	0.8	48	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-012/017	102	1	124	98	23	112	101

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	9	10/12/2019	10/12/2019		[NT]	[NT]
Date analysed	-			[NT]	9	10/12/2019	10/12/2019		[NT]	[NT]
Naphthalene	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Acenaphthylene	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Fluorene	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Phenanthrene	mg/kg	0.1	Org-012/017	[NT]	9	0.7	0.9	25	[NT]	[NT]
Anthracene	mg/kg	0.1	Org-012/017	[NT]	9	0.2	0.1	67	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-012/017	[NT]	9	2.0	1.9	5	[NT]	[NT]
Pyrene	mg/kg	0.1	Org-012/017	[NT]	9	1.8	1.8	0	[NT]	[NT]
Benzo(a)anthracene	mg/kg	0.1	Org-012/017	[NT]	9	1	0.8	22	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-012/017	[NT]	9	1	0.8	22	[NT]	[NT]
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-012/017	[NT]	9	2.0	2	0	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-012/017	[NT]	9	1.2	1.1	9	[NT]	[NT]
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-012/017	[NT]	9	0.7	0.7	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-012/017	[NT]	9	0.2	0.2	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-012/017	[NT]	9	0.9	1.0	11	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-012/017	[NT]	9	98	94	4	[NT]	[NT]

QUALITY CONTROL: Organochlorine Pesticides in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	232681-2
Date extracted	-			10/12/2019	1	10/12/2019	10/12/2019		10/12/2019	10/12/2019
Date analysed	-			10/12/2019	1	10/12/2019	10/12/2019		10/12/2019	10/12/2019
alpha-BHC	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	122	120
HCB	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	120	114
gamma-BHC	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Heptachlor	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	122	118
delta-BHC	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	118	122
Heptachlor Epoxide	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	112	116
gamma-Chlordane	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	112	118
Dieldrin	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	120	132
Endrin	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	126	124
Endosulfan II	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDD	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	122	114
Endrin Aldehyde	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	110	122
Methoxychlor	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-012/017	103	1	120	95	23	109	93

QUALITY CONTROL: Organochlorine Pesticides in soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	9	10/12/2019	10/12/2019		[NT]	[NT]
Date analysed	-			[NT]	9	10/12/2019	10/12/2019		[NT]	[NT]
alpha-BHC	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
HCB	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
gamma-BHC	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Heptachlor	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
delta-BHC	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Heptachlor Epoxide	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
gamma-Chlordane	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Dieldrin	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Endrin	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Endosulfan II	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
pp-DDD	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Endrin Aldehyde	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Methoxychlor	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-012/017	[NT]	9	92	87	6	[NT]	[NT]

QUALITY CONTROL: Organophosphorus Pesticides in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	232681-2
Date extracted	-			10/12/2019	1	10/12/2019	10/12/2019		10/12/2019	10/12/2019
Date analysed	-			10/12/2019	1	10/12/2019	10/12/2019		10/12/2019	10/12/2019
Dichlorvos	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	96	100
Dimethoate	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Chlorpyriphos-methyl	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	96	88
Fenitrothion	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	102	106
Malathion	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	89	88
Chlorpyriphos	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	96	92
Parathion	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	110	114
Bromophos-ethyl	mg/kg	0.1	AT-008	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Ethion	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	84	90
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-012/017	103	1	120	95	23	109	93

QUALITY CONTROL: Organophosphorus Pesticides in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	9	10/12/2019	10/12/2019		[NT]	[NT]
Date analysed	-			[NT]	9	10/12/2019	10/12/2019		[NT]	[NT]
Dichlorvos	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Dimethoate	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Chlorpyriphos-methyl	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Fenitrothion	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Malathion	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Chlorpyriphos	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Parathion	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Bromophos-ethyl	mg/kg	0.1	AT-008	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Ethion	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-012/017	[NT]	9	92	87	6	[NT]	[NT]

QUALITY CONTROL: Misc Soil - Inorg						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	232681-2
Date prepared	-			10/12/2019	1	10/12/2019	10/12/2019		10/12/2019	10/12/2019
Date analysed	-			10/12/2019	1	10/12/2019	10/12/2019		10/12/2019	10/12/2019
Total Phenolics (as Phenol)	mg/kg	5	Inorg-031	<5	1	<5	<5	0	109	102

QUALITY CONTROL: PCBs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	232681-2
Date extracted	-			10/12/2019	1	10/12/2019	10/12/2019		10/12/2019	10/12/2019
Date analysed	-			10/12/2019	1	10/12/2019	10/12/2019		10/12/2019	10/12/2019
Aroclor 1016	mg/kg	0.1	Org-006	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1221	mg/kg	0.1	Org-006	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1232	mg/kg	0.1	Org-006	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1242	mg/kg	0.1	Org-006	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1248	mg/kg	0.1	Org-006	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1254	mg/kg	0.1	Org-006	<0.1	1	<0.1	<0.1	0	110	90
Aroclor 1260	mg/kg	0.1	Org-006	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-006	103	1	120	95	23	109	93

QUALITY CONTROL: PCBs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	9	10/12/2019	10/12/2019		[NT]	[NT]
Date analysed	-			[NT]	9	10/12/2019	10/12/2019		[NT]	[NT]
Aroclor 1016	mg/kg	0.1	Org-006	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1221	mg/kg	0.1	Org-006	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1232	mg/kg	0.1	Org-006	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1242	mg/kg	0.1	Org-006	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1248	mg/kg	0.1	Org-006	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1254	mg/kg	0.1	Org-006	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1260	mg/kg	0.1	Org-006	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-006	[NT]	9	92	87	6	[NT]	[NT]

QUALITY CONTROL: Acid Extractable metals in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	232681-3
Date prepared	-			10/12/2019	1	10/12/2019	10/12/2019		10/12/2019	10/12/2019
Date analysed	-			10/12/2019	1	10/12/2019	10/12/2019		10/12/2019	10/12/2019
Arsenic	mg/kg	4	Metals-020	<4	1	6	7	15	102	#
Cadmium	mg/kg	0.4	Metals-020	<0.4	1	<0.4	<0.4	0	103	99
Chromium	mg/kg	1	Metals-020	<1	1	9	8	12	107	102
Copper	mg/kg	1	Metals-020	<1	1	93	62	40	103	73
Lead	mg/kg	1	Metals-020	<1	1	300	170	55	106	82
Mercury	mg/kg	0.1	Metals-021	<0.1	1	0.3	0.3	0	86	94
Nickel	mg/kg	1	Metals-020	<1	1	13	10	26	102	98
Zinc	mg/kg	1	Metals-020	<1	1	120	120	0	108	#

QUALITY CONTROL: Acid Extractable metals in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	9	10/12/2019	10/12/2019		[NT]	[NT]
Date analysed	-			[NT]	9	10/12/2019	10/12/2019		[NT]	[NT]
Arsenic	mg/kg	4	Metals-020	[NT]	9	6	7	15	[NT]	[NT]
Cadmium	mg/kg	0.4	Metals-020	[NT]	9	<0.4	<0.4	0	[NT]	[NT]
Chromium	mg/kg	1	Metals-020	[NT]	9	9	9	0	[NT]	[NT]
Copper	mg/kg	1	Metals-020	[NT]	9	49	52	6	[NT]	[NT]
Lead	mg/kg	1	Metals-020	[NT]	9	200	190	5	[NT]	[NT]
Mercury	mg/kg	0.1	Metals-021	[NT]	9	0.2	0.5	86	[NT]	[NT]
Nickel	mg/kg	1	Metals-020	[NT]	9	11	10	10	[NT]	[NT]
Zinc	mg/kg	1	Metals-020	[NT]	9	140	140	0	[NT]	[NT]

QUALITY CONTROL: Metals in TCLP USEPA1311						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	232681-3
Date extracted	-			10/12/2019	2	10/12/2019	10/12/2019		10/12/2019	10/12/2019
Date analysed	-			10/12/2019	2	10/12/2019	10/12/2019		10/12/2019	10/12/2019
Arsenic in TCLP	mg/L	0.05	Metals-020 ICP-AES	<0.05	2	<0.05	<0.05	0	101	107
Cadmium in TCLP	mg/L	0.01	Metals-020 ICP-AES	<0.01	2	<0.01	<0.01	0	92	93
Chromium in TCLP	mg/L	0.01	Metals-020 ICP-AES	<0.01	2	<0.01	<0.01	0	95	98
Lead in TCLP	mg/L	0.03	Metals-020 ICP-AES	<0.03	2	0.04	0.03	29	93	96
Mercury in TCLP	mg/L	0.0005	Metals-021 CV-AAS	<0.0005	2	<0.0005	<0.0005	0	120	117
Nickel in TCLP	mg/L	0.02	Metals-020 ICP-AES	<0.02	2	<0.02	<0.02	0	95	97

QUALITY CONTROL: PAHs in TCLP (USEPA 1311)						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	232681-3
Date extracted	-			10/12/2019	2	10/12/2019	10/12/2019		10/12/2019	10/12/2019
Date analysed	-			10/12/2019	2	10/12/2019	10/12/2019		10/12/2019	10/12/2019
Naphthalene in TCLP	mg/L	0.001	Org-012/017	<0.001	2	<0.001	<0.001	0	106	88
Acenaphthylene in TCLP	mg/L	0.001	Org-012/017	<0.001	2	<0.001	<0.001	0	[NT]	[NT]
Acenaphthene in TCLP	mg/L	0.001	Org-012/017	<0.001	2	<0.001	<0.001	0	[NT]	[NT]
Fluorene in TCLP	mg/L	0.001	Org-012/017	<0.001	2	<0.001	<0.001	0	110	97
Phenanthrene in TCLP	mg/L	0.001	Org-012/017	<0.001	2	<0.001	<0.001	0	100	93
Anthracene in TCLP	mg/L	0.001	Org-012/017	<0.001	2	<0.001	<0.001	0	[NT]	[NT]
Fluoranthene in TCLP	mg/L	0.001	Org-012/017	<0.001	2	<0.001	<0.001	0	118	102
Pyrene in TCLP	mg/L	0.001	Org-012/017	<0.001	2	<0.001	<0.001	0	122	81
Benzo(a)anthracene in TCLP	mg/L	0.001	Org-012/017	<0.001	2	<0.001	<0.001	0	[NT]	[NT]
Chrysene in TCLP	mg/L	0.001	Org-012/017	<0.001	2	<0.001	<0.001	0	92	81
Benzo(bjk)fluoranthene in TCLP	mg/L	0.002	Org-012/017	<0.002	2	<0.002	<0.002	0	[NT]	[NT]
Benzo(a)pyrene in TCLP	mg/L	0.001	Org-012/017	<0.001	2	<0.001	<0.001	0	88	79
Indeno(1,2,3-c,d)pyrene - TCLP	mg/L	0.001	Org-012/017	<0.001	2	<0.001	<0.001	0	[NT]	[NT]
Dibenzo(a,h)anthracene in TCLP	mg/L	0.001	Org-012/017	<0.001	2	<0.001	<0.001	0	[NT]	[NT]
Benzo(g,h,i)perylene in TCLP	mg/L	0.001	Org-012/017	<0.001	2	<0.001	<0.001	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-012/017	100	2	89	85	5	112	90

Result Definitions

NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

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

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

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

Report Comments

Asbestos-ID in soil: NEPM
This report is consistent with the reporting recommendations in the National Environment Protection (Assessment of Site Contamination) Measure, Schedule B1, May 2013. This is reported outside our scope of NATA accreditation.

8 metals in soil:
- # Percent recovery is not possible to report due to the inhomogeneous nature of the element/s in the sample/s. However an acceptable recovery was obtained for the LCS.
- The laboratory RPD acceptance criteria has been exceeded for 232681-1 for Cu & Pb. Therefore a triplicate result has been issued as laboratory sample number 232681-12.

PAHs in Soil - The RPD for duplicate results is accepted due to the non homogenous nature of sample 232681-1

CONSARA

CONTAMINATED SITES assessment ▪ remediation ▪ advice

Chain of Custody Record

Project No:	CS1008
Project/Site:	BANK ST
Sampled By:	RORGANO
Phone:	0404005394
Page	1 of 1
Number of Eskies:	1

Lab:	ENVIROLAB
Lab Quote No:	
Lab Batch No:	
Date Results Required:	48HR TAT
Sample Disposal After:	

LAB ID	SAMPLE ID	DATE	MATRIX	CONTAINER TYPE & PRESERVATIVE: Soil 0.1-0.2 L Glass Jar, unpreserved	Soil - Plastic bag	Water 0.1-0.2 L Plastic, Filtered, HNO3	Water 0.5-1.0 L Amber glass, unpreserved	Water 40-50ml Glass, unpreserved	Water 0.25-1 L Plastic, unpreserved	Water 0.2-1.0L Plastic, sterile	ANALYSIS REQUIRED: COMBO 8	ASBESTOS - 0&S - NEPM	COMBO 12	PHENOLICS	BTEX						HOLD
1	CS_01	9/12/19	SOIL	1	1						X	X									
2	CS_02			1	1							X	X	X							
3	CS_03			1	1							X	X	X	X						
4	CS_04			1	1							X	X	X	X						
5	CS_05			1	1							X	X	X	X						
6	CS_06			1	1							X	X	X	X						
7	CS_07			1	1						X	X	X								
8	CS_08			1	1						X	X	X								
9	QC01			1	1						X										
10	QC100			1												X					
11	QC101			1												X					
			TOTALS																		

ENVIROLAB

Envirolab Services
12 Ashley St
Chatswood NSW 2067
Ph. (02) 9910 6200

Job No: 232681
Date Received: 9/12/2019
Time Received: 15:25
Received by: PL
Temp: Cool/Ambient 1.2
Cooling: Ice/Icepack
Security: Intact/Broken/None

Relinquished By:			Received By:	
NAME	SIGNATURE	DATE	NAME	SIGNATURE
RORGANO		9/12/19	Ray	9/12/2019 15:25

Custody Seals Intact	Y	N
Samples Received Chilled	Y	N
Method of Shipment		

NOTES: 2 DAY / 48HR TAT PLEASE.

CONSARA Pty Ltd ABN 27 161 027 881
Suite 2, Level 2, Unit 6 10 Rodborough Road, Frenchs Forest NSW 2100
PO Box 7360 Warringah Mall NSW 2100

web www.consara.com.au
email
email rebeccaorgano@consara.com.au

F2 Letter dated 6 March 2020

Thomas Caruana
Project Manager
Christie Civil
Unit 4, 7-29 Bridge Road
Stanmore NSW

6 March 2020

Dear Thomas

RE: Waste Classification – Stockpiled Excavated Materials, Western Area of 5-11 Bank Street Pyrmont NSW

1. INTRODUCTION

CONSARA Pty Ltd (CONSARA) was engaged by Christie Civil to undertake waste classification works of surface and sub-surface soils that had been excavated and stockpiled and will require off-site disposal as part of redevelopment works being conducted on a property located within the northern part of 5-11 Bank Street 5 Bank Street, Pyrmont NSW (the Site).

The Site is currently being redeveloped by Roads and Maritime Services (RMS) to enable the relocation of a RMS licenced commercial operator from a property on Pyrmont Bridge Road, Glebe NSW to the Site to enable the development of the New Sydney Fish Market. The redevelopment plans for the Site comprises the construction of temporary facilities, open space areas and the location of wharf/marina facility. The location and layout of the Site is shown on the Figure 1.

The sampling for these classification works was conducted on the 28 February 2020 by Ms Rebecca Organo who is a Principal Environmental Scientist and is a Certified Practitioner – Site Contamination Specialist. This waste classification has been undertaken in accordance with the relevant requirements of the following:

- NSW EPA *Waste Classification Guidelines* (2014); and
- *Protection of the Environment Operations* (POEO) Act 1997.

2. SCOPE OF WORK

The scope of work undertaken for this classification was as follows:

- Completion of inspection and sampling of the materials excavated and present in stockpiles on the Site; and
- Assessment of the results of the inspection and sampling works and preparation of this letter report.

3. RESULTS

The results of the inspections identified the following:

- Excavation works had been undertaken along the central and western part of the Site to enable the construction of a retaining wall and associated structures;
- The excavation works had been completed to approximately depths of 0.5 metre to 1 metres below the existing ground surface level;
- The excavated materials had been placed into stockpiles on either side of the resultant excavation;
- The excavated materials primarily were comprised of orange to brown coarse sandy soils that contained some small sandstone and other gravels and also some larger sandstone boulders. The stockpiled materials were not observed to have staining, odours, significant demolition waste or asbestos containing materials in the stockpiled materials or in the locations where samples were collected. No evidence of potential acid sulphate soils was present. It was noted that the stockpiled materials were consistent in composition and that there was little variation in the condition of materials between sampling locations.

Photographs of the excavation and stockpiled excavated materials are provided on Attachment 1. It is estimated that approximately 150 m^3 of the stockpiled excavated materials will require off-site disposal.

Samples from the stockpiled materials were collected as discrete samples directly from the stockpile of the material (either from the near-surface or from stockpiles at a minimum of 10 cm below the surface) by hand protected by a disposable nitrile glove. New nitrile gloves were used for the collection of each sample. Samples for chemical analysis were collected as discrete samples into laboratory-supplied 150 mL glass jars with Teflon-lined lids, which were carefully filled to minimise the amount of headspace in the jar. Samples for asbestos comprised the collection of a 0.5 L and 10L sample from each sampling location. The 10 L sample was screened manually on-site through a < 7 mm sieve. No asbestos (either bonded or friable) or potential asbestos(either bonded or friable) was identified through the screening process. The 0.5L samples were collected into a sealed plastic bag.

Sample identification for the samples collected from the excavated stockpiled materials to be disposed off-site were SP01_01, SP01_02 and SP01_03 and the stockpile locations and sampling locations are shown on Figure 2.

Samples were kept chilled in an ice-filled esky prior to dispatch and during transport to the NATA registered laboratory under chain-of-custody procedures. Three samples were submitted for analysis of metals (Arsenic, Cadmium, Copper, Chromium, Nickel, Lead, Zinc and Mercury), TPH, BTEX, PAHs, OCPs, OPPs, PCBs and TCLPs for metals and TCLPs for PAHs and three samples were submitted for asbestos analysis. The analytical laboratory report for the samples collected and analysed for this waste classification is provided as Attachment 2 to this letter.

3.1. Waste Classification Assessment

The analytical results presented in Table 1 and Attachment 2 to this letter have reported concentrations that require the application of the CT1 limits set out in Table 1 of the NSW EPA (2014) *Waste Classification Guidelines.* The results of the application of these criteria has identified that the concentrations present result in a classification as ***General Solid Waste (non-putrescible).***

The results of the inspection and sampling works undertaken by CONSARA have identified that stockpiled excavated soil materials on the Site are classified for the purposes of off-site disposal as ***General Solid Waste (non-putrescible).***

4. CONCLUSION

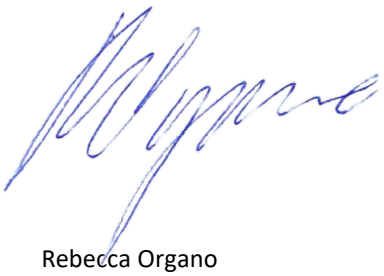
The excavation works on the Site as part of the redevelopment works have resulted in the generation of excess materials that require disposal off-site. The results of this waste classification works have identified that these excavated stockpiled soil materials are required to be transported and transferred to an appropriate acceptor as soils classified as ***General Solid Waste (non-putrescible)*** in accordance with the requirements of the NSW EPA (2014) *Waste Classification Guidelines* and the relevant requirements of POEO Act and its associated regulations.

This soil classification has required chemical assessment and is not a pre-classified waste. In addition, the soils MUST only be disposed to a waste facility licenced to accepted soils classified as *General Solid Waste (non-putrescible)*. Waste facilities that are able to accept soils that meet the CT1 thresholds for General Solid Waste listed in Table 1 of the NSW EPA (2014) *Waste Classification Guidelines* or equivalent can be consulted as to whether the materials subject to this classification can be disposed to their facilities.

It is noted that any materials that are excavated and removed from the Site are required to be transported and transferred to an appropriate acceptor of the materials in accordance with its waste classification and the relevant requirements of POEO Act and its associated regulations. Section 143 of the POEO Act states that if the waste is transported to a place that cannot lawfully be used as a waste facility for that waste, then the transporter and owner of the waste are each guilty of an offence. The transporter and owner of the waste have a duty to ensure that the waste is disposed in an appropriate manner.

If you have any questions or would like to further discuss any aspect of the information presented, please contact the undersigned.

Regards,



Rebecca Organo
Principal Environmental Scientist, CEnvP SC

Encl.
Figure 1 – Site Location Plan
Figure 2 -Sampling Locations
Table 1 – Soil Analytical Results Table
Attachment 1: Photographs of the Site at the time of sampling
Attachment 2: Final Analytical Laboratory Reports

Figures



Figure 1: Site Location Plan
Project: Waste Classification 5-11 Bank Street Pyrmont NSW

—— Approximate Site Boundary

CONSARA
contaminated sites

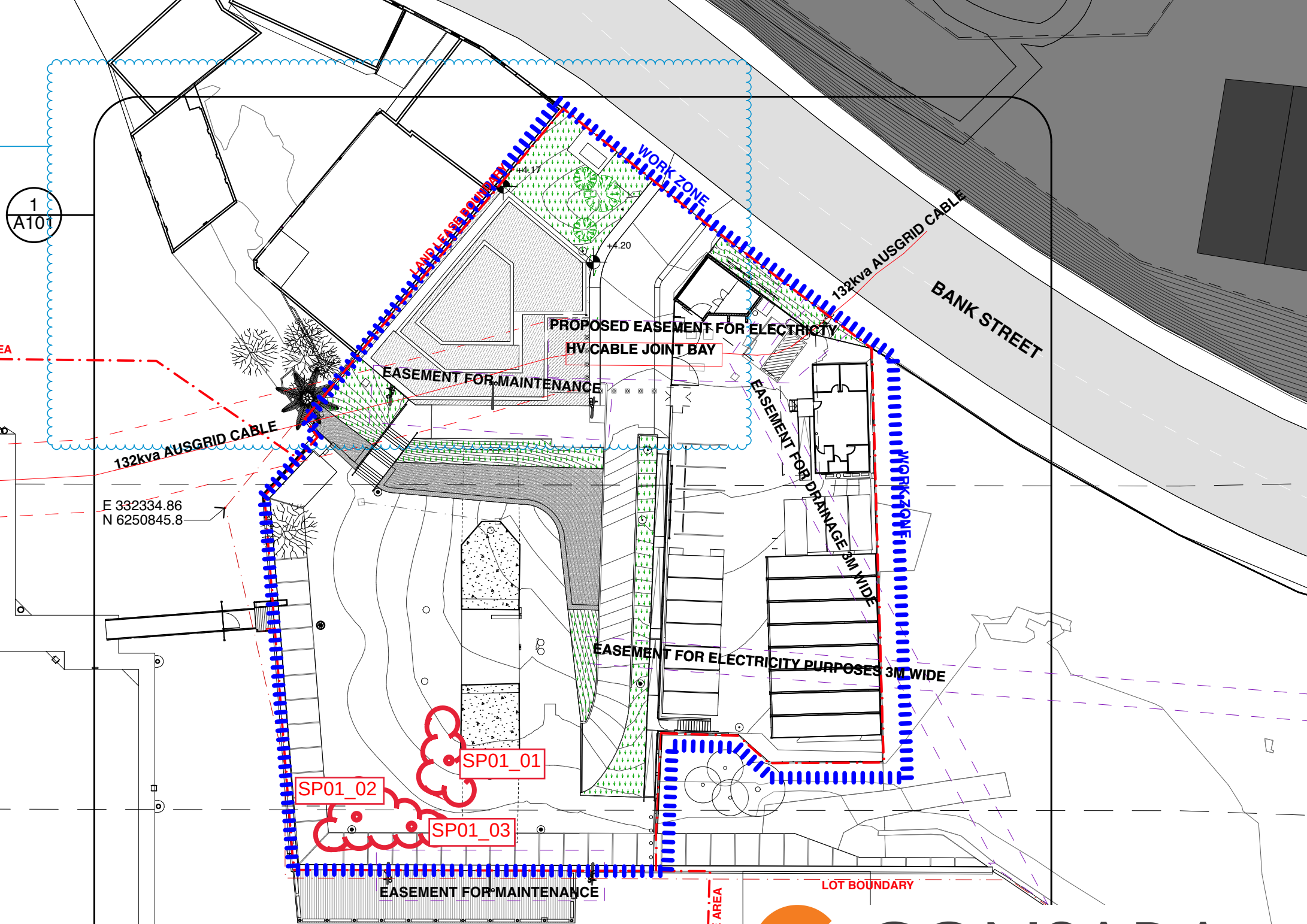


Figure 2 - Stockpile Sampling Location Plan

CONSARA
contaminated sites

CONSARA
contaminated sites

Table 1 - Soil Analytical Results - Waste Classification Stockpiled Materials

Sample ID												SP01-01		SP01-02		SP01-03	
Date Sampled												28/02/2020		28/02/2020		28/02/2020	
Compounds	Unit for Totals	EQL	Unit for TCLP	EQL	General Solid Waste (NSW EPA, 2014) Contaminant Threshold Without Leaching (TCLP) CT1 (mg/kg)	General Solid Waste (NSW EPA, 2014) Leachable Concentration TCLP1 (mg/L)	General Solid Waste (NSW EPA, 2014) Specific Contaminant Concentration SCC1 (mg/kg)	Restricted Solid Waste Contaminant Threshold Without Leaching (TCLP) CT2 (mg/kg)	Restricted Solid Waste Leachable Concentration TCLP2 (mg/L)	Restricted Solid Waste Specific Contaminant Concentration SCC2 (mg/kg)		Totals (mg/kg)	TCLP (mg/L)	Totals (mg/kg)	TCLP (mg/L)	Totals (mg/kg)	TCLP (mg/L)
TRHs																	
C6 - C9 Fraction	mg/kg	25			N/A	N/A	650	N/A	N/A	2,600		<25	NA	<25	NA	<25	NA
C10 - C14 Fraction	mg/kg	50			-	-		-	-	-		<50	NA	<50	NA	<50	NA
C15 - C28 Fraction	mg/kg	100			-	-	-	-	-	-		<100	NA	<100	NA	<100	NA
C29 - C36 Fraction	mg/kg	100			-	-	-					<100	NA	<100	NA	<100	NA
C10 - C36 Fraction (sum)	mg/kg	-			N/A	N/A	10,000	N/A	N/A	40,000		NC	NA	NC	NA	NC	NA
C6 - C10 Fraction	mg/kg	25			-	-	-	-	-	-		<25	NA	<25	NA	<25	NA
C6 - C10 Fraction minus BTEX (F1)	mg/kg	25			-	-	-	-	-	-		<25	NA	<25	NA	<25	NA
>C10 - C16 Fraction	mg/kg	50			-	-	-	-	-	-		<50	NA	<50	NA	<50	NA
>C16 - C34 Fraction	mg/kg	100			-	-	-	-	-	-		<100	NA	110	NA	<100	NA
>C34 - C40 Fraction	mg/kg	100			-	-	-	-	-	-		110	NA	130	NA	<100	NA
>C10 - C40 Fraction (sum)	mg/kg	50			-	-	-	-	-	-		110	NA	240	NA	<50	NA
>C10 - C16 Fraction minus Naphthalene (F2)	mg/kg	50			-	-	-	-	-	-		<50	NA	<50	NA	<50	NA
BTEX																	
Benzene	mg/kg	0.2			10	0.5	18	40	2	72		<0.5	NA	<0.5	NA	<0.5	NA
Ethylbenzene	mg/kg	1			600	30	1,080	2400	120	4,320		<1	NA	<1	NA	<1	NA
Toluene	mg/kg	0.5			288	-	-	1,152	-	-		<0.5	NA	<0.5	NA	<0.5	NA
Xylene (m & p)	mg/kg	2			-	-	-	-	-	-		<2	NA	<2	NA	<2	NA
Xylene (o)	mg/kg	1			-	-	-	-	-	-		<1	NA	<1	NA	<1	NA
Xylene Total	mg/kg	3			1,000	50	1800	4,000	200	7200		<3	NA	<3	NA	<3	NA
PAHs																	
Naphthalene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-		<0.1	<0.001	<0.1	<0.001	<0.1	<0.001
Acenaphthylene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-		<0.1	<0.001	<0.1	<0.001	<0.1	<0.001
Acenaphthene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-		<0.1	<0.001	<0.1	<0.001	<0.1	<0.001
Fluorene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-		<0.1	<0.001	<0.1	<0.001	<0.1	<0.001
Phenanthrene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-		0.3	<0.001	0.5	<0.001	0.4	0.002
Anthracene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-		<0.1	<0.001	0.1	<0.001	0.1	<0.001
Fluoranthene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-		0.6	<0.001	1.2	<0.001	0.9	<0.001
Pyrene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-		0.6	<0.001	1.1	<0.001	0.8	<0.001
Benzo(a)anthracene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-		0.3	<0.001	0.6	<0.001	0.5	<0.001
Chrysene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-		0.3	<0.001	0.5	<0.001	0.4	<0.001
Benzo(b,j+k)fluoranthene	mg/kg	0.2	mg/L	0.002	-	-	-	-	-	-		0.6	<0.002	0.9	<0.002	0.8	<0.002
Benzo(a)pyrene	mg/kg	0.05	mg/L	0.001	0.8	0.04	10	3	0.16	23		0.3	<0.001	0.54	<0.001	0.4	<0.001
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-		0.1	<0.001	0.2	<0.001	0.2	<0.001
Dibenzo(a,h)anthracene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-		<0.1	<0.001	<0.1	<0.001	<0.1	<0.001
Benzo(g,h,i)perylene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-		0.1	<0.001	0.2	<0.001	0.2	<0.001
Total +vePAH's	mg/kg	0.05	mg/L		N/A	N/A	200	-	-	800		3.3	NIL (+)VE	5.9	NIL (+)VE	4.9	NIL (+)VE
Benzo(a)pyrene TEQ calc (zero)	mg/kg	0.5			-	-	-	-	-	-		<0.5	NA	0.7	NA	0.6	NA
Benzo(a)pyrene TEQ calc(half)	mg/kg	0.5			-	-	-	-	-	-		<0.5	NA	0.8	NA	0.6	NA
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	0.5			-	-	-	-	-	-		0.5	NA	0.8	NA	0.7	NA
OCPs																	
alpha-BHC	mg/kg	0.1			-	-	-	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
HCB	mg/kg	0.1			-	-	-					<0.1	NA	<0.1	NA	<0.1	NA
beta-BHC	mg/kg	0.1			-	-	-					<0.1	NA	<0.1	NA	<0.1	NA
gamma-BHC	mg/kg	0.1			-	-	-					<0.1	NA	<0.1	NA	<0.1	NA
Heptachlor	mg/kg	0.1			-	-	-					<0.1	NA	<0.1	NA	<0.1	NA
delta-BHC	mg/kg	0.1			-	-	-					<0.1	NA	<0.1	NA	<0.1	NA
Aldrin	mg/kg	0.1			-	-	-					<0.1	NA	<0.1	NA	<0.1	NA
Heptachlor Epoxide	mg/kg	0.1			-	-	-					<0.1	NA	<0.1	NA	<0.1	NA
gamma-Chlordane	mg/kg	0.1			-	-	-					<0.1	NA	<0.1	NA	<0.1	NA
alpha-chlordane	mg/kg	0.1			-	-	-					<0.1	NA	<0.1	NA	<0.1	NA
Endosulfan I	mg/kg	0.1			-	-	-					<0.1	NA	<0.1	NA	<0.1	NA
pp-DDE	mg/kg	0.1			-	-	-					<0.1	NA	<0.1	NA	<0.1	NA
Dieldrin	mg/kg	0.1			-	-	-					<0.1	NA	<0.1	NA	<0.1	NA
Endrin	mg/kg	0.1			-	-	-	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
Endosulfan II	mg/kg	0.1			-	-	-	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
pp-DDD	mg/kg	0.1			-	-	-	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
Endrin Aldehyde	mg/kg	0.1			-	-	-	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
pp-DDT	mg/kg	0.1			-	-	-	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
Endosulfan Sulphate	mg/kg	0.1			-	-	-	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
Methoxychlor	mg/kg	0.1			-	-	-	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
Total +ve DDT+DDD+DDE	mg/kg	0.1			-	-	-	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
OPPs																	
Dichlorvos	mg/kg	0.1			-	-	-	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
Dimethoate	mg/kg	0.1			-	-	-	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
Diazinon	mg/kg	0.1			-	-	-	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
Chlorpyriphos-methyl	mg/kg	0.1			-	-	-	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
Ronnel	mg/kg	0.1			-	-	-	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
Fenitrothion	mg/kg	0.1										<0.1	NA	<0.1	NA	<0.1	NA
Malathion	mg/kg	0.1			-	-	-	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
Chlorpyriphos	mg/kg	0.1			-	-	-	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
Parathion	mg/kg	0.1			-	-	-	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
Bromophos-ethyl	mg/kg	0.1			-	-	-	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
Ethion	mg/kg	0.1			-	-	-	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
Azinphos-methyl (Guthion)	mg/kg	0.1			-	-	-	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
Polychlorinated Biphenyls																	
Aroclor 1016	mg/kg	0.1			-	-	-	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
Aroclor 1221	mg/kg	0.1			-	-	-	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
Aroclor 1232	mg/kg	0.1			-	-	-					<0.1	NA	<0.1	NA	<0.1	NA
Aroclor 1242	mg/kg	0.1			-	-	-					<0.1	NA	<0.1	NA	<0.1	NA
Aroclor 1248	mg/kg	0.1			-	-	-	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
Aroclor 1254	mg/kg	0.1			-	-	-	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
Aroclor 1260	mg/kg	0.1			-	-	-	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
Total +ve PCBs (1016-1260)	mg/kg	0.1			<50	-	<50	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
Metals																	
Arsenic	mg/kg	5	mg/L	0.05	100	5	500	400	20	2,000		<4	<0.05	<4	<0.05	<4	<0.05
Cadmium	mg/kg	1	mg/L	0.01	20	1	100	80	4	400		<0.4	<0.01	<0.4	<0.01	<0.4	<0.01
Chromium	mg/kg	2	mg/L	0.01	-	-	-	-	-	-		8	<0.01	10	<0.01	10	<0.01
Copper	mg/kg	5			-	-	-	-	-	-		19	NA	25	NA	25	NA
Lead	mg/kg	5	mg/L	0.03	100	5	1,500	400	20	6,000		50	<0.03	59	<0.03	66	<0.03
Mercury	mg/kg	0.1	mg/L	0.0005	4	0.2	50	16	0.8	200		<0.1	<0.0005	0.2	<0.0005	<0.1	<0.0005
Nickel	mg/kg	2	mg/L	0.02	40	2	1,050	160	8	4,200		7	<0.02	9	<0.02	10	<0.02
Zinc	mg/kg	5			-	-	-	-	-	-		72	NA	100	NA	120	NA
Asbestos																	
Sample mass tested	g	--			-	-	-					859.25	NA	794.64	NA	769.46	NA
Sample Description	-	--			-	-	-					Brown coarse-grained soil & rocks	NA	Brown coarse-grained soil & rocks	NA	Brown coarse-grained soil & rocks	NA
Asbestos ID in soil	-	--			-	-	-					No asbestos detected at reporting limit of 0.1g/kg; Organic fibres detected	NA	No asbestos detected at reporting limit of 0.1g/kg; Organic fibres detected	NA	No asbestos detected at reporting limit of 0.1g/kg; Organic fibres detected	NA
Trace Analysis	-	--			-	-	-					No asbestos detected	NA	No asbestos detected	NA	No asbestos detected	NA
Total Asbestos g/kg	g/kg	<0.1			-	-	-					<0.1	NA	<0.1	NA	<0.1	NA
Asbestos ID in soil <0.1 g/kg	-	--			-	-	-					No visible asbestos detected	NA	No visible asbestos detected	NA	No visible asbestos detected	NA
ACM >7mm Estimation	g	--			-	-	-					–	NA	–	NA	–	NA
FA and AF Estimation	g	--			-	-	-					–	NA	–	NA	–	NA
ACM >7mm Estimation %(w/w)	%	<0.01			-	-	-					<0.01	NA	<0.01	NA	<0.01	NA
FA and AF Estimation %(w/w)	%	<0.001			-	-	-					<0.001	NA	<0.001	NA	<0.001	NA
Total Asb Est w/w	%	<0.001			-	-	-					NC	NA	NC	NA	NC	NA

NOTES
All concentrations are in mg/kg
"-" indicates that the criteria is not applicable for these analytes
< Value = Concentration less than laboratory EQL

Attachment 1: Photographs of Stockpiles and Excavation

Plate 1: View of excavated stockpiled materials located on norther side of excavation



Plate 2: View of excavated stockpiled materials located on western side of excavation



Attachment 2: Final Analytical Laboratory Report

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CERTIFICATE OF ANALYSIS 237846

Client Details

Client	Consara Pty Ltd
Attention	Rebecca Organo
Address	PO Box 7360, Warringah Mall, NSW, 2100

Sample Details

Your Reference	**C151008, Bank St Pyrmont**
Number of Samples	3 Soil
Date samples received	28/02/2020
Date completed instructions received	28/02/2020

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Please refer to the last page of this report for any comments relating to the results.

Report Details

Date results requested by	06/03/2020
Date of Issue	06/03/2020

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Authorised by Asbestos Approved Signatory: Lucy Zhu

Results Approved By
Dragana Tomas, Senior Chemist
Josh Williams, Senior Chemist
Ken Nguyen, Reporting Supervisor
Lucy Zhu, Asbestos Supervisor
Ridwan Wijaya, Lab Team Leader

Authorised By



Nancy Zhang, Laboratory Manager

vTRH(C6-C10)/BTEXN in Soil				
Our Reference		237846-1	237846-2	237846-3
Your Reference	UNITS	SP01-01	SP01-02	SP01-03
Date Sampled		28/02/2020	28/02/2020	28/02/2020
Type of sample		Soil	Soil	Soil
Date extracted	-	02/03/2020	02/03/2020	02/03/2020
Date analysed	-	03/03/2020	03/03/2020	03/03/2020
TRH C_6 - C_9	mg/kg	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1
naphthalene	mg/kg	<1	<1	<1
Total +ve Xylenes	mg/kg	<3	<3	<3
Surrogate aaa-Trifluorotoluene	%	105	74	97

svTRH (C10-C40) in Soil				
Our Reference		237846-1	237846-2	237846-3
Your Reference	UNITS	SP01-01	SP01-02	SP01-03
Date Sampled		28/02/2020	28/02/2020	28/02/2020
Type of sample		Soil	Soil	Soil
Date extracted	-	02/03/2020	02/03/2020	02/03/2020
Date analysed	-	03/03/2020	03/03/2020	03/03/2020
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	110	<100
TRH >C_{34} -C_{40}	mg/kg	110	130	<100
Total +ve TRH (>C10-C40)	mg/kg	110	240	<50
Surrogate o-Terphenyl	%	97	94	94

PAHs in Soil				
Our Reference		237846-1	237846-2	237846-3
Your Reference	UNITS	SP01-01	SP01-02	SP01-03
Date Sampled		28/02/2020	28/02/2020	28/02/2020
Type of sample		Soil	Soil	Soil
Date extracted	-	02/03/2020	02/03/2020	02/03/2020
Date analysed	-	03/03/2020	03/03/2020	03/03/2020
Naphthalene	mg/kg	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.3	0.5	0.4
Anthracene	mg/kg	<0.1	0.1	0.1
Fluoranthene	mg/kg	0.6	1.2	0.9
Pyrene	mg/kg	0.6	1.1	0.8
Benzo(a)anthracene	mg/kg	0.3	0.6	0.5
Chrysene	mg/kg	0.3	0.5	0.4
Benzo(b,j+k)fluoranthene	mg/kg	0.6	0.9	0.8
Benzo(a)pyrene	mg/kg	0.3	0.54	0.4
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	0.2	0.2
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	0.1	0.2	0.2
Total +ve PAH's	mg/kg	3.3	5.9	4.9
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	0.7	0.6
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	0.8	0.6
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	0.5	0.8	0.7
Surrogate p-Terphenyl-d14	%	104	101	101

Organochlorine Pesticides in soil				
Our Reference	UNITS	237846-1	237846-2	237846-3
Your Reference		SP01-01	SP01-02	SP01-03
Date Sampled		28/02/2020	28/02/2020	28/02/2020
Type of sample		Soil	Soil	Soil
Date extracted	-	02/03/2020	02/03/2020	02/03/2020
Date analysed	-	03/03/2020	03/03/2020	03/03/2020
HCB	mg/kg	<0.1	<0.1	<0.1
alpha-BHC	mg/kg	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1	<0.1
Surrogate TCMX	%	95	114	115

PCBs in Soil				
Our Reference		237846-1	237846-2	237846-3
Your Reference	UNITS	SP01-01	SP01-02	SP01-03
Date Sampled		28/02/2020	28/02/2020	28/02/2020
Type of sample		Soil	Soil	Soil
Date extracted	-	02/03/2020	02/03/2020	02/03/2020
Date analysed	-	03/03/2020	03/03/2020	03/03/2020
Aroclor 1016	mg/kg	<0.1	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1	<0.1	<0.1
Surrogate TCMX	%	95	114	115

Acid Extractable metals in soil				
Our Reference	UNITS	237846-1	237846-2	237846-3
Your Reference		SP01-01	SP01-02	SP01-03
Date Sampled		28/02/2020	28/02/2020	28/02/2020
Type of sample		Soil	Soil	Soil
Date prepared	-	02/03/2020	02/03/2020	02/03/2020
Date analysed	-	03/03/2020	03/03/2020	03/03/2020
Arsenic	mg/kg	<4	<4	<4
Cadmium	mg/kg	<0.4	<0.4	<0.4
Chromium	mg/kg	8	10	10
Copper	mg/kg	19	25	25
Lead	mg/kg	50	59	66
Mercury	mg/kg	<0.1	0.2	<0.1
Nickel	mg/kg	7	9	10
Zinc	mg/kg	72	100	120

Moisture				
Our Reference		237846-1	237846-2	237846-3
Your Reference	UNITS	SP01-01	SP01-02	SP01-03
Date Sampled		28/02/2020	28/02/2020	28/02/2020
Type of sample		Soil	Soil	Soil
Date prepared	-	02/03/2020	02/03/2020	02/03/2020
Date analysed	-	03/03/2020	03/03/2020	03/03/2020
Moisture	%	5.5	6.8	7.0

PAHs in TCLP (USEPA 1311)				
Our Reference		237846-1	237846-2	237846-3
Your Reference	UNITS	SP01-01	SP01-02	SP01-03
Date Sampled		28/02/2020	28/02/2020	28/02/2020
Type of sample		Soil	Soil	Soil
Date extracted	-	03/03/2020	03/03/2020	03/03/2020
Date analysed	-	03/03/2020	03/03/2020	03/03/2020
Naphthalene in TCLP	mg/L	<0.001	<0.001	<0.001
Acenaphthylene in TCLP	mg/L	<0.001	<0.001	<0.001
Acenaphthene in TCLP	mg/L	<0.001	<0.001	<0.001
Fluorene in TCLP	mg/L	<0.001	<0.001	<0.001
Phenanthrene in TCLP	mg/L	<0.001	<0.001	0.002
Anthracene in TCLP	mg/L	<0.001	<0.001	<0.001
Fluoranthene in TCLP	mg/L	<0.001	<0.001	<0.001
Pyrene in TCLP	mg/L	<0.001	<0.001	<0.001
Benzo(a)anthracene in TCLP	mg/L	<0.001	<0.001	<0.001
Chrysene in TCLP	mg/L	<0.001	<0.001	<0.001
Benzo(bjk)fluoranthene in TCLP	mg/L	<0.002	<0.002	<0.002
Benzo(a)pyrene in TCLP	mg/L	<0.001	<0.001	<0.001
Indeno(1,2,3-c,d)pyrene - TCLP	mg/L	<0.001	<0.001	<0.001
Dibenzo(a,h)anthracene in TCLP	mg/L	<0.001	<0.001	<0.001
Benzo(g,h,i)perylene in TCLP	mg/L	<0.001	<0.001	<0.001
Total +ve PAH's	mg/L	NIL (+)VE	NIL (+)VE	0.0019
Surrogate p-Terphenyl-d14	%	99	100	100

Metals in TCLP USEPA1311				
Our Reference		237846-1	237846-2	237846-3
Your Reference	UNITS	SP01-01	SP01-02	SP01-03
Date Sampled		28/02/2020	28/02/2020	28/02/2020
Type of sample		Soil	Soil	Soil
Date extracted	-	03/03/2020	03/03/2020	03/03/2020
Date analysed	-	03/03/2020	03/03/2020	03/03/2020
pH of soil for fluid# determ.	pH units	9.4	9.3	9.5
pH of soil TCLP (after HCl)	pH units	1.9	1.9	1.9
Extraction fluid used	-	1	1	1
pH of final Leachate	pH units	5.9	5.9	5.7
Arsenic in TCLP	mg/L	<0.05	<0.05	<0.05
Cadmium in TCLP	mg/L	<0.01	<0.01	<0.01
Chromium in TCLP	mg/L	<0.01	<0.01	<0.01
Lead in TCLP	mg/L	<0.03	<0.03	<0.03
Mercury in TCLP	mg/L	<0.0005	<0.0005	<0.0005
Nickel in TCLP	mg/L	<0.02	<0.02	<0.02

Asbestos ID - soils NEPM - ASB-001				
Our Reference	UNITS	237846-1	237846-2	237846-3
Your Reference		SP01-01	SP01-02	SP01-03
Date Sampled		28/02/2020	28/02/2020	28/02/2020
Type of sample		Soil	Soil	Soil
Date analysed	-	02/03/2020	02/03/2020	02/03/2020
Sample mass tested	g	859.25	794.64	769.46
Sample Description	-	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos[#1]	g/kg	<0.1	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	–	–	–
FA and AF Estimation*	g	–	–	–
ACM >7mm Estimation*	%(w/w)	<0.01	<0.01	<0.01
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	<0.001

Method ID	Methodology Summary
ASB-001	Asbestos ID - Qualitative identification of asbestos in bulk samples using Polarised Light Microscopy and Dispersion Staining Techniques including Synthetic Mineral Fibre and Organic Fibre as per Australian Standard 4964-2004.
ASB-001	Asbestos ID - Identification of asbestos in soil samples using Polarised Light Microscopy and Dispersion Staining Techniques. Minimum 500mL soil sample was analysed as recommended by "National Environment Protection (Assessment of site contamination) Measure, Schedule B1 and "The Guidelines from the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia - May 2009" with a reporting limit of 0.1g/kg (0.01% w/w) as per Australian Standard AS4964-2004. Results reported denoted with * are outside our scope of NATA accreditation. **NOTE** #1 Total Asbestos g/kg was analysed and reported as per Australian Standard AS4964 (This is the sum of ACM >7mm, <7mm and FA/AF) **NOTE** #2 The screening level of 0.001% w/w asbestos in soil for FA and AF only applies where the FA and AF are able to be quantified by gravimetric procedures. This screening level is not applicable to free fibres. Estimation = Estimated asbestos weight Results reported with "--" is equivalent to no visible asbestos identified using Polarised Light microscopy and Dispersion Staining Techniques.
EXTRACT.7	Toxicity Characteristic Leaching Procedure (TCLP) using Zero Headspace Extraction (zHE) using AS4439 and USEPA 1311.
Inorg-001	pH - Measured using pH meter and electrode in accordance with APHA latest edition, 4500-H+. Please note that the results for water analyses are indicative only, as analysis outside of the APHA storage times.
Inorg-004	Toxicity Characteristic Leaching Procedure (TCLP) using in house method INORG-004. Please note that the mass used may be scaled down from the default based on sample mass available.
Inorg-008	Moisture content determined by heating at 105+/-5 °C for a minimum of 12 hours.
Metals-020	Determination of various metals by ICP-AES.
Metals-020 ICP-AES	Determination of various metals by ICP-AES.
Metals-021	Determination of Mercury by Cold Vapour AAS.
Metals-021 CV-AAS	Determination of Mercury by Cold Vapour AAS.
Org-003	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.

Method ID	Methodology Summary
Org-003	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis. Note, the Total +ve TRH PQL is reflective of the lowest individual PQL and is therefore "Total +ve TRH" is simply a sum of the positive individual TRH fractions (>C10-C40).
Org-005	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC with dual ECD's.
Org-005	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC with dual ECD's. Note, the Total +ve reported DDD+DDE+DDT PQL is reflective of the lowest individual PQL and is therefore simply a sum of the positive individually report DDD+DDE+DDT.
Org-006	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD.
Org-006	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD. Note, the Total +ve PCBs PQL is reflective of the lowest individual PQL and is therefore" Total +ve PCBs" is simply a sum of the positive individual PCBs.
Org-012/017	Leachates are extracted with Dichloromethane and analysed by GC-MS and/or GC-MS/MS.
Org-012/017	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS and/or GC-MS/MS. Benzo(a)pyrene TEQ as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater - 2013. For soil results:- 1. 'EQ PQL'values are assuming all contributing PAHs reported as <PQL are actually at the PQL. This is the most conservative approach and can give false positive TEQs given that PAHs that contribute to the TEQ calculation may not be present. 2. 'EQ zero'values are assuming all contributing PAHs reported as <PQL are zero. This is the least conservative approach and is more susceptible to false negative TEQs when PAHs that contribute to the TEQ calculation are present but below PQL. 3. 'EQ half PQL'values are assuming all contributing PAHs reported as <PQL are half the stipulated PQL. Hence a mid-point between the most and least conservative approaches above. Note, the Total +ve PAHs PQL is reflective of the lowest individual PQL and is therefore "Total +ve PAHs" is simply a sum of the positive individual PAHs.
Org-014	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS.
Org-016	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.
Org-016	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater. Note, the Total +ve Xylene PQL is reflective of the lowest individual PQL and is therefore "Total +ve Xylenes" is simply a sum of the positive individual Xylenes.

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-11	[NT]
Date extracted	-			02/03/2020	[NT]	[NT]	[NT]	[NT]	02/03/2020	[NT]
Date analysed	-			03/03/2020	[NT]	[NT]	[NT]	[NT]	03/03/2020	[NT]
TRH C_6 - C_9	mg/kg	25	Org-016	<25	[NT]	[NT]	[NT]	[NT]	85	[NT]
TRH C_6 - C_{10}	mg/kg	25	Org-016	<25	[NT]	[NT]	[NT]	[NT]	85	[NT]
Benzene	mg/kg	0.2	Org-016	<0.2	[NT]	[NT]	[NT]	[NT]	83	[NT]
Toluene	mg/kg	0.5	Org-016	<0.5	[NT]	[NT]	[NT]	[NT]	84	[NT]
Ethylbenzene	mg/kg	1	Org-016	<1	[NT]	[NT]	[NT]	[NT]	83	[NT]
m+p-xylene	mg/kg	2	Org-016	<2	[NT]	[NT]	[NT]	[NT]	87	[NT]
o-Xylene	mg/kg	1	Org-016	<1	[NT]	[NT]	[NT]	[NT]	82	[NT]
naphthalene	mg/kg	1	Org-014	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-016	94	[NT]	[NT]	[NT]	[NT]	93	[NT]

QUALITY CONTROL: svTRH (C10-C40) in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-11	[NT]
Date extracted	-			02/03/2020	[NT]	[NT]	[NT]	[NT]	02/03/2020	[NT]
Date analysed	-			03/03/2020	[NT]	[NT]	[NT]	[NT]	03/03/2020	[NT]
TRH C_{10} - C_{14}	mg/kg	50	Org-003	<50	[NT]	[NT]	[NT]	[NT]	79	[NT]
TRH C_{15} - C_{28}	mg/kg	100	Org-003	<100	[NT]	[NT]	[NT]	[NT]	88	[NT]
TRH C_{29} - C_{36}	mg/kg	100	Org-003	<100	[NT]	[NT]	[NT]	[NT]	106	[NT]
TRH >C_{10} -C_{16}	mg/kg	50	Org-003	<50	[NT]	[NT]	[NT]	[NT]	79	[NT]
TRH >C_{16} -C_{34}	mg/kg	100	Org-003	<100	[NT]	[NT]	[NT]	[NT]	88	[NT]
TRH >C_{34} -C_{40}	mg/kg	100	Org-003	<100	[NT]	[NT]	[NT]	[NT]	106	[NT]
Surrogate o-Terphenyl	%		Org-003	94	[NT]	[NT]	[NT]	[NT]	105	[NT]

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-11	[NT]
Date extracted	-			02/03/2020	[NT]	[NT]	[NT]	[NT]	02/03/2020	[NT]
Date analysed	-			03/03/2020	[NT]	[NT]	[NT]	[NT]	03/03/2020	[NT]
Naphthalene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	82	[NT]
Acenaphthylene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Fluorene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	104	[NT]
Phenanthrene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	92	[NT]
Anthracene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	90	[NT]
Pyrene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	84	[NT]
Benzo(a)anthracene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	78	[NT]
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-012/017	<0.2	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-012/017	<0.05	[NT]	[NT]	[NT]	[NT]	94	[NT]
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-012/017	98	[NT]	[NT]	[NT]	[NT]	98	[NT]

QUALITY CONTROL: Organochlorine Pesticides in soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-11	[NT]
Date extracted	-			02/03/2020	[NT]	[NT]	[NT]	[NT]	02/03/2020	[NT]
Date analysed	-			03/03/2020	[NT]	[NT]	[NT]	[NT]	03/03/2020	[NT]
HCB	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
alpha-BHC	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	104	[NT]
gamma-BHC	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	108	[NT]
Heptachlor	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	94	[NT]
delta-BHC	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	106	[NT]
Heptachlor Epoxide	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	102	[NT]
gamma-Chlordane	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	98	[NT]
Dieldrin	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	116	[NT]
Endrin	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	110	[NT]
pp-DDD	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	104	[NT]
Endosulfan II	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Endrin Aldehyde	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	106	[NT]
Methoxychlor	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate TCMX	%		Org-005	97	[NT]	[NT]	[NT]	[NT]	116	[NT]

QUALITY CONTROL: PCBs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-11	[NT]
Date extracted	-			02/03/2020	[NT]	[NT]	[NT]	[NT]	02/03/2020	[NT]
Date analysed	-			03/03/2020	[NT]	[NT]	[NT]	[NT]	03/03/2020	[NT]
Aroclor 1016	mg/kg	0.1	Org-006	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1221	mg/kg	0.1	Org-006	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1232	mg/kg	0.1	Org-006	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1242	mg/kg	0.1	Org-006	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1248	mg/kg	0.1	Org-006	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1254	mg/kg	0.1	Org-006	<0.1	[NT]	[NT]	[NT]	[NT]	94	[NT]
Aroclor 1260	mg/kg	0.1	Org-006	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate TCMX	%		Org-006	97	[NT]	[NT]	[NT]	[NT]	116	[NT]

QUALITY CONTROL: Acid Extractable metals in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-11	[NT]
Date prepared	-			02/03/2020	[NT]	[NT]	[NT]	[NT]	02/03/2020	[NT]
Date analysed	-			03/03/2020	[NT]	[NT]	[NT]	[NT]	03/03/2020	[NT]
Arsenic	mg/kg	4	Metals-020	<4	[NT]	[NT]	[NT]	[NT]	107	[NT]
Cadmium	mg/kg	0.4	Metals-020	<0.4	[NT]	[NT]	[NT]	[NT]	103	[NT]
Chromium	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	110	[NT]
Copper	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	106	[NT]
Lead	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	112	[NT]
Mercury	mg/kg	0.1	Metals-021	<0.1	[NT]	[NT]	[NT]	[NT]	77	[NT]
Nickel	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	104	[NT]
Zinc	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	110	[NT]

QUALITY CONTROL: PAHs in TCLP (USEPA 1311)						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	237846-2
Date extracted	-			03/03/2020	1	03/03/2020	03/03/2020		03/03/2020	03/03/2020
Date analysed	-			03/03/2020	1	03/03/2020	03/03/2020		03/03/2020	03/03/2020
Naphthalene in TCLP	mg/L	0.001	Org-012/017	<0.001	1	<0.001	<0.001	0	126	118
Acenaphthylene in TCLP	mg/L	0.001	Org-012/017	<0.001	1	<0.001	<0.001	0	[NT]	[NT]
Acenaphthene in TCLP	mg/L	0.001	Org-012/017	<0.001	1	<0.001	<0.001	0	[NT]	[NT]
Fluorene in TCLP	mg/L	0.001	Org-012/017	<0.001	1	<0.001	<0.001	0	128	116
Phenanthrene in TCLP	mg/L	0.001	Org-012/017	<0.001	1	<0.001	<0.001	0	128	120
Anthracene in TCLP	mg/L	0.001	Org-012/017	<0.001	1	<0.001	<0.001	0	[NT]	[NT]
Fluoranthene in TCLP	mg/L	0.001	Org-012/017	<0.001	1	<0.001	<0.001	0	126	122
Pyrene in TCLP	mg/L	0.001	Org-012/017	<0.001	1	<0.001	<0.001	0	134	116
Benzo(a)anthracene in TCLP	mg/L	0.001	Org-012/017	<0.001	1	<0.001	<0.001	0	[NT]	[NT]
Chrysene in TCLP	mg/L	0.001	Org-012/017	<0.001	1	<0.001	<0.001	0	134	112
Benzo(bjk)fluoranthene in TCLP	mg/L	0.002	Org-012/017	<0.002	1	<0.002	<0.002	0	[NT]	[NT]
Benzo(a)pyrene in TCLP	mg/L	0.001	Org-012/017	<0.001	1	<0.001	<0.001	0	90	92
Indeno(1,2,3-c,d)pyrene - TCLP	mg/L	0.001	Org-012/017	<0.001	1	<0.001	<0.001	0	[NT]	[NT]
Dibenzo(a,h)anthracene in TCLP	mg/L	0.001	Org-012/017	<0.001	1	<0.001	<0.001	0	[NT]	[NT]
Benzo(g,h,i)perylene in TCLP	mg/L	0.001	Org-012/017	<0.001	1	<0.001	<0.001	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-012/017	100	1	99	97	2	99	93

QUALITY CONTROL: Metals in TCLP USEPA1311						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	237846-2
Date extracted	-			03/03/2020	1	03/03/2020	03/03/2020		03/03/2020	03/03/2020
Date analysed	-			03/03/2020	1	03/03/2020	03/03/2020		03/03/2020	03/03/2020
Arsenic in TCLP	mg/L	0.05	Metals-020 ICP-AES	<0.05	1	<0.05	<0.05	0	108	124
Cadmium in TCLP	mg/L	0.01	Metals-020 ICP-AES	<0.01	1	<0.01	<0.01	0	99	102
Chromium in TCLP	mg/L	0.01	Metals-020 ICP-AES	<0.01	1	<0.01	<0.01	0	98	104
Lead in TCLP	mg/L	0.03	Metals-020 ICP-AES	<0.03	1	<0.03	<0.03	0	98	103
Mercury in TCLP	mg/L	0.0005	Metals-021 CV-AAS	<0.0005	1	<0.0005	<0.0005	0	97	96
Nickel in TCLP	mg/L	0.02	Metals-020 ICP-AES	<0.02	1	<0.02	<0.02	0	99	104

Result Definitions

NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.

The recommended maximums for analytes in urine are taken from “2018 TLVs and BEIs”, as published by ACGIH (where available). Limit provided for Nickel is a precautionary guideline as per Position Paper prepared by AIOH Exposure Standards Committee, 2016.

Guideline limits for Rinse Water Quality reported as per analytical requirements and specifications of AS 4187, Amdt 2 2019, Table 7.2

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

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

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

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

Report Comments

Asbestos-ID in soil: NEPM
This report is consistent with the reporting recommendations in the National Environment Protection (Assessment of Site Contamination) Measure, Schedule B1, May 2013. This is reported outside our scope of NATA accreditation.

CONSARA
contaminated sites

Chain of Custody Record

Project No:	151008
Project/Site:	BANK ST PYRMONT
Sampled By:	R ORGANO
Phone:	0404003394
Page	1 of 1
Number of Eskies:	

Lab:	ENVIROLAB
Lab Quote No:	
Lab Batch No:	
Date Results Required:	STANDARD
Sample Disposal After:	

LAB ID	SAMPLE ID	DATE	MATRIX	CONTAINER TYPE & PRESERVATIVE: Soil 0.1-0.2 L Glass jar, unpreserved	Soil Plastic bag	Water 0.1-0.2 L Plastic, Filtered, HNO3	Water 0.5-1.0 L Amber glass, unpreserved	Water 40-50ml Glass, unpreserved	Water 0.25-1 L Plastic, unpreserved	Water 0.2-1.0L Plastic, sterile	ANALYSIS REQUIRED: COMBO12	ASBESTOS-0.5% NEPM	HOLD
1	SP01-01	28/2/20	SOIL	1	1						X	X	
2	SP01-02	↓	↓	1	1						X	X	
3	SP01-03	↓	↓	1	1						X	X	
			TOTALS										

Relinquished By:
NAME R ORGANO SIGNATURE DATE 28/2/2020

Received By:
NAME May SIGNATURE DATE 28/2/2020 1640

Custody Seals Intact	Y	N
Samples Received Chilled	Y	N
Method of Shipment		

NOTES:

ENVIROLAB

Envirolab Services
12 Ashley St
Chatswood NSW 2067
Ph: (02) 9910 6200

Job No: 23846
Date Received: 28/2/2020
Time Received: 1640
Received by: R
Temp: Cool/Ambient
Cooling: Icepack
Security: Intact/Broken/None

CONSARA Pty Ltd ABN 27 161 027 881
Suite 2, Level 2, Unit 6 10 Rodborough Road, Frenchs Forest NSW 2100
PO Box 7360 Warringah Mall NSW 2100

web www.consara.com.au
email
email rebeccaorgano@consara.com.au

F3 Letter dated 21 March 2020

Thomas Caruana
Project Manager
Christie Civil
Unit 4, 7-29 Bridge Road
Stanmore NSW

21 March 2020

Dear Thomas

RE: Waste Classification – Stockpiled Excavated Materials, Northern Area of 5-11 Bank Street Pyrmont NSW

1. INTRODUCTION

CONSARA Pty Ltd (CONSARA) was engaged by Christie Civil to undertake waste classification works of surface and sub-surface soils that had been excavated and stockpiled and will require off-site disposal as part of redevelopment works being conducted on a property located within the northern part of 5-11 Bank Street 5 Bank Street, Pyrmont NSW (the Site).

The Site is currently being redeveloped by Roads and Maritime Services (RMS) to enable the relocation of a RMS licenced commercial operator from a property on Pyrmont Bridge Road, Glebe NSW to the Site to enable the development of the New Sydney Fish Market. The redevelopment plans for the Site comprises the construction of temporary facilities, open space areas and the location of wharf/marina facility. The location and layout of the Site is shown on the Figure 1.

The sampling for these classification works was conducted on the 18 March 2020 by Ms Rebecca Organo who is a Principal Environmental Scientist and is a Certified Practitioner – Site Contamination Specialist. This waste classification has been undertaken in accordance with the relevant requirements of the following:

- NSW EPA *Waste Classification Guidelines* (2014); and
- *Protection of the Environment Operations* (POEO) Act 1997.

2. SCOPE OF WORK

The scope of work undertaken for this classification was as follows:

- Completion of inspection and sampling of the materials excavated and present in stockpiles on the Site; and
- Assessment of the results of the inspection and sampling works and preparation of this letter report.

3. RESULTS

The results of the inspections identified the following:

- Excavation works had been undertaken along the northern part of the Site for the installation of sub-surface services prior to completion of finished pavement;
- The excavation works had been completed to approximately depths of 0.3 metre to 1 metres below the existing ground surface level;
- The excavated materials had been placed into a stockpile proximal to the excavation and in a smaller stockpile on the southern area of the Site;
- The excavated materials primarily were comprised of brown to grey coarse sandy soils that contained some small sandstone and other bituminous gravels and also some larger sandstone boulders. The stockpiled materials were not observed to have staining, odours, significant demolition waste or asbestos containing materials in the stockpiled materials or in the locations where samples were collected. No evidence of potential acid sulphate soils was present. It was noted that the stockpiled materials were consistent in composition and that there was little variation in the condition of materials between sampling locations.

Photographs of the excavation and stockpiled excavated materials are provided on Attachment 1. It is estimated that approximately 100 m^3 of the stockpiled excavated materials will require off-site disposal.

Samples from the stockpiled materials were collected as discrete samples directly from the stockpile of the material (either from the near-surface or from stockpiles at a minimum of 10 cm below the surface) by hand protected by a disposable nitrile glove. New nitrile gloves were used for the collection of each sample. Samples for chemical analysis were collected as discrete samples into laboratory-supplied 150 mL glass jars with Teflon-lined lids, which were carefully filled to minimise the amount of headspace in the jar. Samples for asbestos comprised the collection of a 0.5 L and 10L sample from each sampling location. The 10 L sample was screened manually on-site through a < 7 mm sieve. No asbestos (either bonded or friable) or potential asbestos (either bonded or friable) was identified through the screening process. The 0.5L samples were collected into a sealed plastic bag.

Sample identification for the samples collected from the excavated stockpiled materials to be disposed off-site were SP01_01, SP01_02 and SP01_03 and the stockpile locations and sampling locations are shown on Figure 2.

Samples were kept chilled in an ice-filled esky prior to dispatch and during transport to the NATA registered laboratory under chain-of-custody procedures. Four samples were submitted for analysis of metals (Arsenic, Cadmium, Copper, Chromium, Nickel, Lead, Zinc and Mercury), TPH, BTEX, PAHs, OCPs, OPPs, PCBs and Phenolics and TCLPs for metals and TCLPs for PAHs and five samples were submitted for asbestos analysis. The analytical laboratory report for the samples collected and analysed for this waste classification is provided as Attachment 2 to this letter.

3.1. Waste Classification Assessment

The analytical results presented in Table 1 and Attachment 2 to this letter have reported concentrations that require the application of the SCC1 and TCLP1 limits set out in Table 2 of the NSW EPA (2014) *Waste Classification Guidelines.* The results of the application of these criteria has identified that the concentrations present result in a classification as ***General Solid Waste (non-putrescible).***

The results of the inspection and sampling works undertaken by CONSARA have identified that stockpiled excavated soil materials on the Site are classified for the purposes of off-site disposal as ***General Solid Waste (non-putrescible).***

4. CONCLUSION

The excavation works on the Site as part of the redevelopment works have resulted in the generation of excess materials that require disposal off-site. The results of this waste classification works have identified that these excavated stockpiled soil materials are required to be transported and transferred to an appropriate acceptor as soils classified as ***General Solid Waste (non-putrescible)*** in accordance with the requirements of the NSW EPA (2014) *Waste Classification Guidelines* and the relevant requirements of POEO Act and its associated regulations.

This soil classification has required chemical assessment and is not a pre-classified waste. In addition, the soils MUST only be disposed to a waste facility licenced to accepted soils classified as *General Solid Waste (non-putrescible)*. These soils are NOT classified as soils that meet the CT1 thresholds or lower for General Solid Waste listed in Table 1 of the NSW EPA (2014) *Waste Classification Guidelines* or equivalent.

It is noted that any materials that are excavated and removed from the Site are required to be transported and transferred to an appropriate acceptor of the materials in accordance with its waste classification and the relevant requirements of POEO Act and its associated regulations. Section 143 of the POEO Act states that if the waste is transported to a place that cannot lawfully be used as a waste facility for that waste, then the transporter and owner of the waste are each guilty of an offence. The transporter and owner of the waste have a duty to ensure that the waste is disposed in an appropriate manner.

If you have any questions or would like to further discuss any aspect of the information presented, please contact the undersigned.

Regards,



Rebecca Organo
Principal Environmental Scientist, CEnvP SC

Encl.
Figure 1 – Site Location Plan
Figure 2 -Sampling Locations
Table 1: Soil Analytical Results Table
Attachment 1: Photographs of the Site at the time of sampling
Attachment 2: Final Analytical Laboratory Reports

Figures



Figure 1: Site Location Plan
Project: Waste Classification 5-11 Bank Street Pyrmont NSW

—— Approximate Site Boundary

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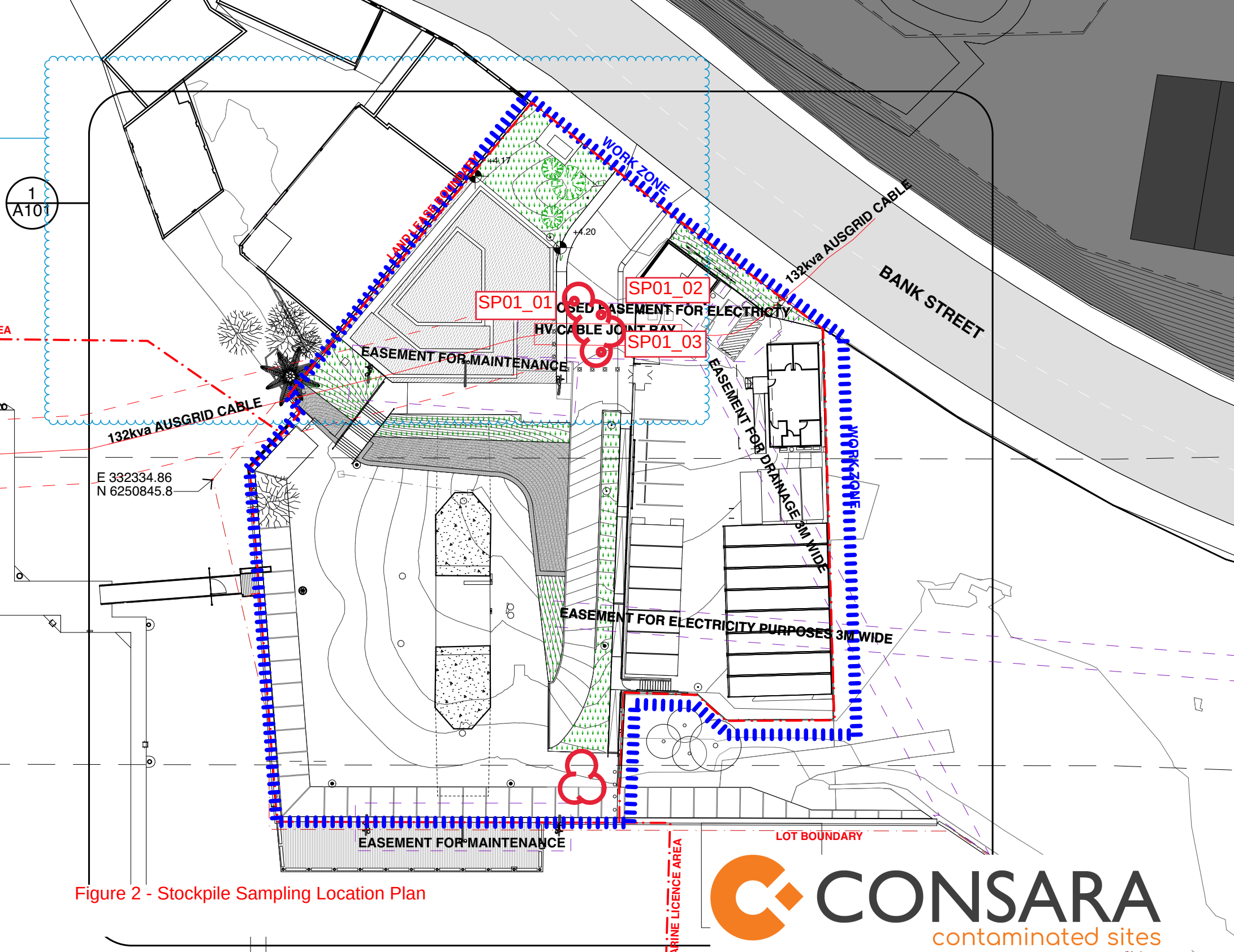


Figure 2 - Stockpile Sampling Location Plan

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Table 1 - Soil Analytical Results - Waste Classification Stockpiled Materials

Sample ID											SP01-01		SP01-02		SP01-03	
Date Sampled											18/03/2020		18/03/2020		18/03/2020	
Compounds	Unit for Totals	EQL	Unit for TCLP	EQL	General Solid Waste (NSW EPA, 2014) Contaminant Threshold Without Leaching (TCLP) CT1 (mg/kg)	General Solid Waste (NSW EPA, 2014) Leachable Concentration TCLP1 (mg/L)	General Solid Waste (NSW EPA, 2014) Specific Contaminant Concentration SCC1 (mg/kg)	Restricted Solid Waste Contaminant Threshold Without Leaching (TCLP) CT2 (mg/kg)	Restricted Solid Waste Leachable Concentration TCLP2 (mg/L)	Restricted Solid Waste Specific Contaminant Concentration SCC2 (mg/kg)	Totals (mg/kg)	TCLP (mg/L)	Totals (mg/kg)	TCLP (mg/L)	Totals (mg/kg)	TCLP (mg/L)
TRHs																
C6 - C9 Fraction	mg/kg	25			N/A	N/A	650	N/A	N/A	2,600	<25	NA	<25	NA	<25	NA
C10 - C14 Fraction	mg/kg	50			-	-		-	-	-	<50	NA	<50	NA	<50	NA
C15 - C28 Fraction	mg/kg	100			-	-	-	-	-	-	110	NA	410	NA	130	NA
C29 - C36 Fraction	mg/kg	100			-	-	-	-	-	-	180	NA	210	NA	250	NA
C10 - C36 Fraction (sum)	mg/kg	-			N/A	N/A	10,000	N/A	N/A	40,000	NC	NA	NC	NA	NC	NA
C6 - C10 Fraction	mg/kg	25			-	-	-	-	-	-	<25	NA	<25	NA	<25	NA
C6 - C10 Fraction minus BTEX (F1)	mg/kg	25			-	-	-	-	-	-	<25	NA	<25	NA	<25	NA
>C10 - C16 Fraction	mg/kg	50			-	-	-	-	-	-	<50	NA	<50	NA	<50	NA
>C16 - C34 Fraction	mg/kg	100			-	-	-	-	-	-	240	NA	410	NA	300	NA
>C34 - C40 Fraction	mg/kg	100			-	-	-	-	-	-	150	NA	210	NA	230	NA
>C10 - C40 Fraction (sum)	mg/kg	50			-	-	-	-	-	-	400	NA	610	NA	530	NA
>C10 - C16 Fraction minus Naphthalene (F2)	mg/kg	50			-	-	-	-	-	-	<50	NA	<50	NA	<50	NA
BTEX																
Benzene	mg/kg	0.2			10	0.5	18	40	2	72	<0.5	NA	<0.5	NA	<0.5	NA
Ethylbenzene	mg/kg	1			600	30	1,080	2400	120	4,320	<1	NA	<1	NA	<1	NA
Toluene	mg/kg	0.5			288	-	-	1,152	-	-	<0.5	NA	<0.5	NA	<0.5	NA
Xylene (m & p)	mg/kg	2			-	-	-	-	-	-	<2	NA	<2	NA	<2	NA
Xylene (o)	mg/kg	1			-	-	-	-	-	-	<1	NA	<1	NA	<1	NA
Xylene Total	mg/kg	3			1,000	50	1800	4,000	200	7200	<3	NA	<3	NA	<3	NA
PAHs																
Naphthalene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-	<0.1	<0.001	<0.1	<0.001	<0.1	<0.001
Acenaphthylene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-	0.3	<0.001	<0.1	<0.001	<0.1	<0.001
Acenaphthene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-	<0.1	<0.001	<0.1	<0.001	<0.1	<0.001
Fluorene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-	<0.1	<0.001	<0.1	<0.001	<0.1	<0.001
Phenanthrene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-	0.3	<0.001	0.3	<0.001	0.2	<0.001
Anthracene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-	0.1	<0.001	<0.1	<0.001	<0.1	<0.001
Fluoranthene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-	1.1	<0.001	1	<0.001	1.1	<0.001
Pyrene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-	1.1	<0.001	0.9	<0.001	1	<0.001
Benzo(a)anthracene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-	0.6	<0.001	0.5	<0.001	0.5	<0.001
Chrysene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-	0.6	<0.001	0.5	<0.001	0.5	<0.001
Benzo(b,j+k)fluoranthene	mg/kg	0.2	mg/L	0.002	-	-	-	-	-	-	2.6	<0.002	2	<0.002	2.2	<0.002
Benzo(a)pyrene	mg/kg	0.05	mg/L	0.001	0.8	0.04	10	3	0.16	23	0.97	<0.001	0.6	<0.001	0.68	<0.001
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-	0.9	<0.001	0.4	<0.001	0.5	<0.001
Dibenzo(a,h)anthracene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-	0.1	<0.001	<0.1	<0.001	<0.1	<0.001
Benzo(g,h,i)perylene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-	0.9	<0.001	0.4	<0.001	0.5	<0.001
Total +vePAH's	mg/kg	0.05	mg/L		N/A	N/A	200	-	-	800	9.7	NIL (+)VE	6.4	NIL (+)VE	7.3	NIL (+)VE
Benzo(a)pyrene TEQ calc (zero)	mg/kg	0.5			-	-	-	-	-	-	1.5	NA	0.9	NA	1	NA
Benzo(a)pyrene TEQ calc(half)	mg/kg	0.5			-	-	-	-	-	-	1.5	NA	0.9	NA	1.1	NA
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	0.5			-	-	-	-	-	-	1.5	NA	1	NA	1.1	NA
OCPs																
alpha-BHC	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
HCB	mg/kg	0.1			-	-	-				<0.1	NA	<0.1	NA	<0.1	NA
beta-BHC	mg/kg	0.1			-	-	-				<0.1	NA	<0.1	NA	<0.1	NA
gamma-BHC	mg/kg	0.1			-	-	-				<0.1	NA	<0.1	NA	<0.1	NA
Heptachlor	mg/kg	0.1			-	-	-				<0.1	NA	<0.1	NA	<0.1	NA
delta-BHC	mg/kg	0.1			-	-	-				<0.1	NA	<0.1	NA	<0.1	NA
Aldrin	mg/kg	0.1			-	-	-				<0.1	NA	<0.1	NA	<0.1	NA
Heptachlor Epoxide	mg/kg	0.1			-	-	-				<0.1	NA	<0.1	NA	<0.1	NA
gamma-Chlordane	mg/kg	0.1			-	-	-				<0.1	NA	<0.1	NA	<0.1	NA
alpha-chlordane	mg/kg	0.1			-	-	-				<0.1	NA	<0.1	NA	<0.1	NA
Endosulfan I	mg/kg	0.1			-	-	-				<0.1	NA	<0.1	NA	<0.1	NA
pp-DDE	mg/kg	0.1			-	-	-				<0.1	NA	<0.1	NA	<0.1	NA
Dieldrin	mg/kg	0.1			-	-	-				<0.1	NA	<0.1	NA	<0.1	NA
Endrin	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
Endosulfan II	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
pp-DDD	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
Endrin Aldehyde	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
pp-DDT	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
Endosulfan Sulphate	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
Methoxychlor	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
Total +ve DDT+DDD+DDE	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
OPPs																
Dichlorvos	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
Dimethoate	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
Diazinon	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
Chlorpyriphos-methyl	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
Ronnel	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
Fenitrothion	mg/kg	0.1									<0.1	NA	<0.1	NA	<0.1	NA
Malathion	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
Chlorpyriphos	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
Parathion	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
Bromophos-ethyl	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
Ethion	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
Azinphos-methyl (Guthion)	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
Polychlorinated Biphenyls																
Aroclor 1016	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
Aroclor 1221	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
Aroclor 1232	mg/kg	0.1			-	-	-				<0.1	NA	<0.1	NA	<0.1	NA
Aroclor 1242	mg/kg	0.1			-	-	-				<0.1	NA	<0.1	NA	<0.1	NA
Aroclor 1248	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
Aroclor 1254	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
Aroclor 1260	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
Total +ve PCBs (1016-1260)	mg/kg	0.1			<50	-	<50	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
Metals																
Arsenic	mg/kg	5	mg/L	0.05	100	5	500	400	20	2,000	5	<0.05	7	<0.05	5	<0.05
Cadmium	mg/kg	1	mg/L	0.01	20	1	100	80	4	400	<0.4	<0.01	<0.4	<0.01	<0.4	<0.01
Chromium	mg/kg	2	mg/L	0.01	-	-	-	-	-	-	7	<0.01	10	<0.01	8	<0.01
Copper	mg/kg	5			-	-	-	-	-		38	NA	57	NA	37	NA
Lead	mg/kg	5	mg/L	0.03	100	5	1,500	400	20	6,000	87	<0.03	410	<0.03	140	0.04
Mercury	mg/kg	0.1	mg/L	0.0005	4	0.2	50	16	0.8	200	0.1	<0.0005	0.2	<0.0005	0.2	<0.0005
Nickel	mg/kg	2	mg/L	0.02	40	2	1,050	160	8	4,200	8	<0.02	11	<0.02	8	<0.02
Zinc	mg/kg	5			-	-	-	-	-	-	91	NA	120	NA	99	NA
Asbestos																
Sample mass tested	g	--			-	-	-				629.76	NA	623.33	NA	540.63	NA
Sample Description	-	--			-	-	-				Brown fine-grained soil & rocks	NA	Brown fine-grained soil & rocks	NA	Brown fine-grained soil & rocks	NA
Asbestos ID in soil	-	--			-	-	-				No asbestos detected at reporting limit of 0.1g/kg: Organic fibres detected: Synthetic mineral fibres detected	NA	No asbestos detected at reporting limit of 0.1g/kg: Organic fibres detected	NA	No asbestos detected at reporting limit of 0.1g/kg: Organic fibres detected: Synthetic mineral fibres detected	NA
Trace Analysis	-	--			-	-	-				No asbestos detected	NA	No asbestos detected	NA	No asbestos detected	NA
Total Asbestos g/kg	g/kg	<0.1			-	-	-				<0.1	NA	<0.1	NA	<0.1	NA
Asbestos ID in soil <0.1 g/kg	-	--			-	-	-				No visible asbestos detected	NA	No visible asbestos detected	NA	No visible asbestos detected	NA
ACM >7mm Estimation	g	--			-	-	-				–	NA	–	NA	–	NA
FA and AF Estimation	g	--			-	-	-				–	NA	–	NA	–	NA
ACM >7mm Estimation %(w/w)	%	<0.01			-	-	-				<0.01	NA	<0.01	NA	<0.01	NA
FA and AF Estimation %(w/w)	%	<0.001			-	-	-				<0.001	NA	<0.001	NA	<0.001	NA
Total Asb Est w/w	%	<0.001			-	-	-				NC	NA	NC	NA	NC	NA

NOTES:
All concentrations are in mg/kg
"-" indicates that the criteria is not applicable for these analytes
< Value = Concentration less than laboratory EQL

Attachment 1: Photographs of Stockpiles and Excavation



Plate 1: View of excavated stockpiled materials located near excavation



Plate 2: View of excavation



Plate 3: View of excavation at northern area of site

Attachment 2: Final Analytical Laboratory Report

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CERTIFICATE OF ANALYSIS 239178

Client Details

Client	Consara Pty Ltd
Attention	Rebecca Organo
Address	PO Box 7360, Warringah Mall, NSW, 2100

Sample Details

Your Reference	**Bank St/ C151008**
Number of Samples	3 Soil
Date samples received	18/03/2020
Date completed instructions received	18/03/2020

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Please refer to the last page of this report for any comments relating to the results.

Report Details

Date results requested by	20/03/2020
Date of Issue	20/03/2020

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Analysed by Asbestos Approved Identifier: Lucy Zhu
Authorised by Asbestos Approved Signatory: Matt Mansfield

Results Approved By
Jaimie Loa-Kum-Cheung, Metals Supervisor
Josh Williams, Senior Chemist
Ken Nguyen, Reporting Supervisor
Matt Mansfield, QHSE manager
Steven Luong, Organics Supervisor

Authorised By



Nancy Zhang, Laboratory Manager

vTRH(C6-C10)/BTEXN in Soil				
Our Reference		239178-1	239178-2	239178-3
Your Reference	UNITS	SP01-01	SP01-02	SP01-03
Date Sampled		18/03/2020	18/03/2020	18/03/2020
Type of sample		Soil	Soil	Soil
Date extracted	-	19/03/2020	19/03/2020	19/03/2020
Date analysed	-	19/03/2020	19/03/2020	19/03/2020
TRH C_6 - C_9	mg/kg	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1
naphthalene	mg/kg	<1	<1	<1
Total +ve Xylenes	mg/kg	<3	<3	<3
Surrogate aaa-Trifluorotoluene	%	99	98	89

svTRH (C10-C40) in Soil				
Our Reference		239178-1	239178-2	239178-3
Your Reference	UNITS	SP01-01	SP01-02	SP01-03
Date Sampled		18/03/2020	18/03/2020	18/03/2020
Type of sample		Soil	Soil	Soil
Date extracted	-	19/03/2020	19/03/2020	19/03/2020
Date analysed	-	19/03/2020	19/03/2020	19/03/2020
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	110	410	130
TRH C_{29} - C_{36}	mg/kg	180	210	250
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	240	410	300
TRH >C_{34} -C_{40}	mg/kg	150	210	230
Total +ve TRH (>C10-C40)	mg/kg	400	610	530
Surrogate o-Terphenyl	%	88	88	89

PAHs in Soil				
Our Reference		239178-1	239178-2	239178-3
Your Reference	UNITS	SP01-01	SP01-02	SP01-03
Date Sampled		18/03/2020	18/03/2020	18/03/2020
Type of sample		Soil	Soil	Soil
Date extracted	-	19/03/2020	19/03/2020	19/03/2020
Date analysed	-	19/03/2020	19/03/2020	19/03/2020
Naphthalene	mg/kg	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.3	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.3	0.3	0.2
Anthracene	mg/kg	0.1	<0.1	<0.1
Fluoranthene	mg/kg	1.1	1	1.1
Pyrene	mg/kg	1.1	0.9	1.0
Benzo(a)anthracene	mg/kg	0.6	0.5	0.5
Chrysene	mg/kg	0.6	0.5	0.5
Benzo(b,j+k)fluoranthene	mg/kg	2.6	2	2.2
Benzo(a)pyrene	mg/kg	0.97	0.60	0.68
Indeno(1,2,3-c,d)pyrene	mg/kg	0.9	0.4	0.5
Dibenzo(a,h)anthracene	mg/kg	0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	0.9	0.4	0.5
Total +ve PAH's	mg/kg	9.7	6.4	7.3
Benzo(a)pyrene TEQ calc (zero)	mg/kg	1.5	0.9	1.0
Benzo(a)pyrene TEQ calc(half)	mg/kg	1.5	0.9	1.1
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	1.5	1	1.1
Surrogate p-Terphenyl-d14	%	85	87	90

Organochlorine Pesticides in soil				
Our Reference		239178-1	239178-2	239178-3
Your Reference	UNITS	SP01-01	SP01-02	SP01-03
Date Sampled		18/03/2020	18/03/2020	18/03/2020
Type of sample		Soil	Soil	Soil
Date extracted	-	19/03/2020	19/03/2020	19/03/2020
Date analysed	-	19/03/2020	19/03/2020	19/03/2020
alpha-BHC	mg/kg	<0.1	<0.1	<0.1
HCB	mg/kg	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1	<0.1
Surrogate TCMX	%	91	99	88

Organophosphorus Pesticides in Soil				
Our Reference	UNITS	239178-1	239178-2	239178-3
Your Reference		SP01-01	SP01-02	SP01-03
Date Sampled		18/03/2020	18/03/2020	18/03/2020
Type of sample		Soil	Soil	Soil
Date extracted	-	19/03/2020	19/03/2020	19/03/2020
Date analysed	-	19/03/2020	19/03/2020	19/03/2020
Dichlorvos	mg/kg	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1
Surrogate TCMX	%	91	99	88

PCBs in Soil				
Our Reference		239178-1	239178-2	239178-3
Your Reference	UNITS	SP01-01	SP01-02	SP01-03
Date Sampled		18/03/2020	18/03/2020	18/03/2020
Type of sample		Soil	Soil	Soil
Date extracted	-	19/03/2020	19/03/2020	19/03/2020
Date analysed	-	19/03/2020	19/03/2020	19/03/2020
Aroclor 1016	mg/kg	<0.1	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1	<0.1	<0.1
Surrogate TCMX	%	91	99	88

Acid Extractable metals in soil				
Our Reference	UNITS	239178-1	239178-2	239178-3
Your Reference		SP01-01	SP01-02	SP01-03
Date Sampled		18/03/2020	18/03/2020	18/03/2020
Type of sample		Soil	Soil	Soil
Date prepared	-	19/03/2020	19/03/2020	19/03/2020
Date analysed	-	19/03/2020	19/03/2020	19/03/2020
Arsenic	mg/kg	5	7	5
Cadmium	mg/kg	<0.4	<0.4	<0.4
Chromium	mg/kg	7	10	8
Copper	mg/kg	38	57	37
Lead	mg/kg	87	410	140
Mercury	mg/kg	0.1	0.2	0.2
Nickel	mg/kg	8	11	8
Zinc	mg/kg	91	120	99

Moisture				
Our Reference		239178-1	239178-2	239178-3
Your Reference	UNITS	SP01-01	SP01-02	SP01-03
Date Sampled		18/03/2020	18/03/2020	18/03/2020
Type of sample		Soil	Soil	Soil
Date prepared	-	19/03/2020	19/03/2020	19/03/2020
Date analysed	-	19/03/2020	19/03/2020	19/03/2020
Moisture	%	11	11	9.1

Asbestos ID - soils NEPM - ASB-001				
Our Reference		239178-1	239178-2	239178-3
Your Reference	UNITS	SP01-01	SP01-02	SP01-03
Date Sampled		18/03/2020	18/03/2020	18/03/2020
Type of sample		Soil	Soil	Soil
Date analysed	-	19/03/2020	19/03/2020	19/03/2020
Sample mass tested	g	629.76	623.33	540.63
Sample Description	-	Brown fine-grained soil & rocks	Brown fine-grained soil & rocks	Brown fine-grained soil & rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected Synthetic mineral fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected Synthetic mineral fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos[#1]	g/kg	<0.1	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	–	–	–
FA and AF Estimation*	g	–	–	–
ACM >7mm Estimation*	%(w/w)	<0.01	<0.01	<0.01
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	<0.001

Metals in TCLP USEPA1311				
Our Reference	UNITS	239178-1	239178-2	239178-3
Your Reference		SP01-01	SP01-02	SP01-03
Date Sampled		18/03/2020	18/03/2020	18/03/2020
Type of sample		Soil	Soil	Soil
Date extracted	-	20/03/2020	20/03/2020	20/03/2020
Date analysed	-	20/03/2020	20/03/2020	20/03/2020
pH of soil for fluid# determ.	pH units	9.6	9.6	9.2
pH of soil TCLP (after HCl)	pH units	2.0	2.2	2.0
Extraction fluid used	-	1	1	1
pH of final Leachate	pH units	6.1	6.2	5.8
Arsenic in TCLP	mg/L	<0.05	<0.05	<0.05
Cadmium in TCLP	mg/L	<0.01	<0.01	<0.01
Chromium in TCLP	mg/L	<0.01	<0.01	<0.01
Lead in TCLP	mg/L	<0.03	<0.03	0.04
Mercury in TCLP	mg/L	<0.0005	<0.0005	<0.0005
Nickel in TCLP	mg/L	<0.02	<0.02	<0.02

PAHs in TCLP (USEPA 1311)				
Our Reference	UNITS	239178-1	239178-2	239178-3
Your Reference		SP01-01	SP01-02	SP01-03
Date Sampled		18/03/2020	18/03/2020	18/03/2020
Type of sample		Soil	Soil	Soil
Date extracted	-	20/03/2020	20/03/2020	20/03/2020
Date analysed	-	20/03/2020	20/03/2020	20/03/2020
Naphthalene in TCLP	mg/L	<0.001	<0.001	<0.001
Acenaphthylene in TCLP	mg/L	<0.001	<0.001	<0.001
Acenaphthene in TCLP	mg/L	<0.001	<0.001	<0.001
Fluorene in TCLP	mg/L	<0.001	<0.001	<0.001
Phenanthrene in TCLP	mg/L	<0.001	<0.001	<0.001
Anthracene in TCLP	mg/L	<0.001	<0.001	<0.001
Fluoranthene in TCLP	mg/L	<0.001	<0.001	<0.001
Pyrene in TCLP	mg/L	<0.001	<0.001	<0.001
Benzo(a)anthracene in TCLP	mg/L	<0.001	<0.001	<0.001
Chrysene in TCLP	mg/L	<0.001	<0.001	<0.001
Benzo(bjk)fluoranthene in TCLP	mg/L	<0.002	<0.002	<0.002
Benzo(a)pyrene in TCLP	mg/L	<0.001	<0.001	<0.001
Indeno(1,2,3-c,d)pyrene - TCLP	mg/L	<0.001	<0.001	<0.001
Dibenzo(a,h)anthracene in TCLP	mg/L	<0.001	<0.001	<0.001
Benzo(g,h,i)perylene in TCLP	mg/L	<0.001	<0.001	<0.001
Total +ve PAH's	mg/L	NIL (+)VE	NIL (+)VE	NIL (+)VE
Surrogate p-Terphenyl-d14	%	80	80	74

Method ID	Methodology Summary
ASB-001	Asbestos ID - Qualitative identification of asbestos in bulk samples using Polarised Light Microscopy and Dispersion Staining Techniques including Synthetic Mineral Fibre and Organic Fibre as per Australian Standard 4964-2004.
ASB-001	Asbestos ID - Identification of asbestos in soil samples using Polarised Light Microscopy and Dispersion Staining Techniques. Minimum 500mL soil sample was analysed as recommended by "National Environment Protection (Assessment of site contamination) Measure, Schedule B1 and "The Guidelines from the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia - May 2009" with a reporting limit of 0.1g/kg (0.01% w/w) as per Australian Standard AS4964-2004. Results reported denoted with * are outside our scope of NATA accreditation. **NOTE** #1 Total Asbestos g/kg was analysed and reported as per Australian Standard AS4964 (This is the sum of ACM >7mm, <7mm and FA/AF) **NOTE** #2 The screening level of 0.001% w/w asbestos in soil for FA and AF only applies where the FA and AF are able to be quantified by gravimetric procedures. This screening level is not applicable to free fibres. Estimation = Estimated asbestos weight Results reported with "--" is equivalent to no visible asbestos identified using Polarised Light microscopy and Dispersion Staining Techniques.
AT-008	Determination of VOCs sampled onto coconut shell charcoal sorbent tubes, that can be desorbed using carbon disulphide, and analysed by GC-MS.
EXTRACT.7	Toxicity Characteristic Leaching Procedure (TCLP) using Zero Headspace Extraction (zHE) using AS4439 and USEPA 1311.
Inorg-001	pH - Measured using pH meter and electrode in accordance with APHA latest edition, 4500-H+. Please note that the results for water analyses are indicative only, as analysis outside of the APHA storage times.
Inorg-004	Toxicity Characteristic Leaching Procedure (TCLP) using in house method INORG-004. Please note that the mass used may be scaled down from the default based on sample mass available.
Inorg-008	Moisture content determined by heating at 105+/-5 °C for a minimum of 12 hours.
Metals-020	Determination of various metals by ICP-AES.
Metals-020 ICP-AES	Determination of various metals by ICP-AES.
Metals-021	Determination of Mercury by Cold Vapour AAS.
Metals-021 CV-AAS	Determination of Mercury by Cold Vapour AAS.
Org-003	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.

Method ID	Methodology Summary
Org-003	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis. Note, the Total +ve TRH PQL is reflective of the lowest individual PQL and is therefore "Total +ve TRH" is simply a sum of the positive individual TRH fractions (>C10-C40).
Org-006	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD.
Org-006	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD. Note, the Total +ve PCBs PQL is reflective of the lowest individual PQL and is therefore" Total +ve PCBs" is simply a sum of the positive individual PCBs.
Org-012/017	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS and/or GC-MS/MS.
Org-012/017	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-MS and/or GC-MS/MS. Note, the Total +ve reported DDD+DDE+DDT PQL is reflective of the lowest individual PQL and is therefore simply a sum of the positive individually report DDD+DDE+DDT.
Org-012/017	Leachates are extracted with Dichloromethane and analysed by GC-MS and/or GC-MS/MS.
Org-012/017	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS and/or GC-MS/MS. Benzo(a)pyrene TEQ as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater - 2013. For soil results:- 1. 'EQ PQL'values are assuming all contributing PAHs reported as <PQL are actually at the PQL. This is the most conservative approach and can give false positive TEQs given that PAHs that contribute to the TEQ calculation may not be present. 2. 'EQ zero'values are assuming all contributing PAHs reported as <PQL are zero. This is the least conservative approach and is more susceptible to false negative TEQs when PAHs that contribute to the TEQ calculation are present but below PQL. 3. 'EQ half PQL'values are assuming all contributing PAHs reported as <PQL are half the stipulated PQL. Hence a mid-point between the most and least conservative approaches above. Note, the Total +ve PAHs PQL is reflective of the lowest individual PQL and is therefore "Total +ve PAHs" is simply a sum of the positive individual PAHs.
Org-014	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS.
Org-016	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.
Org-016	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater. Note, the Total +ve Xylene PQL is reflective of the lowest individual PQL and is therefore "Total +ve Xylenes" is simply a sum of the positive individual Xylenes.

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date extracted	-			19/03/2020	[NT]	[NT]	[NT]	[NT]	19/03/2020	[NT]
Date analysed	-			19/03/2020	[NT]	[NT]	[NT]	[NT]	19/03/2020	[NT]
TRH C_6 - C_9	mg/kg	25	Org-016	<25	[NT]	[NT]	[NT]	[NT]	85	[NT]
TRH C_6 - C_{10}	mg/kg	25	Org-016	<25	[NT]	[NT]	[NT]	[NT]	85	[NT]
Benzene	mg/kg	0.2	Org-016	<0.2	[NT]	[NT]	[NT]	[NT]	94	[NT]
Toluene	mg/kg	0.5	Org-016	<0.5	[NT]	[NT]	[NT]	[NT]	82	[NT]
Ethylbenzene	mg/kg	1	Org-016	<1	[NT]	[NT]	[NT]	[NT]	83	[NT]
m+p-xylene	mg/kg	2	Org-016	<2	[NT]	[NT]	[NT]	[NT]	82	[NT]
o-Xylene	mg/kg	1	Org-016	<1	[NT]	[NT]	[NT]	[NT]	83	[NT]
naphthalene	mg/kg	1	Org-014	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-016	101	[NT]	[NT]	[NT]	[NT]	109	[NT]

QUALITY CONTROL: svTRH (C10-C40) in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date extracted	-			19/03/2020	[NT]	[NT]	[NT]	[NT]	19/03/2020	[NT]
Date analysed	-			19/03/2020	[NT]	[NT]	[NT]	[NT]	19/03/2020	[NT]
TRH C_{10} - C_{14}	mg/kg	50	Org-003	<50	[NT]	[NT]	[NT]	[NT]	96	[NT]
TRH C_{15} - C_{28}	mg/kg	100	Org-003	<100	[NT]	[NT]	[NT]	[NT]	85	[NT]
TRH C_{29} - C_{36}	mg/kg	100	Org-003	<100	[NT]	[NT]	[NT]	[NT]	92	[NT]
TRH >C_{10} -C_{16}	mg/kg	50	Org-003	<50	[NT]	[NT]	[NT]	[NT]	96	[NT]
TRH >C_{16} -C_{34}	mg/kg	100	Org-003	<100	[NT]	[NT]	[NT]	[NT]	85	[NT]
TRH >C_{34} -C_{40}	mg/kg	100	Org-003	<100	[NT]	[NT]	[NT]	[NT]	92	[NT]
Surrogate o-Terphenyl	%		Org-003	88	[NT]	[NT]	[NT]	[NT]	102	[NT]

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date extracted	-			19/03/2020	[NT]	[NT]	[NT]	[NT]	19/03/2020	[NT]
Date analysed	-			19/03/2020	[NT]	[NT]	[NT]	[NT]	19/03/2020	[NT]
Naphthalene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	86	[NT]
Acenaphthylene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Fluorene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	86	[NT]
Phenanthrene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	94	[NT]
Anthracene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	86	[NT]
Pyrene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	80	[NT]
Benzo(a)anthracene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	108	[NT]
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-012/017	<0.2	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-012/017	<0.05	[NT]	[NT]	[NT]	[NT]	94	[NT]
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-012/017	82	[NT]	[NT]	[NT]	[NT]	87	[NT]

QUALITY CONTROL: Organochlorine Pesticides in soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date extracted	-			19/03/2020	[NT]	[NT]	[NT]	[NT]	19/03/2020	[NT]
Date analysed	-			19/03/2020	[NT]	[NT]	[NT]	[NT]	19/03/2020	[NT]
alpha-BHC	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	100	[NT]
HCB	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	116	[NT]
gamma-BHC	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Heptachlor	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	106	[NT]
delta-BHC	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	120	[NT]
Heptachlor Epoxide	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	118	[NT]
gamma-Chlordane	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	118	[NT]
Dieldrin	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	118	[NT]
Endrin	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	88	[NT]
Endosulfan II	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
pp-DDD	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	114	[NT]
Endrin Aldehyde	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	112	[NT]
Methoxychlor	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate TCMX	%		Org-012/017	76	[NT]	[NT]	[NT]	[NT]	98	[NT]

QUALITY CONTROL: Organophosphorus Pesticides in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date extracted	-			19/03/2020	[NT]	[NT]	[NT]	[NT]	19/03/2020	[NT]
Date analysed	-			19/03/2020	[NT]	[NT]	[NT]	[NT]	19/03/2020	[NT]
Dichlorvos	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	82	[NT]
Dimethoate	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Chlorpyriphos-methyl	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	88	[NT]
Fenitrothion	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	80	[NT]
Malathion	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	90	[NT]
Chlorpyriphos	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	92	[NT]
Parathion	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	80	[NT]
Bromophos-ethyl	mg/kg	0.1	AT-008	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Ethion	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	86	[NT]
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate TCMX	%		Org-012/017	76	[NT]	[NT]	[NT]	[NT]	98	[NT]

QUALITY CONTROL: PCBs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date extracted	-			19/03/2020	[NT]	[NT]	[NT]	[NT]	19/03/2020	[NT]
Date analysed	-			19/03/2020	[NT]	[NT]	[NT]	[NT]	19/03/2020	[NT]
Aroclor 1016	mg/kg	0.1	Org-006	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1221	mg/kg	0.1	Org-006	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1232	mg/kg	0.1	Org-006	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1242	mg/kg	0.1	Org-006	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1248	mg/kg	0.1	Org-006	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1254	mg/kg	0.1	Org-006	<0.1	[NT]	[NT]	[NT]	[NT]	70	[NT]
Aroclor 1260	mg/kg	0.1	Org-006	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate TCMX	%		Org-006	76	[NT]	[NT]	[NT]	[NT]	98	[NT]

QUALITY CONTROL: Acid Extractable metals in soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			19/03/2020	[NT]	[NT]	[NT]	[NT]	19/03/2020	[NT]
Date analysed	-			19/03/2020	[NT]	[NT]	[NT]	[NT]	19/03/2020	[NT]
Arsenic	mg/kg	4	Metals-020	<4	[NT]	[NT]	[NT]	[NT]	108	[NT]
Cadmium	mg/kg	0.4	Metals-020	<0.4	[NT]	[NT]	[NT]	[NT]	100	[NT]
Chromium	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	112	[NT]
Copper	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	110	[NT]
Lead	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	112	[NT]
Mercury	mg/kg	0.1	Metals-021	<0.1	[NT]	[NT]	[NT]	[NT]	102	[NT]
Nickel	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	102	[NT]
Zinc	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	109	[NT]

QUALITY CONTROL: Metals in TCLP USEPA1311						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	[NT]
Date extracted	-			20/03/2020	1	20/03/2020	20/03/2020		20/03/2020	[NT]
Date analysed	-			20/03/2020	1	20/03/2020	20/03/2020		20/03/2020	[NT]
Arsenic in TCLP	mg/L	0.05	Metals-020 ICP-AES	<0.05	1	<0.05	<0.05	0	112	[NT]
Cadmium in TCLP	mg/L	0.01	Metals-020 ICP-AES	<0.01	1	<0.01	<0.01	0	101	[NT]
Chromium in TCLP	mg/L	0.01	Metals-020 ICP-AES	<0.01	1	<0.01	<0.01	0	102	[NT]
Lead in TCLP	mg/L	0.03	Metals-020 ICP-AES	<0.03	1	<0.03	<0.03	0	100	[NT]
Mercury in TCLP	mg/L	0.0005	Metals-021 CV-AAS	<0.0005	1	<0.0005	[NT]		95	[NT]
Nickel in TCLP	mg/L	0.02	Metals-020 ICP-AES	<0.02	1	<0.02	<0.02	0	101	[NT]

QUALITY CONTROL: Metals in TCLP USEPA1311						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	2	20/03/2020	20/03/2020		[NT]	[NT]
Date analysed	-			[NT]	2	20/03/2020	20/03/2020		[NT]	[NT]
Arsenic in TCLP	mg/L	0.05	Metals-020 ICP-AES	[NT]	2	<0.05	[NT]		[NT]	[NT]
Cadmium in TCLP	mg/L	0.01	Metals-020 ICP-AES	[NT]	2	<0.01	[NT]		[NT]	[NT]
Chromium in TCLP	mg/L	0.01	Metals-020 ICP-AES	[NT]	2	<0.01	[NT]		[NT]	[NT]
Lead in TCLP	mg/L	0.03	Metals-020 ICP-AES	[NT]	2	<0.03	[NT]		[NT]	[NT]
Mercury in TCLP	mg/L	0.0005	Metals-021 CV-AAS	[NT]	2	<0.0005	<0.0005	0	[NT]	[NT]
Nickel in TCLP	mg/L	0.02	Metals-020 ICP-AES	[NT]	2	<0.02	[NT]		[NT]	[NT]

QUALITY CONTROL: PAHs in TCLP (USEPA 1311)						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	[NT]
Date extracted	-			20/03/2020	1	20/03/2020	20/03/2020		20/03/2020	[NT]
Date analysed	-			20/03/2020	1	20/03/2020	20/03/2020		20/03/2020	[NT]
Naphthalene in TCLP	mg/L	0.001	Org-012/017	<0.001	1	<0.001	<0.001	0	106	[NT]
Acenaphthylene in TCLP	mg/L	0.001	Org-012/017	<0.001	1	<0.001	<0.001	0	[NT]	[NT]
Acenaphthene in TCLP	mg/L	0.001	Org-012/017	<0.001	1	<0.001	<0.001	0	[NT]	[NT]
Fluorene in TCLP	mg/L	0.001	Org-012/017	<0.001	1	<0.001	<0.001	0	90	[NT]
Phenanthrene in TCLP	mg/L	0.001	Org-012/017	<0.001	1	<0.001	<0.001	0	90	[NT]
Anthracene in TCLP	mg/L	0.001	Org-012/017	<0.001	1	<0.001	<0.001	0	[NT]	[NT]
Fluoranthene in TCLP	mg/L	0.001	Org-012/017	<0.001	1	<0.001	<0.001	0	76	[NT]
Pyrene in TCLP	mg/L	0.001	Org-012/017	<0.001	1	<0.001	<0.001	0	76	[NT]
Benzo(a)anthracene in TCLP	mg/L	0.001	Org-012/017	<0.001	1	<0.001	<0.001	0	[NT]	[NT]
Chrysene in TCLP	mg/L	0.001	Org-012/017	<0.001	1	<0.001	<0.001	0	88	[NT]
Benzo(bjk)fluoranthene in TCLP	mg/L	0.002	Org-012/017	<0.002	1	<0.002	<0.002	0	[NT]	[NT]
Benzo(a)pyrene in TCLP	mg/L	0.001	Org-012/017	<0.001	1	<0.001	<0.001	0	78	[NT]
Indeno(1,2,3-c,d)pyrene - TCLP	mg/L	0.001	Org-012/017	<0.001	1	<0.001	<0.001	0	[NT]	[NT]
Dibenzo(a,h)anthracene in TCLP	mg/L	0.001	Org-012/017	<0.001	1	<0.001	<0.001	0	[NT]	[NT]
Benzo(g,h,i)perylene in TCLP	mg/L	0.001	Org-012/017	<0.001	1	<0.001	<0.001	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-012/017	81	1	80	86	7	88	[NT]

Result Definitions

NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.

The recommended maximums for analytes in urine are taken from “2018 TLVs and BEIs”, as published by ACGIH (where available). Limit provided for Nickel is a precautionary guideline as per Position Paper prepared by AIOH Exposure Standards Committee, 2016.

Guideline limits for Rinse Water Quality reported as per analytical requirements and specifications of AS 4187, Amdt 2 2019, Table 7.2

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

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

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

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

Report Comments

Asbestos-ID in soil: NEPM
This report is consistent with the reporting recommendations in the National Environment Protection (Assessment of Site Contamination) Measure, Schedule B1, May 2013. This is reported outside our scope of NATA accreditation.

24 HR TAT

CONSARA
contaminated sites

Chain of Custody Record

Project No:	C151008
Project/Site:	BANKST
Sampled By:	RORGANO
Phone:	0404003394
Page	1 of 1
Number of Eskies:	1

Lab:	ENVIROLAB
Lab Quote No:	
Lab Batch No:	
Date Results Required:	24HR TAT
Sample Disposal After:	

LAB ID	SAMPLE ID	DATE	MATRIX	CONTAINER TYPE & PRESERVATIVE: Soil 0.1-0.2 L Glass jar, unpreserved	Soil - Plastic bag	Water 0.1-0.2 L Plastic, Filtered, HNO3	Water 0.5-1.0 L Amber glass, unpreserved	Water 40-50ml Glass, unpreserved	Water 0.25-1 L Plastic, unpreserved	Water 0.2-1.0L Plastic, sterile	ANALYSIS REQUIRED: 0-0.5m Combo 13	ANALYSIS REQUIRED: Asbestos ID	HOLD
1	SP01-01	18/3/20	SOIL	1	1						X	X	
2	SP01-02	↓	↓	1	1						X	X	
3	SP01-03			1	1						X	X	
TOTALS													

ENVIROLAB GROUP

Envirolab Services
12 Ashley St
Chatswood NSW 2067
Ph: (02) 9910 6200

Job No: 238178

Date Received: 18/03/20
Time Received: 1420
Received by: SB
Temp: Cool/Ambient
Cooling: Ice/Icepack
Security: Intact/Broken/None

Relinquished By:		Received By:	
NAME	R Organo	NAME	S.Bolton
SIGNATURE		SIGNATURE	
DATE	18/3/2020	DATE	18/03/20

Custody Seals Intact	Y	N
Samples Received Chilled	Y	N
Method of Shipment		

NOTES:

24 HR TAT PLEASE

CONSARA Pty Ltd ABN 27 161 027 881
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PO Box 7360 Warringah Mall NSW 2100

web www.consara.com.au
email
email rebeccaorgano@consara.com.au

F4 Letter dated 15 April 2020

Thomas Caruana
Project Manager
Christie Civil
Unit 4, 7-29 Bridge Road
Stanmore NSW

15 April 2020

Dear Thomas

RE: Waste Classification – Stockpiled Excavated Materials, Northern Area of 5-11 Bank Street Pyrmont NSW

1. INTRODUCTION

CONSARA Pty Ltd (CONSARA) was engaged by Christie Civil to undertake waste classification works of surface and sub-surface soils that had been excavated and stockpiled and will require off-site disposal as part of redevelopment works being conducted on a property located within the northern part of 5-11 Bank Street 5 Bank Street, Pyrmont NSW (the Site).

The Site is currently being redeveloped by Roads and Maritime Services (RMS) to enable the relocation of a RMS licenced commercial operator from a property on Pyrmont Bridge Road, Glebe NSW to the Site to enable the development of the New Sydney Fish Market. The redevelopment plans for the Site comprises the construction of temporary facilities, open space areas and the location of wharf/marina facility. The location and layout of the Site is shown on the Figure 1.

The sampling for these classification works was conducted on the 14 April 2020 by Ms Rebecca Organo who is a Principal Environmental Scientist and is a Certified Practitioner – Site Contamination Specialist. This waste classification has been undertaken in accordance with the relevant requirements of the following:

- NSW EPA *Waste Classification Guidelines* (2014); and
- *Protection of the Environment Operations* (POEO) Act 1997.

2. SCOPE OF WORK

The scope of work undertaken for this classification was as follows:

- Completion of inspection and sampling of the materials excavated and present in stockpiles on the Site; and
- Assessment of the results of the inspection and sampling works and preparation of this letter report.

3. RESULTS

The results of the inspections identified the following:

- Excavation works had been undertaken along the northern part of the Site for the installation of sub-surface services prior to completion of finished pavement;
- The excavation works had been completed to approximately depths of 0.3 metre to 1 metres below the existing ground surface level;
- The excavated materials had been placed into a larger stockpile and smaller stockpile proximal to the excavation on the northern area of the Site;
- The excavated materials primarily were comprised of brown to grey coarse sandy soils that contained some small sandstone, gravels and other bituminous gravels. The stockpiled materials were not observed to have staining, odours, significant demolition waste or asbestos containing materials in the stockpiled materials or in the locations where samples were collected. No evidence of potential acid sulphate soils was present. It was noted that the stockpiled materials were consistent in composition and that there was little variation in the condition of materials between sampling locations.

Photographs of the excavation and stockpiled excavated materials are provided on Attachment 1. It is estimated that approximately 150 m^3 of the stockpiled excavated materials will require off-site disposal.

Samples from the stockpiled materials were collected as discrete samples directly from the stockpile of the material (either from the near-surface or from stockpiles at a minimum of 10 cm below the surface) by hand protected by a disposable nitrile glove. New nitrile gloves were used for the collection of each sample. Samples for chemical analysis were collected as discrete samples into laboratory-supplied 150 mL glass jars with Teflon-lined lids, which were carefully filled to minimise the amount of headspace in the jar. Samples for asbestos comprised the collection of a 0.5 L and 10L sample from each sampling location. The 10 L sample was screened manually on-site through a < 7 mm sieve. No asbestos (either bonded or friable) or potential asbestos (either bonded or friable) was identified through the screening process. The 0.5L samples were collected into a sealed plastic bag.

Sample identification for the samples collected from the excavated stockpiled materials to be disposed off-site were SP01_01 collected from the smaller stockpile and SP02_01 and SP02_02 from the larger stockpile. The stockpile locations and sampling locations are shown on Figure 2.

Samples were kept chilled in an ice-filled esky prior to dispatch and during transport to the NATA registered laboratory under chain-of-custody procedures. Three samples were submitted for analysis of metals (Arsenic, Cadmium, Copper, Chromium, Nickel, Lead, Zinc and Mercury), TPH, BTEX, PAHs, OCPs, OPPs, PCBs and TCLPs for metals and TCLPs for PAHs and three 0.5L samples were submitted for asbestos analysis. The analytical laboratory report for the samples collected and analysed for this waste classification is provided as Attachment 2 to this letter.

3.1. Waste Classification Assessment

The analytical results presented in Table 1 and Attachment 2 to this letter have reported concentrations that require the application of the SCC1 and TCLP1 limits set out in Table 2 of the NSW EPA (2014) *Waste Classification Guidelines.* The results of the application of these criteria has identified that the concentrations present result in a classification as ***General Solid Waste (non-putrescible).***

The results of the inspection and sampling works undertaken by CONSARA have identified that stockpiled excavated soil materials on the Site are classified for the purposes of off-site disposal as ***General Solid Waste (non-putrescible).***

4. CONCLUSION

The excavation works on the Site as part of the redevelopment works have resulted in the generation of excess materials that require disposal off-site. The results of this waste classification works have identified that these excavated stockpiled soil materials are required to be transported and transferred to an appropriate acceptor as soils classified as ***General Solid Waste (non-putrescible)*** in accordance with the requirements of the NSW EPA (2014) *Waste Classification Guidelines* and the relevant requirements of POEO Act and its associated regulations.

This waste classification has required chemical assessment and is not a pre-classified waste. This waste classification has required the application of the TCLP1 and SCC1 concentrations set out in Table 2 of the NSW EPA (2014). As such the soils MUST only be disposed to a waste facility licenced to accepted soils classified as *General Solid Waste (non-putrescible)*. These soils are NOT classified as soils that meet the CT1 thresholds or lower for General Solid Waste listed in Table 1 of the NSW EPA (2014) *Waste Classification Guidelines* or equivalent.

It is noted that any materials that are excavated and removed from the Site are required to be transported and transferred to an appropriate acceptor of the materials in accordance with its waste classification and the relevant requirements of POEO Act and its associated regulations. Section 143 of the POEO Act states that if the waste is transported to a place that cannot lawfully be used as a waste facility for that waste, then the transporter and owner of the waste are each guilty of an offence. The transporter and owner of the waste have a duty to ensure that the waste is disposed in an appropriate manner.

If you have any questions or would like to further discuss any aspect of the information presented, please contact the undersigned.

Regards,

Rebecca Organo
Principal Environmental Scientist, CEnvP SC

Encl.
Figure 1 – Site Location Plan
Figure 2 -Sampling Locations
Table 1 – Soil Analytical Results Table
Attachment 1: Photographs of the Site at the time of sampling
Attachment 2: Final Analytical Laboratory Reports

Figures



Figure 1: Site Location Plan
Project: Waste Classification 5-11 Bank Street Pyrmont NSW

—— Approximate Site Boundary

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contaminated sites

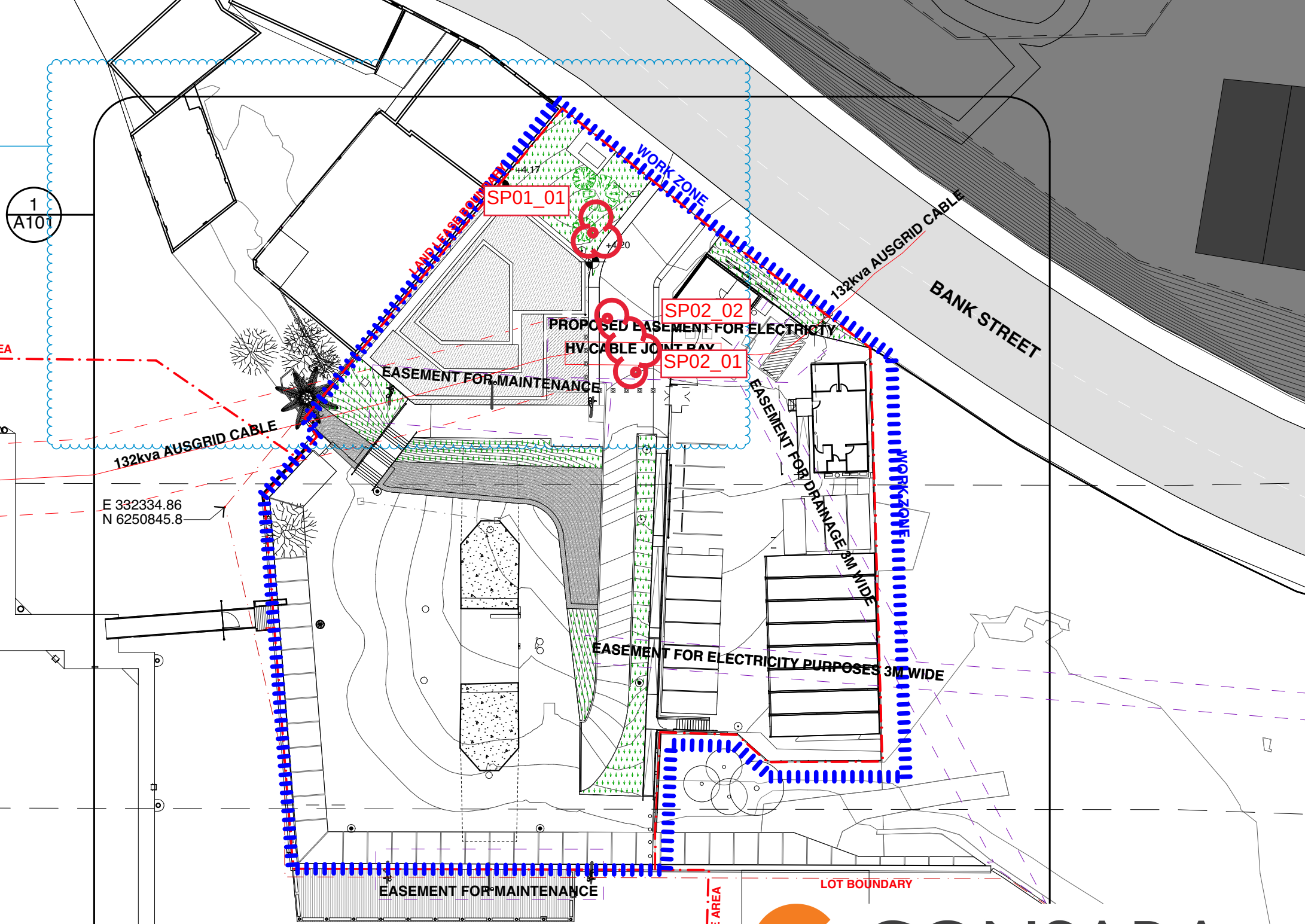


Figure 2 - Stockpile Sampling Location Plan

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Table 1 - Soil Analytical Results - Waste Classification Stockpiled Materials

Sample ID												SP01-01		SP02-01		SP02-02	
Date Sampled												14/04/2020		14/04/2020		14/04/2020	
Compounds	Unit for Totals	EQL	Unit for TCLP	EQL	General Solid Waste (NSW EPA, 2014) Contaminant Threshold Without Leaching (TCLP) CT1 (mg/kg)	General Solid Waste (NSW EPA, 2014) Leachable Concentration TCLP1 (mg/L)	General Solid Waste (NSW EPA, 2014) Specific Contaminant Concentration SCC1 (mg/kg)	Restricted Solid Waste Contaminant Threshold Without Leaching (TCLP) CT2 (mg/kg)	Restricted Solid Waste Leachable Concentration TCLP2 (mg/L)	Restricted Solid Waste Specific Contaminant Concentration SCC2 (mg/kg)		Totals (mg/kg)	TCLP (mg/L)	Totals (mg/kg)	TCLP (mg/L)	Totals (mg/kg)	TCLP (mg/L)
TRHs																	
C6 - C9 Fraction	mg/kg	25			N/A	N/A	650	N/A	N/A	2,600		<25	NA	<25	NA	<25	NA
C10 - C14 Fraction	mg/kg	50			-	-		-	-	-		<50	NA	<50	NA	<50	NA
C15 - C28 Fraction	mg/kg	100			-	-	-	-	-	-		<100	NA	<100	NA	150	NA
C29 - C36 Fraction	mg/kg	100			-	-	-					130	NA	120	NA	220	NA
C10 - C36 Fraction (sum)	mg/kg	-			N/A	N/A	10,000	N/A	N/A	40,000		NC	NA	NC	NA	NC	NA
C6 - C10 Fraction	mg/kg	25			-	-	-	-	-	-		<25	NA	<25	NA	<25	NA
C6 - C10 Fraction minus BTEX (F1)	mg/kg	25			-	-	-	-	-	-		<25	NA	<25	NA	<25	NA
>C10 - C16 Fraction	mg/kg	50			-	-	-	-	-	-		<50	NA	<50	NA	<50	NA
>C16 - C34 Fraction	mg/kg	100			-	-	-	-	-	-		170	NA	140	NA	300	NA
>C34 - C40 Fraction	mg/kg	100			-	-	-	-	-	-		140	NA	130	NA	200	NA
>C10 - C40 Fraction (sum)	mg/kg	50			-	-	-	-	-	-		300	NA	270	NA	500	NA
>C10 - C16 Fraction minus Naphthalene (F2)	mg/kg	50			-	-	-	-	-	-		<50	NA	<50	NA	<50	NA
BTEX																	
Benzene	mg/kg	0.2			10	0.5	18	40	2	72		<0.5	NA	<0.5	NA	<0.5	NA
Ethylbenzene	mg/kg	1			600	30	1,080	2400	120	4,320		<1	NA	<1	NA	<1	NA
Toluene	mg/kg	0.5			288	-	-	1,152	-	-		<0.5	NA	<0.5	NA	<0.5	NA
Xylene (m & p)	mg/kg	2			-	-	-	-	-	-		<2	NA	<2	NA	<2	NA
Xylene (o)	mg/kg	1			-	-	-	-	-	-		<1	NA	<1	NA	<1	NA
Xylene Total	mg/kg	3			1,000	50	1800	4,000	200	7200		<3	NA	<3	NA	<3	NA
PAHs																	
Naphthalene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-		<0.1	<0.001	<0.1	<0.001	<0.1	<0.001
Acenaphthylene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-		<0.1	<0.001	<0.1	<0.001	<0.1	<0.001
Acenaphthene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-		<0.1	<0.001	<0.1	<0.001	0.2	<0.001
Fluorene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-		<0.1	<0.001	<0.1	<0.001	0.2	<0.001
Phenanthrene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-		0.3	<0.001	1.1	<0.001	5.9	<0.001
Anthracene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-		0.1	<0.001	0.2	<0.001	1.4	<0.001
Fluoranthene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-		1.6	<0.001	1.9	<0.001	14	<0.001
Pyrene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-		1.4	<0.001	1.6	<0.001	11	<0.001
Benzo(a)anthracene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-		0.9	<0.001	0.8	<0.001	4.6	<0.001
Chrysene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-		0.9	<0.001	0.7	<0.001	3.7	<0.001
Benzo(b,j+k)fluoranthene	mg/kg	0.2	mg/L	0.002	-	-	-	-	-	-		2	<0.002	1	<0.002	5.8	<0.002
Benzo(a)pyrene	mg/kg	0.05	mg/L	0.001	0.8	0.04	10	3	0.16	23		1.1	<0.001	0.72	<0.001	3.2	<0.001
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-		1.1	<0.001	0.6	<0.001	2.4	<0.001
Dibenzo(a,h)anthracene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-		0.2	<0.001	0.1	<0.001	0.4	<0.001
Benzo(g,h,i)perylene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-		1.1	<0.001	0.6	<0.001	2.4	<0.001
Total +vePAHs	mg/kg	0.05	mg/L		N/A	N/A	200	-	-	800		11	NIL (+)VE	9.6	NIL (+)VE	55	NIL (+)VE
Benzo(a)pyrene TEQ calc (zero)	mg/kg	0.5			-	-	-	-	-	-		1.7	NA	1.1	NA	4.9	NA
Benzo(a)pyrene TEQ calc(half)	mg/kg	0.5			-	-	-	-	-	-		1.7	NA	1.1	NA	4.9	NA
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	0.5			-	-	-	-	-	-		1.7	NA	1.1	NA	4.9	NA
OCPs																	
alpha-BHC	mg/kg	0.1			-	-	-	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
HCB	mg/kg	0.1			-	-	-					<0.1	NA	<0.1	NA	<0.1	NA
beta-BHC	mg/kg	0.1			-	-	-					<0.1	NA	<0.1	NA	<0.1	NA
gamma-BHC	mg/kg	0.1			-	-	-					<0.1	NA	<0.1	NA	<0.1	NA
Heptachlor	mg/kg	0.1			-	-	-					<0.1	NA	<0.1	NA	<0.1	NA
delta-BHC	mg/kg	0.1			-	-	-					<0.1	NA	<0.1	NA	<0.1	NA
Aldrin	mg/kg	0.1			-	-	-					<0.1	NA	<0.1	NA	<0.1	NA
Heptachlor Epoxide	mg/kg	0.1			-	-	-					<0.1	NA	<0.1	NA	<0.1	NA
gamma-Chlordane	mg/kg	0.1			-	-	-					<0.1	NA	<0.1	NA	<0.1	NA
alpha-chlordane	mg/kg	0.1			-	-	-					<0.1	NA	<0.1	NA	<0.1	NA
Endosulfan I	mg/kg	0.1			-	-	-					<0.1	NA	<0.1	NA	<0.1	NA
pp-DDE	mg/kg	0.1			-	-	-					<0.1	NA	<0.1	NA	<0.1	NA
Dieldrin	mg/kg	0.1			-	-	-					<0.1	NA	<0.1	NA	<0.1	NA
Endrin	mg/kg	0.1			-	-	-	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
Endosulfan II	mg/kg	0.1			-	-	-	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
pp-DDD	mg/kg	0.1			-	-	-	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
Endrin Aldehyde	mg/kg	0.1			-	-	-	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
pp-DDT	mg/kg	0.1			-	-	-	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
Endosulfan Sulphate	mg/kg	0.1			-	-	-	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
Methoxychlor	mg/kg	0.1			-	-	-	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
Total +ve DDT+DDD+DDE	mg/kg	0.1			-	-	-	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
OPPs																	
Dichlorvos	mg/kg	0.1			-	-	-	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
Dimethoate	mg/kg	0.1			-	-	-	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
Diazinon	mg/kg	0.1			-	-	-	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
Chlorpyriphos-methyl	mg/kg	0.1			-	-	-	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
Ronnel	mg/kg	0.1			-	-	-	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
Fenitrothion	mg/kg	0.1										<0.1	NA	<0.1	NA	<0.1	NA
Malathion	mg/kg	0.1			-	-	-	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
Chlorpyriphos	mg/kg	0.1			-	-	-	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
Parathion	mg/kg	0.1			-	-	-	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
Bromophos-ethyl	mg/kg	0.1			-	-	-	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
Ethion	mg/kg	0.1			-	-	-	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
Azinphos-methyl (Guthion)	mg/kg	0.1			-	-	-	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
Polychlorinated Biphenyls																	
Aroclor 1016	mg/kg	0.1			-	-	-	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
Aroclor 1221	mg/kg	0.1			-	-	-	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
Aroclor 1232	mg/kg	0.1			-	-	-					<0.1	NA	<0.1	NA	<0.1	NA
Aroclor 1242	mg/kg	0.1			-	-	-					<0.1	NA	<0.1	NA	<0.1	NA
Aroclor 1248	mg/kg	0.1			-	-	-	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
Aroclor 1254	mg/kg	0.1			-	-	-	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
Aroclor 1260	mg/kg	0.1			-	-	-	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
Total +ve PCBs (1016-1260)	mg/kg	0.1			<50	-	<50	-	-	-		<0.1	NA	<0.1	NA	<0.1	NA
Metals																	
Arsenic	mg/kg	5	mg/L	0.05	100	5	500	400	20	2,000		5	<0.05	<4	<0.05	<4	<0.05
Cadmium	mg/kg	1	mg/L	0.01	20	1	100	80	4	400		<0.4	<0.01	<0.4	<0.01	<0.4	<0.01
Chromium	mg/kg	2	mg/L	0.01	-	-	-	-	-	-		10	0.01	10	0.01	8	<0.01
Copper	mg/kg	5			-	-	-	-	-	-		30	NA	71	NA	29	NA
Lead	mg/kg	5	mg/L	0.03	100	5	1,500	400	20	6,000		72	<0.03	92	<0.03	61	0.04
Mercury	mg/kg	0.1	mg/L	0.0005	4	0.2	50	16	0.8	200		0.1	<0.0005	0.1	<0.0005	<0.1	<0.0005
Nickel	mg/kg	2	mg/L	0.02	40	2	1,050	160	8	4,200		9	<0.02	12	<0.02	7	<0.02
Zinc	mg/kg	5			-	-	-	-	-	-		86	NA	82	NA	78	NA
Asbestos																	
Sample mass tested	g	--			-	-	-					601.15	NA	581.11	NA	643.04	NA
Sample Description	-	--			-	-	-					Brown fine-grained soil & rocks	NA	Brown fine-grained soil & rocks	NA	Brown fine-grained soil & rocks	NA
Asbestos ID in soil	-	--			-	-	-					No asbestos detected at reporting limit of 0.1g/kg; Organic fibres detected	NA	No asbestos detected at reporting limit of 0.1g/kg; Organic fibres detected	NA	No asbestos detected at reporting limit of 0.1g/kg; Organic fibres detected	NA
Trace Analysis	-	--			-	-	-					No asbestos detected	NA	No asbestos detected	NA	No asbestos detected	NA
Total Asbestos g/kg	g/kg	<0.1			-	-	-					<0.1	NA	<0.1	NA	<0.1	NA
Asbestos ID in soil <0.1 g/kg	-	--			-	-	-					No visible asbestos detected	NA	No visible asbestos detected	NA	No visible asbestos detected	NA
ACM >7mm Estimation	g	--			-	-	-					–	NA	–	NA	–	NA
FA and AF Estimation	g	--			-	-	-					–	NA	–	NA	–	NA
ACM >7mm Estimation %(w/w)	%	<0.01			-	-	-					<0.01	NA	<0.01	NA	<0.01	NA
FA and AF Estimation %(w/w)	%	<0.001			-	-	-					<0.001	NA	<0.001	NA	<0.001	NA
Total Asb Est w/w	%	<0.001			-	-	-					NC	NA	NC	NA	NC	NA

NOTES
All concentrations are in mg/kg
"-" indicates that the criteria is not applicable for these analytes
< Value = Concentration less than laboratory EQL

Attachment 1: Photographs of Stockpiles and Excavation



Plate 1: View of excavated larger stockpile of materials located near excavation



Plate 2: View of smaller stockpile near excavation

Attachment 2: Final Analytical Laboratory Report

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CERTIFICATE OF ANALYSIS 240818

Client Details

Client	Consara Pty Ltd
Attention	Rebecca Organo
Address	PO Box 7360, Warringah Mall, NSW, 2100

Sample Details

Your Reference	**C151008, Bank St Pyrmont**
Number of Samples	3 Soil
Date samples received	14/04/2020
Date completed instructions received	14/04/2020

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Please refer to the last page of this report for any comments relating to the results.

Report Details

Date results requested by	15/04/2020
Date of Issue	15/04/2020

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Asbestos Approved By
Analysed by Asbestos Approved Identifier: Lucy Zhu
Authorised by Asbestos Approved Signatory: Lucy Zhu

Results Approved By
Hannah Nguyen, Senior Chemist
Josh Williams, Senior Chemist
Lucy Zhu, Asbestos Supervisor

Authorised By



Nancy Zhang, Laboratory Manager

vTRH(C6-C10)/BTEXN in Soil				
Our Reference		240818-1	240818-2	240818-3
Your Reference	UNITS	SP01-01	SP02-01	SP02-02
Date Sampled		14/04/2020	14/04/2020	14/04/2020
Type of sample		Soil	Soil	Soil
Date extracted	-	15/04/2020	15/04/2020	15/04/2020
Date analysed	-	15/04/2020	15/04/2020	15/04/2020
TRH C_6 - C_9	mg/kg	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1
naphthalene	mg/kg	<1	<1	<1
Total +ve Xylenes	mg/kg	<3	<3	<3
Surrogate aaa-Trifluorotoluene	%	87	82	87

svTRH (C10-C40) in Soil				
Our Reference		240818-1	240818-2	240818-3
Your Reference	UNITS	SP01-01	SP02-01	SP02-02
Date Sampled		14/04/2020	14/04/2020	14/04/2020
Type of sample		Soil	Soil	Soil
Date extracted	-	15/04/2020	15/04/2020	15/04/2020
Date analysed	-	15/04/2020	15/04/2020	15/04/2020
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	150
TRH C_{29} - C_{36}	mg/kg	130	120	220
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	170	140	300
TRH >C_{34} -C_{40}	mg/kg	140	130	200
Total +ve TRH (>C10-C40)	mg/kg	300	270	500
Surrogate o-Terphenyl	%	85	81	97

PAHs in Soil				
Our Reference		240818-1	240818-2	240818-3
Your Reference	UNITS	SP01-01	SP02-01	SP02-02
Date Sampled		14/04/2020	14/04/2020	14/04/2020
Type of sample		Soil	Soil	Soil
Date extracted	-	15/04/2020	15/04/2020	15/04/2020
Date analysed	-	15/04/2020	15/04/2020	15/04/2020
Naphthalene	mg/kg	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	0.2
Fluorene	mg/kg	<0.1	<0.1	0.2
Phenanthrene	mg/kg	0.3	1.1	5.9
Anthracene	mg/kg	0.1	0.2	1.4
Fluoranthene	mg/kg	1.6	1.9	14
Pyrene	mg/kg	1.4	1.6	11
Benzo(a)anthracene	mg/kg	0.9	0.8	4.6
Chrysene	mg/kg	0.9	0.7	3.7
Benzo(b,j+k)fluoranthene	mg/kg	2	1	5.8
Benzo(a)pyrene	mg/kg	1.1	0.72	3.2
Indeno(1,2,3-c,d)pyrene	mg/kg	1.1	0.6	2.4
Dibenzo(a,h)anthracene	mg/kg	0.2	0.1	0.4
Benzo(g,h,i)perylene	mg/kg	1.1	0.6	2.4
Total +ve PAH's	mg/kg	11	9.6	55
Benzo(a)pyrene TEQ calc (zero)	mg/kg	1.7	1.1	4.9
Benzo(a)pyrene TEQ calc(half)	mg/kg	1.7	1.1	4.9
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	1.7	1.1	4.9
Surrogate p-Terphenyl-d14	%	96	94	97

Organochlorine Pesticides in soil				
Our Reference	UNITS	240818-1	240818-2	240818-3
Your Reference		SP01-01	SP02-01	SP02-02
Date Sampled		14/04/2020	14/04/2020	14/04/2020
Type of sample		Soil	Soil	Soil
Date extracted	-	15/04/2020	15/04/2020	15/04/2020
Date analysed	-	15/04/2020	15/04/2020	15/04/2020
HCB	mg/kg	<0.1	<0.1	<0.1
alpha-BHC	mg/kg	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1	<0.1
Surrogate TCMX	%	82	80	82

PCBs in Soil				
Our Reference		240818-1	240818-2	240818-3
Your Reference	UNITS	SP01-01	SP02-01	SP02-02
Date Sampled		14/04/2020	14/04/2020	14/04/2020
Type of sample		Soil	Soil	Soil
Date extracted	-	15/04/2020	15/04/2020	15/04/2020
Date analysed	-	15/04/2020	15/04/2020	15/04/2020
Aroclor 1016	mg/kg	<0.1	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1	<0.1	<0.1
Surrogate TCMX	%	82	80	82

Acid Extractable metals in soil				
Our Reference	UNITS	240818-1	240818-2	240818-3
Your Reference		SP01-01	SP02-01	SP02-02
Date Sampled		14/04/2020	14/04/2020	14/04/2020
Type of sample		Soil	Soil	Soil
Date prepared	-	15/04/2020	15/04/2020	15/04/2020
Date analysed	-	15/04/2020	15/04/2020	15/04/2020
Arsenic	mg/kg	5	<4	<4
Cadmium	mg/kg	<0.4	<0.4	<0.4
Chromium	mg/kg	10	10	8
Copper	mg/kg	30	71	29
Lead	mg/kg	72	92	61
Mercury	mg/kg	0.1	0.1	<0.1
Nickel	mg/kg	9	12	7
Zinc	mg/kg	86	82	78

Moisture				
Our Reference		240818-1	240818-2	240818-3
Your Reference	UNITS	SP01-01	SP02-01	SP02-02
Date Sampled		14/04/2020	14/04/2020	14/04/2020
Type of sample		Soil	Soil	Soil
Date prepared	-	15/04/2020	15/04/2020	15/04/2020
Date analysed	-	15/04/2020	15/04/2020	15/04/2020
Moisture	%	9.0	9.4	6.8

PAHs in TCLP (USEPA 1311)				
Our Reference		240818-1	240818-2	240818-3
Your Reference	UNITS	SP01-01	SP02-01	SP02-02
Date Sampled		14/04/2020	14/04/2020	14/04/2020
Type of sample		Soil	Soil	Soil
Date extracted	-	14/04/2020	14/04/2020	14/04/2020
Date analysed	-	14/04/2020	14/04/2020	14/04/2020
Naphthalene in TCLP	mg/L	<0.001	<0.001	<0.001
Acenaphthylene in TCLP	mg/L	<0.001	<0.001	<0.001
Acenaphthene in TCLP	mg/L	<0.001	<0.001	<0.001
Fluorene in TCLP	mg/L	<0.001	<0.001	<0.001
Phenanthrene in TCLP	mg/L	<0.001	<0.001	<0.001
Anthracene in TCLP	mg/L	<0.001	<0.001	<0.001
Fluoranthene in TCLP	mg/L	<0.001	<0.001	<0.001
Pyrene in TCLP	mg/L	<0.001	<0.001	<0.001
Benzo(a)anthracene in TCLP	mg/L	<0.001	<0.001	<0.001
Chrysene in TCLP	mg/L	<0.001	<0.001	<0.001
Benzo(bjk)fluoranthene in TCLP	mg/L	<0.002	<0.002	<0.002
Benzo(a)pyrene in TCLP	mg/L	<0.001	<0.001	<0.001
Indeno(1,2,3-c,d)pyrene - TCLP	mg/L	<0.001	<0.001	<0.001
Dibenzo(a,h)anthracene in TCLP	mg/L	<0.001	<0.001	<0.001
Benzo(g,h,i)perylene in TCLP	mg/L	<0.001	<0.001	<0.001
Total +ve PAH's	mg/L	NIL (+)VE	NIL (+)VE	NIL (+)VE
Surrogate p-Terphenyl-d14	%	87	93	113

Metals in TCLP USEPA1311				
Our Reference		240818-1	240818-2	240818-3
Your Reference	UNITS	SP01-01	SP02-01	SP02-02
Date Sampled		14/04/2020	14/04/2020	14/04/2020
Type of sample		Soil	Soil	Soil
Date extracted	-	15/04/2020	15/04/2020	15/04/2020
Date analysed	-	15/04/2020	15/04/2020	15/04/2020
pH of soil for fluid# determ.	pH units	9.3	9.1	9.1
pH of soil TCLP (after HCl)	pH units	2.0	2.0	2.1
Extraction fluid used	-	1	1	1
pH of final Leachate	pH units	6.3	6.1	6.1
Arsenic in TCLP	mg/L	<0.05	<0.05	<0.05
Cadmium in TCLP	mg/L	<0.01	<0.01	<0.01
Chromium in TCLP	mg/L	0.01	0.01	<0.01
Lead in TCLP	mg/L	<0.03	<0.03	<0.03
Mercury in TCLP	mg/L	<0.0005	<0.0005	<0.0005
Nickel in TCLP	mg/L	<0.02	<0.02	<0.02

Asbestos ID - soils NEPM - ASB-001				
Our Reference	UNITS	240818-1	240818-2	240818-3
Your Reference		SP01-01	SP02-01	SP02-02
Date Sampled		14/04/2020	14/04/2020	14/04/2020
Type of sample		Soil	Soil	Soil
Date analysed	-	15/04/2020	15/04/2020	15/04/2020
Sample mass tested	g	601.15	581.11	643.04
Sample Description	-	Brown fine-grained soil & rocks	Brown fine-grained soil & rocks	Brown fine-grained soil & rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos[#1]	g/kg	<0.1	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	–	–	–
FA and AF Estimation*	g	–	–	–
ACM >7mm Estimation*	%(w/w)	<0.01	<0.01	<0.01
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	<0.001

Method ID	Methodology Summary
ASB-001	Asbestos ID - Qualitative identification of asbestos in bulk samples using Polarised Light Microscopy and Dispersion Staining Techniques including Synthetic Mineral Fibre and Organic Fibre as per Australian Standard 4964-2004.
ASB-001	Asbestos ID - Identification of asbestos in soil samples using Polarised Light Microscopy and Dispersion Staining Techniques. Minimum 500mL soil sample was analysed as recommended by "National Environment Protection (Assessment of site contamination) Measure, Schedule B1 and "The Guidelines from the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia - May 2009" with a reporting limit of 0.1g/kg (0.01% w/w) as per Australian Standard AS4964-2004. Results reported denoted with * are outside our scope of NATA accreditation. **NOTE** #1 Total Asbestos g/kg was analysed and reported as per Australian Standard AS4964 (This is the sum of ACM >7mm, <7mm and FA/AF) **NOTE** #2 The screening level of 0.001% w/w asbestos in soil for FA and AF only applies where the FA and AF are able to be quantified by gravimetric procedures. This screening level is not applicable to free fibres. Estimation = Estimated asbestos weight Results reported with "--" is equivalent to no visible asbestos identified using Polarised Light microscopy and Dispersion Staining Techniques.
EXTRACT.7	Toxicity Characteristic Leaching Procedure (TCLP) using Zero Headspace Extraction (zHE) using AS4439 and USEPA 1311.
Inorg-001	pH - Measured using pH meter and electrode in accordance with APHA latest edition, 4500-H+. Please note that the results for water analyses are indicative only, as analysis outside of the APHA storage times.
Inorg-004	Toxicity Characteristic Leaching Procedure (TCLP) using in house method INORG-004. Please note that the mass used may be scaled down from the default based on sample mass available.
Inorg-008	Moisture content determined by heating at 105+/-5 °C for a minimum of 12 hours.
Metals-020	Determination of various metals by ICP-AES.
Metals-020 ICP-AES	Determination of various metals by ICP-AES.
Metals-021	Determination of Mercury by Cold Vapour AAS.
Metals-021 CV-AAS	Determination of Mercury by Cold Vapour AAS.
Org-003	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.

Method ID	Methodology Summary
Org-003	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis. Note, the Total +ve TRH PQL is reflective of the lowest individual PQL and is therefore "Total +ve TRH" is simply a sum of the positive individual TRH fractions (>C10-C40).
Org-005	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC with dual ECD's.
Org-005	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC with dual ECD's. Note, the Total +ve reported DDD+DDE+DDT PQL is reflective of the lowest individual PQL and is therefore simply a sum of the positive individually report DDD+DDE+DDT.
Org-006	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD.
Org-006	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD. Note, the Total +ve PCBs PQL is reflective of the lowest individual PQL and is therefore" Total +ve PCBs" is simply a sum of the positive individual PCBs.
Org-012/017	Leachates are extracted with Dichloromethane and analysed by GC-MS and/or GC-MS/MS.
Org-012/017	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS and/or GC-MS/MS. Benzo(a)pyrene TEQ as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater - 2013. For soil results:- 1. 'EQ PQL'values are assuming all contributing PAHs reported as <PQL are actually at the PQL. This is the most conservative approach and can give false positive TEQs given that PAHs that contribute to the TEQ calculation may not be present. 2. 'EQ zero'values are assuming all contributing PAHs reported as <PQL are zero. This is the least conservative approach and is more susceptible to false negative TEQs when PAHs that contribute to the TEQ calculation are present but below PQL. 3. 'EQ half PQL'values are assuming all contributing PAHs reported as <PQL are half the stipulated PQL. Hence a mid-point between the most and least conservative approaches above. Note, the Total +ve PAHs PQL is reflective of the lowest individual PQL and is therefore "Total +ve PAHs" is simply a sum of the positive individual PAHs.
Org-014	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS.
Org-016	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.
Org-016	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater. Note, the Total +ve Xylene PQL is reflective of the lowest individual PQL and is therefore "Total +ve Xylenes" is simply a sum of the positive individual Xylenes.

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date extracted	-			15/04/2020	[NT]	[NT]	[NT]	[NT]	15/04/2020	[NT]
Date analysed	-			15/04/2020	[NT]	[NT]	[NT]	[NT]	15/04/2020	[NT]
TRH C_6 - C_9	mg/kg	25	Org-016	<25	[NT]	[NT]	[NT]	[NT]	78	[NT]
TRH C_6 - C_{10}	mg/kg	25	Org-016	<25	[NT]	[NT]	[NT]	[NT]	78	[NT]
Benzene	mg/kg	0.2	Org-016	<0.2	[NT]	[NT]	[NT]	[NT]	70	[NT]
Toluene	mg/kg	0.5	Org-016	<0.5	[NT]	[NT]	[NT]	[NT]	73	[NT]
Ethylbenzene	mg/kg	1	Org-016	<1	[NT]	[NT]	[NT]	[NT]	81	[NT]
m+p-xylene	mg/kg	2	Org-016	<2	[NT]	[NT]	[NT]	[NT]	82	[NT]
o-Xylene	mg/kg	1	Org-016	<1	[NT]	[NT]	[NT]	[NT]	82	[NT]
naphthalene	mg/kg	1	Org-014	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-016	94	[NT]	[NT]	[NT]	[NT]	93	[NT]

QUALITY CONTROL: svTRH (C10-C40) in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-3	[NT]
Date extracted	-			15/04/2020	[NT]	[NT]	[NT]	[NT]	15/04/2020	[NT]
Date analysed	-			15/04/2020	[NT]	[NT]	[NT]	[NT]	15/04/2020	[NT]
TRH C_{10} - C_{14}	mg/kg	50	Org-003	<50	[NT]	[NT]	[NT]	[NT]	92	[NT]
TRH C_{15} - C_{28}	mg/kg	100	Org-003	<100	[NT]	[NT]	[NT]	[NT]	85	[NT]
TRH C_{29} - C_{36}	mg/kg	100	Org-003	<100	[NT]	[NT]	[NT]	[NT]	108	[NT]
TRH >C_{10} -C_{16}	mg/kg	50	Org-003	<50	[NT]	[NT]	[NT]	[NT]	92	[NT]
TRH >C_{16} -C_{34}	mg/kg	100	Org-003	<100	[NT]	[NT]	[NT]	[NT]	85	[NT]
TRH >C_{34} -C_{40}	mg/kg	100	Org-003	<100	[NT]	[NT]	[NT]	[NT]	108	[NT]
Surrogate o-Terphenyl	%		Org-003	92	[NT]	[NT]	[NT]	[NT]	106	[NT]

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date extracted	-			15/04/2020	[NT]	[NT]	[NT]	[NT]	15/04/2020	[NT]
Date analysed	-			15/04/2020	[NT]	[NT]	[NT]	[NT]	15/04/2020	[NT]
Naphthalene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	84	[NT]
Acenaphthylene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Fluorene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	106	[NT]
Phenanthrene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	96	[NT]
Anthracene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	94	[NT]
Pyrene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	90	[NT]
Benzo(a)anthracene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	108	[NT]
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-012/017	<0.2	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-012/017	<0.05	[NT]	[NT]	[NT]	[NT]	84	[NT]
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-012/017	96	[NT]	[NT]	[NT]	[NT]	95	[NT]

QUALITY CONTROL: Organochlorine Pesticides in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date extracted	-			15/04/2020	[NT]	[NT]	[NT]	[NT]	15/04/2020	[NT]
Date analysed	-			15/04/2020	[NT]	[NT]	[NT]	[NT]	15/04/2020	[NT]
HCB	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
alpha-BHC	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	110	[NT]
gamma-BHC	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	100	[NT]
Heptachlor	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	102	[NT]
delta-BHC	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	116	[NT]
Heptachlor Epoxide	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	108	[NT]
gamma-Chlordane	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	108	[NT]
Dieldrin	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	128	[NT]
Endrin	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	112	[NT]
pp-DDD	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	110	[NT]
Endosulfan II	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Endrin Aldehyde	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	108	[NT]
Methoxychlor	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate TCMX	%		Org-005	83	[NT]	[NT]	[NT]	[NT]	79	[NT]

QUALITY CONTROL: PCBs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date extracted	-			15/04/2020	[NT]	[NT]	[NT]	[NT]	15/04/2020	[NT]
Date analysed	-			15/04/2020	[NT]	[NT]	[NT]	[NT]	15/04/2020	[NT]
Aroclor 1016	mg/kg	0.1	Org-006	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1221	mg/kg	0.1	Org-006	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1232	mg/kg	0.1	Org-006	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1242	mg/kg	0.1	Org-006	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1248	mg/kg	0.1	Org-006	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1254	mg/kg	0.1	Org-006	<0.1	[NT]	[NT]	[NT]	[NT]	120	[NT]
Aroclor 1260	mg/kg	0.1	Org-006	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate TCMX	%		Org-006	83	[NT]	[NT]	[NT]	[NT]	79	[NT]

QUALITY CONTROL: Acid Extractable metals in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			15/04/2020	[NT]	[NT]	[NT]	[NT]	15/04/2020	[NT]
Date analysed	-			15/04/2020	[NT]	[NT]	[NT]	[NT]	15/04/2020	[NT]
Arsenic	mg/kg	4	Metals-020	<4	[NT]	[NT]	[NT]	[NT]	106	[NT]
Cadmium	mg/kg	0.4	Metals-020	<0.4	[NT]	[NT]	[NT]	[NT]	103	[NT]
Chromium	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	111	[NT]
Copper	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	105	[NT]
Lead	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	117	[NT]
Mercury	mg/kg	0.1	Metals-021	<0.1	[NT]	[NT]	[NT]	[NT]	99	[NT]
Nickel	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	106	[NT]
Zinc	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	112	[NT]

QUALITY CONTROL: PAHs in TCLP (USEPA 1311)					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W5	[NT]
Date extracted	-			14/04/2020	[NT]	[NT]	[NT]	[NT]	14/04/2020	[NT]
Date analysed	-			14/04/2020	[NT]	[NT]	[NT]	[NT]	14/04/2020	[NT]
Naphthalene in TCLP	mg/L	0.001	Org-012/017	<0.001	[NT]	[NT]	[NT]	[NT]	118	[NT]
Acenaphthylene in TCLP	mg/L	0.001	Org-012/017	<0.001	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Acenaphthene in TCLP	mg/L	0.001	Org-012/017	<0.001	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Fluorene in TCLP	mg/L	0.001	Org-012/017	<0.001	[NT]	[NT]	[NT]	[NT]	102	[NT]
Phenanthrene in TCLP	mg/L	0.001	Org-012/017	<0.001	[NT]	[NT]	[NT]	[NT]	106	[NT]
Anthracene in TCLP	mg/L	0.001	Org-012/017	<0.001	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Fluoranthene in TCLP	mg/L	0.001	Org-012/017	<0.001	[NT]	[NT]	[NT]	[NT]	112	[NT]
Pyrene in TCLP	mg/L	0.001	Org-012/017	<0.001	[NT]	[NT]	[NT]	[NT]	104	[NT]
Benzo(a)anthracene in TCLP	mg/L	0.001	Org-012/017	<0.001	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Chrysene in TCLP	mg/L	0.001	Org-012/017	<0.001	[NT]	[NT]	[NT]	[NT]	120	[NT]
Benzo(bjk)fluoranthene in TCLP	mg/L	0.002	Org-012/017	<0.002	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Benzo(a)pyrene in TCLP	mg/L	0.001	Org-012/017	<0.001	[NT]	[NT]	[NT]	[NT]	102	[NT]
Indeno(1,2,3-c,d)pyrene - TCLP	mg/L	0.001	Org-012/017	<0.001	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Dibenzo(a,h)anthracene in TCLP	mg/L	0.001	Org-012/017	<0.001	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Benzo(g,h,i)perylene in TCLP	mg/L	0.001	Org-012/017	<0.001	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-012/017	89	[NT]	[NT]	[NT]	[NT]	89	[NT]

QUALITY CONTROL: Metals in TCLP USEPA1311					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	[NT]
Date extracted	-			15/04/2020	[NT]	[NT]	[NT]	[NT]	15/04/2020	[NT]
Date analysed	-			15/04/2020	[NT]	[NT]	[NT]	[NT]	15/04/2020	[NT]
Arsenic in TCLP	mg/L	0.05	Metals-020 ICP-AES	<0.05	[NT]	[NT]	[NT]	[NT]	103	[NT]
Cadmium in TCLP	mg/L	0.01	Metals-020 ICP-AES	<0.01	[NT]	[NT]	[NT]	[NT]	96	[NT]
Chromium in TCLP	mg/L	0.01	Metals-020 ICP-AES	<0.01	[NT]	[NT]	[NT]	[NT]	94	[NT]
Lead in TCLP	mg/L	0.03	Metals-020 ICP-AES	<0.03	[NT]	[NT]	[NT]	[NT]	94	[NT]
Mercury in TCLP	mg/L	0.0005	Metals-021 CV-AAS	<0.0005	[NT]	[NT]	[NT]	[NT]	96	[NT]
Nickel in TCLP	mg/L	0.02	Metals-020 ICP-AES	<0.02	[NT]	[NT]	[NT]	[NT]	97	[NT]

Result Definitions

NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.

The recommended maximums for analytes in urine are taken from “2018 TLVs and BEIs”, as published by ACGIH (where available). Limit provided for Nickel is a precautionary guideline as per Position Paper prepared by AIOH Exposure Standards Committee, 2016.

Guideline limits for Rinse Water Quality reported as per analytical requirements and specifications of AS 4187, Amdt 2 2019, Table 7.2

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

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

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

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

Report Comments

Asbestos-ID in soil: NEPM
This report is consistent with the reporting recommendations in the National Environment Protection (Assessment of Site Contamination) Measure, Schedule B1, May 2013. This is reported outside our scope of NATA accreditation.

CONSARA
contaminated sites

24HR TAT

Chain of Custody Record

Project No:	C151008
Project/Site:	BANK ST PYRMONT
Sampled By:	R ORGANO
Phone:	0404003394
Page	1 of 1
Number of Eskies:	1

Lab:	ENVIROLABS
Lab Quote No:	
Lab Batch No:	
Date Results Required:	
Sample Disposal After:	

LAB ID	SAMPLE ID	DATE	MATRIX	CONTAINER TYPE & PRESERVATIVE: Soil 0.1-0.2 L Glass jar, unpreserved	Soil - Plastic bag	Water 0.1-0.2 L Plastic, Filtered, HNO3	Water 0.5-1.0 L Amber glass, unpreserved	Water 40-50ml Glass, unpreserved	Water 0.25-1 L Plastic, unpreserved	Water 0.2-1.0L Plastic, sterile	ANALYSIS REQUIRED: 8 COMBO12	NEPM WATER 0.5 ASBESTOS	HOLD
1	SP01_01	14/4/2020	SOIL	1	1						X	X	
2	SP02_01	↓	↓	1	1						X	X	
3	SP02_02	↓	↓	1	1						X	X	
			TOTALS										

ENVIROLAB group
Envirolab Services
12 Ashley St
Chatswood NSW 2067
Ph: (02) 9910 6200

Job No: 240813
Date Received: 14/4/2020
Time Received: 7.20
Received By: R
Temp: Cool/Ambient
Cooling: Ice/Icepack
Security: Intact/Broken/None

Relinquished By:				Received By:			
NAME	R ORGANO	SIGNATURE	DATE 14/4/2020	NAME	PRay	SIGNATURE	DATE 14/4/2020

Custody Seals Intact	Y	N
Samples Received Chilled	Y	N
Method of Shipment		

NOTES:

CONSARA Pty Ltd ABN 27 161 027 881
Suite 2, Level 2, Unit 6 10 Rodborough Road, Frenchs Forest NSW 2100
PO Box 7360 Warringah Mall NSW 2100

web www.consara.com.au
email
email rebeccaorgano@consara.com.au

24HR TAT PLEASE

F5 Letter dated 13 May 2020

Thomas Caruana
Project Manager
Christie Civil
Unit 4, 7-29 Bridge Road
Stanmore NSW

13 May 2020

Dear Thomas

RE: Waste Classification – Stockpiled Excavated Materials, Northern Area of 5-11 Bank Street Pyrmont NSW

1. INTRODUCTION

CONSARA Pty Ltd (CONSARA) was engaged by Christie Civil to undertake waste classification works of surface and sub-surface soils that had been excavated and stockpiled and will require off-site disposal as part of redevelopment works being conducted on a property located within the northern part of 5-11 Bank Street 5 Bank Street, Pyrmont NSW (the Site).

The Site is currently being redeveloped by Roads and Maritime Services (RMS) to enable the relocation of a RMS licenced commercial operator from a property on Pyrmont Bridge Road, Glebe NSW to the Site to enable the development of the New Sydney Fish Market. The redevelopment plans for the Site comprises the construction of temporary facilities, open space areas and the location of wharf/marina facility. The location and layout of the Site is shown on the Figure 1.

The sampling for these classification works was conducted on the 7 May 2020 by Ms Rebecca Organo who is a Principal Environmental Scientist and is a Certified Practitioner – Site Contamination Specialist. This waste classification has been undertaken in accordance with the relevant requirements of the following:

- NSW EPA *Waste Classification Guidelines* (2014); and
- *Protection of the Environment Operations* (POEO) Act 1997.

2. SCOPE OF WORK

The scope of work undertaken for this classification was as follows:

- Completion of inspection and sampling of the materials excavated and present in stockpiles on the Site; and
- Assessment of the results of the inspection and sampling works and preparation of this letter report.

3. RESULTS

The results of the inspections identified the following:

- Excavation works had been undertaken along the northern part of the Site for the installation of sub-surface services prior to completion of finished pavement;
- The excavation works had been completed to approximately depths of 0.3 metre to 0.5 metres below the existing ground surface level;
- The excavated materials had been placed into a stockpile on the northern area of the Site;
- The excavated materials primarily were comprised of brown to grey coarse sandy soils that contained some small sandstone, gravels and other bituminous gravels. The stockpiled materials were not observed to have staining, odours, significant demolition waste or asbestos containing materials in the stockpiled materials or in the locations where samples were collected. No evidence of potential acid sulphate soils was present. It was noted that the stockpiled materials were consistent in composition and that there was little variation in the condition of materials between sampling locations.

Photographs of the excavation and stockpiled excavated materials are provided on Attachment 1. It is estimated that approximately 80 m^3 of the stockpiled excavated materials will require off-site disposal.

Samples from the stockpiled materials were collected as discrete samples directly from the stockpile of the material (either from the near-surface or from stockpiles at a minimum of 10 cm below the surface) by hand protected by a disposable nitrile glove. New nitrile gloves were used for the collection of each sample. Samples for chemical analysis were collected as discrete samples into laboratory-supplied 150 mL glass jars with Teflon-lined lids, which were carefully filled to minimise the amount of headspace in the jar. Samples for asbestos comprised the collection of a 0.5 L and 10L sample from each sampling location. The 10 L sample was screened manually on-site through a < 7 mm sieve. No asbestos (either bonded or friable) or potential asbestos (either bonded or friable) was identified through the screening process. The 0.5L samples were collected into a sealed plastic bag.

Sample identification for the samples collected from the excavated stockpiled materials to be disposed off-site were SP01_01, SP01_02 and SP01_03. The stockpile location and sampling locations are shown on Figure 2.

Samples were kept chilled in an ice-filled esky prior to dispatch and during transport to the NATA registered laboratory under chain-of-custody procedures. Three samples were submitted for analysis of metals (Arsenic, Cadmium, Copper, Chromium, Nickel, Lead, Zinc and Mercury), TPH, BTEX, PAHs, OCPs, OPPs, PCBs and TCLPs for metals and TCLPs for PAHs and three 0.5L samples were submitted for asbestos analysis. The analytical laboratory report for the samples collected and analysed for this waste classification is provided as Attachment 2 to this letter.

3.1. Waste Classification Assessment

The analytical results presented in Table 1 and Attachment 2 to this letter have reported concentrations that require the application of the SCC1 and TCLP1 limits set out in Table 2 of the NSW EPA (2014) *Waste Classification Guidelines.* The results of the application of these criteria has identified that the concentrations present result in a classification as ***General Solid Waste (non-putrescible).***

The results of the inspection and sampling works undertaken by CONSARA have identified that stockpiled excavated soil materials on the Site are classified for the purposes of off-site disposal as ***General Solid Waste (non-putrescible).***

4. CONCLUSION

The excavation works on the Site as part of the redevelopment works have resulted in the generation of excess materials that require disposal off-site. The results of this waste classification works have identified that these excavated stockpiled soil materials are required to be transported and transferred to an appropriate acceptor as soils classified as ***General Solid Waste (non-putrescible)*** in accordance with the requirements of the NSW EPA (2014) *Waste Classification Guidelines* and the relevant requirements of POEO Act and its associated regulations.

This waste classification has required chemical assessment and is not a pre-classified waste. This waste classification has required the application of the TCLP1 and SCC1 concentrations set out in Table 2 of the NSW EPA (2014). As such the soils MUST only be disposed to a waste facility licenced to accepted soils classified as *General Solid Waste (non-putrescible)*. These soils are NOT classified as soils that meet the CT1 thresholds or lower for General Solid Waste listed in Table 1 of the NSW EPA (2014) *Waste Classification Guidelines* or equivalent.

It is noted that any materials that are excavated and removed from the Site are required to be transported and transferred to an appropriate acceptor of the materials in accordance with its waste classification and the relevant requirements of POEO Act and its associated regulations. Section 143 of the POEO Act states that if the waste is transported to a place that cannot lawfully be used as a waste facility for that waste, then the transporter and owner of the waste are each guilty of an offence. The transporter and owner of the waste have a duty to ensure that the waste is disposed in an appropriate manner.

If you have any questions or would like to further discuss any aspect of the information presented, please contact the undersigned.

Regards,

Rebecca Organo
Principal Environmental Scientist, CEnvP SC

Encl.
Figure 1 – Site Location Plan
Figure 2 -Sampling Locations
Table 1: Soil Analytical Results Table
Attachment 1: Photographs of the stockpile at time of sampling
Attachment 2: Final Analytical Laboratory Reports

Figures



Figure 1: Site Location Plan
Project: Waste Classification 5-11 Bank Street Pyrmont NSW

—— Approximate Site Boundary

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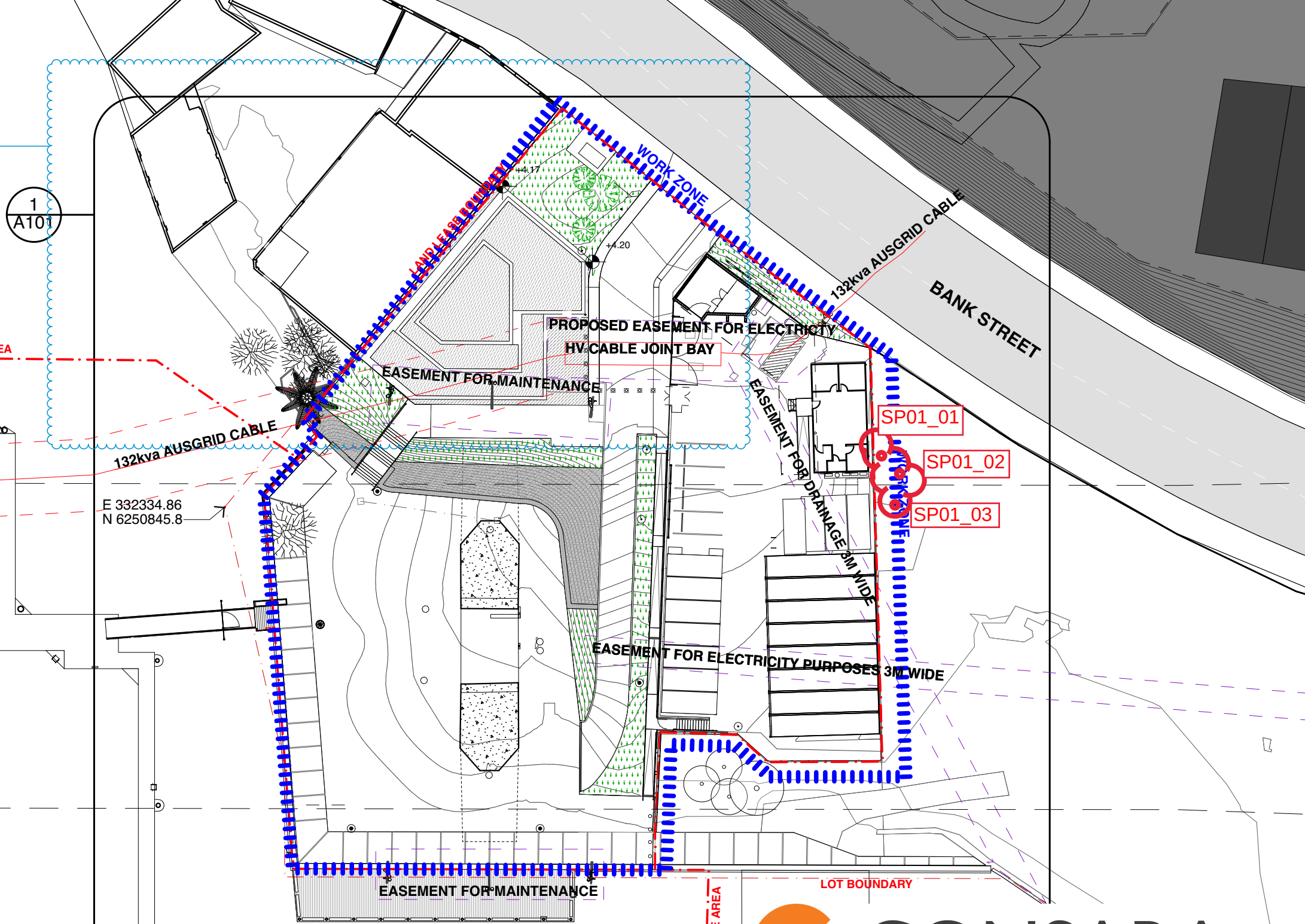


Figure 2 - Stockpile Sampling Location Plan

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Table 1 - Soil Analytical Results - Waste Classification Stockpiled Materials

Sample ID											SP01-01		SP01-02		SP01-03	
Date Sampled											7/05/2020		7/05/2020		7/05/2020	
Compounds	Unit for Totals	EQL	Unit for TCLP	EQL	General Solid Waste (NSW EPA, 2014) Contaminant Threshold Without Leaching (TCLP) CT1 (mg/kg)	General Solid Waste (NSW EPA, 2014) Leachable Concentration TCLP1 (mg/L)	General Solid Waste (NSW EPA, 2014) Specific Contaminant Concentration SCC1 (mg/kg)	Restricted Solid Waste Contaminant Threshold Without Leaching (TCLP) CT2 (mg/kg)	Restricted Solid Waste Leachable Concentration TCLP2 (mg/L)	Restricted Solid Waste Specific Contaminant Concentration SCC2 (mg/kg)	Totals (mg/kg)	TCLP (mg/L)	Totals (mg/kg)	TCLP (mg/L)	Totals (mg/kg)	TCLP (mg/L)
TRHs																
C6 - C9 Fraction	mg/kg	25			N/A	N/A	650	N/A	N/A	2,600	<25	NA	<25	NA	<25	NA
C10 - C14 Fraction	mg/kg	50			-	-		-	-	-	<50	NA	<50	NA	<50	NA
C15 - C28 Fraction	mg/kg	100			-	-	-	-	-	-	100	NA	<100	NA	<100	NA
C29 - C36 Fraction	mg/kg	100			-	-	-				<100	NA	<100	NA	<100	NA
C10 - C36 Fraction (sum)	mg/kg	-			N/A	N/A	10,000	N/A	N/A	40,000	NC	NA	NC	NA	NC	NA
C6 - C10 Fraction	mg/kg	25			-	-	-	-	-	-	<25	NA	<25	NA	<25	NA
C6 - C10 Fraction minus BTEX (F1)	mg/kg	25			-	-	-	-	-	-	<25	NA	<25	NA	<25	NA
>C10 - C16 Fraction	mg/kg	50			-	-	-	-	-	-	<50	NA	<50	NA	<50	NA
>C16 - C34 Fraction	mg/kg	100			-	-	-	-	-	-	180	NA	<100	NA	<100	NA
>C34 - C40 Fraction	mg/kg	100			-	-	-	-	-	-	<100	NA	<100	NA	<100	NA
>C10 - C40 Fraction (sum)	mg/kg	50			-	-	-	-	-	-	180	NA	<50	NA	<50	NA
>C10 - C16 Fraction minus Naphthalene (F2)	mg/kg	50			-	-	-	-	-	-	<50	NA	<50	NA	<50	NA
BTEX																
Benzene	mg/kg	0.2			10	0.5	18	40	2	72	<0.5	NA	<0.5	NA	<0.5	NA
Ethylbenzene	mg/kg	1			600	30	1,080	2400	120	4,320	<1	NA	<1	NA	<1	NA
Toluene	mg/kg	0.5			288	-	-	1,152	-	-	<0.5	NA	<0.5	NA	<0.5	NA
Xylene (m & p)	mg/kg	2			-	-	-	-	-	-	<2	NA	<2	NA	<2	NA
Xylene (o)	mg/kg	1			-	-	-	-	-	-	<1	NA	<1	NA	<1	NA
Xylene Total	mg/kg	3			1,000	50	1800	4,000	200	7200	<3	NA	<3	NA	<3	NA
PAHs																
Naphthalene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-	0.1	<0.001	<0.1	<0.001	<0.1	<0.001
Acenaphthylene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-	<0.1	<0.001	<0.1	<0.001	<0.1	<0.001
Acenaphthene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-	<0.1	<0.001	<0.1	<0.001	<0.1	<0.001
Fluorene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-	<0.1	<0.001	<0.1	<0.001	<0.1	<0.001
Phenanthrene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-	0.2	<0.001	0.2	<0.001	0.9	<0.001
Anthracene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-	<0.1	<0.001	<0.1	<0.001	0.2	<0.001
Fluoranthene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-	0.7	<0.001	0.8	<0.001	1.7	<0.001
Pyrene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-	0.8	<0.001	0.8	<0.001	1.5	<0.001
Benzo(a)anthracene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-	0.5	<0.001	0.5	<0.001	0.7	<0.001
Chrysene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-	0.5	<0.001	0.5	<0.001	0.7	<0.001
Benzo(b,j+k)fluoranthene	mg/kg	0.2	mg/L	0.002	-	-	-	-	-	-	0.9	<0.002	0.9	<0.002	1	<0.002
Benzo(a)pyrene	mg/kg	0.05	mg/L	0.001	0.8	0.04	10	3	0.16	23	0.64	<0.001	0.59	<0.001	0.67	<0.001
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-	0.4	<0.001	0.4	<0.001	0.4	<0.001
Dibenzo(a,h)anthracene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-	0.1	<0.001	0.1	<0.001	0.1	<0.001
Benzo(g,h,i)perylene	mg/kg	0.1	mg/L	0.001	-	-	-	-	-	-	0.5	<0.001	0.9	<0.001	0.6	<0.001
Total +vePAHs	mg/kg	0.05	mg/L		N/A	N/A	200	-	-	800	5.5	NIL (+)VE	5.7	NIL (+)VE	8.5	NIL (+)VE
Benzo(a)pyrene TEQ calc (zero)	mg/kg	0.5			-	-	-	-	-	-	1	NA	0.9	NA	1	NA
Benzo(a)pyrene TEQ calc(half)	mg/kg	0.5			-	-	-	-	-	-	1	NA	0.9	NA	1	NA
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	0.5			-	-	-	-	-	-	1	NA	0.9	NA	1	NA
OCPs																
alpha-BHC	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
HCB	mg/kg	0.1			-	-	-				<0.1	NA	<0.1	NA	<0.1	NA
beta-BHC	mg/kg	0.1			-	-	-				<0.1	NA	<0.1	NA	<0.1	NA
gamma-BHC	mg/kg	0.1			-	-	-				<0.1	NA	<0.1	NA	<0.1	NA
Heptachlor	mg/kg	0.1			-	-	-				<0.1	NA	<0.1	NA	<0.1	NA
delta-BHC	mg/kg	0.1			-	-	-				<0.1	NA	<0.1	NA	<0.1	NA
Aldrin	mg/kg	0.1			-	-	-				<0.1	NA	<0.1	NA	<0.1	NA
Heptachlor Epoxide	mg/kg	0.1			-	-	-				<0.1	NA	<0.1	NA	<0.1	NA
gamma-Chlordane	mg/kg	0.1			-	-	-				<0.1	NA	<0.1	NA	<0.1	NA
alpha-chlordane	mg/kg	0.1			-	-	-				<0.1	NA	<0.1	NA	<0.1	NA
Endosulfan I	mg/kg	0.1			-	-	-				<0.1	NA	<0.1	NA	<0.1	NA
pp-DDE	mg/kg	0.1			-	-	-				<0.1	NA	<0.1	NA	<0.1	NA
Dieldrin	mg/kg	0.1			-	-	-				<0.1	NA	<0.1	NA	<0.1	NA
Endrin	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
Endosulfan II	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
pp-DDD	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
Endrin Aldehyde	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
pp-DDT	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
Endosulfan Sulphate	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
Methoxychlor	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
Total +ve DDT+DDD+DDE	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
OPPs																
Dichlorvos	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
Dimethoate	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
Diazinon	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
Chlorpyriphos-methyl	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
Ronnel	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
Fenitrothion	mg/kg	0.1									<0.1	NA	<0.1	NA	<0.1	NA
Malathion	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
Chlorpyriphos	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
Parathion	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
Bromophos-ethyl	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
Ethion	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
Azinphos-methyl (Guthion)	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
Polychlorinated Biphenyls																
Aroclor 1016	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
Aroclor 1221	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
Aroclor 1232	mg/kg	0.1			-	-	-				<0.1	NA	<0.1	NA	<0.1	NA
Aroclor 1242	mg/kg	0.1			-	-	-				<0.1	NA	<0.1	NA	<0.1	NA
Aroclor 1248	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
Aroclor 1254	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
Aroclor 1260	mg/kg	0.1			-	-	-	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
Total +ve PCBs (1016-1260)	mg/kg	0.1			<50	-	<50	-	-	-	<0.1	NA	<0.1	NA	<0.1	NA
Metals																
Arsenic	mg/kg	5	mg/L	0.05	100	5	500	400	20	2,000	5	<0.05	6	<0.05	6	<0.05
Cadmium	mg/kg	1	mg/L	0.01	20	1	100	80	4	400	<0.4	<0.01	<0.4	<0.01	<0.4	<0.01
Chromium	mg/kg	2	mg/L	0.01	-	-	-	-	-	-	8	<0.01	14	<0.01	7	<0.01
Copper	mg/kg	5			-	-	-	-	-	-	29	NA	33	NA	32	NA
Lead	mg/kg	5	mg/L	0.03	100	5	1,500	400	20	6,000	59	<0.03	53	<0.03	65	<0.03
Mercury	mg/kg	0.1	mg/L	0.0005	4	0.2	50	16	0.8	200	<0.1	<0.0005	<0.1	<0.0005	<0.1	<0.0005
Nickel	mg/kg	2	mg/L	0.02	40	2	1,050	160	8	4,200	7	<0.02	8	<0.02	7	<0.02
Zinc	mg/kg	5			-	-	-	-	-	-	110	NA	57	NA	68	NA
Asbestos																
Sample mass tested	g	--			-	-	-				647.1	NA	590.36	NA	541.46	NA
Sample Description	-	--			-	-	-				Brown coarse-grained soil & rocks	NA	Brown coarse-grained soil & rocks	NA	Brown coarse-grained soil & rocks	NA
Asbestos ID in soil	-	--			-	-	-				No asbestos detected at reporting limit of 0.1g/kg; Organic fibres detected	NA	No asbestos detected at reporting limit of 0.1g/kg; Organic fibres detected	NA	No asbestos detected at reporting limit of 0.1g/kg; Organic fibres detected	NA
Trace Analysis	-	--			-	-	-				No asbestos detected	NA	No asbestos detected	NA	No asbestos detected	NA
Total Asbestos g/kg	g/kg	<0.1			-	-	-				<0.1	NA	<0.1	NA	<0.1	NA
Asbestos ID in soil <0.1 g/kg	-	--			-	-	-				No visible asbestos detected	NA	No visible asbestos detected	NA	No visible asbestos detected	NA
ACM >7mm Estimation	g	--			-	-	-				--	NA	--	NA	--	NA
FA and AF Estimation	g	--			-	-	-				--	NA	--	NA	--	NA
ACM >7mm Estimation %(w/w)	%	<0.01			-	-	-				<0.01	NA	<0.01	NA	<0.01	NA
FA and AF Estimation %(w/w)	%	<0.001			-	-	-				<0.001	NA	<0.001	NA	<0.001	NA
Total Asb Est w/w	%	<0.001			-	-	-				NC	NA	NC	NA	NC	NA

NOTES
All concentrations are in mg/kg
"-" indicates that the criteria is not applicable for these analytes
< Value = Concentration less than laboratory EQL

Attachment 1: Photographs of Stockpiles and Excavation



Plate 1: View of stockpile



Plate 2: View of stockpile

Attachment 2: Final Analytical Laboratory Report

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CERTIFICATE OF ANALYSIS 242556

Client Details

Client	Consara Pty Ltd
Attention	Rebecca Organo
Address	PO Box 7360, Warringah Mall, NSW, 2100

Sample Details

Your Reference	**C151002, Bank St Pyrmont**
Number of Samples	3 Soil
Date samples received	08/05/2020
Date completed instructions received	08/05/2020

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Please refer to the last page of this report for any comments relating to the results.

Report Details

Date results requested by	12/05/2020
Date of Issue	12/05/2020

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Nancy Zhang, Laboratory Manager

vTRH(C6-C10)/BTEXN in Soil				
Our Reference		242556-1	242556-2	242556-3
Your Reference	UNITS	SP01-01	SP01-02	SP01-03
Date Sampled		07/05/2020	07/05/2020	07/05/2020
Type of sample		Soil	Soil	Soil
Date extracted	-	11/05/2020	11/05/2020	11/05/2020
Date analysed	-	12/05/2020	12/05/2020	12/05/2020
TRH C_6 - C_9	mg/kg	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1
naphthalene	mg/kg	<1	<1	<1
Total +ve Xylenes	mg/kg	<3	<3	<3
Surrogate aaa-Trifluorotoluene	%	119	100	114

svTRH (C10-C40) in Soil				
Our Reference		242556-1	242556-2	242556-3
Your Reference	UNITS	SP01-01	SP01-02	SP01-03
Date Sampled		07/05/2020	07/05/2020	07/05/2020
Type of sample		Soil	Soil	Soil
Date extracted	-	11/05/2020	11/05/2020	11/05/2020
Date analysed	-	12/05/2020	12/05/2020	12/05/2020
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	180	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	180	<50	<50
Surrogate o-Terphenyl	%	90	96	86

PAHs in Soil				
Our Reference		242556-1	242556-2	242556-3
Your Reference	UNITS	SP01-01	SP01-02	SP01-03
Date Sampled		07/05/2020	07/05/2020	07/05/2020
Type of sample		Soil	Soil	Soil
Date extracted	-	11/05/2020	11/05/2020	11/05/2020
Date analysed	-	12/05/2020	12/05/2020	12/05/2020
Naphthalene	mg/kg	0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.2	0.2	0.9
Anthracene	mg/kg	<0.1	<0.1	0.2
Fluoranthene	mg/kg	0.7	0.8	1.7
Pyrene	mg/kg	0.8	0.8	1.5
Benzo(a)anthracene	mg/kg	0.5	0.5	0.7
Chrysene	mg/kg	0.5	0.5	0.7
Benzo(b,j+k)fluoranthene	mg/kg	0.9	0.9	1
Benzo(a)pyrene	mg/kg	0.64	0.59	0.67
Indeno(1,2,3-c,d)pyrene	mg/kg	0.4	0.4	0.4
Dibenzo(a,h)anthracene	mg/kg	0.1	0.1	0.1
Benzo(g,h,i)perylene	mg/kg	0.5	0.9	0.6
Total +ve PAH's	mg/kg	5.5	5.7	8.5
Benzo(a)pyrene TEQ calc (zero)	mg/kg	1	0.9	1.0
Benzo(a)pyrene TEQ calc(half)	mg/kg	1	0.9	1.0
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	1	0.9	1.0
Surrogate p-Terphenyl-d14	%	92	90	92

Organochlorine Pesticides in soil				
Our Reference	UNITS	242556-1	242556-2	242556-3
Your Reference		SP01-01	SP01-02	SP01-03
Date Sampled		07/05/2020	07/05/2020	07/05/2020
Type of sample		Soil	Soil	Soil
Date extracted	-	11/05/2020	11/05/2020	11/05/2020
Date analysed	-	12/05/2020	12/05/2020	12/05/2020
alpha-BHC	mg/kg	<0.1	<0.1	<0.1
HCB	mg/kg	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1	<0.1
Surrogate TCMX	%	100	95	100

Organophosphorus Pesticides in Soil				
Our Reference		242556-1	242556-2	242556-3
Your Reference	UNITS	SP01-01	SP01-02	SP01-03
Date Sampled		07/05/2020	07/05/2020	07/05/2020
Type of sample		Soil	Soil	Soil
Date extracted	-	11/05/2020	11/05/2020	11/05/2020
Date analysed	-	12/05/2020	12/05/2020	12/05/2020
Dichlorvos	mg/kg	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1
Surrogate TCMX	%	100	95	100

PCBs in Soil				
Our Reference		242556-1	242556-2	242556-3
Your Reference	UNITS	SP01-01	SP01-02	SP01-03
Date Sampled		07/05/2020	07/05/2020	07/05/2020
Type of sample		Soil	Soil	Soil
Date extracted	-	11/05/2020	11/05/2020	11/05/2020
Date analysed	-	12/05/2020	12/05/2020	12/05/2020
Aroclor 1016	mg/kg	<0.1	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1	<0.1	<0.1
Surrogate TCMX	%	100	95	100

Acid Extractable metals in soil					
Our Reference		242556-1	242556-2	242556-3	242556-4
Your Reference	UNITS	SP01-01	SP01-02	SP01-03	SP01-01 - [TRIPLICATE]
Date Sampled		07/05/2020	07/05/2020	07/05/2020	07/05/2020
Type of sample		Soil	Soil	Soil	Soil
Date prepared	-	12/05/2020	12/05/2020	12/05/2020	12/05/2020
Date analysed	-	12/05/2020	12/05/2020	12/05/2020	12/05/2020
Arsenic	mg/kg	5	6	6	6
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	8	14	7	9
Copper	mg/kg	29	33	32	37
Lead	mg/kg	59	53	65	70
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	7	8	7	7
Zinc	mg/kg	110	57	68	86

Moisture				
Our Reference		242556-1	242556-2	242556-3
Your Reference	UNITS	SP01-01	SP01-02	SP01-03
Date Sampled		07/05/2020	07/05/2020	07/05/2020
Type of sample		Soil	Soil	Soil
Date prepared	-	11/05/2020	11/05/2020	11/05/2020
Date analysed	-	12/05/2020	12/05/2020	12/05/2020
Moisture	%	5.3	9.2	7.1

PAHs in TCLP (USEPA 1311)				
Our Reference		242556-1	242556-2	242556-3
Your Reference	UNITS	SP01-01	SP01-02	SP01-03
Date Sampled		07/05/2020	07/05/2020	07/05/2020
Type of sample		Soil	Soil	Soil
Date extracted	-	12/05/2020	12/05/2020	12/05/2020
Date analysed	-	12/05/2020	12/05/2020	12/05/2020
Naphthalene in TCLP	mg/L	<0.001	<0.001	<0.001
Acenaphthylene in TCLP	mg/L	<0.001	<0.001	<0.001
Acenaphthene in TCLP	mg/L	<0.001	<0.001	<0.001
Fluorene in TCLP	mg/L	<0.001	<0.001	<0.001
Phenanthrene in TCLP	mg/L	<0.001	<0.001	<0.001
Anthracene in TCLP	mg/L	<0.001	<0.001	<0.001
Fluoranthene in TCLP	mg/L	<0.001	<0.001	<0.001
Pyrene in TCLP	mg/L	<0.001	<0.001	<0.001
Benzo(a)anthracene in TCLP	mg/L	<0.001	<0.001	<0.001
Chrysene in TCLP	mg/L	<0.001	<0.001	<0.001
Benzo(bjk)fluoranthene in TCLP	mg/L	<0.002	<0.002	<0.002
Benzo(a)pyrene in TCLP	mg/L	<0.001	<0.001	<0.001
Indeno(1,2,3-c,d)pyrene - TCLP	mg/L	<0.001	<0.001	<0.001
Dibenzo(a,h)anthracene in TCLP	mg/L	<0.001	<0.001	<0.001
Benzo(g,h,i)perylene in TCLP	mg/L	<0.001	<0.001	<0.001
Total +ve PAH's	mg/L	NIL (+)VE	NIL (+)VE	NIL (+)VE
Surrogate p-Terphenyl-d14	%	102	119	108

Metals in TCLP USEPA1311				
Our Reference		242556-1	242556-2	242556-3
Your Reference	UNITS	SP01-01	SP01-02	SP01-03
Date Sampled		07/05/2020	07/05/2020	07/05/2020
Type of sample		Soil	Soil	Soil
Date extracted	-	12/05/2020	12/05/2020	12/05/2020
Date analysed	-	12/05/2020	12/05/2020	12/05/2020
pH of soil for fluid# determ.	pH units	9.7	9.9	9.9
pH of soil TCLP (after HCl)	pH units	2.0	2.3	2.6
Extraction fluid used	-	1	1	1
pH of final Leachate	pH units	6.3	6.3	6.2
Arsenic in TCLP	mg/L	<0.05	<0.05	<0.05
Cadmium in TCLP	mg/L	<0.01	<0.01	<0.01
Chromium in TCLP	mg/L	<0.01	<0.01	<0.01
Lead in TCLP	mg/L	<0.03	<0.03	<0.03
Mercury in TCLP	mg/L	<0.0005	<0.0005	<0.0005
Nickel in TCLP	mg/L	<0.02	<0.02	<0.02

Asbestos ID - soils NEPM - ASB-001				
Our Reference	UNITS	242556-1	242556-2	242556-3
Your Reference		SP01-01	SP01-02	SP01-03
Date Sampled		07/05/2020	07/05/2020	07/05/2020
Type of sample		Soil	Soil	Soil
Date analysed	-	12/05/2020	12/05/2020	12/05/2020
Sample mass tested	g	647.1	590.36	541.46
Sample Description	-	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos[#1]	g/kg	<0.1	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	–	–	–
FA and AF Estimation*	g	–	–	–
ACM >7mm Estimation*	%(w/w)	<0.01	<0.01	<0.01
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	<0.001

Method ID	Methodology Summary
ASB-001	Asbestos ID - Qualitative identification of asbestos in bulk samples using Polarised Light Microscopy and Dispersion Staining Techniques including Synthetic Mineral Fibre and Organic Fibre as per Australian Standard 4964-2004.
ASB-001	Asbestos ID - Identification of asbestos in soil samples using Polarised Light Microscopy and Dispersion Staining Techniques. Minimum 500mL soil sample was analysed as recommended by "National Environment Protection (Assessment of site contamination) Measure, Schedule B1 and "The Guidelines from the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia - May 2009" with a reporting limit of 0.1g/kg (0.01% w/w) as per Australian Standard AS4964-2004. Results reported denoted with * are outside our scope of NATA accreditation. **NOTE** #1 Total Asbestos g/kg was analysed and reported as per Australian Standard AS4964 (This is the sum of ACM >7mm, <7mm and FA/AF) **NOTE** #2 The screening level of 0.001% w/w asbestos in soil for FA and AF only applies where the FA and AF are able to be quantified by gravimetric procedures. This screening level is not applicable to free fibres. Estimation = Estimated asbestos weight Results reported with "--" is equivalent to no visible asbestos identified using Polarised Light microscopy and Dispersion Staining Techniques.
EXTRACT.7	Toxicity Characteristic Leaching Procedure (TCLP) using Zero Headspace Extraction (zHE) using AS4439 and USEPA 1311.
Inorg-001	pH - Measured using pH meter and electrode in accordance with APHA latest edition, 4500-H+. Please note that the results for water analyses are indicative only, as analysis outside of the APHA storage times.
Inorg-004	Toxicity Characteristic Leaching Procedure (TCLP) using in house method INORG-004. Please note that the mass used may be scaled down from the default based on sample mass available.
Inorg-008	Moisture content determined by heating at 105+/-5 °C for a minimum of 12 hours.
Metals-020	Determination of various metals by ICP-AES.
Metals-020 ICP-AES	Determination of various metals by ICP-AES.
Metals-021	Determination of Mercury by Cold Vapour AAS.
Metals-021 CV-AAS	Determination of Mercury by Cold Vapour AAS.
Org-020	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.

Method ID	Methodology Summary
Org-020	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis. Note, the Total +ve TRH PQL is reflective of the lowest individual PQL and is therefore "Total +ve TRH" is simply a sum of the positive individual TRH fractions (>C10-C40).
Org-021	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD.
Org-021	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD. Note, the Total +ve PCBs PQL is reflective of the lowest individual PQL and is therefore" Total +ve PCBs" is simply a sum of the positive individual PCBs.
Org-022	Determination of VOCs sampled onto coconut shell charcoal sorbent tubes, that can be desorbed using carbon disulphide, and analysed by GC-MS.
Org-022/025	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS/GC-MSMS.
Org-022/025	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-MS/GC-MSMS. Note, the Total +ve reported DDD+DDE+DDT PQL is reflective of the lowest individual PQL and is therefore simply a sum of the positive individually report DDD+DDE+DDT.
Org-022/025	Leachates are extracted with Dichloromethane and analysed by GC-MS/GC-MSMS.
Org-022/025	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS and/or GC-MS/MS. Benzo(a)pyrene TEQ as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater - 2013. For soil results:- 1. 'EQ PQL'values are assuming all contributing PAHs reported as <PQL are actually at the PQL. This is the most conservative approach and can give false positive TEQs given that PAHs that contribute to the TEQ calculation may not be present. 2. 'EQ zero'values are assuming all contributing PAHs reported as <PQL are zero. This is the least conservative approach and is more susceptible to false negative TEQs when PAHs that contribute to the TEQ calculation are present but below PQL. 3. 'EQ half PQL'values are assuming all contributing PAHs reported as <PQL are half the stipulated PQL. Hence a mid-point between the most and least conservative approaches above. Note, the Total +ve PAHs PQL is reflective of the lowest individual PQL and is therefore "Total +ve PAHs" is simply a sum of the positive individual PAHs.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater. Note, the Total +ve Xylene PQL is reflective of the lowest individual PQL and is therefore "Total +ve Xylenes" is simply a sum of the positive individual Xylenes.

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-6	242556-2
Date extracted	-			11/05/2020	1	11/05/2020	11/05/2020		11/05/2020	11/05/2020
Date analysed	-			12/05/2020	1	12/05/2020	12/05/2020		12/05/2020	12/05/2020
TRH C_6 - C_9	mg/kg	25	Org-023	<25	1	<25	<25	0	95	98
TRH C_6 - C_{10}	mg/kg	25	Org-023	<25	1	<25	<25	0	95	98
Benzene	mg/kg	0.2	Org-023	<0.2	1	<0.2	<0.2	0	101	104
Toluene	mg/kg	0.5	Org-023	<0.5	1	<0.5	<0.5	0	95	98
Ethylbenzene	mg/kg	1	Org-023	<1	1	<1	<1	0	91	95
m+p-xylene	mg/kg	2	Org-023	<2	1	<2	<2	0	93	97
o-Xylene	mg/kg	1	Org-023	<1	1	<1	<1	0	91	98
naphthalene	mg/kg	1	Org-023	<1	1	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	121	1	119	125	5	97	99

QUALITY CONTROL: svTRH (C10-C40) in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-6	242556-2
Date extracted	-			11/05/2020	1	11/05/2020	11/05/2020		11/05/2020	11/05/2020
Date analysed	-			12/05/2020	1	12/05/2020	12/05/2020		12/05/2020	12/05/2020
TRH C_{10} - C_{14}	mg/kg	50	Org-020	<50	1	<50	<50	0	93	92
TRH C_{15} - C_{28}	mg/kg	100	Org-020	<100	1	100	<100	0	95	92
TRH C_{29} - C_{36}	mg/kg	100	Org-020	<100	1	<100	<100	0	108	87
TRH >C_{10} -C_{16}	mg/kg	50	Org-020	<50	1	<50	<50	0	93	92
TRH >C_{16} -C_{34}	mg/kg	100	Org-020	<100	1	180	120	40	95	92
TRH >C_{34} -C_{40}	mg/kg	100	Org-020	<100	1	<100	<100	0	108	87
Surrogate o-Terphenyl	%		Org-020	100	1	90	100	11	103	112

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-6	242556-2
Date extracted	-			12/05/2020	1	11/05/2020	11/05/2020		11/05/2020	11/05/2020
Date analysed	-			12/05/2020	1	12/05/2020	12/05/2020		12/05/2020	12/05/2020
Naphthalene	mg/kg	0.1	Org-022/025	<0.1	1	0.1	<0.1	0	96	92
Acenaphthylene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Fluorene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	102	96
Phenanthrene	mg/kg	0.1	Org-022/025	<0.1	1	0.2	0.3	40	102	86
Anthracene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	<0.1	1	0.7	1	35	98	120
Pyrene	mg/kg	0.1	Org-022/025	<0.1	1	0.8	1.0	22	100	132
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	<0.1	1	0.5	0.8	46	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	<0.1	1	0.5	0.7	33	86	104
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	<0.2	1	0.9	1	11	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	<0.05	1	0.64	0.81	23	100	135
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	<0.1	1	0.4	0.4	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	<0.1	1	0.1	0.2	67	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	<0.1	1	0.5	0.7	33	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	92	1	92	93	1	91	86

QUALITY CONTROL: Organochlorine Pesticides in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-6	242556-2
Date extracted	-			11/05/2020	1	11/05/2020	11/05/2020		11/05/2020	11/05/2020
Date analysed	-			12/05/2020	1	12/05/2020	12/05/2020		12/05/2020	12/05/2020
alpha-BHC	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	110	112
HCB	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	114	114
gamma-BHC	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Heptachlor	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	92	98
delta-BHC	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	112	112
Heptachlor Epoxide	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	108	104
gamma-Chlordane	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	108	106
Dieldrin	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	116	122
Endrin	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	100	110
Endosulfan II	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDD	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	86	86
Endrin Aldehyde	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	120	108
Methoxychlor	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	97	1	100	99	1	95	95

QUALITY CONTROL: Organophosphorus Pesticides in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-6	242556-2
Date extracted	-			11/05/2020	1	11/05/2020	11/05/2020		11/05/2020	11/05/2020
Date analysed	-			12/05/2020	1	12/05/2020	12/05/2020		12/05/2020	12/05/2020
Dichlorvos	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	94	90
Dimethoate	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Chlorpyriphos-methyl	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	114	112
Fenitrothion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	108	112
Malathion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	116	112
Chlorpyriphos	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	126	122
Parathion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	108	110
Bromophos-ethyl	mg/kg	0.1	Org-022	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Ethion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	118	120
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	97	1	100	99	1	95	95

QUALITY CONTROL: PCBs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-6	242556-2
Date extracted	-			11/05/2020	1	11/05/2020	11/05/2020		11/05/2020	11/05/2020
Date analysed	-			12/05/2020	1	12/05/2020	12/05/2020		12/05/2020	12/05/2020
Aroclor 1016	mg/kg	0.1	Org-021	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1221	mg/kg	0.1	Org-021	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1232	mg/kg	0.1	Org-021	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1242	mg/kg	0.1	Org-021	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1248	mg/kg	0.1	Org-021	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1254	mg/kg	0.1	Org-021	<0.1	1	<0.1	<0.1	0	108	104
Aroclor 1260	mg/kg	0.1	Org-021	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-021	97	1	100	99	1	95	95

QUALITY CONTROL: Acid Extractable metals in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-6	242556-2
Date prepared	-			12/05/2020	1	12/05/2020	12/05/2020		12/05/2020	12/05/2020
Date analysed	-			12/05/2020	1	12/05/2020	12/05/2020		12/05/2020	12/05/2020
Arsenic	mg/kg	4	Metals-020	<4	1	5	<4	22	100	104
Cadmium	mg/kg	0.4	Metals-020	<0.4	1	<0.4	<0.4	0	99	88
Chromium	mg/kg	1	Metals-020	<1	1	8	12	40	96	85
Copper	mg/kg	1	Metals-020	<1	1	29	18	47	97	127
Lead	mg/kg	1	Metals-020	<1	1	59	31	62	98	122
Mercury	mg/kg	0.1	Metals-021	<0.1	1	<0.1	<0.1	0	85	93
Nickel	mg/kg	1	Metals-020	<1	1	7	11	44	101	104
Zinc	mg/kg	1	Metals-020	<1	1	110	46	82	107	#

QUALITY CONTROL: PAHs in TCLP (USEPA 1311)					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	[NT]
Date extracted	-			12/05/2020	[NT]	[NT]	[NT]	[NT]	12/05/2020	[NT]
Date analysed	-			12/05/2020	[NT]	[NT]	[NT]	[NT]	12/05/2020	[NT]
Naphthalene in TCLP	mg/L	0.001	Org-022/025	<0.001	[NT]	[NT]	[NT]	[NT]	94	[NT]
Acenaphthylene in TCLP	mg/L	0.001	Org-022/025	<0.001	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Acenaphthene in TCLP	mg/L	0.001	Org-022/025	<0.001	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Fluorene in TCLP	mg/L	0.001	Org-022/025	<0.001	[NT]	[NT]	[NT]	[NT]	112	[NT]
Phenanthrene in TCLP	mg/L	0.001	Org-022/025	<0.001	[NT]	[NT]	[NT]	[NT]	104	[NT]
Anthracene in TCLP	mg/L	0.001	Org-022/025	<0.001	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Fluoranthene in TCLP	mg/L	0.001	Org-022/025	<0.001	[NT]	[NT]	[NT]	[NT]	106	[NT]
Pyrene in TCLP	mg/L	0.001	Org-022/025	<0.001	[NT]	[NT]	[NT]	[NT]	114	[NT]
Benzo(a)anthracene in TCLP	mg/L	0.001	Org-022/025	<0.001	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Chrysene in TCLP	mg/L	0.001	Org-022/025	<0.001	[NT]	[NT]	[NT]	[NT]	92	[NT]
Benzo(bjk)fluoranthene in TCLP	mg/L	0.002	Org-022/025	<0.002	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Benzo(a)pyrene in TCLP	mg/L	0.001	Org-022/025	<0.001	[NT]	[NT]	[NT]	[NT]	112	[NT]
Indeno(1,2,3-c,d)pyrene - TCLP	mg/L	0.001	Org-022/025	<0.001	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Dibenzo(a,h)anthracene in TCLP	mg/L	0.001	Org-022/025	<0.001	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Benzo(g,h,i)perylene in TCLP	mg/L	0.001	Org-022/025	<0.001	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	116	[NT]	[NT]	[NT]	[NT]	116	[NT]

QUALITY CONTROL: Metals in TCLP USEPA1311					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	[NT]
Date extracted	-			12/05/2020	[NT]	[NT]	[NT]	[NT]	12/05/2020	[NT]
Date analysed	-			12/05/2020	[NT]	[NT]	[NT]	[NT]	12/05/2020	[NT]
Arsenic in TCLP	mg/L	0.05	Metals-020 ICP-AES	<0.05	[NT]	[NT]	[NT]	[NT]	108	[NT]
Cadmium in TCLP	mg/L	0.01	Metals-020 ICP-AES	<0.01	[NT]	[NT]	[NT]	[NT]	101	[NT]
Chromium in TCLP	mg/L	0.01	Metals-020 ICP-AES	<0.01	[NT]	[NT]	[NT]	[NT]	97	[NT]
Lead in TCLP	mg/L	0.03	Metals-020 ICP-AES	<0.03	[NT]	[NT]	[NT]	[NT]	96	[NT]
Mercury in TCLP	mg/L	0.0005	Metals-021 CV-AAS	<0.0005	[NT]	[NT]	[NT]	[NT]	100	[NT]
Nickel in TCLP	mg/L	0.02	Metals-020 ICP-AES	<0.02	[NT]	[NT]	[NT]	[NT]	97	[NT]

Result Definitions

NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.

The recommended maximums for analytes in urine are taken from “2018 TLVs and BEIs”, as published by ACGIH (where available). Limit provided for Nickel is a precautionary guideline as per Position Paper prepared by AIOH Exposure Standards Committee, 2016.

Guideline limits for Rinse Water Quality reported as per analytical requirements and specifications of AS 4187, Amdt 2 2019, Table 7.2

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

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

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

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

Report Comments

Asbestos-ID in soil: NEPM
This report is consistent with the reporting recommendations in the National Environment Protection (Assessment of Site Contamination) Measure, Schedule B1, May 2013. This is reported outside our scope of NATA accreditation.

Acid Extractable Metals in Soil:
-The laboratory RPD acceptance criteria has been exceeded for 242556-1 for Cu,Pb and Zn. Therefore a triplicate result has been issued as laboratory sample number 242556-4.
-# Percent recovery is not possible to report due to the inhomogeneous nature of the element/s in the sample/s. However an acceptable recovery was obtained for the LCS.

CONSARA
contaminated sites

Chain of Custody Record

Project No:	C15002
Project/Site:	BANK ST, PYRMONT
Sampled By:	R ORGANO
Phone:	0404003394
Page	1 of 1
Number of Eskies:	1

Lab:	ENVIROLAB
Lab Quote No:	
Lab Batch No:	
Date Results Required:	~~STANDARD~~ 48HR
Sample Disposal After:	~~STANDARD~~

LAB ID	SAMPLE ID	DATE	MATRIX	CONTAINER TYPE & PRESERVATIVE: Soil 0.1-0.2 L Glass jar, unpreserved	Soil - Plastic bag	Water 0.1-0.2 L Plastic, Filtered, HNO3	Water 0.5-1.0 L Amber glass, unpreserved	Water 40-50ml Glass, unpreserved	Water 0.25-1 L Plastic, unpreserved	Water 0.2-1.0L Plastic, sterile	ANALYSIS REQUIRED: COMBO 13	ASBESTOS - NEPM 2013 Quantification	HOLD
1	BSP01_01	7/5/2020	SOIL	1	1						X	X	
2	SP01_02	↓	↓	1	1						X	X	
3	SP01_03	↓	↓	1	0						X	X	
			TOTALS										

ENVIROLAB
Envirolab Services
12 Ashley St
Chatswood NSW 2067
Ph: (02) 9910 6200

Job No: 242556
Date Received: 8-5-20
Time Received: 1705
Received by: MO
Temp: Cool/Ambient
Cooling: Icepack
Security: Intact/Broken/None

Relinquished By:			
NAME: R ORGANO	SIGNATURE:	DATE: 8/5/2020	
Received By:	ELS		
NAME: Michael Ople	SIGNATURE:	DATE: 8-5-20	

Custody Seals Intact	Y	N
Samples Received Chilled	Y	N
Method of Shipment		

NOTES:

48 HR TAT PLEASE

CONSARA Pty Ltd ABN 27 161 027 881
Suite 2, Level 2, Unit 6 10 Rodborough Road, Frenchs Forest NSW 2100
PO Box 7360 Warringah Mall NSW 2100

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email rebeccaorgano@consara.com.au

Appendix G: Alliance Geotechnical Reports

Alliance Geotechnical
ENGINEERING | ENVIRONMENTAL | TESTING
Your On-Site Geotechnical & Environmental Specialists

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E: geotech@allgeo.com.au
W: www.allgeo.com.au
P: PO Box 275
Seven Hills NSW, 1730

ASBESTOS MATERIALS INSPECTION REPORT

Report Number:	10378-ER-1-1
Client:	Christie Civil
Project Location:	6 Bank St, Pyrmont NSW
Report Date:	23 January 2020
Scope of Works:	Inspection, sampling, and analysis of potential asbestos containing materials (ACM) observed within the subject area.
Subject Area:	Stockpiled soil materials within the northern portion of the site. (refer *to Appendix A – Aerial Photographs and Appendix B – Photographs).*

INTRODUCTION AND PURPOSE

General

Alliance Geotechnical Pty Ltd (AG) was commissioned by Christie Civil (the client) to undertake an Asbestos Materials Inspection of the subject area located within 6 Bank St, Pyrmont NSW as part of an advanced contamination inspection program.

Whole Report

No one section or part of a section, of this report should be taken as giving an overall idea of this report. Each section must be read in conjunction with the whole of this report, including its appendices and attachments.

Legislative Requirements

The survey works and production of this report have been undertaken in accordance with the requirements of:

- *Work Health and Safety Regulation 2017;*
- *Work Health and Safety Act 2011;*
- SafeWork NSW *Code of Practice: How to Manage and Control Asbestos in the Workplace* (2019); and
- SafeWork NSW *Code of Practice: How to Safely Remove Asbestos* (2019).

SCOPE OF WORK

The scope of work involved the following:

- Completion of a Safety, Health, and Environmental Work Method Statement prior to undertaking works;
- Visual inspection of the subject area;
- Sampling and NATA accredited laboratory analysis of samples; and
- Preparation of an Asbestos Materials Inspection Report outlining the site data and conclusions.

INSPECTION DETAILS

General

As part of a Waste Classification Assessment, the stockpiled soil materials (refer to **Appendix A –** *Aerial Photograph* and **Appendix B –** *Site Photographs*) located 6 Bank St, Pyrmont NSW were investigated. During the visual inspection, presumed asbestos containing materials (ACM) were identified within the stockpiled soil materials.

Due to the quantity and nature of the fragments observed, as well as the recent movement of soil materials within the area, soil sampling was undertaken to assess the presence and condition / classification of ACM in the stockpiled soil materials.

Eight (8) soil samples and one (1) fibre cement fragment samples were collected and sent to a NATA accredited laboratory for analysis.

Restrictions on Survey / Areas not accessed

Please note that this inspection is limited only to the soil surface of the aforementioned subject area. Areas adjacent to and beneath the subject soil stockpile are not included within the scope of this inspection / report.

Please remain diligent during any soil interaction works within and adjacent to this subject area.

LABORATORY RESULTS

Samples collected on-site by the client were submitted to a NATA accredited laboratory (Envirolab) for analysis. Soil samples were analysed for asbestos as per AS 4964 (2004) with a nominal reporting limit of 0.01% w/w. Results of the sampling and associated comments are outlined within **Table 1** below.

Table 1. Sample Analytical Results and Associated Comments.

Sample ID	Analytical Result	Comments
SP01-01	No asbestos detected	No ACM observed within sample
SP02-01	No asbestos detected	No ACM observed within sample
BS-01	No asbestos detected	No ACM observed within sample
SP03-02	No asbestos detected	No ACM observed within sample
SP04-01	No asbestos detected	No ACM observed within sample
SP05-01	No asbestos detected	No ACM observed within sample
SP-ACM-01	No asbestos detected	No ACM observed within sample
SP-ACM-03	No asbestos detected	No ACM observed within sample
SP-ACM-FRAG	**Chrysotile & crocidolite detected**	**Considered to be non-friable**

CONCLUSION

Based on the information presented in this report, it is the opinion of AG that:

- Visual inspection of the subject area has indicated the presence of asbestos containing fibre cement fragments scattered throughout the stockpiled material;
- Based on the visual assessment and analytical results of the samples collected by the client, the asbestos containing soil materials are considered to be **non-friable**;
- The subject area has been made-safe with geo-fabric to a satisfactory standard; and
- Please remain diligent and adhere to the restrictions within the body of this report and the limitations stated overleaf.

RECOMMENDATIONS

AG recommends the following:

- A Safework NSW notification for removal / handling of non-friable asbestos containing materials should be lodged at least 5 days prior to scheduled intrusive works within the subject area;
- Removal of the stockpile and the top 100mm of soil within the subject area for off-site disposal by a Class A or B Licenced Removalist Contractor; and
- Compliance supervision, airborne asbestos monitoring (AAM), and clearance inspection / sampling should be undertaken by a NSW Licensed Asbestos Assessor (LAA) during the removal works.

LIMITATIONS

This report has been prepared for use by the client who has commissioned the works in accordance with the project brief only and has been based on information provided by the client. The advice herein relates only to this project and all results, conclusions and recommendations made should be reviewed by a competent and experienced person with experience in environmental investigations, before being used for any other purpose. Alliance Geotechnical Pty Ltd (AG) accepts no liability for use or interpretation by any person or body other than the client who commissioned the works. This report should not be reproduced or amended in any away without prior approval by the client or AG and should not be relied upon by any other party, who should make their own independent enquiries.

This report does not provide a complete assessment of the environmental status of the site and it is limited to the scope defined herein. Should information become available regarding conditions at the site including previously unknown sources of contamination, AG reserves the right to review the report in the context of the additional information.

AG's professional opinions are based upon its professional judgment, experience, training and results from analytical data. In some cases, further testing and analysis may be required, thus producing different results and/or opinions. AG has limited investigation to the scope agreed upon with its client. It should be noted only the subject area outlined in this report was inspected and adjacent areas may contain asbestos.

AG has used a degree of care and skill ordinarily exercised in similar investigations by reputable member of the Environmental Industry within Australia. No other warranty, expressed or implied, is made or intended.

Prepared By:



Jacob Walker

Occupational Hygienist

Reviewed By:



Steven Wallace

Senior Project Manager

APPENDIX A – AERIAL PHOTOGRAPH



Aerial Photograph 1: Approximate location of the stockpiled material, (image adapted from Nearmaps, satellite image accessed on 23/01/20).

APPENDIX B – PHOTOGRAPHS



Photograph 1: Subject stockpile, facing north west (As observed on 23/01/20).



Photograph 2: Potential ACM fragment, as observed and sampled (As observed on 23/01/20).

APPENDIX C – LABORATORY DOCUMENTATION

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CERTIFICATE OF ANALYSIS 234676

Client Details

Client	Consara Pty Ltd
Attention	Rebecca Organo
Address	PO Box 7360, Warringah Mall, NSW, 2100

Sample Details

Your Reference	**C151008, Bank St**
Number of Samples	11 Soil, 1 Material
Date samples received	16/01/2020
Date completed instructions received	16/01/2020

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Please refer to the last page of this report for any comments relating to the results.

Report Details

Date results requested by	23/01/2020
Date of Issue	22/01/2020

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Results Approved By
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Authorised By



Nancy Zhang, Laboratory Manager

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		234676-1	234676-2	234676-3	234676-4	234676-5
Your Reference	UNITS	SP01_01	SP02_01	BS_01	SP03_01	SP03_02
Date Sampled		14/01/2020	14/01/2020	14/01/2020	14/01/2020	14/01/2020
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Date analysed	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<3	<3	<3	<3	<3
Surrogate aaa-Trifluorotoluene	%	92	75	72	95	89

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		234676-6	234676-7	234676-8	234676-10	234676-12
Your Reference	UNITS	SP04_01	SP05_01	SP_ACM_01	SP_ACM_03	QC01
Date Sampled		14/01/2020	14/01/2020	14/01/2020	14/01/2020	14/01/2020
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Date analysed	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<3	<3	<3	<3	<3
Surrogate aaa-Trifluorotoluene	%	96	95	99	82	88

svTRH (C10-C40) in Soil						
Our Reference		234676-1	234676-2	234676-3	234676-4	234676-5
Your Reference	UNITS	SP01_01	SP02_01	BS_01	SP03_01	SP03_02
Date Sampled		14/01/2020	14/01/2020	14/01/2020	14/01/2020	14/01/2020
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Date analysed	-	21/01/2020	21/01/2020	21/01/2020	21/01/2020	21/01/2020
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	160	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	160	<50	<50	<50	<50
Surrogate o-Terphenyl	%	117	83	84	82	82

svTRH (C10-C40) in Soil						
Our Reference		234676-6	234676-7	234676-8	234676-10	234676-12
Your Reference	UNITS	SP04_01	SP05_01	SP_ACM_01	SP_ACM_03	QC01
Date Sampled		14/01/2020	14/01/2020	14/01/2020	14/01/2020	14/01/2020
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Date analysed	-	21/01/2020	21/01/2020	21/01/2020	21/01/2020	21/01/2020
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	110	<100	<100	<100	<100
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	170	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	170	<50	<50	<50	<50
Surrogate o-Terphenyl	%	81	82	84	83	94

PAHs in Soil						
Our Reference		234676-1	234676-2	234676-3	234676-4	234676-5
Your Reference	UNITS	SP01_01	SP02_01	BS_01	SP03_01	SP03_02
Date Sampled		14/01/2020	14/01/2020	14/01/2020	14/01/2020	14/01/2020
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	21/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Date analysed	-	21/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Naphthalene	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	0.4	0.1	0.2	0.2	0.2
Anthracene	mg/kg	<0.1	<0.1	<0.1	0.2	0.3
Fluoranthene	mg/kg	1.7	0.5	0.2	0.7	0.8
Pyrene	mg/kg	1.7	0.5	0.2	0.7	0.8
Benzo(a)anthracene	mg/kg	0.8	0.3	0.1	0.3	0.4
Chrysene	mg/kg	0.7	0.2	<0.1	0.3	0.4
Benzo(b,j+k)fluoranthene	mg/kg	1	0.5	<0.2	0.6	0.7
Benzo(a)pyrene	mg/kg	0.85	0.3	0.08	0.4	0.4
Indeno(1,2,3-c,d)pyrene	mg/kg	0.5	0.2	<0.1	0.2	0.2
Dibenzo(a,h)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	0.6	0.2	<0.1	0.2	0.2
Total +ve PAH's	mg/kg	8.8	2.8	0.84	3.8	4.2
Benzo(a)pyrene TEQ calc (zero)	mg/kg	1.3	<0.5	<0.5	<0.5	0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	1.3	<0.5	<0.5	0.5	0.6
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	1.3	<0.5	<0.5	0.6	0.6
Surrogate p-Terphenyl-d14	%	105	109	107	103	106

PAHs in Soil						
Our Reference		234676-6	234676-7	234676-8	234676-10	234676-12
Your Reference	UNITS	SP04_01	SP05_01	SP_ACM_01	SP_ACM_03	QC01
Date Sampled		14/01/2020	14/01/2020	14/01/2020	14/01/2020	14/01/2020
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Date analysed	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Naphthalene	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	2.4	0.7	0.9	0.3	0.4
Anthracene	mg/kg	0.5	0.2	0.4	<0.1	<0.1
Fluoranthene	mg/kg	7.6	1.6	2.9	0.8	1
Pyrene	mg/kg	7.6	1.6	2.9	0.8	1
Benzo(a)anthracene	mg/kg	3.3	0.6	1.1	0.4	0.5
Chrysene	mg/kg	2.7	0.5	0.9	0.4	0.4
Benzo(b,j+k)fluoranthene	mg/kg	6.0	0.9	2	0.7	0.9
Benzo(a)pyrene	mg/kg	3.3	0.5	0.80	0.4	0.5
Indeno(1,2,3-c,d)pyrene	mg/kg	1.6	0.2	0.3	0.1	0.2
Dibenzo(a,h)anthracene	mg/kg	0.3	<0.1	0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	1.8	0.2	0.4	0.2	0.2
Total +ve PAH's	mg/kg	37	7.0	12	4.1	5.0
Benzo(a)pyrene TEQ calc (zero)	mg/kg	4.8	0.6	1.2	0.5	0.6
Benzo(a)pyrene TEQ calc(half)	mg/kg	4.8	0.7	1.2	0.6	0.7
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	4.8	0.7	1.2	0.6	0.7
Surrogate p-Terphenyl-d14	%	106	104	111	104	109

PAHs in Soil		
Our Reference		234676-13
Your Reference	UNITS	SP01_01 - [TRIPLICATE]
Date Sampled		14/01/2020
Type of sample		Soil
Date extracted	-	21/01/2020
Date analysed	-	22/01/2020
Naphthalene	mg/kg	<0.1
Acenaphthylene	mg/kg	<0.1
Acenaphthene	mg/kg	<0.1
Fluorene	mg/kg	<0.1
Phenanthrene	mg/kg	0.4
Anthracene	mg/kg	<0.1
Fluoranthene	mg/kg	1.9
Pyrene	mg/kg	1.8
Benzo(a)anthracene	mg/kg	1.2
Chrysene	mg/kg	1.2
Benzo(b,j+k)fluoranthene	mg/kg	2
Benzo(a)pyrene	mg/kg	1.0
Indeno(1,2,3-c,d)pyrene	mg/kg	0.8
Dibenzo(a,h)anthracene	mg/kg	0.3
Benzo(g,h,i)perylene	mg/kg	0.9
Total +ve PAH's	mg/kg	11
Benzo(a)pyrene TEQ calc (zero)	mg/kg	1.7
Benzo(a)pyrene TEQ calc(half)	mg/kg	1.7
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	1.7
Surrogate p-Terphenyl-d14	%	98

Organochlorine Pesticides in soil						
Our Reference		234676-1	234676-2	234676-3	234676-4	234676-5
Your Reference	UNITS	SP01_01	SP02_01	BS_01	SP03_01	SP03_02
Date Sampled		14/01/2020	14/01/2020	14/01/2020	14/01/2020	14/01/2020
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Date analysed	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
HCB	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	101	101	101	95	103

Organochlorine Pesticides in soil						
Our Reference		234676-6	234676-7	234676-8	234676-10	234676-12
Your Reference	UNITS	SP04_01	SP05_01	SP_ACM_01	SP_ACM_03	QC01
Date Sampled		14/01/2020	14/01/2020	14/01/2020	14/01/2020	14/01/2020
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Date analysed	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
HCB	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	110	102	108	107	107

Organophosphorus Pesticides in Soil						
Our Reference		234676-1	234676-2	234676-3	234676-4	234676-5
Your Reference	UNITS	SP01_01	SP02_01	BS_01	SP03_01	SP03_02
Date Sampled		14/01/2020	14/01/2020	14/01/2020	14/01/2020	14/01/2020
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Date analysed	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Dichlorvos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	101	101	101	95	103

Organophosphorus Pesticides in Soil						
Our Reference		234676-6	234676-7	234676-8	234676-10	234676-12
Your Reference	UNITS	SP04_01	SP05_01	SP_ACM_01	SP_ACM_03	QC01
Date Sampled		14/01/2020	14/01/2020	14/01/2020	14/01/2020	14/01/2020
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Date analysed	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Dichlorvos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	110	102	108	107	107

Misc Soil - Inorg						
Our Reference		234676-1	234676-2	234676-3	234676-4	234676-5
Your Reference	UNITS	SP01_01	SP02_01	BS_01	SP03_01	SP03_02
Date Sampled		14/01/2020	14/01/2020	14/01/2020	14/01/2020	14/01/2020
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Date analysed	-	21/01/2020	21/01/2020	21/01/2020	21/01/2020	21/01/2020
Total Phenolics (as Phenol)	mg/kg	<5	<5	<5	<5	<5

Misc Soil - Inorg						
Our Reference		234676-6	234676-7	234676-8	234676-10	234676-12
Your Reference	UNITS	SP04_01	SP05_01	SP_ACM_01	SP_ACM_03	QC01
Date Sampled		14/01/2020	14/01/2020	14/01/2020	14/01/2020	14/01/2020
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Date analysed	-	21/01/2020	21/01/2020	21/01/2020	21/01/2020	21/01/2020
Total Phenolics (as Phenol)	mg/kg	<5	<5	<5	<5	<5

PCBs in Soil						
Our Reference		234676-1	234676-2	234676-3	234676-4	234676-5
Your Reference	UNITS	SP01_01	SP02_01	BS_01	SP03_01	SP03_02
Date Sampled		14/01/2020	14/01/2020	14/01/2020	14/01/2020	14/01/2020
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Date analysed	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Aroclor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	101	101	101	95	103

PCBs in Soil						
Our Reference		234676-6	234676-7	234676-8	234676-10	234676-12
Your Reference	UNITS	SP04_01	SP05_01	SP_ACM_01	SP_ACM_03	QC01
Date Sampled		14/01/2020	14/01/2020	14/01/2020	14/01/2020	14/01/2020
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Date analysed	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Aroclor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	110	102	108	107	107

Acid Extractable metals in soil						
Our Reference		234676-1	234676-2	234676-3	234676-4	234676-5
Your Reference	UNITS	SP01_01	SP02_01	BS_01	SP03_01	SP03_02
Date Sampled		14/01/2020	14/01/2020	14/01/2020	14/01/2020	14/01/2020
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Date analysed	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Arsenic	mg/kg	5	<4	<4	<4	4
Cadmium	mg/kg	<0.4	<0.4	<0.4	0.9	<0.4
Chromium	mg/kg	9	8	13	12	13
Copper	mg/kg	40	16	15	24	27
Lead	mg/kg	80	38	11	43	39
Mercury	mg/kg	<0.1	<0.1	<0.1	0.1	<0.1
Nickel	mg/kg	7	5	8	7	8
Zinc	mg/kg	240	65	40	65	66

Acid Extractable metals in soil						
Our Reference		234676-6	234676-7	234676-8	234676-10	234676-12
Your Reference	UNITS	SP04_01	SP05_01	SP_ACM_01	SP_ACM_03	QC01
Date Sampled		14/01/2020	14/01/2020	14/01/2020	14/01/2020	14/01/2020
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Date analysed	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Arsenic	mg/kg	5	<4	10	7	6
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	9	8	10	8	9
Copper	mg/kg	36	34	59	50	55
Lead	mg/kg	93	110	85	82	89
Mercury	mg/kg	0.1	<0.1	0.2	0.2	0.5
Nickel	mg/kg	8	7	12	10	11
Zinc	mg/kg	91	120	110	99	98

Moisture						
Our Reference		234676-1	234676-2	234676-3	234676-4	234676-5
Your Reference	UNITS	SP01_01	SP02_01	BS_01	SP03_01	SP03_02
Date Sampled		14/01/2020	14/01/2020	14/01/2020	14/01/2020	14/01/2020
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Date analysed	-	21/01/2020	21/01/2020	21/01/2020	21/01/2020	21/01/2020
Moisture	%	0.6	6.6	5.5	7.0	7.5

Moisture						
Our Reference		234676-6	234676-7	234676-8	234676-10	234676-12
Your Reference	UNITS	SP04_01	SP05_01	SP_ACM_01	SP_ACM_03	QC01
Date Sampled		14/01/2020	14/01/2020	14/01/2020	14/01/2020	14/01/2020
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Date analysed	-	21/01/2020	21/01/2020	21/01/2020	21/01/2020	21/01/2020
Moisture	%	6.2	3.2	1.5	1	1.1

Asbestos ID - soils NEPM - ASB-001						
Our Reference	UNITS	234676-1	234676-2	234676-3	234676-5	234676-6
Your Reference		SP01_01	SP02_01	BS_01	SP03_02	SP04_01
Date Sampled		14/01/2020	14/01/2020	14/01/2020	14/01/2020	14/01/2020
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	17/01/2020	17/01/2020	17/01/2020	17/01/2020	17/01/2020
Sample mass tested	g	794.33	566.97	766.32	684.24	622.96
Sample Description	-	Brown sandy soil & rocks	Brown sandy soil & rocks	Brown sandy soil & rocks	Brown sandy soil & rocks	Brown sandy soil & rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected Synthetic Mineral Fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected Synthetic Mineral Fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos#1	g/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	–	–	–	–	–
FA and AF Estimation*	g	–	–	–	–	–
ACM >7mm Estimation*	%(w/w)	<0.01	<0.01	<0.01	<0.01	<0.01
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	<0.001	<0.001	<0.001

Asbestos ID - soils NEPM - ASB-001				
Our Reference		234676-7	234676-8	234676-10
Your Reference	UNITS	SP05_01	SP_ACM_01	SP_ACM_03
Date Sampled		14/01/2020	14/01/2020	14/01/2020
Type of sample		Soil	Soil	Soil
Date analysed	-	17/01/2020	17/01/2020	17/01/2020
Sample mass tested	g	676.81	667.47	596.14
Sample Description	-	Brown sandy soil & rocks	Brown sandy soil & rocks	Brown sandy soil & rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos#1	g/kg	<0.1	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	–	–	–
FA and AF Estimation*	g	–	–	–
ACM >7mm Estimation*	%(w/w)	<0.01	<0.01	<0.01
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	<0.001

Asbestos ID - materials		
Our Reference		234676-11
Your Reference	UNITS	SP_ACM_FRAG
Date Sampled		14/01/2020
Type of sample		Material
Date analysed	-	22/01/2020
Mass / Dimension of Sample	-	66x65x8mm
Sample Description	-	Beige fibre cement material
Asbestos ID in materials	-	Chrysotile asbestos detected Crocidolite asbestos detected
Trace Analysis	-	[NT]

Method ID	Methodology Summary
ASB-001	Asbestos ID - Qualitative identification of asbestos in bulk samples using Polarised Light Microscopy and Dispersion Staining Techniques including Synthetic Mineral Fibre and Organic Fibre as per Australian Standard 4964-2004.
ASB-001	Asbestos ID - Identification of asbestos in soil samples using Polarised Light Microscopy and Dispersion Staining Techniques. Minimum 500mL soil sample was analysed as recommended by "National Environment Protection (Assessment of site contamination) Measure, Schedule B1 and "The Guidelines from the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia - May 2009" with a reporting limit of 0.1g/kg (0.01% w/w) as per Australian Standard AS4964-2004. Results reported denoted with * are outside our scope of NATA accreditation. **NOTE** #1 Total Asbestos g/kg was analysed and reported as per Australian Standard AS4964 (This is the sum of ACM >7mm, <7mm and FA/AF) **NOTE** #2 The screening level of 0.001% w/w asbestos in soil for FA and AF only applies where the FA and AF are able to be quantified by gravimetric procedures. This screening level is not applicable to free fibres. Estimation = Estimated asbestos weight Results reported with "--" is equivalent to no visible asbestos identified using Polarised Light microscopy and Dispersion Staining Techniques.
AT-008	Determination of VOCs sampled onto coconut shell charcoal sorbent tubes, that can be desorbed using carbon disulphide, and analysed by GC-MS.
Inorg-008	Moisture content determined by heating at 105+/-5 °C for a minimum of 12 hours.
Inorg-031	Total Phenolics by segmented flow analyser (in line distillation with colourimetric finish). Solids are extracted in a caustic media prior to analysis.
Metals-020	Determination of various metals by ICP-AES.
Metals-021	Determination of Mercury by Cold Vapour AAS.
Org-003	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.

Method ID	Methodology Summary
Org-003	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis. Note, the Total +ve TRH PQL is reflective of the lowest individual PQL and is therefore "Total +ve TRH" is simply a sum of the positive individual TRH fractions (>C10-C40).
Org-006	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD.
Org-006	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD. Note, the Total +ve PCBs PQL is reflective of the lowest individual PQL and is therefore" Total +ve PCBs" is simply a sum of the positive individual PCBs.
Org-012/017	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS and/or GC-MS/MS.
Org-012/017	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-MS and/or GC-MS/MS. Note, the Total +ve reported DDD+DDE+DDT PQL is reflective of the lowest individual PQL and is therefore simply a sum of the positive individually report DDD+DDE+DDT.
Org-012/017	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS and/or GC-MS/MS. Benzo(a)pyrene TEQ as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater - 2013. For soil results:- 1. 'EQ PQL'values are assuming all contributing PAHs reported as <PQL are actually at the PQL. This is the most conservative approach and can give false positive TEQs given that PAHs that contribute to the TEQ calculation may not be present. 2. 'EQ zero'values are assuming all contributing PAHs reported as <PQL are zero. This is the least conservative approach and is more susceptible to false negative TEQs when PAHs that contribute to the TEQ calculation are present but below PQL. 3. 'EQ half PQL'values are assuming all contributing PAHs reported as <PQL are half the stipulated PQL. Hence a mid-point between the most and least conservative approaches above. Note, the Total +ve PAHs PQL is reflective of the lowest individual PQL and is therefore "Total +ve PAHs" is simply a sum of the positive individual PAHs.
Org-014	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS.
Org-016	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.
Org-016	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater. Note, the Total +ve Xylene PQL is reflective of the lowest individual PQL and is therefore "Total +ve Xylenes" is simply a sum of the positive individual Xylenes.

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	234676-2
Date extracted	-			20/01/2020	1	20/01/2020	20/01/2020		20/01/2020	20/01/2020
Date analysed	-			20/01/2020	1	20/01/2020	20/01/2020		20/01/2020	20/01/2020
TRH C_6 - C_9	mg/kg	25	Org-016	<25	1	<25	<25	0	109	85
TRH C_6 - C_{10}	mg/kg	25	Org-016	<25	1	<25	<25	0	109	85
Benzene	mg/kg	0.2	Org-016	<0.2	1	<0.2	<0.2	0	115	85
Toluene	mg/kg	0.5	Org-016	<0.5	1	<0.5	<0.5	0	112	86
Ethylbenzene	mg/kg	1	Org-016	<1	1	<1	<1	0	107	86
m+p-xylene	mg/kg	2	Org-016	<2	1	<2	<2	0	106	84
o-Xylene	mg/kg	1	Org-016	<1	1	<1	<1	0	105	83
naphthalene	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-016	104	1	92	97	5	107	84

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	12	20/01/2020	20/01/2020		[NT]	[NT]
Date analysed	-			[NT]	12	20/01/2020	20/01/2020		[NT]	[NT]
TRH C_6 - C_9	mg/kg	25	Org-016	[NT]	12	<25	<25	0	[NT]	[NT]
TRH C_6 - C_{10}	mg/kg	25	Org-016	[NT]	12	<25	<25	0	[NT]	[NT]
Benzene	mg/kg	0.2	Org-016	[NT]	12	<0.2	<0.2	0	[NT]	[NT]
Toluene	mg/kg	0.5	Org-016	[NT]	12	<0.5	<0.5	0	[NT]	[NT]
Ethylbenzene	mg/kg	1	Org-016	[NT]	12	<1	<1	0	[NT]	[NT]
m+p-xylene	mg/kg	2	Org-016	[NT]	12	<2	<2	0	[NT]	[NT]
o-Xylene	mg/kg	1	Org-016	[NT]	12	<1	<1	0	[NT]	[NT]
naphthalene	mg/kg	1	Org-014	[NT]	12	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-016	[NT]	12	88	93	6	[NT]	[NT]

QUALITY CONTROL: svTRH (C10-C40) in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	234676-2
Date extracted	-			20/01/2020	1	20/01/2020	20/01/2020		20/01/2020	20/01/2020
Date analysed	-			21/01/2020	1	21/01/2020	21/01/2020		21/01/2020	21/01/2020
TRH C_{10} - C_{14}	mg/kg	50	Org-003	<50	1	<50	<50	0	82	92
TRH C_{15} - C_{28}	mg/kg	100	Org-003	<100	1	100	<100	0	95	113
TRH C_{29} - C_{36}	mg/kg	100	Org-003	<100	1	<100	<100	0	108	105
TRH >C_{10} -C_{16}	mg/kg	50	Org-003	<50	1	<50	<50	0	82	92
TRH >C_{16} -C_{34}	mg/kg	100	Org-003	<100	1	160	<100	46	95	113
TRH >C_{34} -C_{40}	mg/kg	100	Org-003	<100	1	<100	<100	0	108	105
Surrogate o-Terphenyl	%		Org-003	84	1	117	89	27	94	83

QUALITY CONTROL: svTRH (C10-C40) in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	12	20/01/2020	20/01/2020		[NT]	[NT]
Date analysed	-			[NT]	12	21/01/2020	21/01/2020		[NT]	[NT]
TRH C_{10} - C_{14}	mg/kg	50	Org-003	[NT]	12	<50	<50	0	[NT]	[NT]
TRH C_{15} - C_{28}	mg/kg	100	Org-003	[NT]	12	<100	<100	0	[NT]	[NT]
TRH C_{29} - C_{36}	mg/kg	100	Org-003	[NT]	12	<100	<100	0	[NT]	[NT]
TRH >C_{10} -C_{16}	mg/kg	50	Org-003	[NT]	12	<50	<50	0	[NT]	[NT]
TRH >C_{16} -C_{34}	mg/kg	100	Org-003	[NT]	12	<100	<100	0	[NT]	[NT]
TRH >C_{34} -C_{40}	mg/kg	100	Org-003	[NT]	12	<100	<100	0	[NT]	[NT]
Surrogate o-Terphenyl	%		Org-003	[NT]	12	94	83	12	[NT]	[NT]

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	234676-2
Date extracted	-			21/01/2020	1	21/01/2020	21/01/2020		20/01/2020	20/01/2020
Date analysed	-			21/01/2020	1	21/01/2020	21/01/2020		20/01/2020	20/01/2020
Naphthalene	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	90	91
Acenaphthylene	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Fluorene	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	92	98
Phenanthrene	mg/kg	0.1	Org-012/017	<0.1	1	0.4	1.5	116	92	88
Anthracene	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	0.4	120	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-012/017	<0.1	1	1.7	4.4	89	92	112
Pyrene	mg/kg	0.1	Org-012/017	<0.1	1	1.7	4.4	89	92	112
Benzo(a)anthracene	mg/kg	0.1	Org-012/017	<0.1	1	0.8	2.4	100	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-012/017	<0.1	1	0.7	2.0	96	82	96
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-012/017	<0.2	1	1	3.7	115	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-012/017	<0.05	1	0.85	2.2	89	88	94
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-012/017	<0.1	1	0.5	1.1	75	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-012/017	<0.1	1	0.1	0.3	100	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-012/017	<0.1	1	0.6	1.2	67	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-012/017	95	1	105	107	2	106	111

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	12	20/01/2020	20/01/2020		[NT]	[NT]
Date analysed	-			[NT]	12	20/01/2020	20/01/2020		[NT]	[NT]
Naphthalene	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Acenaphthylene	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Fluorene	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Phenanthrene	mg/kg	0.1	Org-012/017	[NT]	12	0.4	0.5	22	[NT]	[NT]
Anthracene	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-012/017	[NT]	12	1	1	0	[NT]	[NT]
Pyrene	mg/kg	0.1	Org-012/017	[NT]	12	1	1	0	[NT]	[NT]
Benzo(a)anthracene	mg/kg	0.1	Org-012/017	[NT]	12	0.5	0.5	0	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-012/017	[NT]	12	0.4	0.4	0	[NT]	[NT]
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-012/017	[NT]	12	0.9	0.7	25	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-012/017	[NT]	12	0.5	0.4	22	[NT]	[NT]
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-012/017	[NT]	12	0.2	0.2	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-012/017	[NT]	12	0.2	0.2	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-012/017	[NT]	12	109	109	0	[NT]	[NT]

QUALITY CONTROL: Organochlorine Pesticides in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	234676-2
Date extracted	-			20/01/2020	1	20/01/2020	20/01/2020		20/01/2020	20/01/2020
Date analysed	-			20/01/2020	1	20/01/2020	20/01/2020		20/01/2020	20/01/2020
alpha-BHC	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	106	109
HCB	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	104	116
gamma-BHC	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Heptachlor	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	100	104
delta-BHC	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	110	114
Heptachlor Epoxide	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	106	109
gamma-Chlordane	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	106	112
Dieldrin	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	114	123
Endrin	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	100	118
Endosulfan II	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDD	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	104	109
Endrin Aldehyde	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	112	121
Methoxychlor	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-012/017	100	1	101	104	3	102	71

QUALITY CONTROL: Organochlorine Pesticides in soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	12	20/01/2020	20/01/2020		[NT]	[NT]
Date analysed	-			[NT]	12	20/01/2020	20/01/2020		[NT]	[NT]
alpha-BHC	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
HCB	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
gamma-BHC	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Heptachlor	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
delta-BHC	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Heptachlor Epoxide	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
gamma-Chlordane	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Dieldrin	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Endrin	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Endosulfan II	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
pp-DDD	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Endrin Aldehyde	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Methoxychlor	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-012/017	[NT]	12	107	108	1	[NT]	[NT]

QUALITY CONTROL: Organophosphorus Pesticides in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	234676-2
Date extracted	-			20/01/2020	1	20/01/2020	20/01/2020		20/01/2020	20/01/2020
Date analysed	-			20/01/2020	1	20/01/2020	20/01/2020		20/01/2020	20/01/2020
Dichlorvos	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	100	93
Dimethoate	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Chlorpyriphos-methyl	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	102	107
Fenitrothion	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	90	93
Malathion	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	94	104
Chlorpyriphos	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	102	112
Parathion	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	100	107
Bromophos-ethyl	mg/kg	0.1	AT-008	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Ethion	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	96	109
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-012/017	100	1	101	104	3	102	71

QUALITY CONTROL: Organophosphorus Pesticides in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	12	20/01/2020	20/01/2020		[NT]	[NT]
Date analysed	-			[NT]	12	20/01/2020	20/01/2020		[NT]	[NT]
Dichlorvos	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Dimethoate	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Chlorpyriphos-methyl	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Fenitrothion	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Malathion	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Chlorpyriphos	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Parathion	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Bromophos-ethyl	mg/kg	0.1	AT-008	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Ethion	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-012/017	[NT]	12	107	108	1	[NT]	[NT]

QUALITY CONTROL: Misc Soil - Inorg						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	234676-2
Date prepared	-			20/01/2020	1	20/01/2020	20/01/2020		20/01/2020	20/01/2020
Date analysed	-			21/01/2020	1	21/01/2020	21/01/2020		21/01/2020	21/01/2020
Total Phenolics (as Phenol)	mg/kg	5	Inorg-031	<5	1	<5	<5	0	100	102

QUALITY CONTROL: Misc Soil - Inorg						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	12	20/01/2020	20/01/2020		[NT]	[NT]
Date analysed	-			[NT]	12	21/01/2020	21/01/2020		[NT]	[NT]
Total Phenolics (as Phenol)	mg/kg	5	Inorg-031	[NT]	12	<5	<5	0	[NT]	[NT]

QUALITY CONTROL: PCBs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	234676-2
Date extracted	-			20/01/2020	1	20/01/2020	20/01/2020		20/01/2020	20/01/2020
Date analysed	-			20/01/2020	1	20/01/2020	20/01/2020		20/01/2020	20/01/2020
Aroclor 1016	mg/kg	0.1	Org-006	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1221	mg/kg	0.1	Org-006	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1232	mg/kg	0.1	Org-006	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1242	mg/kg	0.1	Org-006	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1248	mg/kg	0.1	Org-006	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1254	mg/kg	0.1	Org-006	<0.1	1	<0.1	<0.1	0	100	106
Aroclor 1260	mg/kg	0.1	Org-006	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-006	100	1	101	104	3	102	71

QUALITY CONTROL: PCBs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	12	20/01/2020	20/01/2020		[NT]	[NT]
Date analysed	-			[NT]	12	20/01/2020	20/01/2020		[NT]	[NT]
Aroclor 1016	mg/kg	0.1	Org-006	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1221	mg/kg	0.1	Org-006	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1232	mg/kg	0.1	Org-006	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1242	mg/kg	0.1	Org-006	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1248	mg/kg	0.1	Org-006	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1254	mg/kg	0.1	Org-006	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1260	mg/kg	0.1	Org-006	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-006	[NT]	12	107	108	1	[NT]	[NT]

QUALITY CONTROL: Acid Extractable metals in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	234676-2
Date prepared	-			20/01/2020	1	20/01/2020	20/01/2020		20/01/2020	20/01/2020
Date analysed	-			20/01/2020	1	20/01/2020	20/01/2020		20/01/2020	20/01/2020
Arsenic	mg/kg	4	Metals-020	<4	1	5	5	0	108	101
Cadmium	mg/kg	0.4	Metals-020	<0.4	1	<0.4	<0.4	0	106	93
Chromium	mg/kg	1	Metals-020	<1	1	9	8	12	115	95
Copper	mg/kg	1	Metals-020	<1	1	40	43	7	109	95
Lead	mg/kg	1	Metals-020	<1	1	80	81	1	114	97
Mercury	mg/kg	0.1	Metals-021	<0.1	1	<0.1	0.1	0	115	93
Nickel	mg/kg	1	Metals-020	<1	1	7	6	15	105	97
Zinc	mg/kg	1	Metals-020	<1	1	240	270	12	114	80

QUALITY CONTROL: Acid Extractable metals in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	12	20/01/2020	20/01/2020		[NT]	[NT]
Date analysed	-			[NT]	12	20/01/2020	20/01/2020		[NT]	[NT]
Arsenic	mg/kg	4	Metals-020	[NT]	12	6	12	67	[NT]	[NT]
Cadmium	mg/kg	0.4	Metals-020	[NT]	12	<0.4	<0.4	0	[NT]	[NT]
Chromium	mg/kg	1	Metals-020	[NT]	12	9	9	0	[NT]	[NT]
Copper	mg/kg	1	Metals-020	[NT]	12	55	50	10	[NT]	[NT]
Lead	mg/kg	1	Metals-020	[NT]	12	89	76	16	[NT]	[NT]
Mercury	mg/kg	0.1	Metals-021	[NT]	12	0.5	0.2	86	[NT]	[NT]
Nickel	mg/kg	1	Metals-020	[NT]	12	11	12	9	[NT]	[NT]
Zinc	mg/kg	1	Metals-020	[NT]	12	98	89	10	[NT]	[NT]

Result Definitions

NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

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

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

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

Report Comments

Asbestos-ID in soil: NEPM
This report is consistent with the reporting recommendations in the National Environment Protection (Assessment of Site Contamination) Measure, Schedule B1, May 2013. This is reported outside our scope of NATA accreditation.

PAHs in Soil - The laboratory RPD acceptance criteria has been exceeded for 234676-1. Therefore a triplicate result has been issued as laboratory sample number 234676-13.

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ASBESTOS MATERIALS CLEARANCE REPORT

Report Number: 10378-ER-2-1
Client: Christie Civil Pty Ltd
Project Location: 6 Bank Street, Pyrmont, NSW 2009
Inspection Date: 26 March 2020
Report Date: 30 March 2020
Scope of Works: Visual inspection of soil surface following movement and placement of non-friable asbestos containing soil materials within retaining wall feature.
Subject Areas: Within the Christie Civil worksite located at 6 Bank Street, Pyrmont, NSW, retaining wall feature located within the norteastern side of the site and former location of non-friable asbestos containing stockpiled soil materials, soil surface (refer to *Appendix A – Aerial Photographs* and *Appendix B – Photographs*).

INTRODUCTION AND PURPOSE

General

Alliance Geotechnical Pty Ltd (AG) was commissioned by Christine Civil Pty Ltd to undertake an Asbestos Materials Clearance Inspection of the subject area located within the Christie Civil worksite at 6 Bank Street, Pyrmont, NSW, following the placement of non-friable asbestos containing soil materials within a retaining wall feature.

Compliance supervision was undertaken by AG during placement of non-friable asbestos containing soil materials. The activities were carried out on 10, 13 and 17 of February 2020 by Shambhu Shrestha and Isabelle Figatowski, two appropriately experienced occupational hygienists representing AG. The Asbestos Materials Clearance inspection was undertaken on 26 March 2020 by Isabelle Figatowski.

Whole Report

No one section or part of a section, of this report should be taken as giving an overall idea of this report. Each section must be read in conjunction with the whole of this report, including its appendices and attachments.

Legislative Requirements

The survey works and production of this report have been undertaken in accordance with the requirements of:

- *Work Health and Safety Regulation 2017;*
- *Work Health and Safety Act 2011;*
- SafeWork NSW *Code of Practice: How to Manage and Control Asbestos in the Workplace* (2019);
- SafeWork NSW *Code of Practice: How to Safely Remove Asbestos* (2019); and
- *Guidance note on the membrane filter method for estimating airborne asbestos fibres, 2nd edition [NOHSC:3003(2005)].*

SCOPE OF WORK

The scope of work involved the following:

- Completion of a Safety, Health, and Environmental Work Method Statement prior to undertaking works;
- Asbestos Air Monitoring for the duration of the removal works;
- Supervision of the removal works by an occupational hygienist;
- Visual inspection of the subject area following removal works by an occupational hygienist; and
- Preparation of an Asbestos Materials Clearance Report outlining the site data and conclusions.

INSPECTION DETAILS

General

Movement and placement of identified non-friable asbestos containing soil materials within the retaining wall feature was carried out on 10, 13 and 17 February 2020. All works were carried out as per SafeWork NSW (2019).

No visible contamination was observed on the soil surface within the subject area during the visual inspection carried out on 26 March 2020.

AG understands the placement of non-friable asbestos containing materials within the retaining wall feature are part of asbestos encapsulation works. It is further understood that the non-friable ACM encapsulation works will be validated by a suitable environmental consultancy to confirm land-use suitability.

Airborne Asbestos Monitoring

Airborne asbestos monitoring was carried out for the duration of the removal works. No airborne asbestos fibres were detected above the detection limit of the method (0.01 fibres/mL) (refer to *Appendix C – Airborne Asbestos Monitoring Results*).

Restrictions on Survey / Areas not accessed

Please note that this inspection is limited to the soil surface of the subject area, as outlined previously. Areas adjacent to and below the soil surface of the subject area are considered outside the scope of this report and may contain asbestos.

Please remain diligent when undertaking any further work within or adjacent to the subject area, and contact AG immediately if any further contamination is observed.

CONCLUSION

Based on the information presented in this report, it is the opinion of AG that:

- No visible contamination was observed on the soil surface during visual inspection of the subject area;
- Airborne asbestos monitoring undertaken during the works did not detect airborne asbestos fibres above the detection limit of the method (0.01 fibres/mL);
- The subject area was considered ***safe*** with regards to the asbestos hazard at the time of the visual inspection; and
- Please remain diligent and adhere to the restrictions within the body of this report and the limitations stated below.

LIMITATIONS

This report has been prepared for use by the client who has commissioned the works in accordance with the project brief only and has been based on information provided by the client. The advice herein relates only to this project and all results, conclusions and recommendations made should be reviewed by a competent and experienced person with experience in environmental investigations, before being used for any other purpose. Alliance Geotechnical Pty Ltd (AG) accepts no liability for use or interpretation by any person or body other than the client who commissioned the works. This report should not be reproduced or amended in any away without prior approval by the client or AG and should not be relied upon by any other party, who should make their own independent enquiries.

This report does not provide a complete assessment of the environmental status of the site and it is limited to the scope defined herein. Should information become available regarding conditions at the site including previously unknown sources of contamination, AG reserves the right to review the report in the context of the additional information.

AG's professional opinions are based upon its professional judgment, experience, training and results from analytical data. In some cases, further testing and analysis may be required, thus producing different results and/or opinions. AG has limited investigation to the scope agreed upon with its client. It should be noted only the subject areas outlined in this report were inspected and adjacent areas may contain asbestos.

AG has used a degree of care and skill ordinarily exercised in similar investigations by reputable member of the Environmental Industry within Australia. No other warranty, expressed or implied, is made or intended.

Prepared By:



Isabelle Figatowski

Occupational Hygienist

Reviewed By:



Steven Wallace

Senior Project Manager
Licensed Asbestos Assessor (LAA001096)

APPENDIX A – AERIAL PHOTOGRAPH



Aerial Photograph 1. Approximate location of the subject area located within the Christie Civil worksite at 6 Bank Street, Pyrmont, NSW (image adapted from maps.six.nsw.gov.au, satellite image accessed on 26.03.20).

APPENDIX B – PHOTOGRAPH



Photograph 1. Representative photograph of the subject area, following placement works within the retaining wall feature, facing south west (as observed on 26.03.2020).

Appendix C – AIRBORNE ASBESTOS MONITORING RESULTS

Certificate of Analysis

Environment Testing

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Alliance Geotechnical
10 Welder Road
Seven Hills
NSW 2147

Attention:	Steven Wallace
Report	701153-AFC
Project Name	PYRMONT
Project ID	10378
Received Date	Feb 10, 2020
Date Reported	Feb 11, 2020

METHODOLOGY:

Asbestos Sampling	Sampling as per the National Occupational Health & Safety Commission - Guidance Note on The Membrane Filter Method For Estimating Airborne Asbestos Fibres 2nd Edition [NOHSC:3003(2005)]
Pump Calibration	Defender 520M: Calibrated against National Institute of Standards & Technology (NIST) SOP 13 Standard Operating Procedure for Calibration of Volumetric Ware, Gravimetric Method utilising a 1000 mL burette with a digital stop watch.
Asbestos Counting	Conducted in accordance with the National Occupational Health & Safety Commission - Guidance Note on The Membrane Filter Method For Estimating Airborne Asbestos Fibres 2nd Edition [NOHSC:3003(2005)] and in-house Method LTM-ASB-8010.

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Project Name PYRMONT
Project ID 10378
Date Sampled Feb 10, 2020
Report 701153-AFC

Eurofins Sample No.	Client Sample ID	Pump ID	Location	Start (time)	End (time)	Start Flow Rate (L/min)	End Flow Rate (L/min)	Result (Fibres/Fields)	Result (Fibres/mL)
20-Fe11994	DL010697	78348	NORTH EAST BOUNDARY ON FENCE	7:35	11:00	2.0	2.0	0/100	< 0.01*
20-Fe11995	DL010655	45194	EASTERN ASPECT ADJ TO SITE OFFICE	7:36	11:01	2.0	2.0	0/100	< 0.01*
20-Fe11996	DL010747	81565	SOUTHERN ASPECT ON FENCE	7:37	11:02	2.0	2.0	2/100	< 0.01*

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

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

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8010	Sydney	Feb 10, 2020	Indefinite
Asbestos - LTM-ASB-8010	Sydney	Feb 10, 2020	Indefinite

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ABN – 50 005 085 521 web : www.eurofins.com.au e.mail : EnviroSales@eurofins.com

Australia

Melbourne
6 Monterey Road
Dandenong South VIC 3175
Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

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

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

Perth
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261
Site # 23736

New Zealand

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

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

Company Name: Alliance Geotechnical
Address: 10 Welder Road
Seven Hills
NSW 2147

Project Name: PYRMONT
Project ID: 10378

Order No.:
Report #: 701153
Phone: 1800 288 188
Fax: 02 9675 1888

Received: Feb 10, 2020 5:50 PM
Due: Feb 11, 2020
Priority: Overnight
Contact Name: Steven Wallace

Eurofins Analytical Services Manager : Andrew Black

Sample Detail						CANCELLED	Asbestos (concentration of fibres in air)
Melbourne Laboratory - NATA Site # 1254 & 14271							
Sydney Laboratory - NATA Site # 18217						X	X
Brisbane Laboratory - NATA Site # 20794							
Perth Laboratory - NATA Site # 23736							
External Laboratory							
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**		
1	DL010697	Feb 10, 2020	11:00AM	Air	S20-Fe11994		X
2	DL010655	Feb 10, 2020	11:01AM	Air	S20-Fe11995		X
3	DL010747	Feb 10, 2020	11:02AM	Air	S20-Fe11996		X
4	DL010756	Feb 10, 2020		Air	S20-Fe11997	X	
Test Counts						1	3

Internal Quality Control Review and Glossary

General

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

Holding Times

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

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample Receipt Advice.

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

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

Units

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

Terms

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

Comments

Volume Measurement : Shambhu, Alliance Geotechnical, has been trained by Eurofins and they conducted the sampling in accordance with the National Occupational Health & Safety Commission - Guidance Note on The Membrane Filter Method For Estimating Airborne Asbestos Fibres 2nd Edition [NOHSC:3003(2005)]methodology. Sampling pumps used by Alliance Geotechnical were calibrated by Eurofins Environment Testing and therefore volume measurements contained in this report are traceable back to Eurofins Environment Testing. Eurofins Environment Testing are responsible for all data contained in this report.

Sampling pumps used by Alliance Geotechnical were calibrated by Eurofins Environment Testing and therefore volume measurements contained in this report are traceable back to Eurofins Environment Testing. Eurofins Environment Testing are responsible for all data contained in this report.

*The sampler has not been trained by Eurofins in volume measurement.

Sample Integrity

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

Qualifier Codes/Comments

Code	Description
N/A	Not applicable

Asbestos Counter/Identifier:

Cameron Maxworthy	Senior Analyst-Asbestos (NSW)

Authorised by:

Sayeed Abu	Senior Analyst-Asbestos (NSW)



Glenn Jackson
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

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

Measurement uncertainty of test data is available on request or please click here.

Eurofins shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

Certificate of Analysis

Environment Testing

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Alliance Geotechnical
10 Welder Road
Seven Hills
NSW 2147

Attention:	Steven Wallace
Report	701957-AFC
Project Name	PYRMONT
Project ID	10378
Received Date	Feb 13, 2020
Date Reported	Feb 13, 2020

METHODOLOGY:

Asbestos Sampling	Sampling as per the National Occupational Health & Safety Commission - Guidance Note on The Membrane Filter Method For Estimating Airborne Asbestos Fibres 2nd Edition [NOHSC:3003(2005)]
Pump Calibration	Defender 520M: Calibrated against National Institute of Standards & Technology (NIST) SOP 13 Standard Operating Procedure for Calibration of Volumetric Ware, Gravimetric Method utilising a 1000 mL burette with a digital stop watch.
Asbestos Counting	Conducted in accordance with the National Occupational Health & Safety Commission - Guidance Note on The Membrane Filter Method For Estimating Airborne Asbestos Fibres 2nd Edition [NOHSC:3003(2005)] and in-house Method LTM-ASB-8010.

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Project Name PYRMONT
Project ID 10378
Date Sampled Feb 13, 2020
Report 701957-AFC

Eurofins Sample No.	Client Sample ID	Pump ID	Location	Start (time)	End (time)	Start Flow Rate (L/min)	End Flow Rate (L/min)	Result (Fibres/Fields)	Result (Fibres/mL)
20-Fe17860	DL011102	62222	SOUTH	7:08	12:43	3.0	3.0	0/100	< 0.01
20-Fe17861	DL010908	21233	EAST	7:06	12:41	3.0	3.0	0/100	< 0.01
20-Fe17862	DL011137	81658	WEST	7:10	12:39	3.0	3.0	0/100	< 0.01
20-Fe17863	DL010984	BLANK	BLANK	--	--	--	--	0/100	--

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

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

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8010	Sydney	Feb 13, 2020	Indefinite
Asbestos - LTM-ASB-8010	Sydney	Feb 13, 2020	Indefinite

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ABN – 50 005 085 521 web : www.eurofins.com.au e.mail : EnviroSales@eurofins.com

Australia

Melbourne
6 Monterey Road
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Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

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

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

Perth
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261
Site # 23736

New Zealand

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

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

Company Name: Alliance Geotechnical
Address: 10 Welder Road
Seven Hills
NSW 2147

Project Name: PYRMONT
Project ID: 10378

Order No.:
Report #: 701957
Phone: 1800 288 188
Fax: 02 9675 1888

Received: Feb 13, 2020 6:20 PM
Due: Feb 13, 2020
Priority: Same day
Contact Name: Steven Wallace

Eurofins Analytical Services Manager : Andrew Black

Sample Detail						Asbestos (concentration of fibres in air)
Melbourne Laboratory - NATA Site # 1254 & 14271						
Sydney Laboratory - NATA Site # 18217						X
Brisbane Laboratory - NATA Site # 20794						
Perth Laboratory - NATA Site # 23736						
External Laboratory						
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**	
1	DL011102	Feb 13, 2020	12:43PM	Air	S20-Fe17860	X
2	DL010908	Feb 13, 2020	12:41PM	Air	S20-Fe17861	X
3	DL011137	Feb 13, 2020	12:39PM	Air	S20-Fe17862	X
4	DL010984	Feb 13, 2020		Air	S20-Fe17863	X
Test Counts						4

Internal Quality Control Review and Glossary

General

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

Holding Times

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

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample Receipt Advice.

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

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

Units

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

Terms

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

Comments

Volume Measurement : Issabelle Figatowski, Alliance Geotechnical, has been trained by Eurofins and they conducted the sampling in accordance with the National Occupational Health & Safety Commission - Guidance Note on The Membrane Filter Method For Estimating Airborne Asbestos Fibres 2nd Edition [NOHSC:3003(2005)]methodology. Sampling pumps used by Alliance Geotechnical were calibrated by Eurofins Environment Testing and therefore volume measurements contained in this report are traceable back to Eurofins Environment Testing. Eurofins Environment Testing are responsible for all data contained in this report.

Sample Integrity

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

Qualifier Codes/Comments

Code	Description
N/A	Not applicable

Asbestos Counter/Identifier:

Cameron Maxworthy	Senior Analyst-Asbestos (NSW)

Authorised by:

Sayeed Abu	Senior Analyst-Asbestos (NSW)



Glenn Jackson
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

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

Measurement uncertainty of test data is available on request or please click here.

Eurofins shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

Certificate of Analysis

Environment Testing

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Alliance Geotechnical
10 Welder Road
Seven Hills
NSW 2147

Attention:	Steven Wallace
Report	702723-AFC
Project Name	PYRMONT
Project ID	10378
Received Date	Feb 18, 2020
Date Reported	Feb 18, 2020

METHODOLOGY:

Asbestos Sampling	Sampling as per the National Occupational Health & Safety Commission - Guidance Note on The Membrane Filter Method For Estimating Airborne Asbestos Fibres 2nd Edition [NOHSC:3003(2005)]
Pump Calibration	Defender 520M: Calibrated against National Institute of Standards & Technology (NIST) SOP 13 Standard Operating Procedure for Calibration of Volumetric Ware, Gravimetric Method utilising a 1000 mL burette with a digital stop watch.
Asbestos Counting	Conducted in accordance with the National Occupational Health & Safety Commission - Guidance Note on The Membrane Filter Method For Estimating Airborne Asbestos Fibres 2nd Edition [NOHSC:3003(2005)] and in-house Method LTM-ASB-8010.

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Project Name PYRMONT
Project ID 10378
Date Sampled Feb 17, 2020
Report 702723-AFC

Eurofins Sample No.	Client Sample ID	Pump ID	Location	Start (time)	End (time)	Start Flow Rate (L/min)	End Flow Rate (L/min)	Result (Fibres/Fields)	Result (Fibres/mL)
20-Fe23649	DL012512	62222	SOUTH	7:02	14:53	2.0	2.0	0/100	< 0.01
20-Fe23650	DL029863	21233	EAST	7:03	14:54	2.0	2.0	0/100	< 0.01
20-Fe23651	DL012610	81658	WEST	7:04	14:55	2.0	2.0	0/100	< 0.01
20-Fe23652	DL029879	BLANK	BLANK	--	--	--	--	0/100	--

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

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

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8010	Sydney	Feb 18, 2020	Indefinite
Asbestos - LTM-ASB-8010	Sydney	Feb 18, 2020	Indefinite

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ABN – 50 005 085 521 web : www.eurofins.com.au e.mail : EnviroSales@eurofins.com

Australia

Melbourne
6 Monterey Road
Dandenong South VIC 3175
Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

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

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

Perth
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261
Site # 23736

New Zealand

Auckland
35 O'Rorke Road
Penrose, Auckland 1061
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Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Company Name: Alliance Geotechnical
Address: 10 Welder Road
Seven Hills
NSW 2147

Project Name: PYRMONT
Project ID: 10378

Order No.:
Report #: 702723
Phone: 1800 288 188
Fax: 02 9675 1888

Received: Feb 18, 2020 6:02 PM
Due: Feb 18, 2020
Priority: Same day
Contact Name: Steven Wallace

Eurofins Analytical Services Manager : Andrew Black

Sample Detail						Asbestos (concentration of fibres in air)
Melbourne Laboratory - NATA Site # 1254 & 14271						
Sydney Laboratory - NATA Site # 18217						X
Brisbane Laboratory - NATA Site # 20794						
Perth Laboratory - NATA Site # 23736						
External Laboratory						
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**	
1	DL012512	Feb 17, 2020	2:53PM	Air	S20-Fe23649	X
2	DL029863	Feb 17, 2020	2:54PM	Air	S20-Fe23650	X
3	DL012610	Feb 17, 2020	2:55PM	Air	S20-Fe23651	X
4	DL029879	Feb 17, 2020		Air	S20-Fe23652	X
Test Counts						4

Internal Quality Control Review and Glossary

General

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

Holding Times

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

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample Receipt Advice.

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

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

Units

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

Terms

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

Comments

Volume Measurement : Isabelle Figatowski, Alliance Geotechnical, has been trained by Eurofins and they conducted the sampling in accordance with the National Occupational Health & Safety Commission - Guidance Note on The Membrane Filter Method For Estimating Airborne Asbestos Fibres 2nd Edition [NOHSC:3003(2005)]methodology. Sampling pumps used by Alliance Geotechnical were calibrated by Eurofins Environment Testing and therefore volume measurements contained in this report are traceable back to Eurofins Environment Testing. Eurofins Environment Testing are responsible for all data contained in this report.

Sample Integrity

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

Qualifier Codes/Comments

Code	Description
N/A	Not applicable

Asbestos Counter/Identifier:

Cameron Maxworthy	Senior Analyst-Asbestos (NSW)

Authorised by:

Sayeed Abu	Senior Analyst-Asbestos (NSW)



Glenn Jackson
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

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

Measurement uncertainty of test data is available on request or please click here.

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VOLUME AIR MEASUREMENT CHAIN OF CUSTODY RECORD

ABN 50 005 085 521

☑ **Sydney Laboratory** Unit F3 Bld.F, 16 Mars Rd, Lane Cove West, NSW 2066 02 9900 8400 EnviroSampleNSW@eurofins.com

☐ **Brisbane Laboratory** Unit 1, 21 Smallwood Pl., Murarrie, QLD 4172 07 3902 4600 EnviroSampleQLD@eurofins.com

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

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

Company	Alliance Geotechnical Pty Ltd	Project №	10378	Project Manager	S. Wallace
Address	10 Welder Road, Seven Hills 2147 NSW	Project Name	Pyramont	Eurofins Quote Number	
Contact Number				CoC Submitted (date & sign)	__:__ 10/2/2020
Sampler Name	S. Shrestha			Primary Email for Results	enviro@allgeo.com.au
Site Conditions / Observations				Secondary Email for Results	sambhu@allgeo.com.au
Timepiece ID					
Flowmeter ID	AGR03				

Analyses (Note SUITE code must be used to attract SUITE pricing)

VOLUME AIR MEASUREMENT RECORD

Containers

Turnaround Time (TAT) (Default will be 5 days if not ticked)

☐ Same Day / ASAP Report*
☑ 1 Day* ☐ 2 Day*
☐ 3 Day* ☐ 5 Day
* Surcharges apply
☐ Other ( )

№	Client Sample ID (or Location)	Date (dd/mm/yy)	Pump ID	Asbestos ID - Concentration of Fibres in air	Start Time (HH:mm)	End Time (HH:mm)	Initial Flow Rate (L/min)	Check Flow Rate (L/min)	Final Flow Rate (L/min)	ΔFlow Rates <10%? (y/n)	Fibre Count Cowl (25mm, MFM)	Carbon Tube	Dust Cassette	Respirable Membrane	Inhalable Membrane	Hi-Vol Filter	DPM Membrane	Other (please specify in sample notes)	Sample Location (or Barcode) / Comments / Media
1	DC010697		~~78348~~ ~~20525~~	x	735	1100	2	2	2	N	x								North East, Boundary on fence
2	DC010655		45196	x	736	1101	2	2	2	N	x								Eastern aspect adj. Tosie ~~Hall~~ office
3	DC010747		81565	x	737	1102	2	2	2	N	x								southern aspect on fence
4	DC010756			13 CANIC															
5																			
6																			
7																			
8																			
9																			
10																			
	Total Counts																		

Method of Shipment	☑ Courier (#)	☐ Hand Delivered	☐ Postal	Name	S Shrestha	Signature		Date __/__/__ Time __:__
Eurofins | mgt Laboratory Use Only	Received By	Suzanne Ford	SYD | BNE | MEL | PER | ADL | NTL | DRW	Signature		Date	10/2/2020	Time 5650 Temperature
	Received By		SYD | BNE | MEL | PER | ADL | NTL | DRW	Signature		Date	__/__/__	Time __:__ Report № 701153

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VOLUME AIR MEASUREMENT CHAIN OF CUSTODY RECORD

ABN 50 005 085 521

☐ **Sydney Laboratory** Unit F3 Bld.F, 16 Mars Rd, Lane Cove West, NSW 2066 02 9900 8400 EnviroSampleNSW@eurofins.com

☐ **Brisbane Laboratory** Unit 1, 21 Smallwood Pl., Murarrie, QLD 4172 07 3902 4600 EnviroSampleQLD@eurofins.com

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

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

Company	Alliance Geotechnical Pty Ltd	**Project №**	10378	**Project Manager**	S. WALLACE
Address	10 Welder Road, Seven Hills 2147 NSW	**Project Name**	PYRMONT	**Eurofins Quote Number**	
Contact Number	0430 572 224			**CoC Submitted** *(date & sign)*	__:__ __/__/__
Sampler Name	ISABELLE FIGATOWSKI			**Primary Email for Results**	enviro@allgeo.com.au
Site Conditions / Observations				**Secondary Email for Results**	
Timepiece ID					
Flowmeter ID	AGL-02				

Analyses (Note: SUITE code must be used to attract SUITE pricing): ASBESTOS FIXED

VOLUME AIR MEASUREMENT RECORD

Containers

Turnaround Time (TAT) (Default will be 5 days if not ticked)

☑ Same Day / ASAP Report* ☐ 1 Day* ☐ 2 Day* ☐ 3 Day* ☐ 5 Day * Surcharges apply ☐ Other ( )

№	Client Sample ID (or Location)	Date (dd/mm/yy)	Pump ID	Start Time (HH:mm)	End Time (HH:mm)	Initial Flow Rate (L/min)	Check Flow Rate (L/min)	Final Flow Rate (L/min)	ΔFlow Rates <10%? (y/n)	Fibre Count Cowl (25mm, MFM)	Carbon Tube	Dust Cassette	Respirable Membrane	Inhalable Membrane	Hi-Vol Filter	DPM Membrane	Other (please specify in sample notes)	Sample Location (or Barcode) / Comments / Media
1	DL011102	13/2/20	62222	0708	1243	3.0	–	3.0	y	X							~~X~~	SOUTH
2	DL010908	↓	21233	0706	1241	3.0	–	3.0	y	X							~~X~~	EAST
3	DL011137		81658	0710	1239	3.0	–	3.0	y	X								WEST
4	DL010984		–	–	–	–	–	–		X								BLANK.
5																		
6																		
7																		
8																		
9																		
10																		
	Total Counts		4							4								

Method of Shipment	☐ Courier (#) ☐ Hand Delivered ☐ Postal	Name	ISABELLE FIGATOWSKI	Signature		Date	13/2/20 Time 16:00
Eurofins | mgt Laboratory Use Only	Received By	SYD | BNE | MEL | PER | ADL | NTL | DRW	Signature	Date	13/2/2020 Time 6:20PM	Temperature	
	Received By	SYD | BNE | MEL | PER | ADL | NTL | DRW	Signature	Date __/__/__ Time __:__		Report №	701957

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VOLUME AIR MEASUREMENT CHAIN OF CUSTODY RECORD

ABN 50 005 085 521

☑ Sydney Laboratory
Unit F3 Bld.F, 16 Mars Rd, Lane Cove West, NSW 2066
02 9900 8400 EnviroSampleNSW@eurofins.com

☐ Brisbane Laboratory
Unit 1, 21 Smallwood Pl, Murarrie, QLD 4172
07 3902 4600 EnviroSampleQLD@eurofins.com

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

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

Company	ALLIANCE GEOTECHNICAL	Project №	10378	Project Manager	S. WALLACE
Address	10 WELDER RD SEVEN HILLS	Project Name	PYRMONT	Eurofins Quote Number	
Contact Number	0430572224			CoC Submitted (date & sign)	__:__ __/__/__
Sampler Name	ISABELLE FIGLAROWSKI			Primary Email for Results	
Site Conditions / Observations				Secondary Email for Results	
Timepiece ID					
Flowmeter ID	AQR-02				

Analyses (Note: SUITE code must be used to attract SuITE pricing): ASBESTOS FIBRES.

VOLUME AIR MEASUREMENT RECORD

Containers

Turnaround Time (TAT) (Default will be 5 days if not ticked)

☒ Same Day / ASAP Report*
☐ 1 Day* ☐ 2 Day*
☐ 3 Day* ☐ 5 Day
* Surcharges apply
☐ Other ( )

№	Client Sample ID (or Location)	Date (dd/mm/yy)	Pump ID		Start Time (HH:mm)	End Time (HH:mm)	Initial Flow Rate (L/min)	Check Flow Rate (L/min)	Final Flow Rate (L/min)	ΔFlow Rates <10%? (y/n)	Fibre Count Cowl (25mm, MFM)	Carbon Tube	Dust Cassette	Respirable Membrane	Inhalable Membrane	Hi-Vol Filter	DPM Membrane	Other (please specify in sample notes)	Sample Location (or Barcode) / Comments / Media
1	DL012512	17/02/20	62222	X	0702	1453	2.0	–	2.0	y	X								SOUTH
2	DL029863		21233	X	0703	1454	2.0	–	2.0	y	X								EAST
3	DL012610		81658	X	0704	1455	2.0	–	2.0	y.	X								WEST
4	DL029879			X							X								
5																			
6																			
7																			
8																			
9																			
10																			
		Total Counts		4							4								

Method of Shipment	☑ Courier (#)	☐ Hand Delivered	☐ Postal	Name	I. FIGLAROWSKI	Signature		Date 17/2/20 Time 16:00
Eurofins | mgt Laboratory Use Only	Received By		SYD | BNE | MEL | PER | ADL | NTL | DRW	Signature		Date 18/2/2020	Time 6:20pm	Temperature
	Received By		SYD | BNE | MEL | PER | ADL | NTL | DRW	Signature		Date __/__/__	Time __:__	Report № 70273

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Appendix H: Final Analytical Laboratory Reports for Characterisation/Validation Samples and Imported Material Samples

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

CERTIFICATE OF ANALYSIS 232681

Client Details

Client	Consara Pty Ltd
Attention	Rebecca Organo
Address	PO Box 7360, Warringah Mall, NSW, 2100

Sample Details

Your Reference	**C151008, Bank St**
Number of Samples	11 Soil
Date samples received	09/12/2019
Date completed instructions received	09/12/2019

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Please refer to the last page of this report for any comments relating to the results.

Report Details

Date results requested by	11/12/2019
Date of Issue	11/12/2019

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Asbestos Approved By
Analysed by Asbestos Approved Identifier: Lucy Zhu
Authorised by Asbestos Approved Signatory: Lucy Zhu

Results Approved By
Diego Bigolin, Team Leader, Inorganics
Jaimie Loa-Kum-Cheung, Metals Supervisor
Josh Williams, Senior Chemist
Lucy Zhu, Senior Asbestos Analyst
Steven Luong, Organics Supervisor

Authorised By



Nancy Zhang, Laboratory Manager

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		232681-1	232681-2	232681-3	232681-4	232681-6
Your Reference	UNITS	CS_01	CS_02	CS_03	CS_04	CS_06
Date Sampled		09/12/2019	09/12/2019	09/12/2019	09/12/2019	09/12/2019
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Date analysed	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<3	<3	<3	<3	<3
Surrogate aaa-Trifluorotoluene	%	128	116	132	126	122

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		232681-7	232681-8	232681-9	232681-10	232681-11
Your Reference	UNITS	CS_07	CS_08	QC01	QC100	QC101
Date Sampled		09/12/2019	09/12/2019	09/12/2019	09/12/2019	09/12/2019
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Date analysed	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
TRH C_6 - C_9	mg/kg	<25	<25	<25	[NA]	[NA]
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	[NA]	[NA]
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	[NA]	[NA]
Benzene	mg/kg	<0.2	<0.2	<0.2	90%	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	91%	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	88%	<1
m+p-xylene	mg/kg	<2	<2	<2	88%	<2
o-Xylene	mg/kg	<1	<1	<1	90%	<1
naphthalene	mg/kg	<1	<1	<1	[NA]	[NA]
Total +ve Xylenes	mg/kg	<3	<3	<3	[NA]	<3
Surrogate aaa-Trifluorotoluene	%	122	118	123	91	121

svTRH (C10-C40) in Soil						
Our Reference		232681-1	232681-2	232681-3	232681-4	232681-6
Your Reference	UNITS	CS_01	CS_02	CS_03	CS_04	CS_06
Date Sampled		09/12/2019	09/12/2019	09/12/2019	09/12/2019	09/12/2019
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Date analysed	-	11/12/2019	11/12/2019	11/12/2019	11/12/2019	11/12/2019
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	84	78	77	86	80

svTRH (C10-C40) in Soil				
Our Reference		232681-7	232681-8	232681-9
Your Reference	UNITS	CS_07	CS_08	QC01
Date Sampled		09/12/2019	09/12/2019	09/12/2019
Type of sample		Soil	Soil	Soil
Date extracted	-	10/12/2019	10/12/2019	10/12/2019
Date analysed	-	11/12/2019	11/12/2019	11/12/2019
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50
Surrogate o-Terphenyl	%	74	76	75

PAHs in Soil						
Our Reference		232681-1	232681-2	232681-3	232681-4	232681-6
Your Reference	UNITS	CS_01	CS_02	CS_03	CS_04	CS_06
Date Sampled		09/12/2019	09/12/2019	09/12/2019	09/12/2019	09/12/2019
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Date analysed	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Naphthalene	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	0.8	0.2	0.5	0.3	0.5
Anthracene	mg/kg	0.1	0.1	0.1	<0.1	0.2
Fluoranthene	mg/kg	2.1	1.0	1.3	0.9	2.1
Pyrene	mg/kg	2.0	1	1.2	0.8	2.0
Benzo(a)anthracene	mg/kg	1.1	0.5	0.6	0.4	0.9
Chrysene	mg/kg	1.0	0.5	0.5	0.4	0.8
Benzo(b,j+k)fluoranthene	mg/kg	2.4	2	1	1	2
Benzo(a)pyrene	mg/kg	1.4	0.95	0.69	0.57	1.1
Indeno(1,2,3-c,d)pyrene	mg/kg	0.9	0.7	0.4	0.4	0.6
Dibenzo(a,h)anthracene	mg/kg	0.2	0.2	0.1	0.1	0.2
Benzo(g,h,i)perylene	mg/kg	1.3	1.1	0.6	0.5	0.9
Total +ve PAH's	mg/kg	14	7.9	7.2	5.4	11
Benzo(a)pyrene TEQ calc (zero)	mg/kg	2.2	1.4	1.0	0.9	1.6
Benzo(a)pyrene TEQ calc(half)	mg/kg	2.2	1.4	1.0	0.9	1.6
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	2.2	1.4	1.0	0.9	1.6
Surrogate p-Terphenyl-d14	%	124	98	100	100	98

PAHs in Soil				
Our Reference		232681-7	232681-8	232681-9
Your Reference	UNITS	CS_07	CS_08	QC01
Date Sampled		09/12/2019	09/12/2019	09/12/2019
Type of sample		Soil	Soil	Soil
Date extracted	-	10/12/2019	10/12/2019	10/12/2019
Date analysed	-	10/12/2019	10/12/2019	10/12/2019
Naphthalene	mg/kg	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	0.4	0.7
Anthracene	mg/kg	<0.1	0.1	0.2
Fluoranthene	mg/kg	0.4	1	2.0
Pyrene	mg/kg	0.4	0.9	1.8
Benzo(a)anthracene	mg/kg	0.2	0.5	1
Chrysene	mg/kg	0.2	0.5	1
Benzo(b,j+k)fluoranthene	mg/kg	0.4	1	2.0
Benzo(a)pyrene	mg/kg	0.3	0.60	1.2
Indeno(1,2,3-c,d)pyrene	mg/kg	0.2	0.4	0.7
Dibenzo(a,h)anthracene	mg/kg	<0.1	0.1	0.2
Benzo(g,h,i)perylene	mg/kg	0.2	0.5	0.9
Total +ve PAH's	mg/kg	2.5	5.9	12
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	0.9	1.8
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	0.9	1.8
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	0.9	1.8
Surrogate p-Terphenyl-d14	%	101	102	98

Organochlorine Pesticides in soil						
Our Reference		232681-1	232681-2	232681-3	232681-4	232681-6
Your Reference	UNITS	CS_01	CS_02	CS_03	CS_04	CS_06
Date Sampled		09/12/2019	09/12/2019	09/12/2019	09/12/2019	09/12/2019
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Date analysed	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
HCB	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	120	93	93	94	93

Organochlorine Pesticides in soil				
Our Reference		232681-7	232681-8	232681-9
Your Reference	UNITS	CS_07	CS_08	QC01
Date Sampled		09/12/2019	09/12/2019	09/12/2019
Type of sample		Soil	Soil	Soil
Date extracted	-	10/12/2019	10/12/2019	10/12/2019
Date analysed	-	10/12/2019	10/12/2019	10/12/2019
alpha-BHC	mg/kg	<0.1	<0.1	<0.1
HCB	mg/kg	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1	<0.1
Surrogate TCMX	%	94	93	92

Organophosphorus Pesticides in Soil						
Our Reference		232681-1	232681-2	232681-3	232681-4	232681-6
Your Reference	UNITS	CS_01	CS_02	CS_03	CS_04	CS_06
Date Sampled		09/12/2019	09/12/2019	09/12/2019	09/12/2019	09/12/2019
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Date analysed	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Dichlorvos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	120	93	93	94	93

Organophosphorus Pesticides in Soil				
Our Reference		232681-7	232681-8	232681-9
Your Reference	UNITS	CS_07	CS_08	QC01
Date Sampled		09/12/2019	09/12/2019	09/12/2019
Type of sample		Soil	Soil	Soil
Date extracted	-	10/12/2019	10/12/2019	10/12/2019
Date analysed	-	10/12/2019	10/12/2019	10/12/2019
Dichlorvos	mg/kg	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1
Surrogate TCMX	%	94	93	92

Misc Soil - Inorg						
Our Reference		232681-1	232681-2	232681-3	232681-4	232681-6
Your Reference	UNITS	CS_01	CS_02	CS_03	CS_04	CS_06
Date Sampled		09/12/2019	09/12/2019	09/12/2019	09/12/2019	09/12/2019
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Date analysed	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Total Phenolics (as Phenol)	mg/kg	<5	<5	<5	<5	<5

Misc Soil - Inorg				
Our Reference		232681-7	232681-8	232681-9
Your Reference	UNITS	CS_07	CS_08	QC01
Date Sampled		09/12/2019	09/12/2019	09/12/2019
Type of sample		Soil	Soil	Soil
Date prepared	-	10/12/2019	10/12/2019	10/12/2019
Date analysed	-	10/12/2019	10/12/2019	10/12/2019
Total Phenolics (as Phenol)	mg/kg	<5	<5	<5

PCBs in Soil						
Our Reference		232681-1	232681-2	232681-3	232681-4	232681-6
Your Reference	UNITS	CS_01	CS_02	CS_03	CS_04	CS_06
Date Sampled		09/12/2019	09/12/2019	09/12/2019	09/12/2019	09/12/2019
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Date analysed	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Aroclor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	120	93	93	94	93

PCBs in Soil				
Our Reference		232681-7	232681-8	232681-9
Your Reference	UNITS	CS_07	CS_08	QC01
Date Sampled		09/12/2019	09/12/2019	09/12/2019
Type of sample		Soil	Soil	Soil
Date extracted	-	10/12/2019	10/12/2019	10/12/2019
Date analysed	-	10/12/2019	10/12/2019	10/12/2019
Aroclor 1016	mg/kg	<0.1	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1	<0.1	<0.1
Surrogate TCMX	%	94	93	92

Acid Extractable metals in soil						
Our Reference		232681-1	232681-2	232681-3	232681-4	232681-6
Your Reference	UNITS	CS_01	CS_02	CS_03	CS_04	CS_06
Date Sampled		09/12/2019	09/12/2019	09/12/2019	09/12/2019	09/12/2019
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Date analysed	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Arsenic	mg/kg	6	<4	25	6	<4
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	9	6	8	8	7
Copper	mg/kg	93	16	41	59	29
Lead	mg/kg	300	38	58	110	40
Mercury	mg/kg	0.3	<0.1	<0.1	0.2	<0.1
Nickel	mg/kg	13	5	7	10	6
Zinc	mg/kg	120	48	100	95	72

Acid Extractable metals in soil					
Our Reference		232681-7	232681-8	232681-9	232681-12
Your Reference	UNITS	CS_07	CS_08	QC01	CS_01 - [TRIPLICATE]
Date Sampled		09/12/2019	09/12/2019	09/12/2019	09/12/2019
Type of sample		Soil	Soil	Soil	Soil
Date prepared	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Date analysed	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Arsenic	mg/kg	<4	5	6	6
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	9	10	9	8
Copper	mg/kg	18	33	49	43
Lead	mg/kg	25	82	200	140
Mercury	mg/kg	<0.1	0.1	0.2	0.3
Nickel	mg/kg	16	9	11	9
Zinc	mg/kg	64	130	140	100

Moisture						
Our Reference		232681-1	232681-2	232681-3	232681-4	232681-6
Your Reference	UNITS	CS_01	CS_02	CS_03	CS_04	CS_06
Date Sampled		09/12/2019	09/12/2019	09/12/2019	09/12/2019	09/12/2019
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Date analysed	-	11/12/2019	11/12/2019	11/12/2019	11/12/2019	11/12/2019
Moisture	%	9.2	5.9	5.2	6.1	8.2

Moisture				
Our Reference		232681-7	232681-8	232681-9
Your Reference	UNITS	CS_07	CS_08	QC01
Date Sampled		09/12/2019	09/12/2019	09/12/2019
Type of sample		Soil	Soil	Soil
Date prepared	-	10/12/2019	10/12/2019	10/12/2019
Date analysed	-	11/12/2019	11/12/2019	11/12/2019
Moisture	%	4.8	3.0	7.6

Asbestos ID - soils NEPM - ASB-001						
Our Reference	UNITS	232681-1	232681-2	232681-3	232681-4	232681-5
Your Reference		CS_01	CS_02	CS_03	CS_04	CS_05
Date Sampled		09/12/2019	09/12/2019	09/12/2019	09/12/2019	09/12/2019
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Sample mass tested	g	620.05	552.52	797.18	667.88	720.18
Sample Description	-	Grey coarse-grained soil & rocks	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos[#1]	g/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	–	–	–	–	–
FA and AF Estimation*	g	–	–	–	–	–
ACM >7mm Estimation*	%(w/w)	<0.01	<0.01	<0.01	<0.01	<0.01
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	<0.001	<0.001	<0.001

Asbestos ID - soils NEPM - ASB-001				
Our Reference		232681-6	232681-7	232681-8
Your Reference	UNITS	CS_06	CS_07	CS_08
Date Sampled		09/12/2019	09/12/2019	09/12/2019
Type of sample		Soil	Soil	Soil
Date analysed	-	10/12/2019	10/12/2019	10/12/2019
Sample mass tested	g	639.15	633.21	652.11
Sample Description	-	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos#1	g/kg	<0.1	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	–	–	–
FA and AF Estimation*	g	–	–	–
ACM >7mm Estimation*	%(w/w)	<0.01	<0.01	<0.01
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	<0.001

Metals in TCLP USEPA1311					
Our Reference		232681-2	232681-3	232681-4	232681-6
Your Reference	UNITS	CS_02	CS_03	CS_04	CS_06
Date Sampled		09/12/2019	09/12/2019	09/12/2019	09/12/2019
Type of sample		Soil	Soil	Soil	Soil
Date extracted	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Date analysed	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019
pH of soil for fluid# determ.	pH units	9.2	9.4	9.3	9.3
pH of soil TCLP (after HCl)	pH units	1.7	1.7	1.8	1.7
Extraction fluid used	-	1	1	1	1
pH of final Leachate	pH units	5.2	5.3	5.2	5.0
Arsenic in TCLP	mg/L	<0.05	<0.05	<0.05	<0.05
Cadmium in TCLP	mg/L	<0.01	<0.01	<0.01	<0.01
Chromium in TCLP	mg/L	<0.01	<0.01	<0.01	<0.01
Lead in TCLP	mg/L	0.04	0.04	0.07	0.2
Mercury in TCLP	mg/L	<0.0005	<0.0005	<0.0005	<0.0005
Nickel in TCLP	mg/L	<0.02	<0.02	<0.02	0.02

PAHs in TCLP (USEPA 1311)					
Our Reference		232681-2	232681-3	232681-4	232681-6
Your Reference	UNITS	CS_02	CS_03	CS_04	CS_06
Date Sampled		09/12/2019	09/12/2019	09/12/2019	09/12/2019
Type of sample		Soil	Soil	Soil	Soil
Date extracted	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Date analysed	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Naphthalene in TCLP	mg/L	<0.001	<0.001	<0.001	<0.001
Acenaphthylene in TCLP	mg/L	<0.001	<0.001	<0.001	<0.001
Acenaphthene in TCLP	mg/L	<0.001	<0.001	<0.001	<0.001
Fluorene in TCLP	mg/L	<0.001	<0.001	<0.001	<0.001
Phenanthrene in TCLP	mg/L	<0.001	<0.001	<0.001	<0.001
Anthracene in TCLP	mg/L	<0.001	<0.001	<0.001	<0.001
Fluoranthene in TCLP	mg/L	<0.001	<0.001	<0.001	<0.001
Pyrene in TCLP	mg/L	<0.001	<0.001	<0.001	<0.001
Benzo(a)anthracene in TCLP	mg/L	<0.001	<0.001	<0.001	<0.001
Chrysene in TCLP	mg/L	<0.001	<0.001	<0.001	<0.001
Benzo(bjk)fluoranthene in TCLP	mg/L	<0.002	<0.002	<0.002	<0.002
Benzo(a)pyrene in TCLP	mg/L	<0.001	<0.001	<0.001	<0.001
Indeno(1,2,3-c,d)pyrene - TCLP	mg/L	<0.001	<0.001	<0.001	<0.001
Dibenzo(a,h)anthracene in TCLP	mg/L	<0.001	<0.001	<0.001	<0.001
Benzo(g,h,i)perylene in TCLP	mg/L	<0.001	<0.001	<0.001	<0.001
Total +ve PAH's	mg/L	NIL (+)VE	NIL (+)VE	NIL (+)VE	NIL (+)VE
Surrogate p-Terphenyl-d14	%	89	114	111	94

Method ID	Methodology Summary
ASB-001	Asbestos ID - Qualitative identification of asbestos in bulk samples using Polarised Light Microscopy and Dispersion Staining Techniques including Synthetic Mineral Fibre and Organic Fibre as per Australian Standard 4964-2004.
ASB-001	Asbestos ID - Identification of asbestos in soil samples using Polarised Light Microscopy and Dispersion Staining Techniques. Minimum 500mL soil sample was analysed as recommended by "National Environment Protection (Assessment of site contamination) Measure, Schedule B1 and "The Guidelines from the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia - May 2009" with a reporting limit of 0.1g/kg (0.01% w/w) as per Australian Standard AS4964-2004. Results reported denoted with * are outside our scope of NATA accreditation. **NOTE** #1 Total Asbestos g/kg was analysed and reported as per Australian Standard AS4964 (This is the sum of ACM >7mm, <7mm and FA/AF) **NOTE** #2 The screening level of 0.001% w/w asbestos in soil for FA and AF only applies where the FA and AF are able to be quantified by gravimetric procedures. This screening level is not applicable to free fibres. Estimation = Estimated asbestos weight Results reported with "--" is equivalent to no visible asbestos identified using Polarised Light microscopy and Dispersion Staining Techniques.
AT-008	Determination of VOCs sampled onto coconut shell charcoal sorbent tubes, that can be desorbed using carbon disulphide, and analysed by GC-MS.
EXTRACT.7	Toxicity Characteristic Leaching Procedure (TCLP) using Zero Headspace Extraction (zHE) using AS4439 and USEPA 1311.
Inorg-001	pH - Measured using pH meter and electrode in accordance with APHA latest edition, 4500-H+. Please note that the results for water analyses are indicative only, as analysis outside of the APHA storage times.
Inorg-004	Toxicity Characteristic Leaching Procedure (TCLP) using in house method INORG-004. Please note that the mass used may be scaled down from the default based on sample mass available.
Inorg-008	Moisture content determined by heating at 105+/-5 °C for a minimum of 12 hours.
Inorg-031	Total Phenolics by segmented flow analyser (in line distillation with colourimetric finish). Solids are extracted in a caustic media prior to analysis.
Metals-020	Determination of various metals by ICP-AES.
Metals-020 ICP-AES	Determination of various metals by ICP-AES.
Metals-021	Determination of Mercury by Cold Vapour AAS.
Metals-021 CV-AAS	Determination of Mercury by Cold Vapour AAS.

Method ID	Methodology Summary
Org-003	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.
Org-003	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis. Note, the Total +ve TRH PQL is reflective of the lowest individual PQL and is therefore "Total +ve TRH" is simply a sum of the positive individual TRH fractions (>C10-C40).
Org-006	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD.
Org-006	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD. Note, the Total +ve PCBs PQL is reflective of the lowest individual PQL and is therefore" Total +ve PCBs" is simply a sum of the positive individual PCBs.
Org-012/017	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS and/or GC-MS/MS.
Org-012/017	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-MS and/or GC-MS/MS. Note, the Total +ve reported DDD+DDE+DDT PQL is reflective of the lowest individual PQL and is therefore simply a sum of the positive individually report DDD+DDE+DDT.
Org-012/017	Leachates are extracted with Dichloromethane and analysed by GC-MS and/or GC-MS/MS.
Org-012/017	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS and/or GC-MS/MS. Benzo(a)pyrene TEQ as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater - 2013. For soil results:- 1. 'EQ PQL'values are assuming all contributing PAHs reported as <PQL are actually at the PQL. This is the most conservative approach and can give false positive TEQs given that PAHs that contribute to the TEQ calculation may not be present. 2. 'EQ zero'values are assuming all contributing PAHs reported as <PQL are zero. This is the least conservative approach and is more susceptible to false negative TEQs when PAHs that contribute to the TEQ calculation are present but below PQL. 3. 'EQ half PQL'values are assuming all contributing PAHs reported as <PQL are half the stipulated PQL. Hence a mid-point between the most and least conservative approaches above. Note, the Total +ve PAHs PQL is reflective of the lowest individual PQL and is therefore "Total +ve PAHs" is simply a sum of the positive individual PAHs.
Org-014	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS.
Org-016	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.

Method ID	Methodology Summary
Org-016	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater. Note, the Total +ve Xylene PQL is reflective of the lowest individual PQL and is therefore "Total +ve Xylenes" is simply a sum of the positive individual Xylenes.

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	232681-2
Date extracted	-			10/12/2019	1	10/12/2019	10/12/2019		10/12/2019	10/12/2019
Date analysed	-			10/12/2019	1	10/12/2019	10/12/2019		10/12/2019	10/12/2019
TRH C_6 - C_9	mg/kg	25	Org-016	<25	1	<25	<25	0	124	105
TRH C_6 - C_{10}	mg/kg	25	Org-016	<25	1	<25	<25	0	124	105
Benzene	mg/kg	0.2	Org-016	<0.2	1	<0.2	<0.2	0	124	106
Toluene	mg/kg	0.5	Org-016	<0.5	1	<0.5	<0.5	0	123	103
Ethylbenzene	mg/kg	1	Org-016	<1	1	<1	<1	0	123	103
m+p-xylene	mg/kg	2	Org-016	<2	1	<2	<2	0	126	106
o-Xylene	mg/kg	1	Org-016	<1	1	<1	<1	0	123	103
naphthalene	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-016	133	1	128	116	10	127	109

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	9	10/12/2019	10/12/2019		[NT]	[NT]
Date analysed	-			[NT]	9	10/12/2019	10/12/2019		[NT]	[NT]
TRH C_6 - C_9	mg/kg	25	Org-016	[NT]	9	<25	<25	0	[NT]	[NT]
TRH C_6 - C_{10}	mg/kg	25	Org-016	[NT]	9	<25	<25	0	[NT]	[NT]
Benzene	mg/kg	0.2	Org-016	[NT]	9	<0.2	<0.2	0	[NT]	[NT]
Toluene	mg/kg	0.5	Org-016	[NT]	9	<0.5	<0.5	0	[NT]	[NT]
Ethylbenzene	mg/kg	1	Org-016	[NT]	9	<1	<1	0	[NT]	[NT]
m+p-xylene	mg/kg	2	Org-016	[NT]	9	<2	<2	0	[NT]	[NT]
o-Xylene	mg/kg	1	Org-016	[NT]	9	<1	<1	0	[NT]	[NT]
naphthalene	mg/kg	1	Org-014	[NT]	9	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-016	[NT]	9	123	123	0	[NT]	[NT]

QUALITY CONTROL: svTRH (C10-C40) in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	232681-2
Date extracted	-			10/12/2019	1	10/12/2019	10/12/2019		10/12/2019	10/12/2019
Date analysed	-			10/12/2019	1	11/12/2019	11/12/2019		11/12/2019	11/12/2019
TRH C_{10} - C_{14}	mg/kg	50	Org-003	<50	1	<50	<50	0	102	97
TRH C_{15} - C_{28}	mg/kg	100	Org-003	<100	1	<100	<100	0	119	115
TRH C_{29} - C_{36}	mg/kg	100	Org-003	<100	1	<100	<100	0	92	86
TRH >C_{10} -C_{16}	mg/kg	50	Org-003	<50	1	<50	<50	0	102	97
TRH >C_{16} -C_{34}	mg/kg	100	Org-003	<100	1	<100	<100	0	119	115
TRH >C_{34} -C_{40}	mg/kg	100	Org-003	<100	1	<100	<100	0	92	86
Surrogate o-Terphenyl	%		Org-003	82	1	84	86	2	91	78

QUALITY CONTROL: svTRH (C10-C40) in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	9	10/12/2019	10/12/2019		[NT]	[NT]
Date analysed	-			[NT]	9	11/12/2019	11/12/2019		[NT]	[NT]
TRH C_{10} - C_{14}	mg/kg	50	Org-003	[NT]	9	<50	<50	0	[NT]	[NT]
TRH C_{15} - C_{28}	mg/kg	100	Org-003	[NT]	9	<100	<100	0	[NT]	[NT]
TRH C_{29} - C_{36}	mg/kg	100	Org-003	[NT]	9	<100	<100	0	[NT]	[NT]
TRH >C_{10} -C_{16}	mg/kg	50	Org-003	[NT]	9	<50	<50	0	[NT]	[NT]
TRH >C_{16} -C_{34}	mg/kg	100	Org-003	[NT]	9	<100	<100	0	[NT]	[NT]
TRH >C_{34} -C_{40}	mg/kg	100	Org-003	[NT]	9	<100	<100	0	[NT]	[NT]
Surrogate o-Terphenyl	%		Org-003	[NT]	9	75	76	1	[NT]	[NT]

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	232681-2
Date extracted	-			10/12/2019	1	10/12/2019	10/12/2019		10/12/2019	10/12/2019
Date analysed	-			10/12/2019	1	10/12/2019	10/12/2019		10/12/2019	10/12/2019
Naphthalene	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	114	116
Acenaphthylene	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Fluorene	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	124	116
Phenanthrene	mg/kg	0.1	Org-012/017	<0.1	1	0.8	0.5	46	134	122
Anthracene	mg/kg	0.1	Org-012/017	<0.1	1	0.1	0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-012/017	<0.1	1	2.1	1.3	47	124	124
Pyrene	mg/kg	0.1	Org-012/017	<0.1	1	2.0	1.3	42	120	125
Benzo(a)anthracene	mg/kg	0.1	Org-012/017	<0.1	1	1.1	0.6	59	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-012/017	<0.1	1	1.0	0.6	50	118	120
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-012/017	<0.2	1	2.4	1	82	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-012/017	<0.05	1	1.4	0.80	55	138	107
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-012/017	<0.1	1	0.9	0.5	57	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-012/017	<0.1	1	0.2	0.2	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-012/017	<0.1	1	1.3	0.8	48	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-012/017	102	1	124	98	23	112	101

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	9	10/12/2019	10/12/2019		[NT]	[NT]
Date analysed	-			[NT]	9	10/12/2019	10/12/2019		[NT]	[NT]
Naphthalene	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Acenaphthylene	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Fluorene	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Phenanthrene	mg/kg	0.1	Org-012/017	[NT]	9	0.7	0.9	25	[NT]	[NT]
Anthracene	mg/kg	0.1	Org-012/017	[NT]	9	0.2	0.1	67	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-012/017	[NT]	9	2.0	1.9	5	[NT]	[NT]
Pyrene	mg/kg	0.1	Org-012/017	[NT]	9	1.8	1.8	0	[NT]	[NT]
Benzo(a)anthracene	mg/kg	0.1	Org-012/017	[NT]	9	1	0.8	22	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-012/017	[NT]	9	1	0.8	22	[NT]	[NT]
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-012/017	[NT]	9	2.0	2	0	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-012/017	[NT]	9	1.2	1.1	9	[NT]	[NT]
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-012/017	[NT]	9	0.7	0.7	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-012/017	[NT]	9	0.2	0.2	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-012/017	[NT]	9	0.9	1.0	11	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-012/017	[NT]	9	98	94	4	[NT]	[NT]

QUALITY CONTROL: Organochlorine Pesticides in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	232681-2
Date extracted	-			10/12/2019	1	10/12/2019	10/12/2019		10/12/2019	10/12/2019
Date analysed	-			10/12/2019	1	10/12/2019	10/12/2019		10/12/2019	10/12/2019
alpha-BHC	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	122	120
HCB	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	120	114
gamma-BHC	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Heptachlor	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	122	118
delta-BHC	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	118	122
Heptachlor Epoxide	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	112	116
gamma-Chlordane	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	112	118
Dieldrin	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	120	132
Endrin	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	126	124
Endosulfan II	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDD	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	122	114
Endrin Aldehyde	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	110	122
Methoxychlor	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-012/017	103	1	120	95	23	109	93

QUALITY CONTROL: Organochlorine Pesticides in soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	9	10/12/2019	10/12/2019		[NT]	[NT]
Date analysed	-			[NT]	9	10/12/2019	10/12/2019		[NT]	[NT]
alpha-BHC	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
HCB	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
gamma-BHC	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Heptachlor	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
delta-BHC	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Heptachlor Epoxide	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
gamma-Chlordane	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Dieldrin	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Endrin	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Endosulfan II	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
pp-DDD	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Endrin Aldehyde	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Methoxychlor	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-012/017	[NT]	9	92	87	6	[NT]	[NT]

QUALITY CONTROL: Organophosphorus Pesticides in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	232681-2
Date extracted	-			10/12/2019	1	10/12/2019	10/12/2019		10/12/2019	10/12/2019
Date analysed	-			10/12/2019	1	10/12/2019	10/12/2019		10/12/2019	10/12/2019
Dichlorvos	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	96	100
Dimethoate	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Chlorpyriphos-methyl	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	96	88
Fenitrothion	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	102	106
Malathion	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	89	88
Chlorpyriphos	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	96	92
Parathion	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	110	114
Bromophos-ethyl	mg/kg	0.1	AT-008	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Ethion	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	84	90
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-012/017	103	1	120	95	23	109	93

QUALITY CONTROL: Organophosphorus Pesticides in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	9	10/12/2019	10/12/2019		[NT]	[NT]
Date analysed	-			[NT]	9	10/12/2019	10/12/2019		[NT]	[NT]
Dichlorvos	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Dimethoate	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Chlorpyriphos-methyl	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Fenitrothion	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Malathion	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Chlorpyriphos	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Parathion	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Bromophos-ethyl	mg/kg	0.1	AT-008	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Ethion	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-012/017	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-012/017	[NT]	9	92	87	6	[NT]	[NT]

QUALITY CONTROL: Misc Soil - Inorg						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	232681-2
Date prepared	-			10/12/2019	1	10/12/2019	10/12/2019		10/12/2019	10/12/2019
Date analysed	-			10/12/2019	1	10/12/2019	10/12/2019		10/12/2019	10/12/2019
Total Phenolics (as Phenol)	mg/kg	5	Inorg-031	<5	1	<5	<5	0	109	102

QUALITY CONTROL: PCBs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	232681-2
Date extracted	-			10/12/2019	1	10/12/2019	10/12/2019		10/12/2019	10/12/2019
Date analysed	-			10/12/2019	1	10/12/2019	10/12/2019		10/12/2019	10/12/2019
Aroclor 1016	mg/kg	0.1	Org-006	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1221	mg/kg	0.1	Org-006	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1232	mg/kg	0.1	Org-006	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1242	mg/kg	0.1	Org-006	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1248	mg/kg	0.1	Org-006	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1254	mg/kg	0.1	Org-006	<0.1	1	<0.1	<0.1	0	110	90
Aroclor 1260	mg/kg	0.1	Org-006	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-006	103	1	120	95	23	109	93

QUALITY CONTROL: PCBs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	9	10/12/2019	10/12/2019		[NT]	[NT]
Date analysed	-			[NT]	9	10/12/2019	10/12/2019		[NT]	[NT]
Aroclor 1016	mg/kg	0.1	Org-006	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1221	mg/kg	0.1	Org-006	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1232	mg/kg	0.1	Org-006	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1242	mg/kg	0.1	Org-006	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1248	mg/kg	0.1	Org-006	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1254	mg/kg	0.1	Org-006	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1260	mg/kg	0.1	Org-006	[NT]	9	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-006	[NT]	9	92	87	6	[NT]	[NT]

QUALITY CONTROL: Acid Extractable metals in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	232681-3
Date prepared	-			10/12/2019	1	10/12/2019	10/12/2019		10/12/2019	10/12/2019
Date analysed	-			10/12/2019	1	10/12/2019	10/12/2019		10/12/2019	10/12/2019
Arsenic	mg/kg	4	Metals-020	<4	1	6	7	15	102	#
Cadmium	mg/kg	0.4	Metals-020	<0.4	1	<0.4	<0.4	0	103	99
Chromium	mg/kg	1	Metals-020	<1	1	9	8	12	107	102
Copper	mg/kg	1	Metals-020	<1	1	93	62	40	103	73
Lead	mg/kg	1	Metals-020	<1	1	300	170	55	106	82
Mercury	mg/kg	0.1	Metals-021	<0.1	1	0.3	0.3	0	86	94
Nickel	mg/kg	1	Metals-020	<1	1	13	10	26	102	98
Zinc	mg/kg	1	Metals-020	<1	1	120	120	0	108	#

QUALITY CONTROL: Acid Extractable metals in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	9	10/12/2019	10/12/2019		[NT]	[NT]
Date analysed	-			[NT]	9	10/12/2019	10/12/2019		[NT]	[NT]
Arsenic	mg/kg	4	Metals-020	[NT]	9	6	7	15	[NT]	[NT]
Cadmium	mg/kg	0.4	Metals-020	[NT]	9	<0.4	<0.4	0	[NT]	[NT]
Chromium	mg/kg	1	Metals-020	[NT]	9	9	9	0	[NT]	[NT]
Copper	mg/kg	1	Metals-020	[NT]	9	49	52	6	[NT]	[NT]
Lead	mg/kg	1	Metals-020	[NT]	9	200	190	5	[NT]	[NT]
Mercury	mg/kg	0.1	Metals-021	[NT]	9	0.2	0.5	86	[NT]	[NT]
Nickel	mg/kg	1	Metals-020	[NT]	9	11	10	10	[NT]	[NT]
Zinc	mg/kg	1	Metals-020	[NT]	9	140	140	0	[NT]	[NT]

QUALITY CONTROL: Metals in TCLP USEPA1311						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	232681-3
Date extracted	-			10/12/2019	2	10/12/2019	10/12/2019		10/12/2019	10/12/2019
Date analysed	-			10/12/2019	2	10/12/2019	10/12/2019		10/12/2019	10/12/2019
Arsenic in TCLP	mg/L	0.05	Metals-020 ICP-AES	<0.05	2	<0.05	<0.05	0	101	107
Cadmium in TCLP	mg/L	0.01	Metals-020 ICP-AES	<0.01	2	<0.01	<0.01	0	92	93
Chromium in TCLP	mg/L	0.01	Metals-020 ICP-AES	<0.01	2	<0.01	<0.01	0	95	98
Lead in TCLP	mg/L	0.03	Metals-020 ICP-AES	<0.03	2	0.04	0.03	29	93	96
Mercury in TCLP	mg/L	0.0005	Metals-021 CV-AAS	<0.0005	2	<0.0005	<0.0005	0	120	117
Nickel in TCLP	mg/L	0.02	Metals-020 ICP-AES	<0.02	2	<0.02	<0.02	0	95	97

QUALITY CONTROL: PAHs in TCLP (USEPA 1311)						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	232681-3
Date extracted	-			10/12/2019	2	10/12/2019	10/12/2019		10/12/2019	10/12/2019
Date analysed	-			10/12/2019	2	10/12/2019	10/12/2019		10/12/2019	10/12/2019
Naphthalene in TCLP	mg/L	0.001	Org-012/017	<0.001	2	<0.001	<0.001	0	106	88
Acenaphthylene in TCLP	mg/L	0.001	Org-012/017	<0.001	2	<0.001	<0.001	0	[NT]	[NT]
Acenaphthene in TCLP	mg/L	0.001	Org-012/017	<0.001	2	<0.001	<0.001	0	[NT]	[NT]
Fluorene in TCLP	mg/L	0.001	Org-012/017	<0.001	2	<0.001	<0.001	0	110	97
Phenanthrene in TCLP	mg/L	0.001	Org-012/017	<0.001	2	<0.001	<0.001	0	100	93
Anthracene in TCLP	mg/L	0.001	Org-012/017	<0.001	2	<0.001	<0.001	0	[NT]	[NT]
Fluoranthene in TCLP	mg/L	0.001	Org-012/017	<0.001	2	<0.001	<0.001	0	118	102
Pyrene in TCLP	mg/L	0.001	Org-012/017	<0.001	2	<0.001	<0.001	0	122	81
Benzo(a)anthracene in TCLP	mg/L	0.001	Org-012/017	<0.001	2	<0.001	<0.001	0	[NT]	[NT]
Chrysene in TCLP	mg/L	0.001	Org-012/017	<0.001	2	<0.001	<0.001	0	92	81
Benzo(bjk)fluoranthene in TCLP	mg/L	0.002	Org-012/017	<0.002	2	<0.002	<0.002	0	[NT]	[NT]
Benzo(a)pyrene in TCLP	mg/L	0.001	Org-012/017	<0.001	2	<0.001	<0.001	0	88	79
Indeno(1,2,3-c,d)pyrene - TCLP	mg/L	0.001	Org-012/017	<0.001	2	<0.001	<0.001	0	[NT]	[NT]
Dibenzo(a,h)anthracene in TCLP	mg/L	0.001	Org-012/017	<0.001	2	<0.001	<0.001	0	[NT]	[NT]
Benzo(g,h,i)perylene in TCLP	mg/L	0.001	Org-012/017	<0.001	2	<0.001	<0.001	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-012/017	100	2	89	85	5	112	90

Result Definitions

NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

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

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

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

Report Comments

Asbestos-ID in soil: NEPM
This report is consistent with the reporting recommendations in the National Environment Protection (Assessment of Site Contamination) Measure, Schedule B1, May 2013. This is reported outside our scope of NATA accreditation.

8 metals in soil:
- # Percent recovery is not possible to report due to the inhomogeneous nature of the element/s in the sample/s. However an acceptable recovery was obtained for the LCS.
- The laboratory RPD acceptance criteria has been exceeded for 232681-1 for Cu & Pb. Therefore a triplicate result has been issued as laboratory sample number 232681-12.

PAHs in Soil - The RPD for duplicate results is accepted due to the non homogenous nature of sample 232681-1

CONSARA

CONTAMINATED SITES assessment ▪ remediation ▪ advice

Chain of Custody Record

Project No:	CS1008
Project/Site:	BANK ST
Sampled By:	RORGANO
Phone:	0404005394
Page	1 of 1
Number of Eskies:	1

Lab:	ENVIROLAB
Lab Quote No:	
Lab Batch No:	
Date Results Required:	48HR TAT
Sample Disposal After:	

LAB ID	SAMPLE ID	DATE	MATRIX	CONTAINER TYPE & PRESERVATIVE: Soil 0.1-0.2 L Glass Jar, unpreserved	Soil - Plastic bag	Water 0.1-0.2 L Plastic, Filtered, HNO3	Water 0.5-1.0 L Amber glass, unpreserved	Water 40-50ml Glass, unpreserved	Water 0.25-1 L Plastic, unpreserved	Water 0.2-1.0L Plastic, sterile	ANALYSIS REQUIRED: COMBO 8	ASBESTOS - 0&S - NEPM	COMBO 12	PHENOLICS	BTEX						HOLD
1	CS_01	9/12/19	SOIL	1	1						X	X									
2	CS_02			1	1							X	X	X							
3	CS_03			1	1							X	X	X	X						
4	CS_04			1	1							X	X	X	X						
5	CS_05			1	1							X	X	X	X						
6	CS_06			1	1							X	X	X	X						
7	CS_07			1	1						X	X	X								
8	CS_08			1	1						X	X	X								
9	QC01			1	1						X										
10	QC100			1												X					
11	QC101			1												X					
			TOTALS																		

ENVIROLAB

Envirolab Services
12 Ashley St
Chatswood NSW 2067
Ph. (02) 9910 6200

Job No: 232681
Date Received: 9/12/2019
Time Received: 15:25
Received by: PL
Temp: Cool/Ambient 1.2
Cooling: Ice/Icepack
Security: Intact/Broken/None

Relinquished By:			Received By:	
NAME	SIGNATURE	DATE	NAME	SIGNATURE
RORGANO		9/12/19	Ray	9/12/2019 15:25

Custody Seals Intact	Y	N
Samples Received Chilled	Y	N
Method of Shipment		

NOTES: 2 DAY / 48HR TAT PLEASE.

CONSARA Pty Ltd ABN 27 161 027 881
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PO Box 7360 Warringah Mall NSW 2100

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

CERTIFICATE OF ANALYSIS 234676

Client Details

Client	Consara Pty Ltd
Attention	Rebecca Organo
Address	PO Box 7360, Warringah Mall, NSW, 2100

Sample Details

Your Reference	**C151008, Bank St**
Number of Samples	11 Soil, 1 Material
Date samples received	16/01/2020
Date completed instructions received	16/01/2020

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Please refer to the last page of this report for any comments relating to the results.

Report Details

Date results requested by	23/01/2020
Date of Issue	22/01/2020

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Accredited for compliance with ISO/IEC 17025 - Testing. **Tests not covered by NATA are denoted with ***

Asbestos Approved By
Analysed by Asbestos Approved Identifier: Wonnie Condos
Authorised by Asbestos Approved Signatory: Lucy Zhu

Results Approved By
Diego Bigolin, Team Leader, Inorganics
Jaimie Loa-Kum-Cheung, Metals Supervisor
Josh Williams, Senior Chemist
Lucy Zhu, Asbestos Supervisor
Steven Luong, Organics Supervisor

Authorised By



Nancy Zhang, Laboratory Manager

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		234676-1	234676-2	234676-3	234676-4	234676-5
Your Reference	UNITS	SP01_01	SP02_01	BS_01	SP03_01	SP03_02
Date Sampled		14/01/2020	14/01/2020	14/01/2020	14/01/2020	14/01/2020
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Date analysed	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<3	<3	<3	<3	<3
Surrogate aaa-Trifluorotoluene	%	92	75	72	95	89

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		234676-6	234676-7	234676-8	234676-10	234676-12
Your Reference	UNITS	SP04_01	SP05_01	SP_ACM_01	SP_ACM_03	QC01
Date Sampled		14/01/2020	14/01/2020	14/01/2020	14/01/2020	14/01/2020
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Date analysed	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<3	<3	<3	<3	<3
Surrogate aaa-Trifluorotoluene	%	96	95	99	82	88

svTRH (C10-C40) in Soil						
Our Reference		234676-1	234676-2	234676-3	234676-4	234676-5
Your Reference	UNITS	SP01_01	SP02_01	BS_01	SP03_01	SP03_02
Date Sampled		14/01/2020	14/01/2020	14/01/2020	14/01/2020	14/01/2020
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Date analysed	-	21/01/2020	21/01/2020	21/01/2020	21/01/2020	21/01/2020
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	160	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	160	<50	<50	<50	<50
Surrogate o-Terphenyl	%	117	83	84	82	82

svTRH (C10-C40) in Soil						
Our Reference		234676-6	234676-7	234676-8	234676-10	234676-12
Your Reference	UNITS	SP04_01	SP05_01	SP_ACM_01	SP_ACM_03	QC01
Date Sampled		14/01/2020	14/01/2020	14/01/2020	14/01/2020	14/01/2020
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Date analysed	-	21/01/2020	21/01/2020	21/01/2020	21/01/2020	21/01/2020
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	110	<100	<100	<100	<100
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	170	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	170	<50	<50	<50	<50
Surrogate o-Terphenyl	%	81	82	84	83	94

PAHs in Soil						
Our Reference		234676-1	234676-2	234676-3	234676-4	234676-5
Your Reference	UNITS	SP01_01	SP02_01	BS_01	SP03_01	SP03_02
Date Sampled		14/01/2020	14/01/2020	14/01/2020	14/01/2020	14/01/2020
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	21/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Date analysed	-	21/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Naphthalene	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	0.4	0.1	0.2	0.2	0.2
Anthracene	mg/kg	<0.1	<0.1	<0.1	0.2	0.3
Fluoranthene	mg/kg	1.7	0.5	0.2	0.7	0.8
Pyrene	mg/kg	1.7	0.5	0.2	0.7	0.8
Benzo(a)anthracene	mg/kg	0.8	0.3	0.1	0.3	0.4
Chrysene	mg/kg	0.7	0.2	<0.1	0.3	0.4
Benzo(b,j+k)fluoranthene	mg/kg	1	0.5	<0.2	0.6	0.7
Benzo(a)pyrene	mg/kg	0.85	0.3	0.08	0.4	0.4
Indeno(1,2,3-c,d)pyrene	mg/kg	0.5	0.2	<0.1	0.2	0.2
Dibenzo(a,h)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	0.6	0.2	<0.1	0.2	0.2
Total +ve PAH's	mg/kg	8.8	2.8	0.84	3.8	4.2
Benzo(a)pyrene TEQ calc (zero)	mg/kg	1.3	<0.5	<0.5	<0.5	0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	1.3	<0.5	<0.5	0.5	0.6
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	1.3	<0.5	<0.5	0.6	0.6
Surrogate p-Terphenyl-d14	%	105	109	107	103	106

PAHs in Soil						
Our Reference		234676-6	234676-7	234676-8	234676-10	234676-12
Your Reference	UNITS	SP04_01	SP05_01	SP_ACM_01	SP_ACM_03	QC01
Date Sampled		14/01/2020	14/01/2020	14/01/2020	14/01/2020	14/01/2020
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Date analysed	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Naphthalene	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	2.4	0.7	0.9	0.3	0.4
Anthracene	mg/kg	0.5	0.2	0.4	<0.1	<0.1
Fluoranthene	mg/kg	7.6	1.6	2.9	0.8	1
Pyrene	mg/kg	7.6	1.6	2.9	0.8	1
Benzo(a)anthracene	mg/kg	3.3	0.6	1.1	0.4	0.5
Chrysene	mg/kg	2.7	0.5	0.9	0.4	0.4
Benzo(b,j+k)fluoranthene	mg/kg	6.0	0.9	2	0.7	0.9
Benzo(a)pyrene	mg/kg	3.3	0.5	0.80	0.4	0.5
Indeno(1,2,3-c,d)pyrene	mg/kg	1.6	0.2	0.3	0.1	0.2
Dibenzo(a,h)anthracene	mg/kg	0.3	<0.1	0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	1.8	0.2	0.4	0.2	0.2
Total +ve PAH's	mg/kg	37	7.0	12	4.1	5.0
Benzo(a)pyrene TEQ calc (zero)	mg/kg	4.8	0.6	1.2	0.5	0.6
Benzo(a)pyrene TEQ calc(half)	mg/kg	4.8	0.7	1.2	0.6	0.7
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	4.8	0.7	1.2	0.6	0.7
Surrogate p-Terphenyl-d14	%	106	104	111	104	109

PAHs in Soil		
Our Reference		234676-13
Your Reference	UNITS	SP01_01 - [TRIPLICATE]
Date Sampled		14/01/2020
Type of sample		Soil
Date extracted	-	21/01/2020
Date analysed	-	22/01/2020
Naphthalene	mg/kg	<0.1
Acenaphthylene	mg/kg	<0.1
Acenaphthene	mg/kg	<0.1
Fluorene	mg/kg	<0.1
Phenanthrene	mg/kg	0.4
Anthracene	mg/kg	<0.1
Fluoranthene	mg/kg	1.9
Pyrene	mg/kg	1.8
Benzo(a)anthracene	mg/kg	1.2
Chrysene	mg/kg	1.2
Benzo(b,j+k)fluoranthene	mg/kg	2
Benzo(a)pyrene	mg/kg	1.0
Indeno(1,2,3-c,d)pyrene	mg/kg	0.8
Dibenzo(a,h)anthracene	mg/kg	0.3
Benzo(g,h,i)perylene	mg/kg	0.9
Total +ve PAH's	mg/kg	11
Benzo(a)pyrene TEQ calc (zero)	mg/kg	1.7
Benzo(a)pyrene TEQ calc(half)	mg/kg	1.7
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	1.7
Surrogate p-Terphenyl-d14	%	98

Organochlorine Pesticides in soil						
Our Reference		234676-1	234676-2	234676-3	234676-4	234676-5
Your Reference	UNITS	SP01_01	SP02_01	BS_01	SP03_01	SP03_02
Date Sampled		14/01/2020	14/01/2020	14/01/2020	14/01/2020	14/01/2020
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Date analysed	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
HCB	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	101	101	101	95	103

Organochlorine Pesticides in soil						
Our Reference		234676-6	234676-7	234676-8	234676-10	234676-12
Your Reference	UNITS	SP04_01	SP05_01	SP_ACM_01	SP_ACM_03	QC01
Date Sampled		14/01/2020	14/01/2020	14/01/2020	14/01/2020	14/01/2020
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Date analysed	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
HCB	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	110	102	108	107	107

Organophosphorus Pesticides in Soil						
Our Reference		234676-1	234676-2	234676-3	234676-4	234676-5
Your Reference	UNITS	SP01_01	SP02_01	BS_01	SP03_01	SP03_02
Date Sampled		14/01/2020	14/01/2020	14/01/2020	14/01/2020	14/01/2020
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Date analysed	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Dichlorvos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	101	101	101	95	103

Organophosphorus Pesticides in Soil						
Our Reference		234676-6	234676-7	234676-8	234676-10	234676-12
Your Reference	UNITS	SP04_01	SP05_01	SP_ACM_01	SP_ACM_03	QC01
Date Sampled		14/01/2020	14/01/2020	14/01/2020	14/01/2020	14/01/2020
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Date analysed	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Dichlorvos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	110	102	108	107	107

Misc Soil - Inorg						
Our Reference		234676-1	234676-2	234676-3	234676-4	234676-5
Your Reference	UNITS	SP01_01	SP02_01	BS_01	SP03_01	SP03_02
Date Sampled		14/01/2020	14/01/2020	14/01/2020	14/01/2020	14/01/2020
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Date analysed	-	21/01/2020	21/01/2020	21/01/2020	21/01/2020	21/01/2020
Total Phenolics (as Phenol)	mg/kg	<5	<5	<5	<5	<5

Misc Soil - Inorg						
Our Reference		234676-6	234676-7	234676-8	234676-10	234676-12
Your Reference	UNITS	SP04_01	SP05_01	SP_ACM_01	SP_ACM_03	QC01
Date Sampled		14/01/2020	14/01/2020	14/01/2020	14/01/2020	14/01/2020
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Date analysed	-	21/01/2020	21/01/2020	21/01/2020	21/01/2020	21/01/2020
Total Phenolics (as Phenol)	mg/kg	<5	<5	<5	<5	<5

PCBs in Soil						
Our Reference		234676-1	234676-2	234676-3	234676-4	234676-5
Your Reference	UNITS	SP01_01	SP02_01	BS_01	SP03_01	SP03_02
Date Sampled		14/01/2020	14/01/2020	14/01/2020	14/01/2020	14/01/2020
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Date analysed	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Aroclor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	101	101	101	95	103

PCBs in Soil						
Our Reference		234676-6	234676-7	234676-8	234676-10	234676-12
Your Reference	UNITS	SP04_01	SP05_01	SP_ACM_01	SP_ACM_03	QC01
Date Sampled		14/01/2020	14/01/2020	14/01/2020	14/01/2020	14/01/2020
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Date analysed	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Aroclor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	110	102	108	107	107

Acid Extractable metals in soil						
Our Reference		234676-1	234676-2	234676-3	234676-4	234676-5
Your Reference	UNITS	SP01_01	SP02_01	BS_01	SP03_01	SP03_02
Date Sampled		14/01/2020	14/01/2020	14/01/2020	14/01/2020	14/01/2020
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Date analysed	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Arsenic	mg/kg	5	<4	<4	<4	4
Cadmium	mg/kg	<0.4	<0.4	<0.4	0.9	<0.4
Chromium	mg/kg	9	8	13	12	13
Copper	mg/kg	40	16	15	24	27
Lead	mg/kg	80	38	11	43	39
Mercury	mg/kg	<0.1	<0.1	<0.1	0.1	<0.1
Nickel	mg/kg	7	5	8	7	8
Zinc	mg/kg	240	65	40	65	66

Acid Extractable metals in soil						
Our Reference		234676-6	234676-7	234676-8	234676-10	234676-12
Your Reference	UNITS	SP04_01	SP05_01	SP_ACM_01	SP_ACM_03	QC01
Date Sampled		14/01/2020	14/01/2020	14/01/2020	14/01/2020	14/01/2020
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Date analysed	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Arsenic	mg/kg	5	<4	10	7	6
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	9	8	10	8	9
Copper	mg/kg	36	34	59	50	55
Lead	mg/kg	93	110	85	82	89
Mercury	mg/kg	0.1	<0.1	0.2	0.2	0.5
Nickel	mg/kg	8	7	12	10	11
Zinc	mg/kg	91	120	110	99	98

Moisture						
Our Reference		234676-1	234676-2	234676-3	234676-4	234676-5
Your Reference	UNITS	SP01_01	SP02_01	BS_01	SP03_01	SP03_02
Date Sampled		14/01/2020	14/01/2020	14/01/2020	14/01/2020	14/01/2020
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Date analysed	-	21/01/2020	21/01/2020	21/01/2020	21/01/2020	21/01/2020
Moisture	%	0.6	6.6	5.5	7.0	7.5

Moisture						
Our Reference		234676-6	234676-7	234676-8	234676-10	234676-12
Your Reference	UNITS	SP04_01	SP05_01	SP_ACM_01	SP_ACM_03	QC01
Date Sampled		14/01/2020	14/01/2020	14/01/2020	14/01/2020	14/01/2020
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	20/01/2020	20/01/2020	20/01/2020	20/01/2020	20/01/2020
Date analysed	-	21/01/2020	21/01/2020	21/01/2020	21/01/2020	21/01/2020
Moisture	%	6.2	3.2	1.5	1	1.1

Asbestos ID - soils NEPM - ASB-001						
Our Reference	UNITS	234676-1	234676-2	234676-3	234676-5	234676-6
Your Reference		SP01_01	SP02_01	BS_01	SP03_02	SP04_01
Date Sampled		14/01/2020	14/01/2020	14/01/2020	14/01/2020	14/01/2020
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	17/01/2020	17/01/2020	17/01/2020	17/01/2020	17/01/2020
Sample mass tested	g	794.33	566.97	766.32	684.24	622.96
Sample Description	-	Brown sandy soil & rocks	Brown sandy soil & rocks	Brown sandy soil & rocks	Brown sandy soil & rocks	Brown sandy soil & rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected Synthetic Mineral Fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected Synthetic Mineral Fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos#1	g/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	–	–	–	–	–
FA and AF Estimation*	g	–	–	–	–	–
ACM >7mm Estimation*	%(w/w)	<0.01	<0.01	<0.01	<0.01	<0.01
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	<0.001	<0.001	<0.001

Asbestos ID - soils NEPM - ASB-001				
Our Reference		234676-7	234676-8	234676-10
Your Reference	UNITS	SP05_01	SP_ACM_01	SP_ACM_03
Date Sampled		14/01/2020	14/01/2020	14/01/2020
Type of sample		Soil	Soil	Soil
Date analysed	-	17/01/2020	17/01/2020	17/01/2020
Sample mass tested	g	676.81	667.47	596.14
Sample Description	-	Brown sandy soil & rocks	Brown sandy soil & rocks	Brown sandy soil & rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos#1	g/kg	<0.1	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	–	–	–
FA and AF Estimation*	g	–	–	–
ACM >7mm Estimation*	%(w/w)	<0.01	<0.01	<0.01
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	<0.001

Asbestos ID - materials		
Our Reference		234676-11
Your Reference	UNITS	SP_ACM_FRAG
Date Sampled		14/01/2020
Type of sample		Material
Date analysed	-	22/01/2020
Mass / Dimension of Sample	-	66x65x8mm
Sample Description	-	Beige fibre cement material
Asbestos ID in materials	-	Chrysotile asbestos detected Crocidolite asbestos detected
Trace Analysis	-	[NT]

Method ID	Methodology Summary
ASB-001	Asbestos ID - Qualitative identification of asbestos in bulk samples using Polarised Light Microscopy and Dispersion Staining Techniques including Synthetic Mineral Fibre and Organic Fibre as per Australian Standard 4964-2004.
ASB-001	Asbestos ID - Identification of asbestos in soil samples using Polarised Light Microscopy and Dispersion Staining Techniques. Minimum 500mL soil sample was analysed as recommended by "National Environment Protection (Assessment of site contamination) Measure, Schedule B1 and "The Guidelines from the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia - May 2009" with a reporting limit of 0.1g/kg (0.01% w/w) as per Australian Standard AS4964-2004. Results reported denoted with * are outside our scope of NATA accreditation. **NOTE** #1 Total Asbestos g/kg was analysed and reported as per Australian Standard AS4964 (This is the sum of ACM >7mm, <7mm and FA/AF) **NOTE** #2 The screening level of 0.001% w/w asbestos in soil for FA and AF only applies where the FA and AF are able to be quantified by gravimetric procedures. This screening level is not applicable to free fibres. Estimation = Estimated asbestos weight Results reported with "--" is equivalent to no visible asbestos identified using Polarised Light microscopy and Dispersion Staining Techniques.
AT-008	Determination of VOCs sampled onto coconut shell charcoal sorbent tubes, that can be desorbed using carbon disulphide, and analysed by GC-MS.
Inorg-008	Moisture content determined by heating at 105+/-5 °C for a minimum of 12 hours.
Inorg-031	Total Phenolics by segmented flow analyser (in line distillation with colourimetric finish). Solids are extracted in a caustic media prior to analysis.
Metals-020	Determination of various metals by ICP-AES.
Metals-021	Determination of Mercury by Cold Vapour AAS.
Org-003	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.

Method ID	Methodology Summary
Org-003	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis. Note, the Total +ve TRH PQL is reflective of the lowest individual PQL and is therefore "Total +ve TRH" is simply a sum of the positive individual TRH fractions (>C10-C40).
Org-006	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD.
Org-006	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD. Note, the Total +ve PCBs PQL is reflective of the lowest individual PQL and is therefore" Total +ve PCBs" is simply a sum of the positive individual PCBs.
Org-012/017	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS and/or GC-MS/MS.
Org-012/017	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-MS and/or GC-MS/MS. Note, the Total +ve reported DDD+DDE+DDT PQL is reflective of the lowest individual PQL and is therefore simply a sum of the positive individually report DDD+DDE+DDT.
Org-012/017	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS and/or GC-MS/MS. Benzo(a)pyrene TEQ as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater - 2013. For soil results:- 1. 'EQ PQL'values are assuming all contributing PAHs reported as <PQL are actually at the PQL. This is the most conservative approach and can give false positive TEQs given that PAHs that contribute to the TEQ calculation may not be present. 2. 'EQ zero'values are assuming all contributing PAHs reported as <PQL are zero. This is the least conservative approach and is more susceptible to false negative TEQs when PAHs that contribute to the TEQ calculation are present but below PQL. 3. 'EQ half PQL'values are assuming all contributing PAHs reported as <PQL are half the stipulated PQL. Hence a mid-point between the most and least conservative approaches above. Note, the Total +ve PAHs PQL is reflective of the lowest individual PQL and is therefore "Total +ve PAHs" is simply a sum of the positive individual PAHs.
Org-014	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS.
Org-016	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.
Org-016	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater. Note, the Total +ve Xylene PQL is reflective of the lowest individual PQL and is therefore "Total +ve Xylenes" is simply a sum of the positive individual Xylenes.

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	234676-2
Date extracted	-			20/01/2020	1	20/01/2020	20/01/2020		20/01/2020	20/01/2020
Date analysed	-			20/01/2020	1	20/01/2020	20/01/2020		20/01/2020	20/01/2020
TRH C_6 - C_9	mg/kg	25	Org-016	<25	1	<25	<25	0	109	85
TRH C_6 - C_{10}	mg/kg	25	Org-016	<25	1	<25	<25	0	109	85
Benzene	mg/kg	0.2	Org-016	<0.2	1	<0.2	<0.2	0	115	85
Toluene	mg/kg	0.5	Org-016	<0.5	1	<0.5	<0.5	0	112	86
Ethylbenzene	mg/kg	1	Org-016	<1	1	<1	<1	0	107	86
m+p-xylene	mg/kg	2	Org-016	<2	1	<2	<2	0	106	84
o-Xylene	mg/kg	1	Org-016	<1	1	<1	<1	0	105	83
naphthalene	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-016	104	1	92	97	5	107	84

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	12	20/01/2020	20/01/2020		[NT]	[NT]
Date analysed	-			[NT]	12	20/01/2020	20/01/2020		[NT]	[NT]
TRH C_6 - C_9	mg/kg	25	Org-016	[NT]	12	<25	<25	0	[NT]	[NT]
TRH C_6 - C_{10}	mg/kg	25	Org-016	[NT]	12	<25	<25	0	[NT]	[NT]
Benzene	mg/kg	0.2	Org-016	[NT]	12	<0.2	<0.2	0	[NT]	[NT]
Toluene	mg/kg	0.5	Org-016	[NT]	12	<0.5	<0.5	0	[NT]	[NT]
Ethylbenzene	mg/kg	1	Org-016	[NT]	12	<1	<1	0	[NT]	[NT]
m+p-xylene	mg/kg	2	Org-016	[NT]	12	<2	<2	0	[NT]	[NT]
o-Xylene	mg/kg	1	Org-016	[NT]	12	<1	<1	0	[NT]	[NT]
naphthalene	mg/kg	1	Org-014	[NT]	12	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-016	[NT]	12	88	93	6	[NT]	[NT]

QUALITY CONTROL: svTRH (C10-C40) in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	234676-2
Date extracted	-			20/01/2020	1	20/01/2020	20/01/2020		20/01/2020	20/01/2020
Date analysed	-			21/01/2020	1	21/01/2020	21/01/2020		21/01/2020	21/01/2020
TRH C_{10} - C_{14}	mg/kg	50	Org-003	<50	1	<50	<50	0	82	92
TRH C_{15} - C_{28}	mg/kg	100	Org-003	<100	1	100	<100	0	95	113
TRH C_{29} - C_{36}	mg/kg	100	Org-003	<100	1	<100	<100	0	108	105
TRH >C_{10} -C_{16}	mg/kg	50	Org-003	<50	1	<50	<50	0	82	92
TRH >C_{16} -C_{34}	mg/kg	100	Org-003	<100	1	160	<100	46	95	113
TRH >C_{34} -C_{40}	mg/kg	100	Org-003	<100	1	<100	<100	0	108	105
Surrogate o-Terphenyl	%		Org-003	84	1	117	89	27	94	83

QUALITY CONTROL: svTRH (C10-C40) in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	12	20/01/2020	20/01/2020		[NT]	[NT]
Date analysed	-			[NT]	12	21/01/2020	21/01/2020		[NT]	[NT]
TRH C_{10} - C_{14}	mg/kg	50	Org-003	[NT]	12	<50	<50	0	[NT]	[NT]
TRH C_{15} - C_{28}	mg/kg	100	Org-003	[NT]	12	<100	<100	0	[NT]	[NT]
TRH C_{29} - C_{36}	mg/kg	100	Org-003	[NT]	12	<100	<100	0	[NT]	[NT]
TRH >C_{10} -C_{16}	mg/kg	50	Org-003	[NT]	12	<50	<50	0	[NT]	[NT]
TRH >C_{16} -C_{34}	mg/kg	100	Org-003	[NT]	12	<100	<100	0	[NT]	[NT]
TRH >C_{34} -C_{40}	mg/kg	100	Org-003	[NT]	12	<100	<100	0	[NT]	[NT]
Surrogate o-Terphenyl	%		Org-003	[NT]	12	94	83	12	[NT]	[NT]

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	234676-2
Date extracted	-			21/01/2020	1	21/01/2020	21/01/2020		20/01/2020	20/01/2020
Date analysed	-			21/01/2020	1	21/01/2020	21/01/2020		20/01/2020	20/01/2020
Naphthalene	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	90	91
Acenaphthylene	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Fluorene	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	92	98
Phenanthrene	mg/kg	0.1	Org-012/017	<0.1	1	0.4	1.5	116	92	88
Anthracene	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	0.4	120	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-012/017	<0.1	1	1.7	4.4	89	92	112
Pyrene	mg/kg	0.1	Org-012/017	<0.1	1	1.7	4.4	89	92	112
Benzo(a)anthracene	mg/kg	0.1	Org-012/017	<0.1	1	0.8	2.4	100	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-012/017	<0.1	1	0.7	2.0	96	82	96
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-012/017	<0.2	1	1	3.7	115	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-012/017	<0.05	1	0.85	2.2	89	88	94
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-012/017	<0.1	1	0.5	1.1	75	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-012/017	<0.1	1	0.1	0.3	100	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-012/017	<0.1	1	0.6	1.2	67	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-012/017	95	1	105	107	2	106	111

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	12	20/01/2020	20/01/2020		[NT]	[NT]
Date analysed	-			[NT]	12	20/01/2020	20/01/2020		[NT]	[NT]
Naphthalene	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Acenaphthylene	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Fluorene	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Phenanthrene	mg/kg	0.1	Org-012/017	[NT]	12	0.4	0.5	22	[NT]	[NT]
Anthracene	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-012/017	[NT]	12	1	1	0	[NT]	[NT]
Pyrene	mg/kg	0.1	Org-012/017	[NT]	12	1	1	0	[NT]	[NT]
Benzo(a)anthracene	mg/kg	0.1	Org-012/017	[NT]	12	0.5	0.5	0	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-012/017	[NT]	12	0.4	0.4	0	[NT]	[NT]
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-012/017	[NT]	12	0.9	0.7	25	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-012/017	[NT]	12	0.5	0.4	22	[NT]	[NT]
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-012/017	[NT]	12	0.2	0.2	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-012/017	[NT]	12	0.2	0.2	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-012/017	[NT]	12	109	109	0	[NT]	[NT]

QUALITY CONTROL: Organochlorine Pesticides in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	234676-2
Date extracted	-			20/01/2020	1	20/01/2020	20/01/2020		20/01/2020	20/01/2020
Date analysed	-			20/01/2020	1	20/01/2020	20/01/2020		20/01/2020	20/01/2020
alpha-BHC	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	106	109
HCB	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	104	116
gamma-BHC	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Heptachlor	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	100	104
delta-BHC	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	110	114
Heptachlor Epoxide	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	106	109
gamma-Chlordane	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	106	112
Dieldrin	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	114	123
Endrin	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	100	118
Endosulfan II	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDD	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	104	109
Endrin Aldehyde	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	112	121
Methoxychlor	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-012/017	100	1	101	104	3	102	71

QUALITY CONTROL: Organochlorine Pesticides in soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	12	20/01/2020	20/01/2020		[NT]	[NT]
Date analysed	-			[NT]	12	20/01/2020	20/01/2020		[NT]	[NT]
alpha-BHC	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
HCB	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
gamma-BHC	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Heptachlor	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
delta-BHC	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Heptachlor Epoxide	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
gamma-Chlordane	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Dieldrin	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Endrin	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Endosulfan II	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
pp-DDD	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Endrin Aldehyde	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Methoxychlor	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-012/017	[NT]	12	107	108	1	[NT]	[NT]

QUALITY CONTROL: Organophosphorus Pesticides in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	234676-2
Date extracted	-			20/01/2020	1	20/01/2020	20/01/2020		20/01/2020	20/01/2020
Date analysed	-			20/01/2020	1	20/01/2020	20/01/2020		20/01/2020	20/01/2020
Dichlorvos	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	100	93
Dimethoate	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Chlorpyriphos-methyl	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	102	107
Fenitrothion	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	90	93
Malathion	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	94	104
Chlorpyriphos	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	102	112
Parathion	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	100	107
Bromophos-ethyl	mg/kg	0.1	AT-008	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Ethion	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	96	109
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-012/017	100	1	101	104	3	102	71

QUALITY CONTROL: Organophosphorus Pesticides in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	12	20/01/2020	20/01/2020		[NT]	[NT]
Date analysed	-			[NT]	12	20/01/2020	20/01/2020		[NT]	[NT]
Dichlorvos	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Dimethoate	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Chlorpyriphos-methyl	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Fenitrothion	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Malathion	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Chlorpyriphos	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Parathion	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Bromophos-ethyl	mg/kg	0.1	AT-008	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Ethion	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-012/017	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-012/017	[NT]	12	107	108	1	[NT]	[NT]

QUALITY CONTROL: Misc Soil - Inorg						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	234676-2
Date prepared	-			20/01/2020	1	20/01/2020	20/01/2020		20/01/2020	20/01/2020
Date analysed	-			21/01/2020	1	21/01/2020	21/01/2020		21/01/2020	21/01/2020
Total Phenolics (as Phenol)	mg/kg	5	Inorg-031	<5	1	<5	<5	0	100	102

QUALITY CONTROL: Misc Soil - Inorg						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	12	20/01/2020	20/01/2020		[NT]	[NT]
Date analysed	-			[NT]	12	21/01/2020	21/01/2020		[NT]	[NT]
Total Phenolics (as Phenol)	mg/kg	5	Inorg-031	[NT]	12	<5	<5	0	[NT]	[NT]

QUALITY CONTROL: PCBs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	234676-2
Date extracted	-			20/01/2020	1	20/01/2020	20/01/2020		20/01/2020	20/01/2020
Date analysed	-			20/01/2020	1	20/01/2020	20/01/2020		20/01/2020	20/01/2020
Aroclor 1016	mg/kg	0.1	Org-006	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1221	mg/kg	0.1	Org-006	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1232	mg/kg	0.1	Org-006	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1242	mg/kg	0.1	Org-006	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1248	mg/kg	0.1	Org-006	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1254	mg/kg	0.1	Org-006	<0.1	1	<0.1	<0.1	0	100	106
Aroclor 1260	mg/kg	0.1	Org-006	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-006	100	1	101	104	3	102	71

QUALITY CONTROL: PCBs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	12	20/01/2020	20/01/2020		[NT]	[NT]
Date analysed	-			[NT]	12	20/01/2020	20/01/2020		[NT]	[NT]
Aroclor 1016	mg/kg	0.1	Org-006	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1221	mg/kg	0.1	Org-006	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1232	mg/kg	0.1	Org-006	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1242	mg/kg	0.1	Org-006	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1248	mg/kg	0.1	Org-006	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1254	mg/kg	0.1	Org-006	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1260	mg/kg	0.1	Org-006	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-006	[NT]	12	107	108	1	[NT]	[NT]

QUALITY CONTROL: Acid Extractable metals in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	234676-2
Date prepared	-			20/01/2020	1	20/01/2020	20/01/2020		20/01/2020	20/01/2020
Date analysed	-			20/01/2020	1	20/01/2020	20/01/2020		20/01/2020	20/01/2020
Arsenic	mg/kg	4	Metals-020	<4	1	5	5	0	108	101
Cadmium	mg/kg	0.4	Metals-020	<0.4	1	<0.4	<0.4	0	106	93
Chromium	mg/kg	1	Metals-020	<1	1	9	8	12	115	95
Copper	mg/kg	1	Metals-020	<1	1	40	43	7	109	95
Lead	mg/kg	1	Metals-020	<1	1	80	81	1	114	97
Mercury	mg/kg	0.1	Metals-021	<0.1	1	<0.1	0.1	0	115	93
Nickel	mg/kg	1	Metals-020	<1	1	7	6	15	105	97
Zinc	mg/kg	1	Metals-020	<1	1	240	270	12	114	80

QUALITY CONTROL: Acid Extractable metals in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	12	20/01/2020	20/01/2020		[NT]	[NT]
Date analysed	-			[NT]	12	20/01/2020	20/01/2020		[NT]	[NT]
Arsenic	mg/kg	4	Metals-020	[NT]	12	6	12	67	[NT]	[NT]
Cadmium	mg/kg	0.4	Metals-020	[NT]	12	<0.4	<0.4	0	[NT]	[NT]
Chromium	mg/kg	1	Metals-020	[NT]	12	9	9	0	[NT]	[NT]
Copper	mg/kg	1	Metals-020	[NT]	12	55	50	10	[NT]	[NT]
Lead	mg/kg	1	Metals-020	[NT]	12	89	76	16	[NT]	[NT]
Mercury	mg/kg	0.1	Metals-021	[NT]	12	0.5	0.2	86	[NT]	[NT]
Nickel	mg/kg	1	Metals-020	[NT]	12	11	12	9	[NT]	[NT]
Zinc	mg/kg	1	Metals-020	[NT]	12	98	89	10	[NT]	[NT]

Result Definitions

NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

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

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

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

Report Comments

Asbestos-ID in soil: NEPM
This report is consistent with the reporting recommendations in the National Environment Protection (Assessment of Site Contamination) Measure, Schedule B1, May 2013. This is reported outside our scope of NATA accreditation.

PAHs in Soil - The laboratory RPD acceptance criteria has been exceeded for 234676-1. Therefore a triplicate result has been issued as laboratory sample number 234676-13.

CONSARA

CONTAMINATED SITES assessment ▪ remediation ▪ advice

Chain of Custody Record

Project No:	CS1008
Project/Site:	BANKST PYRMONT
Sampled By:	R ORGANO
Phone:	0404083994
Page	1 of 1
Number of Eskies:	1

Lab:	ENVIROLAB
Lab Quote No:	
Lab Batch No:	
Date Results Required:	STANDARD
Sample Disposal After:	STANDARD

LAB ID	SAMPLE ID	DATE	MATRIX	Soil 0.1-0.2 L Glass jar, unpreserved	Soil - Plastic bag	Water 0.1-0.2 L Plastic, Filtered, HNO3	Water 0.5-1.0 L Amber glass, unpreserved	Water 40-50ml Glass, unpreserved	Water 0.25-1 L Plastic, unpreserved	Water 0.2-1.0L Plastic, sterile	CONTAINER TYPE & PRESERVATIVE	ANALYSIS REQUIRED: COND 8	ANALYSIS REQUIRED: OT (NEPM Asbestos summary)	ANALYSIS REQUIRED: ACM ID	HOLD
1	SP01_01	14/1/2020	SOIL	1	1							X	X		
2	SP02_01			1	1							X	X		
3	BS_01			1	1							X	X		
4	SP03_01			1	1							X			
5	SP03_02			1	1							X	X		
6	SP04_01			1	1							X	X		
7	SP05_01			1	1							X	X		
8	SP_ACM_01			1	1							X	X		
9	SP_ACM_02			1	1										X
10	SP_ACM_03			1	1							X	X		
11	SP_ACM_FRAG				1									X	
12	QC01			1								X			
			TOTALS												

Envirolab Services
12 Ashley St
Chatswood NSW 2067
Ph: (02) 9910 6200

Job No: 234676
Date Received: 15/1/20
Time Received: 1630
Received by: UM
Temp: Cool/Ambient
Cooling: Ice/Icepack
Security: Intact/Broken/None

Relinquished By:			
NAME	R ORGANO	SIGNATURE	DATE 15/1/2020
Received By:	ES SYDNEY		
NAME	CUMME	SIGNATURE UM	DATE 15/1/20 1630

Custody Seals Intact (Y / N)
Samples Received Chilled (Y / N)
Method of Shipment

NOTES:

CONSARA Pty Ltd ABN 27 161 027 881
Suite 2, Level 2, Unit 6 10 Rodborough Road, Frenchs Forest NSW 2100
PO Box 7360 Warringah Mall NSW 2100
web www.consara.com.au
email
email rebeccaorgano@consara.com.au

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES1940784**	Page	: 1 of 8
Client	: **CONSARA PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: MS REBECCA ORGANO	Contact	: Customer Services ES
Address	: SUITE 2, LEVEL 2, UNIT 6, 10 RODBOROUGH ROAD FRENCHS FOREST 2100	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: +61 02 9451 1549	Telephone	: +61-2-8784 8555
Project	: C151008 BANK ST	Date Samples Received	: 10-Dec-2019 13:00
Order number	: ----	Date Analysis Commenced	: 11-Dec-2019
C-O-C number	: ----	Issue Date	: 17-Dec-2019 16:59
Sampler	: REBECCA ORGANO		
Site	: ----		
Quote number	: EN/222		
No. of samples received	: 1		
No. of samples analysed	: 1		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW

General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	QC02	----	----	----	----
				Client sampling date / time	09-Dec-2019 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES1940784-001	--------	--------	--------	--------
					Result	----	----	----	----
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		8.3	----	----	----	----
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		8	----	----	----	----
Cadmium	7440-43-9	1	mg/kg		<1	----	----	----	----
Chromium	7440-47-3	2	mg/kg		7	----	----	----	----
Copper	7440-50-8	5	mg/kg		53	----	----	----	----
Lead	7439-92-1	5	mg/kg		369	----	----	----	----
Nickel	7440-02-0	2	mg/kg		14	----	----	----	----
Zinc	7440-66-6	5	mg/kg		170	----	----	----	----
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		0.3	----	----	----	----
EP066: Polychlorinated Biphenyls (PCB)									
Total Polychlorinated biphenyls	----	0.1	mg/kg		<0.1	----	----	----	----
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.05	mg/kg		<0.05	----	----	----	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg		<0.05	----	----	----	----
beta-BHC	319-85-7	0.05	mg/kg		<0.05	----	----	----	----
gamma-BHC	58-89-9	0.05	mg/kg		<0.05	----	----	----	----
delta-BHC	319-86-8	0.05	mg/kg		<0.05	----	----	----	----
Heptachlor	76-44-8	0.05	mg/kg		<0.05	----	----	----	----
Aldrin	309-00-2	0.05	mg/kg		<0.05	----	----	----	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg		<0.05	----	----	----	----
^ Total Chlordane (sum)	----	0.05	mg/kg		<0.05	----	----	----	----
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	----	----	----	----
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	----	----	----	----
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	----	----	----	----
Dieldrin	60-57-1	0.05	mg/kg		<0.05	----	----	----	----
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	----	----	----	----
Endrin	72-20-8	0.05	mg/kg		<0.05	----	----	----	----
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	----	----	----	----
^ Endosulfan (sum)	115-29-7	0.05	mg/kg		<0.05	----	----	----	----
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	----	----	----	----
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	----	----	----	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	----	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	QC02	----	----	----	----
				Client sampling date / time	09-Dec-2019 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES1940784-001	--------	--------	--------	--------
					Result	----	----	----	----
EP068A: Organochlorine Pesticides (OC) - Continued									
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	----	----	----	----
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	----	----	----	----
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	----	----	----	----
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg		<0.05	----	----	----	----
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	----	----	----	----
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	----	----	----	----
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	----	----	----	----
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	----	----	----	----
Dimethoate	60-51-5	0.05	mg/kg		<0.05	----	----	----	----
Diazinon	333-41-5	0.05	mg/kg		<0.05	----	----	----	----
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	----	----	----	----
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	----	----	----	----
Malathion	121-75-5	0.05	mg/kg		<0.05	----	----	----	----
Fenthion	55-38-9	0.05	mg/kg		<0.05	----	----	----	----
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	----	----	----	----
Parathion	56-38-2	0.2	mg/kg		<0.2	----	----	----	----
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	----	----	----	----
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	----	----	----	----
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	----	----	----	----
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	----	----	----	----
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	----	----	----	----
Ethion	563-12-2	0.05	mg/kg		<0.05	----	----	----	----
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	----	----	----	----
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	----	----	----	----
EP075(SIM)A: Phenolic Compounds									
Phenol	108-95-2	0.5	mg/kg		<0.5	----	----	----	----
2-Chlorophenol	95-57-8	0.5	mg/kg		<0.5	----	----	----	----
2-Methylphenol	95-48-7	0.5	mg/kg		<0.5	----	----	----	----
3- & 4-Methylphenol	1319-77-3	1	mg/kg		<1	----	----	----	----
2-Nitrophenol	88-75-5	0.5	mg/kg		<0.5	----	----	----	----
2.4-Dimethylphenol	105-67-9	0.5	mg/kg		<0.5	----	----	----	----
2.4-Dichlorophenol	120-83-2	0.5	mg/kg		<0.5	----	----	----	----
2.6-Dichlorophenol	87-65-0	0.5	mg/kg		<0.5	----	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	QC02	----	----	----	----
				Client sampling date / time	09-Dec-2019 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES1940784-001	--------	--------	--------	--------
					Result	----	----	----	----
EP075(SIM)A: Phenolic Compounds - Continued									
4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg		<0.5	----	----	----	----
2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg		<0.5	----	----	----	----
2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg		<0.5	----	----	----	----
Pentachlorophenol	87-86-5	2	mg/kg		<2	----	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	----	----	----	----
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	----	----	----	----
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	----	----	----	----
Fluorene	86-73-7	0.5	mg/kg		<0.5	----	----	----	----
Phenanthrene	85-01-8	0.5	mg/kg		**0.8**	----	----	----	----
Anthracene	120-12-7	0.5	mg/kg		<0.5	----	----	----	----
Fluoranthene	206-44-0	0.5	mg/kg		**2.8**	----	----	----	----
Pyrene	129-00-0	0.5	mg/kg		**2.7**	----	----	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg		**1.2**	----	----	----	----
Chrysene	218-01-9	0.5	mg/kg		**1.2**	----	----	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		**1.9**	----	----	----	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		**0.6**	----	----	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg		**1.4**	----	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		**1.0**	----	----	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	----	----	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		**1.3**	----	----	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		**14.9**	----	----	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		**1.9**	----	----	----	----
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**2.1**	----	----	----	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**2.4**	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	----	----	----	----
C10 - C14 Fraction	----	50	mg/kg		<50	----	----	----	----
C15 - C28 Fraction	----	100	mg/kg		**110**	----	----	----	----
C29 - C36 Fraction	----	100	mg/kg		<100	----	----	----	----
^ C10 - C36 Fraction (sum)	----	50	mg/kg		**110**	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	----	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	QC02	----	----	----	----
				Client sampling date / time	09-Dec-2019 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES1940784-001	--------	--------	--------	--------
					Result	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
^ **C6 - C10 Fraction minus BTEX (F1)**	C6_C10-BTEX	10	mg/kg		<10	----	----	----	----
>C10 - C16 Fraction	----	50	mg/kg		<50	----	----	----	----
>C16 - C34 Fraction	----	100	mg/kg		**160**	----	----	----	----
>C34 - C40 Fraction	----	100	mg/kg		<100	----	----	----	----
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		**160**	----	----	----	----
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	50	mg/kg		<50	----	----	----	----
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	----	----	----	----
Toluene	108-88-3	0.5	mg/kg		<0.5	----	----	----	----
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	----	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	----	----	----	----
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	----	----	----	----
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	----	----	----	----
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	----	----	----	----
Naphthalene	91-20-3	1	mg/kg		<1	----	----	----	----
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%		**110**	----	----	----	----
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**80.2**	----	----	----	----
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**84.2**	----	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**108**	----	----	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%		**106**	----	----	----	----
2.4.6-Tribromophenol	118-79-6	0.5	%		**83.4**	----	----	----	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**112**	----	----	----	----
Anthracene-d10	1719-06-8	0.5	%		**107**	----	----	----	----
4-Terphenyl-d14	1718-51-0	0.5	%		**107**	----	----	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**122**	----	----	----	----
Toluene-D8	2037-26-5	0.2	%		**104**	----	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	QC02	----	----	----	----
				Client sampling date / time	09-Dec-2019 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES1940784-001	--------	--------	--------	--------
					Result	----	----	----	----
EP080S: TPH(V)/BTEX Surrogates - Continued									
4-Bromofluorobenzene	460-00-4	0.2	%		**93.6**	----	----	----	----

Surrogate Control Limits

Sub-Matrix: **SOIL**

Compound	CAS Number	Recovery Limits (%) Low	High
EP066S: PCB Surrogate			
Decachlorobiphenyl	2051-24-3	39	149
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	49	147
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	35	143
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	63	123
2-Chlorophenol-D4	93951-73-6	66	122
2.4.6-Tribromophenol	118-79-6	40	138
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	70	122
Anthracene-d10	1719-06-8	66	128
4-Terphenyl-d14	1718-51-0	65	129
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	73	133
Toluene-D8	2037-26-5	74	132
4-Bromofluorobenzene	460-00-4	72	130

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **ES1940784**	Page	: 1 of 10
Client	: **CONSARA PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: MS REBECCA ORGANO	Contact	: Customer Services ES
Address	: SUITE 2, LEVEL 2, UNIT 6, 10 RODBOROUGH ROAD FRENCHS FOREST 2100	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: +61 02 9451 1549	Telephone	: +61-2-8784 8555
Project	: C151008 BANK ST	Date Samples Received	: 10-Dec-2019
Order number	: ----	Date Analysis Commenced	: 11-Dec-2019
C-O-C number	: ----	Issue Date	: 17-Dec-2019
Sampler	: REBECCA ORGANO		
Site	: ----		
Quote number	: EN/222		
No. of samples received	: 1		
No. of samples analysed	: 1		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW

General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
# = Indicates failed QC

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 2760406)									
EM1921022-121	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	28	34	18.0	0% - 50%
		EG005T: Nickel	7440-02-0	2	mg/kg	11	13	12.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	26	29	12.2	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	8	10	20.5	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	28	31	11.7	No Limit
ES1940827-003	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	472	462	2.16	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	6	5	28.8	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	22	19	16.2	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	18	<5	114	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	37	26	35.3	No Limit
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 2760409)									
EP1912995-002	Anonymous	EA055: Moisture Content	----	0.1	%	6.7	6.9	2.29	No Limit
ES1940832-002	Anonymous	EA055: Moisture Content	----	0.1	%	12.7	11.9	6.61	0% - 50%
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 2760405)									
EM1921022-121	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
ES1940827-003	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 2757577)									
EW1905398-001	Anonymous	EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 2757576)									
EW1905398-001	Anonymous	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.25	<0.25	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068A: Organochlorine Pesticides (OC) (QC Lot: 2757576) - continued									
EW1905398-001	Anonymous	EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<1.0	<1.0	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<1.0	<1.0	0.00	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 2757576)									
EW1905398-001	Anonymous	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<1.0	<1.0	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<1.0	<1.0	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<1.0	<1.0	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP075(SIM)A: Phenolic Compounds (QC Lot: 2757574)									
EW1905398-001	Anonymous	EP075(SIM): Phenol	108-95-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): 2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): 2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): 2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): 2.4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): 2.4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): 2.6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): 4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): 2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): 2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	0.00	No Limit
		EP075(SIM): Pentachlorophenol	87-86-5	2	mg/kg	<2	<2	0.00	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 2757574)									
EW1905398-001	Anonymous	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	4.8	6.4	29.4	0% - 50%
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	1.0	1.2	16.9	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	13.1	11.4	14.0	0% - 20%
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	11.5	9.8	16.4	0% - 20%
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	4.1	3.4	17.6	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	3.4	3.1	9.76	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	4.6	4.0	13.4	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	1.7	1.4	21.2	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	3.6	3.1	15.0	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	2.0	1.8	9.37	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	2.6	2.4	11.2	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	52.4	48.5	7.73	0% - 20%
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	4.9	4.2	15.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 2757575)									
EW1905398-001	Anonymous	EP071: C15 - C28 Fraction	----	100	mg/kg	460	510	10.3	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	250	290	14.1	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 2758967)									
ES1940768-001	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
ES1940768-011	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 2757575)									
EW1905398-001	Anonymous	EP071: >C16 - C34 Fraction	----	100	mg/kg	630	710	11.7	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	180	210	16.4	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 2758967)									
ES1940768-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
ES1940768-011	Anonymous	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
EP080: BTEXN (QC Lot: 2758967)									
ES1940768-001	Anonymous	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit
ES1940768-011	Anonymous	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit

Method Blank (MB) and Laboratory Control Spike (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Spike (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 2760406)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	21.7 mg/kg	104	86.0	126
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	4.64 mg/kg	102	83.0	113
EG005T: Chromium	7440-47-3	2	mg/kg	<2	43.9 mg/kg	96.9	76.0	128
EG005T: Copper	7440-50-8	5	mg/kg	<5	32 mg/kg	102	86.0	120
EG005T: Lead	7439-92-1	5	mg/kg	<5	40 mg/kg	101	80.0	114
EG005T: Nickel	7440-02-0	2	mg/kg	<2	55 mg/kg	106	87.0	123
EG005T: Zinc	7440-66-6	5	mg/kg	<5	60.8 mg/kg	110	80.0	122
EG035T: Total Recoverable Mercury by FIMS (QCLot: 2760405)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	2.57 mg/kg	90.9	70.0	105
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 2757577)								
EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	1 mg/kg	95.0	62.0	126
EP068A: Organochlorine Pesticides (OC) (QCLot: 2757576)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	89.7	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	94.6	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	90.0	67.0	119
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	92.1	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	89.2	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	87.3	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	94.0	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	92.0	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	88.7	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	91.8	66.0	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	88.5	64.0	116
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	83.7	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	92.2	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	86.9	67.0	123
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	91.5	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	92.6	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	84.4	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	87.8	62.0	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	84.4	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	90.3	64.0	122
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	81.9	54.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 2757576)								

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP068B: Organophosphorus Pesticides (OP) (QCLot: 2757576) - continued								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	82.2	59.0	119
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	98.4	62.0	128
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	99.0	54.0	126
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	80.4	67.0	119
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	86.6	70.0	120
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	87.7	72.0	120
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	84.6	68.0	120
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	87.1	68.0	122
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	84.7	69.0	117
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	86.8	76.0	118
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	82.9	64.0	122
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	85.8	70.0	116
EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	0.5 mg/kg	84.6	69.0	121
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	86.0	66.0	118
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	81.7	68.0	124
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	86.6	62.0	112
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	83.6	68.0	120
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	85.3	65.0	127
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	62.3	41.0	123
EP075(SIM)A: Phenolic Compounds (QCLot: 2757574)								
EP075(SIM): Phenol	108-95-2	0.5	mg/kg	<0.5	6 mg/kg	95.1	71.0	125
EP075(SIM): 2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	6 mg/kg	94.9	72.0	124
EP075(SIM): 2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	6 mg/kg	95.6	71.0	123
EP075(SIM): 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	12 mg/kg	99.9	67.0	127
EP075(SIM): 2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	6 mg/kg	84.1	54.0	114
EP075(SIM): 2.4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	6 mg/kg	94.0	68.0	126
EP075(SIM): 2.4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	6 mg/kg	93.9	66.0	120
EP075(SIM): 2.6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	6 mg/kg	95.8	70.0	120
EP075(SIM): 4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	<0.5	6 mg/kg	91.2	70.0	116
EP075(SIM): 2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	6 mg/kg	93.7	54.0	114
EP075(SIM): 2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	6 mg/kg	95.5	60.0	114
EP075(SIM): Pentachlorophenol	87-86-5	2	mg/kg	<2	12 mg/kg	# 67.6	10.0	57.0
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 2757574)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	100	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	103	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	96.4	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	101	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	102	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	101	77.0	127

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 2757574) - continued								
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	105	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	104	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	97.9	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	99.5	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	93.5	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	102	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	96.1	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	93.4	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	90.4	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	93.4	63.0	121
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2757575)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	89.5	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	90.2	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	104	71.0	129
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2758967)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	120	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 2757575)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	88.9	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	94.5	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	79.2	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 2758967)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	123	68.4	128
EP080: BTEXN (QCLot: 2758967)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	108	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	104	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	106	65.0	117
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	102	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	104	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	105	63.0	119

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **SOIL**

Matrix Spike (MS) Report		
Spike	SpikeRecovery(%)	Recovery Limits (%)

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 2760406)							
EM1921022-121	Anonymous	EG005T: Arsenic	7440-38-2	50 mg/kg	102	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	102	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	106	70.0	130
		EG005T: Copper	7440-50-8	250 mg/kg	103	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	101	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	109	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	104	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 2760405)							
EM1921022-121	Anonymous	EG035T: Mercury	7439-97-6	5 mg/kg	86.5	70.0	130
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 2757577)							
EW1905398-001	Anonymous	EP066: Total Polychlorinated biphenyls	----	1 mg/kg	87.0	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 2757576)							
EW1905398-001	Anonymous	EP068: gamma-BHC	58-89-9	0.5 mg/kg	109	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	80.2	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	90.9	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	91.2	70.0	130
		EP068: Endrin	72-20-8	2 mg/kg	103	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	83.9	70.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 2757576)							
EW1905398-001	Anonymous	EP068: Diazinon	333-41-5	0.5 mg/kg	113	70.0	130
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	93.5	70.0	130
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	84.3	70.0	130
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	82.9	70.0	130
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	84.2	70.0	130
EP075(SIM)A: Phenolic Compounds (QCLot: 2757574)							
EW1905398-001	Anonymous	EP075(SIM): Phenol	108-95-2	10 mg/kg	104	70.0	130
		EP075(SIM): 2-Chlorophenol	95-57-8	10 mg/kg	105	70.0	130
		EP075(SIM): 2-Nitrophenol	88-75-5	10 mg/kg	98.6	60.0	130
		EP075(SIM): 4-Chloro-3-methylphenol	59-50-7	10 mg/kg	99.3	70.0	130
		EP075(SIM): Pentachlorophenol	87-86-5	10 mg/kg	76.3	20.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 2757574)							
EW1905398-001	Anonymous	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	109	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	130	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2757575)							
EW1905398-001	Anonymous	EP071: C10 - C14 Fraction	----	523 mg/kg	94.0	73.0	137
		EP071: C15 - C28 Fraction	----	2319 mg/kg	105	53.0	131
		EP071: C29 - C36 Fraction	----	1714 mg/kg	122	52.0	132

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*Concentration*	*MS*	*Low*	*High*
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2758967)							
ES1940768-001	Anonymous	EP080: C6 - C9 Fraction	----	32.5 mg/kg	112	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 2757575)							
EW1905398-001	Anonymous	EP071: >C10 - C16 Fraction	----	860 mg/kg	92.0	73.0	137
		EP071: >C16 - C34 Fraction	----	3223 mg/kg	113	53.0	131
		EP071: >C34 - C40 Fraction	----	1058 mg/kg	119	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 2758967)							
ES1940768-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	114	70.0	130
EP080: BTEXN (QCLot: 2758967)							
ES1940768-001	Anonymous	EP080: Benzene	71-43-2	2.5 mg/kg	96.7	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	93.2	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	95.0	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	94.0	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	96.1	70.0	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	87.9	70.0	130

ALS Environmental

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **ES1940784**	Page	: 1 of 5
Client	: **CONSARA PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: MS REBECCA ORGANO	Telephone	: +61-2-8784 8555
Project	: C151008 BANK ST	Date Samples Received	: 10-Dec-2019
Site	: ----	Issue Date	: 17-Dec-2019
Sampler	: REBECCA ORGANO	No. of samples received	: 1
Order number	: ----	No. of samples analysed	: 1

This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.

Brief method summaries and references are also provided to assist in traceability.

Summary of Outliers

Outliers : Quality Control Samples

This report highlights outliers flagged in the Quality Control (QC) Report.

- **NO Method Blank value outliers occur.**
- **NO Duplicate outliers occur.**
- **NO Matrix Spike outliers occur.**
- **Laboratory Control outliers exist - please see following pages for full details.**
- **For all regular sample matrices, NO surrogate recovery outliers occur.**

Outliers : Analysis Holding Time Compliance

- **NO Analysis Holding Time Outliers exist.**

Outliers : Frequency of Quality Control Samples

- **NO Quality Control Sample Frequency Outliers exist.**

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **SOIL**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Laboratory Control Spike (LCS) Recoveries							
EP075(SIM)A: Phenolic Compounds	QC-2757574-002	----	**Pentachlorophenol**	87-86-5	67.6 %	10.0-57.0%	**Recovery greater than upper control limit**

Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for ***VOC in soils*** vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA055: Moisture Content (Dried @ 105-110°C)							
Soil Glass Jar - Unpreserved (EA055)							
QC02	**09-Dec-2019**	**----**	----	----	**12-Dec-2019**	23-Dec-2019	✓
EG005(ED093)T: Total Metals by ICP-AES							
Soil Glass Jar - Unpreserved (EG005T)							
QC02	**09-Dec-2019**	**12-Dec-2019**	06-Jun-2020	✓	**13-Dec-2019**	06-Jun-2020	✓
EG035T: Total Recoverable Mercury by FIMS							
Soil Glass Jar - Unpreserved (EG035T)							
QC02	**09-Dec-2019**	**12-Dec-2019**	06-Jan-2020	✓	**13-Dec-2019**	06-Jan-2020	✓
EP066: Polychlorinated Biphenyls (PCB)							
Soil Glass Jar - Unpreserved (EP066)							
QC02	**09-Dec-2019**	**11-Dec-2019**	23-Dec-2019	✓	**12-Dec-2019**	20-Jan-2020	✓
EP068A: Organochlorine Pesticides (OC)							
Soil Glass Jar - Unpreserved (EP068)							
QC02	**09-Dec-2019**	**11-Dec-2019**	23-Dec-2019	✓	**12-Dec-2019**	20-Jan-2020	✓
EP068B: Organophosphorus Pesticides (OP)							
Soil Glass Jar - Unpreserved (EP068)							
QC02	**09-Dec-2019**	**11-Dec-2019**	23-Dec-2019	✓	**12-Dec-2019**	20-Jan-2020	✓
EP075(SIM)A: Phenolic Compounds							
Soil Glass Jar - Unpreserved (EP075(SIM))							
QC02	**09-Dec-2019**	**11-Dec-2019**	23-Dec-2019	✓	**12-Dec-2019**	20-Jan-2020	✓
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075(SIM))							
QC02	**09-Dec-2019**	**11-Dec-2019**	23-Dec-2019	✓	**12-Dec-2019**	20-Jan-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved (EP071)							
QC02	**09-Dec-2019**	**11-Dec-2019**	23-Dec-2019	✓	**12-Dec-2019**	20-Jan-2020	✓
Soil Glass Jar - Unpreserved (EP080)							
QC02	**09-Dec-2019**	**11-Dec-2019**	23-Dec-2019	✓	**15-Dec-2019**	23-Dec-2019	✓
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Soil Glass Jar - Unpreserved (EP071)							
QC02	**09-Dec-2019**	**11-Dec-2019**	23-Dec-2019	✓	**12-Dec-2019**	20-Jan-2020	✓
Soil Glass Jar - Unpreserved (EP080)							
QC02	**09-Dec-2019**	**11-Dec-2019**	23-Dec-2019	✓	**15-Dec-2019**	23-Dec-2019	✓
EP080: BTEXN							
Soil Glass Jar - Unpreserved (EP080)							
QC02	**09-Dec-2019**	**11-Dec-2019**	23-Dec-2019	✓	**15-Dec-2019**	23-Dec-2019	✓

Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(were) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **SOIL**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP)							
Moisture Content	EA055	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	1	9	**11.11**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	3	**33.33**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	1	3	**33.33**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	9	**11.11**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	19	**10.53**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
PAH/Phenols (SIM)	EP075(SIM)	1	9	**11.11**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	3	**33.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	1	3	**33.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	9	**11.11**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
PAH/Phenols (SIM)	EP075(SIM)	1	9	**11.11**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	3	**33.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	1	3	**33.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	9	**11.11**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
PAH/Phenols (SIM)	EP075(SIM)	1	9	**11.11**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	3	**33.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	1	3	**33.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	9	**11.11**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Moisture Content	EA055	SOIL	In house: A gravimetric procedure based on weight loss over a 12 hour drying period at 105-110 degrees C. This method is compliant with NEPM (2013) Schedule B(3) Section 6.1 and Table 1 (14 day holding time).
Total Metals by ICP-AES	EG005T	SOIL	In house: Referenced to APHA 3120; USEPA SW 846 - 6010. Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM (2013) Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	In house: Referenced to AS 3550, APHA 3112 Hg - B (Flow-injection (SnCl2) (Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM (2013) Schedule B(3)
Polychlorinated Biphenyls (PCB)	EP066	SOIL	In house: Referenced to USEPA SW 846 - 8270D Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (2013) Schedule B(3) (Method 504)
Pesticides by GCMS	EP068	SOIL	In house: Referenced to USEPA SW 846 - 8270D Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM (2013) Schedule B(3) (Method 504,505)
TRH - Semivolatile Fraction	EP071	SOIL	In house: Referenced to USEPA SW 846 - 8015A Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40. Compliant with NEPM amended 2013.
PAH/Phenols (SIM)	EP075(SIM)	SOIL	In house: Referenced to USEPA SW 846 - 8270D. Extracts are analysed by Capillary GC/MS in Selective Ion Mode (SIM) and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (2013) Schedule B(3) (Method 502 and 507)
TRH Volatiles/BTEX	EP080	SOIL	In house: Referenced to USEPA SW 846 - 8260B. Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. Compliant with NEPM amended 2013.

Preparation Methods	Method	Matrix	Method Descriptions
Hot Block Digest for metals in soils sediments and sludges	EN69	SOIL	In house: Referenced to USEPA 200.2. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM (2013) Schedule B(3) (Method 202)
Methanolic Extraction of Soils for Purge and Trap	ORG16	SOIL	In house: Referenced to USEPA SW 846 - 5030A. 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids	ORG17	SOIL	In house: Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.

CONSARA

CONTAMINATED SITES assessment ■ remediation ■ advice

Chain of Custody Record

Project No:	C157008
Project/Site:	BANK ST
Sampled By:	R ORGANO
Phone:	0400400338
Page	1 of 1
Number of Eskies:	1

Lab:	ALS
Lab Quote No:	EN/491/14
Lab Batch No:	
Date Results Required:	STANDARD
Sample Disposal After:	STANDARD

LAB ID	SAMPLE ID	DATE	MATRIX	CONTAINER TYPE & PRESERVATIVE: Soil 0.1-0.2 L Glass Jar, unpreserved	Soil - Plastic bag	Water 0.1-0.2 L Plastic, Filtered, HNO3	Water 0.5-1.0 L Amber glass, unpreserved	Water 40-50ml Glass, unpreserved	Water 0.25-1 L Plastic, unpreserved	Water 0.2-1.0L Plastic, sterile	ANALYSIS REQUIRED: S-19	HOLD
1	QC02	9/12/19	SOIL	1							X	
			TOTALS									

Environmental Division
Sydney
Work Order Reference
ES1940784

Telephone : + 61-2-8784 8555

Relinquished By:				Received By:			
NAME	R ORGANO	SIGNATURE	DATE 9/12/19	NAME	SIGNATURE	DATE 10/12/19	

Custody Seals Intact	Y	N
Samples Received Chilled	Y	N
Method of Shipment		

NOTES:

CONSARA Pty Ltd ABN 27 161 027 881
Suite 2, Level 2, Unit 6 10 Rodborough Road, Frenchs Forest NSW 2100
PO Box 7360 Warringah Mall NSW 2100

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

CERTIFICATE OF ANALYSIS 232634

Client Details

Client	Consara Pty Ltd
Attention	Rebecca Organo
Address	PO Box 7360, Warringah Mall, NSW, 2100

Sample Details

Your Reference	**C151008, Bank St**
Number of Samples	5 Soil
Date samples received	09/12/2019
Date completed instructions received	09/12/2019

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Please refer to the last page of this report for any comments relating to the results.

Report Details

Date results requested by	11/12/2019
Date of Issue	11/12/2019

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Asbestos Approved By
Analysed by Asbestos Approved Identifier: Panika Wongchanda
Authorised by Asbestos Approved Signatory: Lucy Zhu

Results Approved By
Jaimie Loa-Kum-Cheung, Metals Supervisor
Josh Williams, Senior Chemist
Lucy Zhu, Senior Asbestos Analyst
Steven Luong, Organics Supervisor

Authorised By



Nancy Zhang, Laboratory Manager

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		232634-1	232634-2	232634-3	232634-4	232634-5
Your Reference	UNITS	1M_01	1M_02	1M_03	1M_04	QC01
Date Sampled		06/12/2019	06/12/2019	06/12/2019	06/12/2019	06/12/2019
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Date analysed	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<3	<3	<3	<3	<3
Surrogate aaa-Trifluorotoluene	%	113	128	136	120	128

svTRH (C10-C40) in Soil						
Our Reference		232634-1	232634-2	232634-3	232634-4	232634-5
Your Reference	UNITS	1M_01	1M_02	1M_03	1M_04	QC01
Date Sampled		06/12/2019	06/12/2019	06/12/2019	06/12/2019	06/12/2019
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Date analysed	-	11/12/2019	11/12/2019	11/12/2019	11/12/2019	11/12/2019
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100	<100	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100	<100	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	84	90	77	78	79

PAHs in Soil						
Our Reference		232634-1	232634-2	232634-3	232634-4	232634-5
Your Reference	UNITS	1M_01	1M_02	1M_03	1M_04	QC01
Date Sampled		06/12/2019	06/12/2019	06/12/2019	06/12/2019	06/12/2019
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Date analysed	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Naphthalene	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	0.2	0.1	0.2
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.2	0.2	0.2	0.2	0.2
Pyrene	mg/kg	0.2	0.2	0.2	0.1	0.2
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+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	0.08	0.08	0.1	0.08	0.1
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	0.52	0.4	1.1	0.50	0.72
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	93	99	99	97	98

Organochlorine Pesticides in soil						
Our Reference		232634-1	232634-2	232634-3	232634-4	232634-5
Your Reference	UNITS	1M_01	1M_02	1M_03	1M_04	QC01
Date Sampled		06/12/2019	06/12/2019	06/12/2019	06/12/2019	06/12/2019
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Date analysed	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
HCB	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	91	91	94	92	91

Organophosphorus Pesticides in Soil						
Our Reference		232634-1	232634-2	232634-3	232634-4	232634-5
Your Reference	UNITS	1M_01	1M_02	1M_03	1M_04	QC01
Date Sampled		06/12/2019	06/12/2019	06/12/2019	06/12/2019	06/12/2019
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Date analysed	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Dichlorvos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	91	91	94	92	91

PCBs in Soil						
Our Reference		232634-1	232634-2	232634-3	232634-4	232634-5
Your Reference	UNITS	1M_01	1M_02	1M_03	1M_04	QC01
Date Sampled		06/12/2019	06/12/2019	06/12/2019	06/12/2019	06/12/2019
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Date analysed	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Aroclor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	91	91	94	92	91

Acid Extractable metals in soil						
Our Reference	UNITS	232634-1	232634-2	232634-3	232634-4	232634-5
Your Reference		1M_01	1M_02	1M_03	1M_04	QC01
Date Sampled		06/12/2019	06/12/2019	06/12/2019	06/12/2019	06/12/2019
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Date analysed	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Arsenic	mg/kg	4	<4	<4	<4	<4
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	11	13	13	12	11
Copper	mg/kg	17	20	12	12	18
Lead	mg/kg	19	24	26	24	30
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	6	7	7	8	7
Zinc	mg/kg	48	45	49	42	79

Moisture						
Our Reference		232634-1	232634-2	232634-3	232634-4	232634-5
Your Reference	UNITS	1M_01	1M_02	1M_03	1M_04	QC01
Date Sampled		06/12/2019	06/12/2019	06/12/2019	06/12/2019	06/12/2019
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Date analysed	-	11/12/2019	11/12/2019	11/12/2019	11/12/2019	11/12/2019
Moisture	%	6.5	8.4	7.3	5.6	5.3

Asbestos ID - soils NEPM - ASB-001					
Our Reference		232634-1	232634-2	232634-3	232634-4
Your Reference	UNITS	1M_01	1M_02	1M_03	1M_04
Date Sampled		06/12/2019	06/12/2019	06/12/2019	06/12/2019
Type of sample		Soil	Soil	Soil	Soil
Date analysed	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Sample mass tested	g	721.18	649.14	715.53	717.12
Sample Description	-	Brown sandy soil & rocks & debris	Brown sandy soil & rocks & debris	Brown sandy soil & rocks & debris	Brown sandy soil & rocks & debris
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected Synthetic mineral fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected Synthetic mineral fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected Synthetic mineral fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected Synthetic mineral fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos[#1]	g/kg	<0.1	<0.1	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	–	–	–	–
FA and AF Estimation*	g	–	–	–	–
ACM >7mm Estimation*	%(w/w)	<0.01	<0.01	<0.01	<0.01
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	<0.001	<0.001

Method ID	Methodology Summary
ASB-001	Asbestos ID - Qualitative identification of asbestos in bulk samples using Polarised Light Microscopy and Dispersion Staining Techniques including Synthetic Mineral Fibre and Organic Fibre as per Australian Standard 4964-2004.
ASB-001	Asbestos ID - Identification of asbestos in soil samples using Polarised Light Microscopy and Dispersion Staining Techniques. Minimum 500mL soil sample was analysed as recommended by "National Environment Protection (Assessment of site contamination) Measure, Schedule B1 and "The Guidelines from the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia - May 2009" with a reporting limit of 0.1g/kg (0.01% w/w) as per Australian Standard AS4964-2004. Results reported denoted with * are outside our scope of NATA accreditation. **NOTE** #1 Total Asbestos g/kg was analysed and reported as per Australian Standard AS4964 (This is the sum of ACM >7mm, <7mm and FA/AF) **NOTE** #2 The screening level of 0.001% w/w asbestos in soil for FA and AF only applies where the FA and AF are able to be quantified by gravimetric procedures. This screening level is not applicable to free fibres. Estimation = Estimated asbestos weight Results reported with "--" is equivalent to no visible asbestos identified using Polarised Light microscopy and Dispersion Staining Techniques.
AT-008	Determination of VOCs sampled onto coconut shell charcoal sorbent tubes, that can be desorbed using carbon disulphide, and analysed by GC-MS.
Inorg-008	Moisture content determined by heating at 105+/-5 °C for a minimum of 12 hours.
Metals-020	Determination of various metals by ICP-AES.
Metals-021	Determination of Mercury by Cold Vapour AAS.
Org-003	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.
Org-003	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis. Note, the Total +ve TRH PQL is reflective of the lowest individual PQL and is therefore "Total +ve TRH" is simply a sum of the positive individual TRH fractions (>C10-C40).

Method ID	Methodology Summary
Org-006	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD.
Org-006	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD. Note, the Total +ve PCBs PQL is reflective of the lowest individual PQL and is therefore" Total +ve PCBs" is simply a sum of the positive individual PCBs.
Org-012/017	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS and/or GC-MS/MS.
Org-012/017	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-MS and/or GC-MS/MS. Note, the Total +ve reported DDD+DDE+DDT PQL is reflective of the lowest individual PQL and is therefore simply a sum of the positive individually report DDD+DDE+DDT.
Org-012/017	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS and/or GC-MS/MS. Benzo(a)pyrene TEQ as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater - 2013. For soil results:- 1. 'EQ PQL'values are assuming all contributing PAHs reported as <PQL are actually at the PQL. This is the most conservative approach and can give false positive TEQs given that PAHs that contribute to the TEQ calculation may not be present. 2. 'EQ zero'values are assuming all contributing PAHs reported as <PQL are zero. This is the least conservative approach and is more susceptible to false negative TEQs when PAHs that contribute to the TEQ calculation are present but below PQL. 3. 'EQ half PQL'values are assuming all contributing PAHs reported as <PQL are half the stipulated PQL. Hence a mid-point between the most and least conservative approaches above. Note, the Total +ve PAHs PQL is reflective of the lowest individual PQL and is therefore "Total +ve PAHs" is simply a sum of the positive individual PAHs.
Org-014	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS.
Org-016	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.
Org-016	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater. Note, the Total +ve Xylene PQL is reflective of the lowest individual PQL and is therefore "Total +ve Xylenes" is simply a sum of the positive individual Xylenes.

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date extracted	-			10/12/2019	[NT]	[NT]	[NT]	[NT]	10/12/2019	[NT]
Date analysed	-			10/12/2019	[NT]	[NT]	[NT]	[NT]	10/12/2019	[NT]
TRH C_6 - C_9	mg/kg	25	Org-016	<25	[NT]	[NT]	[NT]	[NT]	124	[NT]
TRH C_6 - C_{10}	mg/kg	25	Org-016	<25	[NT]	[NT]	[NT]	[NT]	124	[NT]
Benzene	mg/kg	0.2	Org-016	<0.2	[NT]	[NT]	[NT]	[NT]	124	[NT]
Toluene	mg/kg	0.5	Org-016	<0.5	[NT]	[NT]	[NT]	[NT]	123	[NT]
Ethylbenzene	mg/kg	1	Org-016	<1	[NT]	[NT]	[NT]	[NT]	123	[NT]
m+p-xylene	mg/kg	2	Org-016	<2	[NT]	[NT]	[NT]	[NT]	126	[NT]
o-Xylene	mg/kg	1	Org-016	<1	[NT]	[NT]	[NT]	[NT]	123	[NT]
naphthalene	mg/kg	1	Org-014	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-016	133	[NT]	[NT]	[NT]	[NT]	127	[NT]

QUALITY CONTROL: svTRH (C10-C40) in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date extracted	-			10/12/2019	[NT]	[NT]	[NT]	[NT]	10/12/2019	[NT]
Date analysed	-			10/12/2019	[NT]	[NT]	[NT]	[NT]	11/12/2019	[NT]
TRH C_{10} - C_{14}	mg/kg	50	Org-003	<50	[NT]	[NT]	[NT]	[NT]	102	[NT]
TRH C_{15} - C_{28}	mg/kg	100	Org-003	<100	[NT]	[NT]	[NT]	[NT]	119	[NT]
TRH C_{29} - C_{36}	mg/kg	100	Org-003	<100	[NT]	[NT]	[NT]	[NT]	92	[NT]
TRH >C_{10} -C_{16}	mg/kg	50	Org-003	<50	[NT]	[NT]	[NT]	[NT]	102	[NT]
TRH >C_{16} -C_{34}	mg/kg	100	Org-003	<100	[NT]	[NT]	[NT]	[NT]	119	[NT]
TRH >C_{34} -C_{40}	mg/kg	100	Org-003	<100	[NT]	[NT]	[NT]	[NT]	92	[NT]
Surrogate o-Terphenyl	%		Org-003	82	[NT]	[NT]	[NT]	[NT]	91	[NT]

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date extracted	-			10/12/2019	[NT]	[NT]	[NT]	[NT]	10/12/2019	[NT]
Date analysed	-			10/12/2019	[NT]	[NT]	[NT]	[NT]	10/12/2019	[NT]
Naphthalene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	114	[NT]
Acenaphthylene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Fluorene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	124	[NT]
Phenanthrene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	134	[NT]
Anthracene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	124	[NT]
Pyrene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	120	[NT]
Benzo(a)anthracene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	118	[NT]
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-012/017	<0.2	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-012/017	<0.05	[NT]	[NT]	[NT]	[NT]	138	[NT]
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-012/017	102	[NT]	[NT]	[NT]	[NT]	112	[NT]

QUALITY CONTROL: Organochlorine Pesticides in soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date extracted	-			10/12/2019	[NT]	[NT]	[NT]	[NT]	10/12/2019	[NT]
Date analysed	-			10/12/2019	[NT]	[NT]	[NT]	[NT]	10/12/2019	[NT]
alpha-BHC	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	122	[NT]
HCB	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	120	[NT]
gamma-BHC	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Heptachlor	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	122	[NT]
delta-BHC	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	118	[NT]
Heptachlor Epoxide	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	112	[NT]
gamma-Chlordane	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	112	[NT]
Dieldrin	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	120	[NT]
Endrin	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	126	[NT]
Endosulfan II	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
pp-DDD	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	122	[NT]
Endrin Aldehyde	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	110	[NT]
Methoxychlor	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate TCMX	%		Org-012/017	103	[NT]	[NT]	[NT]	[NT]	109	[NT]

QUALITY CONTROL: Organophosphorus Pesticides in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date extracted	-			10/12/2019	[NT]	[NT]	[NT]	[NT]	10/12/2019	[NT]
Date analysed	-			10/12/2019	[NT]	[NT]	[NT]	[NT]	10/12/2019	[NT]
Dichlorvos	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	96	[NT]
Dimethoate	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Chlorpyriphos-methyl	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	96	[NT]
Fenitrothion	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	102	[NT]
Malathion	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	89	[NT]
Chlorpyriphos	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	96	[NT]
Parathion	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	110	[NT]
Bromophos-ethyl	mg/kg	0.1	AT-008	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Ethion	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	84	[NT]
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-012/017	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate TCMX	%		Org-012/017	103	[NT]	[NT]	[NT]	[NT]	109	[NT]

QUALITY CONTROL: PCBs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date extracted	-			10/12/2019	[NT]	[NT]	[NT]	[NT]	10/12/2019	[NT]
Date analysed	-			10/12/2019	[NT]	[NT]	[NT]	[NT]	10/12/2019	[NT]
Aroclor 1016	mg/kg	0.1	Org-006	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1221	mg/kg	0.1	Org-006	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1232	mg/kg	0.1	Org-006	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1242	mg/kg	0.1	Org-006	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1248	mg/kg	0.1	Org-006	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1254	mg/kg	0.1	Org-006	<0.1	[NT]	[NT]	[NT]	[NT]	110	[NT]
Aroclor 1260	mg/kg	0.1	Org-006	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate TCMX	%		Org-006	103	[NT]	[NT]	[NT]	[NT]	109	[NT]

QUALITY CONTROL: Acid Extractable metals in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			10/12/2019	[NT]	[NT]	[NT]	[NT]	10/12/2019	[NT]
Date analysed	-			10/12/2019	[NT]	[NT]	[NT]	[NT]	10/12/2019	[NT]
Arsenic	mg/kg	4	Metals-020	<4	[NT]	[NT]	[NT]	[NT]	102	[NT]
Cadmium	mg/kg	0.4	Metals-020	<0.4	[NT]	[NT]	[NT]	[NT]	103	[NT]
Chromium	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	107	[NT]
Copper	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	103	[NT]
Lead	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	106	[NT]
Mercury	mg/kg	0.1	Metals-021	<0.1	[NT]	[NT]	[NT]	[NT]	86	[NT]
Nickel	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	102	[NT]
Zinc	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	108	[NT]

Result Definitions

NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

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

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

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

Report Comments

Asbestos-ID in soil: NEPM
This report is consistent with the reporting recommendations in the National Environment Protection (Assessment of Site Contamination) Measure, Schedule B1, May 2013. This is reported outside our scope of NATA accreditation.

CONSARA

CONTAMINATED SITES assessment ▪ remediation ▪ advice

Chain of Custody Record

Project No:	C1510CR
Project/Site:	BANK ST
Sampled By:	R ORGANO
Phone:	0409003394
Page	1 of 1
Number of Eskies:	1

Lab:	ENVIROLAB
Lab Quote No:	
Lab Batch No:	
Date Results Required:	STD TAT
Sample Disposal After:	

LAB ID	SAMPLE ID	DATE	MATRIX	CONTAINER TYPE & PRESERVATIVE: Soil 0.1-0.2 L Glass jar, unpreserved	Soil - Plastic bag	Water 0.1-0.2 L Plastic, Filtered, HNO3	Water 0.5-1.0 L Amber glass, unpreserved	Water 40-50ml Glass, unpreserved	Water 0.25-1 L Plastic, unpreserved	Water 0.2-1.0L Plastic, sterile	ANALYSIS REQUIRED: COMBO 6	ASBESTOS - 500mL	HOLD
1	BH_01	6/12/19	SOIL	1	1						X	X	
2	BH_02	↓	↓	1	1						X	X	
3	BH_03			1	1						X	X	
4	BH_04			1	1						X	X	
5	QC01			1	1						X	X	
			TOTALS										

ENVIROLAB

Envirolab Services
12 Ashley St
Chatswood NSW 2067
Ph: (02) 9910 6200

Job No: 232634

Date Received: 9/12/19
Time Received: 9:55
Received by: RC
Temp: Cool/Ambient
Cooling: Icepack
Security: Intact/Broken/None

Relinquished By:			Received By:		
NAME	R ORGANO	SIGNATURE	NAME	SIGNATURE	DATE 9/12/19
DATE	9/12/19				

Custody Seals Intact	Y	N
Samples Received Chilled	Y	N
Method of Shipment		

NOTES:

2 DAY TAT PLEASE

CONSARA Pty Ltd ABN 27 161 027 881
Suite 2, Level 2, Unit 6 10 Rodborough Road, Frenchs Forest NSW 2100
PO Box 7360 Warringah Mall NSW 2100

web www.consara.com.au
email
email rebeccaorgano@consara.com.au

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES1940617**	Page	: 1 of 7
Client	: **CONSARA PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: MS REBECCA ORGANO	Contact	: Customer Services ES
Address	: SUITE 2, LEVEL 2, UNIT 6, 10 RODBOROUGH ROAD FRENCHS FOREST 2100	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: +61 02 9451 1549	Telephone	: +61-2-8784 8555
Project	: C151008 BANK ST	Date Samples Received	: 09-Dec-2019 12:10
Order number	: ----	Date Analysis Commenced	: 10-Dec-2019
C-O-C number	: ----	Issue Date	: 16-Dec-2019 15:31
Sampler	: REBECCA ORGANO		
Site	: ----		
Quote number	: EN/222		
No. of samples received	: 1		
No. of samples analysed	: 1		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW

General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EP071: Results of sample QC02 have been confirmed by re-extraction and re-analysis.

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	QC02	----	----	----	----
			Client sampling date / time	06-Dec-2019 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit	ES1940617-001	--------	--------	--------	--------
				Result	----	----	----	----
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	**5.4**	----	----	----	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	----	----	----	----
Cadmium	7440-43-9	1	mg/kg	<1	----	----	----	----
Chromium	7440-47-3	2	mg/kg	**13**	----	----	----	----
Copper	7440-50-8	5	mg/kg	**13**	----	----	----	----
Lead	7439-92-1	5	mg/kg	**26**	----	----	----	----
Nickel	7440-02-0	2	mg/kg	**8**	----	----	----	----
Zinc	7440-66-6	5	mg/kg	**51**	----	----	----	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	----	----	----	----
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	----	----	----	----
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	----	----	----	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	----	----	----	----
beta-BHC	319-85-7	0.05	mg/kg	<0.05	----	----	----	----
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	----	----	----	----
delta-BHC	319-86-8	0.05	mg/kg	<0.05	----	----	----	----
Heptachlor	76-44-8	0.05	mg/kg	<0.05	----	----	----	----
Aldrin	309-00-2	0.05	mg/kg	<0.05	----	----	----	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	----	----	----	----
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	----	----	----	----
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	----	----	----	----
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	----	----	----	----
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	----	----	----	----
Dieldrin	60-57-1	0.05	mg/kg	<0.05	----	----	----	----
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	----	----	----	----
Endrin	72-20-8	0.05	mg/kg	<0.05	----	----	----	----
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	----	----	----	----
^ Endosulfan (sum)	115-29-7	0.05	mg/kg	<0.05	----	----	----	----
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	----	----	----	----
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	----	----	----	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	----	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	QC02	----	----	----	----
				Client sampling date / time	06-Dec-2019 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES1940617-001	--------	--------	--------	--------
					Result	----	----	----	----
EP068A: Organochlorine Pesticides (OC) - Continued									
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	----	----	----	----
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	----	----	----	----
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	----	----	----	----
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg		<0.05	----	----	----	----
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	----	----	----	----
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	----	----	----	----
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	----	----	----	----
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	----	----	----	----
Dimethoate	60-51-5	0.05	mg/kg		<0.05	----	----	----	----
Diazinon	333-41-5	0.05	mg/kg		<0.05	----	----	----	----
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	----	----	----	----
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	----	----	----	----
Malathion	121-75-5	0.05	mg/kg		<0.05	----	----	----	----
Fenthion	55-38-9	0.05	mg/kg		<0.05	----	----	----	----
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	----	----	----	----
Parathion	56-38-2	0.2	mg/kg		<0.2	----	----	----	----
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	----	----	----	----
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	----	----	----	----
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	----	----	----	----
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	----	----	----	----
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	----	----	----	----
Ethion	563-12-2	0.05	mg/kg		<0.05	----	----	----	----
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	----	----	----	----
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	----	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	----	----	----	----
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	----	----	----	----
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	----	----	----	----
Fluorene	86-73-7	0.5	mg/kg		<0.5	----	----	----	----
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	----	----	----	----
Anthracene	120-12-7	0.5	mg/kg		<0.5	----	----	----	----
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	----	----	----	----
Pyrene	129-00-0	0.5	mg/kg		<0.5	----	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	QC02	----	----	----	----
				Client sampling date / time	06-Dec-2019 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES1940617-001	--------	--------	--------	--------
					Result	----	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	----	----	----	----
Chrysene	218-01-9	0.5	mg/kg		<0.5	----	----	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	----	----	----	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	----	----	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	----	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	----	----	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	----	----	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	----	----	----	----
^ **Sum of polycyclic aromatic hydrocarbons**	----	0.5	mg/kg		<0.5	----	----	----	----
^ **Benzo(a)pyrene TEQ (zero)**	----	0.5	mg/kg		<0.5	----	----	----	----
^ **Benzo(a)pyrene TEQ (half LOR)**	----	0.5	mg/kg		**0.6**	----	----	----	----
^ **Benzo(a)pyrene TEQ (LOR)**	----	0.5	mg/kg		**1.2**	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	----	----	----	----
C10 - C14 Fraction	----	50	mg/kg		<50	----	----	----	----
C15 - C28 Fraction	----	100	mg/kg		<100	----	----	----	----
C29 - C36 Fraction	----	100	mg/kg		<100	----	----	----	----
^ **C10 - C36 Fraction (sum)**	----	50	mg/kg		<50	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	----	----	----	----
^ **C6 - C10 Fraction minus BTEX (F1)**	C6_C10-BTEX	10	mg/kg		<10	----	----	----	----
>C10 - C16 Fraction	----	50	mg/kg		<50	----	----	----	----
>C16 - C34 Fraction	----	100	mg/kg		**110**	----	----	----	----
>C34 - C40 Fraction	----	100	mg/kg		<100	----	----	----	----
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		**110**	----	----	----	----
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	50	mg/kg		<50	----	----	----	----
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	----	----	----	----
Toluene	108-88-3	0.5	mg/kg		<0.5	----	----	----	----
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	----	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	----	----	----	----
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	----	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	QC02	----	----	----	----
				Client sampling date / time	06-Dec-2019 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES1940617-001	--------	--------	--------	--------
					Result	----	----	----	----
EP080: BTEXN - Continued									
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	----	----	----	----
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	----	----	----	----
Naphthalene	91-20-3	1	mg/kg		<1	----	----	----	----
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%		**94.0**	----	----	----	----
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**97.0**	----	----	----	----
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**75.5**	----	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**102**	----	----	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%		**66.0**	----	----	----	----
2.4.6-Tribromophenol	118-79-6	0.5	%		**39.5**	----	----	----	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**119**	----	----	----	----
Anthracene-d10	1719-06-8	0.5	%		**110**	----	----	----	----
4-Terphenyl-d14	1718-51-0	0.5	%		**102**	----	----	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**107**	----	----	----	----
Toluene-D8	2037-26-5	0.2	%		**103**	----	----	----	----
4-Bromofluorobenzene	460-00-4	0.2	%		**105**	----	----	----	----

Surrogate Control Limits

Sub-Matrix: **SOIL**

Compound	CAS Number	Recovery Limits (%) Low	High
EP066S: PCB Surrogate			
Decachlorobiphenyl	2051-24-3	39	149
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	49	147
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	35	143
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	63	123
2-Chlorophenol-D4	93951-73-6	66	122
2.4.6-Tribromophenol	118-79-6	40	138
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	70	122
Anthracene-d10	1719-06-8	66	128
4-Terphenyl-d14	1718-51-0	65	129
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	73	133
Toluene-D8	2037-26-5	74	132
4-Bromofluorobenzene	460-00-4	72	130

QUALITY CONTROL REPORT

Work Order	: **ES1940617**	Page	: 1 of 10
Client	: **CONSARA PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: MS REBECCA ORGANO	Contact	: Customer Services ES
Address	: SUITE 2, LEVEL 2, UNIT 6, 10 RODBOROUGH ROAD FRENCHS FOREST 2100	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: +61 02 9451 1549	Telephone	: +61-2-8784 8555
Project	: C151008 BANK ST	Date Samples Received	: 09-Dec-2019
Order number	: ----	Date Analysis Commenced	: 10-Dec-2019
C-O-C number	: ----	Issue Date	: 16-Dec-2019
Sampler	: REBECCA ORGANO		
Site	: ----		
Quote number	: EN/222		
No. of samples received	: 1		
No. of samples analysed	: 1		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW

General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
# = Indicates failed QC

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 2756745)									
ES1940525-001	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	13	12	0.00	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	4	4	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	7	5	28.4	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	13	15	11.9	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	12	12	0.00	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	20	23	17.8	No Limit
ES1940525-011	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	16	15	0.00	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	16	13	15.6	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	79	76	2.79	0% - 50%
		EG005T: Lead	7439-92-1	5	mg/kg	12	10	9.54	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	51	42	18.5	0% - 50%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 2756748)									
ES1940525-003	Anonymous	EA055: Moisture Content	----	0.1	%	15.7	15.6	0.768	0% - 50%
ES1940525-014	Anonymous	EA055: Moisture Content	----	0.1	%	5.8	6.0	3.74	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 2756746)									
ES1940525-001	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
ES1940525-011	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 2755096)									
ES1940607-021	Anonymous	EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 2755099)									
ES1940607-021	Anonymous	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068A: Organochlorine Pesticides (OC) (QC Lot: 2755099) - continued									
ES1940607-021	Anonymous	EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 2755099)									
ES1940607-021	Anonymous	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 2755098)									
ES1940607-021	Anonymous	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 2755097)									
ES1940607-021	Anonymous	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 2755616)									
ES1940592-002	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
ES1940617-001	QC02	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 2755097)									
ES1940607-021	Anonymous	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 2755616)									
ES1940592-002	Anonymous	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
ES1940617-001	QC02	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
EP080: BTEXN (QC Lot: 2755616)									
ES1940592-002	Anonymous	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP080: BTEXN (QC Lot: 2755616) - continued									
ES1940592-002	Anonymous	EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit
ES1940617-001	QC02	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit

Method Blank (MB) and Laboratory Control Spike (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Spike (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 2756745)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	21.7 mg/kg	94.8	86.0	126
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	4.64 mg/kg	94.6	83.0	113
EG005T: Chromium	7440-47-3	2	mg/kg	<2	43.9 mg/kg	98.2	76.0	128
EG005T: Copper	7440-50-8	5	mg/kg	<5	32 mg/kg	91.6	86.0	120
EG005T: Lead	7439-92-1	5	mg/kg	<5	40 mg/kg	95.1	80.0	114
EG005T: Nickel	7440-02-0	2	mg/kg	<2	55 mg/kg	103	87.0	123
EG005T: Zinc	7440-66-6	5	mg/kg	<5	60.8 mg/kg	102	80.0	122
EG035T: Total Recoverable Mercury by FIMS (QCLot: 2756746)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	2.57 mg/kg	93.2	70.0	105
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 2755096)								
EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	1 mg/kg	98.0	62.0	126
EP068A: Organochlorine Pesticides (OC) (QCLot: 2755099)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	81.7	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	84.9	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	88.8	67.0	119
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	89.3	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	88.3	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	80.9	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	93.3	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	89.0	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	88.5	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	92.6	66.0	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	87.4	64.0	116
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	95.1	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	89.9	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	103	67.0	123
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	103	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	105	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	81.8	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	83.6	62.0	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	81.7	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	87.8	64.0	122
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	85.9	54.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 2755099)								

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP068B: Organophosphorus Pesticides (OP) (QCLot: 2755099) - continued								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	82.1	59.0	119
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	80.0	62.0	128
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	81.1	54.0	126
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	87.8	67.0	119
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	85.5	70.0	120
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	79.4	72.0	120
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	79.4	68.0	120
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	90.7	68.0	122
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	89.9	69.0	117
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	91.0	76.0	118
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	84.4	64.0	122
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	86.4	70.0	116
EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	0.5 mg/kg	83.7	69.0	121
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	85.6	66.0	118
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	79.0	68.0	124
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	78.8	62.0	112
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	104	68.0	120
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	83.8	65.0	127
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	76.3	41.0	123
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 2755098)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	102	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	101	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	96.1	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	98.4	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	103	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	102	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	104	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	103	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	96.0	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	97.5	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	93.8	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	93.8	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	93.3	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	83.8	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	79.3	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	85.9	63.0	121
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2755097)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	104	75.0	129

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2755097) - continued								
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	106	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	106	71.0	129
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2755616)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	126	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 2755097)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	108	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	105	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	106	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 2755616)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	128	68.4	128
EP080: BTEXN (QCLot: 2755616)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	113	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	107	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	114	65.0	117
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	112	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	113	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	99.9	63.0	119

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **SOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Recovery Limits (%): Low	Recovery Limits (%): High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 2756745)							
ES1940525-001	Anonymous	EG005T: Arsenic	7440-38-2	50 mg/kg	85.8	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	94.0	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	97.9	70.0	130
		EG005T: Copper	7440-50-8	250 mg/kg	92.3	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	91.5	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	95.2	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	92.0	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 2756746)							
ES1940525-001	Anonymous	EG035T: Mercury	7439-97-6	5 mg/kg	95.9	70.0	130
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 2755096)							

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 2755096) - continued							
ES1940607-021	Anonymous	EP066: Total Polychlorinated biphenyls	----	1 mg/kg	97.0	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 2755099)							
ES1940607-021	Anonymous	EP068: gamma-BHC	58-89-9	0.5 mg/kg	99.3	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	76.1	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	82.2	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	94.4	70.0	130
		EP068: Endrin	72-20-8	2 mg/kg	85.4	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	86.9	70.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 2755099)							
ES1940607-021	Anonymous	EP068: Diazinon	333-41-5	0.5 mg/kg	104	70.0	130
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	74.5	70.0	130
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	79.9	70.0	130
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	80.5	70.0	130
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	99.4	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 2755098)							
ES1940607-021	Anonymous	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	110	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	113	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2755097)							
ES1940607-021	Anonymous	EP071: C10 - C14 Fraction	----	523 mg/kg	93.3	73.0	137
		EP071: C15 - C28 Fraction	----	2319 mg/kg	112	53.0	131
		EP071: C29 - C36 Fraction	----	1714 mg/kg	131	52.0	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2755616)							
ES1940592-002	Anonymous	EP080: C6 - C9 Fraction	----	32.5 mg/kg	122	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 2755097)							
ES1940607-021	Anonymous	EP071: >C10 - C16 Fraction	----	860 mg/kg	94.9	73.0	137
		EP071: >C16 - C34 Fraction	----	3223 mg/kg	122	53.0	131
		EP071: >C34 - C40 Fraction	----	1058 mg/kg	127	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 2755616)							
ES1940592-002	Anonymous	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	118	70.0	130
EP080: BTEXN (QCLot: 2755616)							
ES1940592-002	Anonymous	EP080: Benzene	71-43-2	2.5 mg/kg	104	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	99.3	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	109	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	106	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	103	70.0	130

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*Concentration*	*MS*	*Low*	*High*
EP080: BTEXN (QCLot: 2755616) - continued							
ES1940592-002	Anonymous	EP080: Naphthalene	91-20-3	2.5 mg/kg	83.2	70.0	130

ALS Environmental

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **ES1940617**	Page	: 1 of 5
Client	: **CONSARA PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: MS REBECCA ORGANO	Telephone	: +61-2-8784 8555
Project	: C151008 BANK ST	Date Samples Received	: 09-Dec-2019
Site	: ----	Issue Date	: 16-Dec-2019
Sampler	: REBECCA ORGANO	No. of samples received	: 1
Order number	: ----	No. of samples analysed	: 1

This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.

Brief method summaries and references are also provided to assist in traceability.

Summary of Outliers

Outliers : Quality Control Samples

This report highlights outliers flagged in the Quality Control (QC) Report.

- **NO Method Blank value outliers occur.**
- **NO Duplicate outliers occur.**
- **NO Laboratory Control outliers occur.**
- **NO Matrix Spike outliers occur.**
- **Surrogate recovery outliers exist for all regular sample matrices - please see following pages for full details.**

Outliers : Analysis Holding Time Compliance

- **NO Analysis Holding Time Outliers exist.**

Outliers : Frequency of Quality Control Samples

- **NO Quality Control Sample Frequency Outliers exist.**

Regular Sample Surrogates

Sub-Matrix: **SOIL**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Samples Submitted							
EP075(SIM)S: Phenolic Compound Surrogates	ES1940617-001	QC02	**2.4.6-Tribromophenol**	118-79-6	39.5 %	40.0-138 %	**Recovery less than lower data quality objective**

Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for ***VOC in soils*** vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: **SOIL** Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / *Container / Client Sample ID(s)*	*Sample Date*	*Extraction / Preparation*			*Analysis*		
		Date extracted	*Due for extraction*	*Evaluation*	*Date analysed*	*Due for analysis*	*Evaluation*
EA055: Moisture Content (Dried @ 105-110°C)							
Soil Glass Jar - Unpreserved (EA055)							
QC02	**06-Dec-2019**	**----**	----	----	**10-Dec-2019**	20-Dec-2019	✓
EG005(ED093)T: Total Metals by ICP-AES							
Soil Glass Jar - Unpreserved (EG005T)							
QC02	**06-Dec-2019**	**11-Dec-2019**	03-Jun-2020	✓	**11-Dec-2019**	03-Jun-2020	✓
EG035T: Total Recoverable Mercury by FIMS							
Soil Glass Jar - Unpreserved (EG035T)							
QC02	**06-Dec-2019**	**11-Dec-2019**	03-Jan-2020	✓	**12-Dec-2019**	03-Jan-2020	✓
EP066: Polychlorinated Biphenyls (PCB)							
Soil Glass Jar - Unpreserved (EP066)							
QC02	**06-Dec-2019**	**11-Dec-2019**	20-Dec-2019	✓	**12-Dec-2019**	20-Jan-2020	✓
EP068A: Organochlorine Pesticides (OC)							
Soil Glass Jar - Unpreserved (EP068)							
QC02	**06-Dec-2019**	**11-Dec-2019**	20-Dec-2019	✓	**12-Dec-2019**	20-Jan-2020	✓
EP068B: Organophosphorus Pesticides (OP)							
Soil Glass Jar - Unpreserved (EP068)							
QC02	**06-Dec-2019**	**11-Dec-2019**	20-Dec-2019	✓	**12-Dec-2019**	20-Jan-2020	✓
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075(SIM))							
QC02	**06-Dec-2019**	**11-Dec-2019**	20-Dec-2019	✓	**12-Dec-2019**	20-Jan-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved (EP080)							
QC02	**06-Dec-2019**	**10-Dec-2019**	20-Dec-2019	✓	**14-Dec-2019**	20-Dec-2019	✓
Soil Glass Jar - Unpreserved (EP071)							
QC02	**06-Dec-2019**	**11-Dec-2019**	20-Dec-2019	✓	**13-Dec-2019**	20-Jan-2020	✓
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Soil Glass Jar - Unpreserved (EP080)							
QC02	**06-Dec-2019**	**10-Dec-2019**	20-Dec-2019	✓	**14-Dec-2019**	20-Dec-2019	✓
Soil Glass Jar - Unpreserved (EP071)							
QC02	**06-Dec-2019**	**11-Dec-2019**	20-Dec-2019	✓	**13-Dec-2019**	20-Jan-2020	✓
EP080: BTEXN							
Soil Glass Jar - Unpreserved (EP080)							
QC02	**06-Dec-2019**	**10-Dec-2019**	20-Dec-2019	✓	**14-Dec-2019**	20-Dec-2019	✓

Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(were) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **SOIL**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP)							
Moisture Content	EA055	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	1	8	**12.50**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	8	**12.50**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	1	8	**12.50**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	9	**11.11**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	12	**16.67**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
PAH/Phenols (SIM)	EP075(SIM)	1	8	**12.50**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	8	**12.50**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	1	8	**12.50**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	9	**11.11**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	12	**8.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
PAH/Phenols (SIM)	EP075(SIM)	1	8	**12.50**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	8	**12.50**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	1	8	**12.50**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	9	**11.11**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	12	**8.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
PAH/Phenols (SIM)	EP075(SIM)	1	8	**12.50**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	8	**12.50**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	1	8	**12.50**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	9	**11.11**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	12	**8.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Moisture Content	EA055	SOIL	In house: A gravimetric procedure based on weight loss over a 12 hour drying period at 105-110 degrees C. This method is compliant with NEPM (2013) Schedule B(3) Section 6.1 and Table 1 (14 day holding time).
Total Metals by ICP-AES	EG005T	SOIL	In house: Referenced to APHA 3120; USEPA SW 846 - 6010. Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM (2013) Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	In house: Referenced to AS 3550, APHA 3112 Hg - B (Flow-injection (SnCl2) (Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM (2013) Schedule B(3)
Polychlorinated Biphenyls (PCB)	EP066	SOIL	In house: Referenced to USEPA SW 846 - 8270D Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (2013) Schedule B(3) (Method 504)
Pesticides by GCMS	EP068	SOIL	In house: Referenced to USEPA SW 846 - 8270D Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM (2013) Schedule B(3) (Method 504,505)
TRH - Semivolatile Fraction	EP071	SOIL	In house: Referenced to USEPA SW 846 - 8015A Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40. Compliant with NEPM amended 2013.
PAH/Phenols (SIM)	EP075(SIM)	SOIL	In house: Referenced to USEPA SW 846 - 8270D. Extracts are analysed by Capillary GC/MS in Selective Ion Mode (SIM) and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (2013) Schedule B(3) (Method 502 and 507)
TRH Volatiles/BTEX	EP080	SOIL	In house: Referenced to USEPA SW 846 - 8260B. Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. Compliant with NEPM amended 2013.

Preparation Methods	Method	Matrix	Method Descriptions
Hot Block Digest for metals in soils sediments and sludges	EN69	SOIL	In house: Referenced to USEPA 200.2. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM (2013) Schedule B(3) (Method 202)
Methanolic Extraction of Soils for Purge and Trap	ORG16	SOIL	In house: Referenced to USEPA SW 846 - 5030A. 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids	ORG17	SOIL	In house: Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.

Due: 16/12/2019

CONSARA

CONTAMINATED SITES assessment ■ remediation ■ advice

Chain of Custody Record

Project No:	C191008
Project/Site:	BANKS ST
Sampled By:	R ORGANO
Phone:	0409003394
Page	1 of 1
Number of Eskies:	1

Lab:	ALS
Lab Quote No:	SY/491/14
Lab Batch No:	
Date Results Required:	
Sample Disposal After:	

LAB ID	SAMPLE ID	DATE	MATRIX	CONTAINER TYPE & PRESERVATIVE: Soil 0.1-0.2 L Glass jar, unpreserved	Soil - Plastic bag	Water 0.1-0.2 L Plastic, Filtered, HNO3	Water 0.5-1.0 L Amber glass, unpreserved	Water 40-50ml Glass, unpreserved	Water 0.25-1 L Plastic, unpreserved	Water 0.2-1.0L Plastic, sterile	ANALYSIS REQUIRED: 8 Metals	HOLD
1	QC02	6/12/19	SOIL	1							X	
			TOTALS									

Environmental Division Sydney
Work Order Reference
ES1940617

Telephone : +61-2-8784 8555

Relinquished By:			Received By:		
NAME	R ORGANO	SIGNATURE	NAME	SIGNATURE	
DATE	6/12/19.		DATE	12/19	

Custody Seals Intact	Y	N
Samples Received Chilled	Y	N
Method of Shipment		

NOTES:

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Suite 2, Level 2, Unit 6 10 Rodborough Road, Frenchs Forest NSW 2100
PO Box 7360 Warringah Mall NSW 2100

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Envirolab Services Pty Ltd
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customerservice@envirolab.com.au
www.envirolab.com.au

CERTIFICATE OF ANALYSIS 233489

Client Details

Client	Consara Pty Ltd
Attention	Rebecca Organo
Address	PO Box 7360, Warringah Mall, NSW, 2100

Sample Details

Your Reference	**C151008, Bank St**
Number of Samples	5 solid
Date samples received	18/12/2019
Date completed instructions received	18/12/2019

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Please refer to the last page of this report for any comments relating to the results.

Report Details

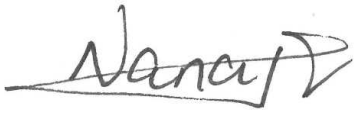
Date results requested by	02/01/2020
Date of Issue	20/12/2019

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Asbestos Approved By
Analysed by Asbestos Approved Identifier: Lucy Zhu
Authorised by Asbestos Approved Signatory: Lucy Zhu
Results Approved By
Lucy Zhu, Senior Asbestos Analyst

Authorised By



Nancy Zhang, Laboratory Manager

Asbestos ID - soils NEPM - ASB-001						
Our Reference		233489-1	233489-2	233489-3	233489-4	233489-5
Your Reference	UNITS	RA-20-01	RA-20-02	RA-20-03	RA-20-04	RA-20-05
Date Sampled		18/12/2019	18/12/2019	18/12/2019	18/12/2019	18/12/2019
Type of sample		solid	solid	solid	solid	solid
Date analysed	-	20/12/2019	20/12/2019	20/12/2019	20/12/2019	20/12/2019
Sample mass tested	g	1,947.1	1,802.3	1,112.5	1,873	1,123.2
Sample Description	-	Assorted aggregate	Assorted aggregate	Assorted aggregate	Assorted aggregate	Assorted aggregate
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg	No asbestos detected at reporting limit of 0.1g/kg	No asbestos detected at reporting limit of 0.1g/kg	No asbestos detected at reporting limit of 0.1g/kg	No asbestos detected at reporting limit of 0.1g/kg
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos#1	g/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	–	–	–	–	–
FA and AF Estimation*	g	–	–	–	–	–
ACM >7mm Estimation*	%(w/w)	<0.01	<0.01	<0.01	<0.01	<0.01
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	<0.001	<0.001	<0.001

Method ID	Methodology Summary
ASB-001	Asbestos ID - Qualitative identification of asbestos in bulk samples using Polarised Light Microscopy and Dispersion Staining Techniques including Synthetic Mineral Fibre and Organic Fibre as per Australian Standard 4964-2004.
ASB-001	Asbestos ID - Identification of asbestos in soil samples using Polarised Light Microscopy and Dispersion Staining Techniques. Minimum 500mL soil sample was analysed as recommended by "National Environment Protection (Assessment of site contamination) Measure, Schedule B1 and "The Guidelines from the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia - May 2009" with a reporting limit of 0.1g/kg (0.01% w/w) as per Australian Standard AS4964-2004. Results reported denoted with * are outside our scope of NATA accreditation. **NOTE** #1 Total Asbestos g/kg was analysed and reported as per Australian Standard AS4964 (This is the sum of ACM >7mm, <7mm and FA/AF) **NOTE** #2 The screening level of 0.001% w/w asbestos in soil for FA and AF only applies where the FA and AF are able to be quantified by gravimetric procedures. This screening level is not applicable to free fibres. Estimation = Estimated asbestos weight Results reported with "--" is equivalent to no visible asbestos identified using Polarised Light microscopy and Dispersion Staining Techniques.

Result Definitions

NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Report Comments

Asbestos-ID in soil: NEPM
This report is consistent with the reporting recommendations in the National Environment Protection (Assessment of Site Contamination) Measure, Schedule B1, May 2013. This is reported outside our scope of NATA accreditation.

CONSARA

CONTAMINATED SITES assessment ■ remediation ■ advice

Chain of Custody Record

Project No:	C1S1008
Project/Site:	BANK ST
Sampled By:	ROCCOANO
Phone:	0404003394
Page	1 of 1
Number of Eskies:	1

Lab:	ENVIROCAR
Lab Quote No:	
Lab Batch No:	
Date Results Required:	STANDARD
Sample Disposal After:	STANDARD

LAB ID	SAMPLE ID	DATE	MATRIX
1	RA_20_01	18/12/19	SOIL
2	RA_20_02	↓	↓
3	RA_20_03		
4	RA_20_04		
5	RA_20_05		

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CERTIFICATE OF ANALYSIS 235777

Client Details

Client	Consara Pty Ltd
Attention	Rebecca Organo
Address	PO Box 7360, Warringah Mall, NSW, 2100

Sample Details

Your Reference	**C151008, Bank St**
Number of Samples	7 SOIL
Date samples received	31/01/2020
Date completed instructions received	31/01/2020

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Please refer to the last page of this report for any comments relating to the results.

Report Details

Date results requested by	03/02/2020
Date of Issue	03/02/2020

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Asbestos Approved By
Analysed by Asbestos Approved Identifier: Lucy Zhu
Authorised by Asbestos Approved Signatory: Lucy Zhu

Results Approved By
Jaimie Loa-Kum-Cheung, Metals Supervisor
Josh Williams, Senior Chemist
Lucy Zhu, Asbestos Supervisor
Steven Luong, Organics Supervisor

Authorised By



Nancy Zhang, Laboratory Manager

vTRH(C6-C10)/BTEXN in Soil					
Our Reference		235777-1	235777-2	235777-3	235777-4
Your Reference	UNITS	DGB-01	DGB-02	DGB-03	DGB-04
Date Sampled		31/01/2020	31/01/2020	31/01/2020	31/01/2020
Type of sample		SOIL	SOIL	SOIL	SOIL
Date extracted	-	31/01/2020	31/01/2020	31/01/2020	31/01/2020
Date analysed	-	31/01/2020	31/01/2020	31/01/2020	31/01/2020
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1
naphthalene	mg/kg	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<3	<3	<3	<3
Surrogate aaa-Trifluorotoluene	%	89	90	72	77

svTRH (C10-C40) in Soil					
Our Reference		235777-1	235777-2	235777-3	235777-4
Your Reference	UNITS	DGB-01	DGB-02	DGB-03	DGB-04
Date Sampled		31/01/2020	31/01/2020	31/01/2020	31/01/2020
Type of sample		SOIL	SOIL	SOIL	SOIL
Date extracted	-	31/01/2020	31/01/2020	31/01/2020	31/01/2020
Date analysed	-	31/01/2020	01/02/2020	01/02/2020	01/02/2020
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	140	<100	<100	110
TRH C_{29} - C_{36}	mg/kg	190	160	150	160
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	260	180	170	200
TRH >C_{34} -C_{40}	mg/kg	180	170	150	190
Total +ve TRH (>C10-C40)	mg/kg	450	350	330	390
Surrogate o-Terphenyl	%	71	69	71	70

PAHs in Soil					
Our Reference		235777-1	235777-2	235777-3	235777-4
Your Reference	UNITS	DGB-01	DGB-02	DGB-03	DGB-04
Date Sampled		31/01/2020	31/01/2020	31/01/2020	31/01/2020
Type of sample		SOIL	SOIL	SOIL	SOIL
Date extracted	-	31/01/2020	31/01/2020	31/01/2020	31/01/2020
Date analysed	-	31/01/2020	31/01/2020	31/01/2020	31/01/2020
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.6	0.5	0.5	0.3
Anthracene	mg/kg	0.2	0.1	0.2	<0.1
Fluoranthene	mg/kg	0.7	0.7	0.8	0.8
Pyrene	mg/kg	0.8	0.7	0.8	0.8
Benzo(a)anthracene	mg/kg	0.4	0.4	0.4	0.4
Chrysene	mg/kg	0.4	0.4	0.4	0.5
Benzo(b,j+k)fluoranthene	mg/kg	0.5	0.5	0.6	0.6
Benzo(a)pyrene	mg/kg	0.4	0.4	0.4	0.4
Indeno(1,2,3-c,d)pyrene	mg/kg	0.2	0.2	0.2	0.2
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	0.3	0.2	0.2	0.3
Total +ve PAH's	mg/kg	4.4	4.1	4.4	4.4
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	0.5	0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	0.5	0.5	0.6	0.6
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	0.6	0.6	0.6	0.6
Surrogate p-Terphenyl-d14	%	95	96	96	100

Organochlorine Pesticides in soil					
Our Reference		235777-1	235777-2	235777-3	235777-4
Your Reference	UNITS	DGB-01	DGB-02	DGB-03	DGB-04
Date Sampled		31/01/2020	31/01/2020	31/01/2020	31/01/2020
Type of sample		SOIL	SOIL	SOIL	SOIL
Date extracted	-	31/01/2020	31/01/2020	31/01/2020	31/01/2020
Date analysed	-	31/01/2020	31/01/2020	31/01/2020	31/01/2020
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1
HCB	mg/kg	<0.1	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	0.1	0.1	0.2
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	101	96	98	99

Organophosphorus Pesticides in Soil					
Our Reference	UNITS	235777-1	235777-2	235777-3	235777-4
Your Reference		DGB-01	DGB-02	DGB-03	DGB-04
Date Sampled		31/01/2020	31/01/2020	31/01/2020	31/01/2020
Type of sample		SOIL	SOIL	SOIL	SOIL
Date extracted	-	31/01/2020	31/01/2020	31/01/2020	31/01/2020
Date analysed	-	31/01/2020	31/01/2020	31/01/2020	31/01/2020
Dichlorvos	mg/kg	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	101	96	98	99

PCBs in Soil					
Our Reference		235777-1	235777-2	235777-3	235777-4
Your Reference	UNITS	DGB-01	DGB-02	DGB-03	DGB-04
Date Sampled		31/01/2020	31/01/2020	31/01/2020	31/01/2020
Type of sample		SOIL	SOIL	SOIL	SOIL
Date extracted	-	31/01/2020	31/01/2020	31/01/2020	31/01/2020
Date analysed	-	31/01/2020	31/01/2020	31/01/2020	31/01/2020
Aroclor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	101	96	98	99

Acid Extractable metals in soil					
Our Reference	UNITS	235777-1	235777-2	235777-3	235777-4
Your Reference		DGB-01	DGB-02	DGB-03	DGB-04
Date Sampled		31/01/2020	31/01/2020	31/01/2020	31/01/2020
Type of sample		SOIL	SOIL	SOIL	SOIL
Date prepared	-	03/02/2020	03/02/2020	03/02/2020	03/02/2020
Date analysed	-	03/02/2020	03/02/2020	03/02/2020	03/02/2020
Arsenic	mg/kg	<4	<4	<4	<4
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	9	9	10	6
Copper	mg/kg	17	25	18	19
Lead	mg/kg	22	21	19	11
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	5	6	5	4
Zinc	mg/kg	40	60	45	44

Moisture					
Our Reference		235777-1	235777-2	235777-3	235777-4
Your Reference	UNITS	DGB-01	DGB-02	DGB-03	DGB-04
Date Sampled		31/01/2020	31/01/2020	31/01/2020	31/01/2020
Type of sample		SOIL	SOIL	SOIL	SOIL
Date prepared	-	31/01/2020	31/01/2020	31/01/2020	31/01/2020
Date analysed	-	03/02/2020	03/02/2020	03/02/2020	03/02/2020
Moisture	%	10	9.4	11	8.8

Asbestos ID - soils NEPM - ASB-001						
Our Reference	UNITS	235777-1	235777-2	235777-3	235777-4	235777-5
Your Reference		DGB-01	DGB-02	DGB-03	DGB-04	DGB-05
Date Sampled		31/01/2020	31/01/2020	31/01/2020	31/01/2020	31/01/2020
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date analysed	-	03/02/2020	03/02/2020	03/02/2020	03/02/2020	03/02/2020
Sample mass tested	g	749.36	745.14	648.08	839.68	802.24
Sample Description	-	Beige coarse-grained soil & rocks	Beige coarse-grained soil & rocks	Beige coarse-grained soil & rocks	Beige coarse-grained soil & rocks	Beige coarse-grained soil & rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos[#1]	g/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	–	–	–	–	–
FA and AF Estimation*	g	–	–	–	–	–
ACM >7mm Estimation*	%(w/w)	<0.01	<0.01	<0.01	<0.01	<0.01
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	<0.001	<0.001	<0.001

Asbestos ID - soils NEPM - ASB-001			
Our Reference		235777-6	235777-7
Your Reference	UNITS	DGB-06	DGB-07
Date Sampled		31/01/2020	31/01/2020
Type of sample		SOIL	SOIL
Date analysed	-	03/02/2020	03/02/2020
Sample mass tested	g	794.9	768.83
Sample Description	-	Beige coarse-grained soil & rocks	Beige coarse-grained soil & rocks
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected
Total Asbestos#1	g/kg	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	–	–
FA and AF Estimation*	g	–	–
ACM >7mm Estimation*	%(w/w)	<0.01	<0.01
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001

Method ID	Methodology Summary
ASB-001	Asbestos ID - Qualitative identification of asbestos in bulk samples using Polarised Light Microscopy and Dispersion Staining Techniques including Synthetic Mineral Fibre and Organic Fibre as per Australian Standard 4964-2004.
ASB-001	Asbestos ID - Identification of asbestos in soil samples using Polarised Light Microscopy and Dispersion Staining Techniques. Minimum 500mL soil sample was analysed as recommended by "National Environment Protection (Assessment of site contamination) Measure, Schedule B1 and "The Guidelines from the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia - May 2009" with a reporting limit of 0.1g/kg (0.01% w/w) as per Australian Standard AS4964-2004. Results reported denoted with * are outside our scope of NATA accreditation. **NOTE** #1 Total Asbestos g/kg was analysed and reported as per Australian Standard AS4964 (This is the sum of ACM >7mm, <7mm and FA/AF) **NOTE** #2 The screening level of 0.001% w/w asbestos in soil for FA and AF only applies where the FA and AF are able to be quantified by gravimetric procedures. This screening level is not applicable to free fibres. Estimation = Estimated asbestos weight Results reported with "--" is equivalent to no visible asbestos identified using Polarised Light microscopy and Dispersion Staining Techniques.
AT-008	Determination of VOCs sampled onto coconut shell charcoal sorbent tubes, that can be desorbed using carbon disulphide, and analysed by GC-MS.
Inorg-008	Moisture content determined by heating at 105+/-5 °C for a minimum of 12 hours.
Metals-020	Determination of various metals by ICP-AES.
Metals-021	Determination of Mercury by Cold Vapour AAS.
Org-003	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.
Org-003	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis. Note, the Total +ve TRH PQL is reflective of the lowest individual PQL and is therefore "Total +ve TRH" is simply a sum of the positive individual TRH fractions (>C10-C40).

Method ID	Methodology Summary
Org-006	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD.
Org-006	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD. Note, the Total +ve PCBs PQL is reflective of the lowest individual PQL and is therefore" Total +ve PCBs" is simply a sum of the positive individual PCBs.
Org-012/017	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS and/or GC-MS/MS.
Org-012/017	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-MS and/or GC-MS/MS. Note, the Total +ve reported DDD+DDE+DDT PQL is reflective of the lowest individual PQL and is therefore simply a sum of the positive individually report DDD+DDE+DDT.
Org-012/017	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS and/or GC-MS/MS. Benzo(a)pyrene TEQ as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater - 2013. For soil results:- 1. 'EQ PQL'values are assuming all contributing PAHs reported as <PQL are actually at the PQL. This is the most conservative approach and can give false positive TEQs given that PAHs that contribute to the TEQ calculation may not be present. 2. 'EQ zero'values are assuming all contributing PAHs reported as <PQL are zero. This is the least conservative approach and is more susceptible to false negative TEQs when PAHs that contribute to the TEQ calculation are present but below PQL. 3. 'EQ half PQL'values are assuming all contributing PAHs reported as <PQL are half the stipulated PQL. Hence a mid-point between the most and least conservative approaches above. Note, the Total +ve PAHs PQL is reflective of the lowest individual PQL and is therefore "Total +ve PAHs" is simply a sum of the positive individual PAHs.
Org-014	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS.
Org-016	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.
Org-016	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater. Note, the Total +ve Xylene PQL is reflective of the lowest individual PQL and is therefore "Total +ve Xylenes" is simply a sum of the positive individual Xylenes.

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-15	[NT]
Date extracted	-			31/01/2020	1	31/01/2020	31/01/2020		31/01/2020	[NT]
Date analysed	-			31/01/2020	1	31/01/2020	31/01/2020		31/01/2020	[NT]
TRH C_6 - C_9	mg/kg	25	Org-016	<25	1	<25	<25	0	87	[NT]
TRH C_6 - C_{10}	mg/kg	25	Org-016	<25	1	<25	<25	0	87	[NT]
Benzene	mg/kg	0.2	Org-016	<0.2	1	<0.2	<0.2	0	88	[NT]
Toluene	mg/kg	0.5	Org-016	<0.5	1	<0.5	<0.5	0	91	[NT]
Ethylbenzene	mg/kg	1	Org-016	<1	1	<1	<1	0	86	[NT]
m+p-xylene	mg/kg	2	Org-016	<2	1	<2	<2	0	86	[NT]
o-Xylene	mg/kg	1	Org-016	<1	1	<1	<1	0	84	[NT]
naphthalene	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-016	83	1	89	91	2	80	[NT]

QUALITY CONTROL: svTRH (C10-C40) in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-15	[NT]
Date extracted	-			31/01/2020	1	31/01/2020	31/01/2020		31/01/2020	[NT]
Date analysed	-			31/01/2020	1	31/01/2020	31/01/2020		31/01/2020	[NT]
TRH C_{10} - C_{14}	mg/kg	50	Org-003	<50	1	<50	<50	0	100	[NT]
TRH C_{15} - C_{28}	mg/kg	100	Org-003	<100	1	140	130	7	102	[NT]
TRH C_{29} - C_{36}	mg/kg	100	Org-003	<100	1	190	160	17	108	[NT]
TRH >C_{10} -C_{16}	mg/kg	50	Org-003	<50	1	<50	<50	0	100	[NT]
TRH >C_{16} -C_{34}	mg/kg	100	Org-003	<100	1	260	220	17	102	[NT]
TRH >C_{34} -C_{40}	mg/kg	100	Org-003	<100	1	180	180	0	108	[NT]
Surrogate o-Terphenyl	%		Org-003	67	1	71	73	3	82	[NT]

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-15	235777-2
Date extracted	-			31/01/2020	1	31/01/2020	31/01/2020		31/01/2020	31/01/2020
Date analysed	-			31/01/2020	1	31/01/2020	31/01/2020		31/01/2020	31/01/2020
Naphthalene	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	98	97
Acenaphthylene	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Fluorene	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	100	108
Phenanthrene	mg/kg	0.1	Org-012/017	<0.1	1	0.6	0.4	40	98	#
Anthracene	mg/kg	0.1	Org-012/017	<0.1	1	0.2	<0.1	67	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-012/017	<0.1	1	0.7	0.6	15	96	#
Pyrene	mg/kg	0.1	Org-012/017	<0.1	1	0.8	0.6	29	96	#
Benzo(a)anthracene	mg/kg	0.1	Org-012/017	<0.1	1	0.4	0.3	29	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-012/017	<0.1	1	0.4	0.4	0	100	#
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-012/017	<0.2	1	0.5	0.4	22	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-012/017	<0.05	1	0.4	0.3	29	104	#
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-012/017	<0.1	1	0.2	0.1	67	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-012/017	<0.1	1	0.3	0.2	40	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-012/017	91	1	95	99	4	96	96

QUALITY CONTROL: Organochlorine Pesticides in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-15	235777-2
Date extracted	-			31/01/2020	1	31/01/2020	31/01/2020		31/01/2020	31/01/2020
Date analysed	-			31/01/2020	1	31/01/2020	31/01/2020		31/01/2020	31/01/2020
alpha-BHC	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	100	83
HCB	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	100	81
gamma-BHC	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Heptachlor	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	96	95
delta-BHC	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	112	103
Heptachlor Epoxide	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	100	99
gamma-Chlordane	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	98	99
Dieldrin	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	108	114
Endrin	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	98	99
Endosulfan II	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDD	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	82	83
Endrin Aldehyde	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	88	91
Methoxychlor	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-012/017	95	1	101	100	1	98	96

QUALITY CONTROL: Organophosphorus Pesticides in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-15	235777-2
Date extracted	-			31/01/2020	1	31/01/2020	31/01/2020		31/01/2020	31/01/2020
Date analysed	-			31/01/2020	1	31/01/2020	31/01/2020		31/01/2020	31/01/2020
Dichlorvos	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	104	62
Dimethoate	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Chlorpyriphos-methyl	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	100	97
Fenitrothion	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	90	89
Malathion	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	76	63
Chlorpyriphos	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	102	120
Parathion	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	82	81
Bromophos-ethyl	mg/kg	0.1	AT-008	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Ethion	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	92	99
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-012/017	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-012/017	95	1	101	100	1	98	96

QUALITY CONTROL: PCBs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-15	235777-2
Date extracted	-			31/01/2020	1	31/01/2020	31/01/2020		31/01/2020	31/01/2020
Date analysed	-			31/01/2020	1	31/01/2020	31/01/2020		31/01/2020	31/01/2020
Aroclor 1016	mg/kg	0.1	Org-006	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1221	mg/kg	0.1	Org-006	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1232	mg/kg	0.1	Org-006	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1242	mg/kg	0.1	Org-006	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1248	mg/kg	0.1	Org-006	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1254	mg/kg	0.1	Org-006	<0.1	1	<0.1	<0.1	0	96	98
Aroclor 1260	mg/kg	0.1	Org-006	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-006	95	1	101	100	1	98	96

QUALITY CONTROL: Acid Extractable metals in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-15	[NT]
Date prepared	-			03/02/2020	1	03/02/2020	03/02/2020		03/02/2020	[NT]
Date analysed	-			03/02/2020	1	03/02/2020	03/02/2020		03/02/2020	[NT]
Arsenic	mg/kg	4	Metals-020	<4	1	<4	<4	0	101	[NT]
Cadmium	mg/kg	0.4	Metals-020	<0.4	1	<0.4	<0.4	0	97	[NT]
Chromium	mg/kg	1	Metals-020	<1	1	9	12	29	105	[NT]
Copper	mg/kg	1	Metals-020	<1	1	17	21	21	105	[NT]
Lead	mg/kg	1	Metals-020	<1	1	22	22	0	107	[NT]
Mercury	mg/kg	0.1	Metals-021	<0.1	1	<0.1	<0.1	0	90	[NT]
Nickel	mg/kg	1	Metals-020	<1	1	5	8	46	98	[NT]
Zinc	mg/kg	1	Metals-020	<1	1	40	49	20	102	[NT]

Result Definitions

NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

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

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

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

Report Comments

PAHs in Soil - # Percent recovery for the matrix spike is not possible to report as the high concentration of analytes in sample 235777-2 has caused interference.

Asbestos-ID in soil: NEPM
This report is consistent with the reporting recommendations in the National Environment Protection (Assessment of Site Contamination) Measure, Schedule B1, May 2013. This is reported outside our scope of NATA accreditation.

24TAT PLEASE

CONSARA
contaminated sites

Chain of Custody Record

Project No:	CES100578
Project/Site:	BANK ST
Sampled By:	R LORGANO
Phone:	0404003394
Page	1 of 1
Number of Eskies:	1

Lab:	ENVIROLAB
Lab Quote No:	
Lab Batch No:	
Date Results Required:	STANDARD
Sample Disposal After:	STANDARD

LAB ID	SAMPLE ID	DATE	MATRIX	CONTAINER TYPE & PRESERVATIVE: Soil 0.1-0.2 L Glass jar, unpreserved	Soil - Plastic bag	Water 0.1-0.2 L Plastic, Filtered, HNO3	Water 0.5-1.0 L Amber glass, unpreserved	Water 40-50ml Glass, unpreserved	Water 0.25-1 L Plastic, unpreserved	Water 0.2-1.0L Plastic, sterile	ANALYSIS REQUIRED: 0.5L Nepm	COMBO6	HOLD
1	DGB_01	31/1/20	SOIL	1	1						X	X	
2	DGB_02			1	1						X	X	
3	DGB_03			1	1						X		
4	DGB_04			1	1						X		
5	DGB_05			1							X		
6	DGB_06			1							X		
7	DGB_07			1							X		
8													
			TOTALS										

Environmental Laboratory Services
12 Ashley St
Chatswood NSW 2067
Ph: (02) 9910 6200

Job No: 235747
Date Received: 31/1/20
Time Received: 1655
Received by: SD
Temp: Cool/Ambient
Cooling: Ice/Icepack
Security: Intact/Broken/None

u

Relinquished By:			Received By:			
NAME	R LORGANO	SIGNATURE	NAME	Jason Day	SIGNATURE	
DATE	31/01/20		DATE	31/1/20 1655		

Custody Seals Intact	Y	N
Samples Received Chilled	Y	N
Method of Shipment		

NOTES:

24TAT PLEASE

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CERTIFICATE OF ANALYSIS 243400

Client Details

Client	Consara Pty Ltd
Attention	Rebecca Organo
Address	PO Box 7360, Warringah Mall, NSW, 2100

Sample Details

Your Reference	**C151018, Bank St Pyrmont**
Number of Samples	6 SOIL
Date samples received	21/05/2020
Date completed instructions received	21/05/2020

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Please refer to the last page of this report for any comments relating to the results.

Report Details

Date results requested by	28/05/2020
Date of Issue	28/05/2020

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Asbestos Approved By
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Authorised by Asbestos Approved Signatory: Lucy Zhu

Results Approved By
Dragana Tomas, Senior Chemist
Jaimie Loa-Kum-Cheung, Metals Supervisor
Josh Williams, Senior Chemist
Lucy Zhu, Asbestos Supervisor

Authorised By



Nancy Zhang, Laboratory Manager

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		243400-1	243400-2	243400-3	243400-4	243400-5
Your Reference	UNITS	TS-01	TS-02	TS-03	TS-04	TS-05
Date Sampled		18/05/2020	18/05/2020	18/05/2020	18/05/2020	18/05/2020
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date extracted	-	25/05/2020	25/05/2020	25/05/2020	25/05/2020	25/05/2020
Date analysed	-	25/05/2020	25/05/2020	25/05/2020	25/05/2020	25/05/2020
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<3	<3	<3	<3	<3
Surrogate aaa-Trifluorotoluene	%	106	99	107	101	103

vTRH(C6-C10)/BTEXN in Soil		
Our Reference		243400-6
Your Reference	UNITS	QC01
Date Sampled		18/05/2020
Type of sample		SOIL
Date extracted	-	25/05/2020
Date analysed	-	25/05/2020
TRH C_6 - C_9	mg/kg	<25
TRH C_6 - C_{10}	mg/kg	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25
Benzene	mg/kg	<0.2
Toluene	mg/kg	<0.5
Ethylbenzene	mg/kg	<1
m+p-xylene	mg/kg	<2
o-Xylene	mg/kg	<1
naphthalene	mg/kg	<1
Total +ve Xylenes	mg/kg	<3
Surrogate aaa-Trifluorotoluene	%	105

svTRH (C10-C40) in Soil						
Our Reference		243400-1	243400-2	243400-3	243400-4	243400-5
Your Reference	UNITS	TS-01	TS-02	TS-03	TS-04	TS-05
Date Sampled		18/05/2020	18/05/2020	18/05/2020	18/05/2020	18/05/2020
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date extracted	-	25/05/2020	25/05/2020	25/05/2020	25/05/2020	25/05/2020
Date analysed	-	26/05/2020	26/05/2020	26/05/2020	26/05/2020	26/05/2020
TRH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TRH C_{15} - C_{28}	mg/kg	110	130	220	130	180
TRH C_{29} - C_{36}	mg/kg	320	390	570	390	520
TRH >C_{10} -C_{16}	mg/kg	<50	<50	<50	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C_{16} -C_{34}	mg/kg	320	400	610	400	530
TRH >C_{34} -C_{40}	mg/kg	180	250	330	240	300
Total +ve TRH (>C10-C40)	mg/kg	500	650	950	640	830
Surrogate o-Terphenyl	%	74	75	76	76	76

svTRH (C10-C40) in Soil		
Our Reference		243400-6
Your Reference	UNITS	QC01
Date Sampled		18/05/2020
Type of sample		SOIL
Date extracted	-	25/05/2020
Date analysed	-	26/05/2020
TRH C_{10} - C_{14}	mg/kg	<50
TRH C_{15} - C_{28}	mg/kg	150
TRH C_{29} - C_{36}	mg/kg	470
TRH >C_{10} -C_{16}	mg/kg	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50
TRH >C_{16} -C_{34}	mg/kg	460
TRH >C_{34} -C_{40}	mg/kg	280
Total +ve TRH (>C10-C40)	mg/kg	740
Surrogate o-Terphenyl	%	82

PAHs in Soil						
Our Reference		243400-1	243400-2	243400-3	243400-4	243400-5
Your Reference	UNITS	TS-01	TS-02	TS-03	TS-04	TS-05
Date Sampled		18/05/2020	18/05/2020	18/05/2020	18/05/2020	18/05/2020
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date extracted	-	25/05/2020	25/05/2020	25/05/2020	25/05/2020	25/05/2020
Date analysed	-	25/05/2020	25/05/2020	25/05/2020	25/05/2020	25/05/2020
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	0.2
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	0.2	0.1	0.7
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	0.2
Fluoranthene	mg/kg	0.2	0.2	0.3	0.3	0.5
Pyrene	mg/kg	0.2	0.2	0.3	0.2	0.4
Benzo(a)anthracene	mg/kg	<0.1	0.1	0.2	0.1	0.2
Chrysene	mg/kg	0.1	0.2	0.2	0.1	0.2
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	0.3	0.3	0.2	0.2
Benzo(a)pyrene	mg/kg	0.08	0.2	0.2	0.1	0.1
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	0.1	0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	0.1	0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	0.70	1.5	1.8	1.2	2.8
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	106	106	103	107	106

PAHs in Soil		
Our Reference		243400-6
Your Reference	UNITS	QC01
Date Sampled		18/05/2020
Type of sample		SOIL
Date extracted	-	25/05/2020
Date analysed	-	25/05/2020
Naphthalene	mg/kg	<0.1
Acenaphthylene	mg/kg	<0.1
Acenaphthene	mg/kg	<0.1
Fluorene	mg/kg	<0.1
Phenanthrene	mg/kg	0.1
Anthracene	mg/kg	<0.1
Fluoranthene	mg/kg	0.2
Pyrene	mg/kg	0.2
Benzo(a)anthracene	mg/kg	0.1
Chrysene	mg/kg	0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2
Benzo(a)pyrene	mg/kg	0.1
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1
Total +ve PAH's	mg/kg	1.0
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5
Surrogate p-Terphenyl-d14	%	109

Organochlorine Pesticides in soil						
Our Reference		243400-1	243400-2	243400-3	243400-4	243400-5
Your Reference	UNITS	TS-01	TS-02	TS-03	TS-04	TS-05
Date Sampled		18/05/2020	18/05/2020	18/05/2020	18/05/2020	18/05/2020
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date extracted	-	25/05/2020	25/05/2020	25/05/2020	25/05/2020	25/05/2020
Date analysed	-	25/05/2020	25/05/2020	25/05/2020	25/05/2020	25/05/2020
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
HCB	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	108	109	107	112	112

Organochlorine Pesticides in soil		
Our Reference		243400-6
Your Reference	UNITS	QC01
Date Sampled		18/05/2020
Type of sample		SOIL
Date extracted	-	25/05/2020
Date analysed	-	25/05/2020
alpha-BHC	mg/kg	<0.1
HCB	mg/kg	<0.1
beta-BHC	mg/kg	<0.1
gamma-BHC	mg/kg	<0.1
Heptachlor	mg/kg	<0.1
delta-BHC	mg/kg	<0.1
Aldrin	mg/kg	<0.1
Heptachlor Epoxide	mg/kg	<0.1
gamma-Chlordane	mg/kg	<0.1
alpha-chlordane	mg/kg	<0.1
Endosulfan I	mg/kg	<0.1
pp-DDE	mg/kg	<0.1
Dieldrin	mg/kg	<0.1
Endrin	mg/kg	<0.1
Endosulfan II	mg/kg	<0.1
pp-DDD	mg/kg	<0.1
Endrin Aldehyde	mg/kg	<0.1
pp-DDT	mg/kg	<0.1
Endosulfan Sulphate	mg/kg	<0.1
Methoxychlor	mg/kg	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1
Surrogate TCMX	%	111

Organophosphorus Pesticides in Soil						
Our Reference		243400-1	243400-2	243400-3	243400-4	243400-5
Your Reference	UNITS	TS-01	TS-02	TS-03	TS-04	TS-05
Date Sampled		18/05/2020	18/05/2020	18/05/2020	18/05/2020	18/05/2020
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date extracted	-	25/05/2020	25/05/2020	25/05/2020	25/05/2020	25/05/2020
Date analysed	-	25/05/2020	25/05/2020	25/05/2020	25/05/2020	25/05/2020
Dichlorvos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	108	109	107	112	112

Organophosphorus Pesticides in Soil		
Our Reference		243400-6
Your Reference	UNITS	QC01
Date Sampled		18/05/2020
Type of sample		SOIL
Date extracted	-	25/05/2020
Date analysed	-	25/05/2020
Dichlorvos	mg/kg	<0.1
Dimethoate	mg/kg	<0.1
Diazinon	mg/kg	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1
Ronnel	mg/kg	<0.1
Fenitrothion	mg/kg	<0.1
Malathion	mg/kg	<0.1
Chlorpyriphos	mg/kg	<0.1
Parathion	mg/kg	<0.1
Bromophos-ethyl	mg/kg	<0.1
Ethion	mg/kg	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1
Surrogate TCMX	%	111

PCBs in Soil						
Our Reference		243400-1	243400-2	243400-3	243400-4	243400-5
Your Reference	UNITS	TS-01	TS-02	TS-03	TS-04	TS-05
Date Sampled		18/05/2020	18/05/2020	18/05/2020	18/05/2020	18/05/2020
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date extracted	-	25/05/2020	25/05/2020	25/05/2020	25/05/2020	25/05/2020
Date analysed	-	25/05/2020	25/05/2020	25/05/2020	25/05/2020	25/05/2020
Aroclor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	108	109	107	112	112

PCBs in Soil		
Our Reference		243400-6
Your Reference	UNITS	QC01
Date Sampled		18/05/2020
Type of sample		SOIL
Date extracted	-	25/05/2020
Date analysed	-	25/05/2020
Aroclor 1016	mg/kg	<0.1
Aroclor 1221	mg/kg	<0.1
Aroclor 1232	mg/kg	<0.1
Aroclor 1242	mg/kg	<0.1
Aroclor 1248	mg/kg	<0.1
Aroclor 1254	mg/kg	<0.1
Aroclor 1260	mg/kg	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1
Surrogate TCMX	%	111

Acid Extractable metals in soil						
Our Reference		243400-1	243400-2	243400-3	243400-4	243400-5
Your Reference	UNITS	TS-01	TS-02	TS-03	TS-04	TS-05
Date Sampled		18/05/2020	18/05/2020	18/05/2020	18/05/2020	18/05/2020
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date prepared	-	25/05/2020	25/05/2020	25/05/2020	25/05/2020	25/05/2020
Date analysed	-	25/05/2020	25/05/2020	25/05/2020	25/05/2020	25/05/2020
Arsenic	mg/kg	6	6	6	7	6
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	0.4
Chromium	mg/kg	12	15	14	22	14
Copper	mg/kg	79	66	66	57	77
Lead	mg/kg	22	23	52	24	28
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	0.1
Nickel	mg/kg	7	8	9	7	8
Zinc	mg/kg	100	110	110	99	130

Acid Extractable metals in soil			
Our Reference		243400-6	243400-7
Your Reference	UNITS	QC01	TS-01 - [TRIPLICATE]
Date Sampled		18/05/2020	18/05/2020
Type of sample		SOIL	SOIL
Date prepared	-	25/05/2020	25/05/2020
Date analysed	-	25/05/2020	25/05/2020
Arsenic	mg/kg	5	5
Cadmium	mg/kg	<0.4	<0.4
Chromium	mg/kg	13	12
Copper	mg/kg	59	54
Lead	mg/kg	22	22
Mercury	mg/kg	<0.1	<0.1
Nickel	mg/kg	7	6
Zinc	mg/kg	110	89

Moisture						
Our Reference		243400-1	243400-2	243400-3	243400-4	243400-5
Your Reference	UNITS	TS-01	TS-02	TS-03	TS-04	TS-05
Date Sampled		18/05/2020	18/05/2020	18/05/2020	18/05/2020	18/05/2020
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date prepared	-	25/05/2020	25/05/2020	25/05/2020	25/05/2020	25/05/2020
Date analysed	-	26/05/2020	26/05/2020	26/05/2020	26/05/2020	26/05/2020
Moisture	%	31	34	27	33	37

Moisture		
Our Reference		243400-6
Your Reference	UNITS	QC01
Date Sampled		18/05/2020
Type of sample		SOIL
Date prepared	-	25/05/2020
Date analysed	-	26/05/2020
Moisture	%	29

Asbestos ID - soils NEPM - ASB-001						
Our Reference	UNITS	243400-1	243400-2	243400-3	243400-4	243400-5
Your Reference		TS-01	TS-02	TS-03	TS-04	TS-05
Date Sampled		18/05/2020	18/05/2020	18/05/2020	18/05/2020	18/05/2020
Type of sample		SOIL	SOIL	SOIL	SOIL	SOIL
Date analysed	-	27/05/2020	27/05/2020	27/05/2020	27/05/2020	27/05/2020
Sample mass tested	g	351.74	278.59	334.95	360.85	383.3
Sample Description	-	Brown fine-grained soil & debris	Brown fine-grained soil & debris	Brown fine-grained soil & debris	Brown fine-grained soil & debris	Brown fine-grained soil & debris
Asbestos ID in soil (AS4964) >0.1g/kg	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected Synthetic Mineral Fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos[#1]	g/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected	No visible asbestos detected
ACM >7mm Estimation*	g	–	–	–	–	–
FA and AF Estimation*	g	–	–	–	–	–
ACM >7mm Estimation*	%(w/w)	<0.01	<0.01	<0.01	<0.01	<0.01
FA and AF Estimation*#2	%(w/w)	<0.001	<0.001	<0.001	<0.001	<0.001

Method ID	Methodology Summary
ASB-001	Asbestos ID - Qualitative identification of asbestos in bulk samples using Polarised Light Microscopy and Dispersion Staining Techniques including Synthetic Mineral Fibre and Organic Fibre as per Australian Standard 4964-2004.
ASB-001	Asbestos ID - Identification of asbestos in soil samples using Polarised Light Microscopy and Dispersion Staining Techniques. Minimum 500mL soil sample was analysed as recommended by "National Environment Protection (Assessment of site contamination) Measure, Schedule B1 and "The Guidelines from the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia - May 2009" with a reporting limit of 0.1g/kg (0.01% w/w) as per Australian Standard AS4964-2004. Results reported denoted with * are outside our scope of NATA accreditation. **NOTE** #1 Total Asbestos g/kg was analysed and reported as per Australian Standard AS4964 (This is the sum of ACM >7mm, <7mm and FA/AF) **NOTE** #2 The screening level of 0.001% w/w asbestos in soil for FA and AF only applies where the FA and AF are able to be quantified by gravimetric procedures. This screening level is not applicable to free fibres. Estimation = Estimated asbestos weight Results reported with "--" is equivalent to no visible asbestos identified using Polarised Light microscopy and Dispersion Staining Techniques.
Inorg-008	Moisture content determined by heating at 105+/-5 °C for a minimum of 12 hours.
Metals-020	Determination of various metals by ICP-AES.
Metals-021	Determination of Mercury by Cold Vapour AAS.
Org-020	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.
Org-020	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis. Note, the Total +ve TRH PQL is reflective of the lowest individual PQL and is therefore "Total +ve TRH" is simply a sum of the positive individual TRH fractions (>C10-C40).
Org-021	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD.

Method ID	Methodology Summary
Org-021	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD. Note, the Total +ve PCBs PQL is reflective of the lowest individual PQL and is therefore" Total +ve PCBs" is simply a sum of the positive individual PCBs.
Org-022	Determination of VOCs sampled onto coconut shell charcoal sorbent tubes, that can be desorbed using carbon disulphide, and analysed by GC-MS.
Org-022/025	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS/GC-MSMS.
Org-022/025	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-MS/GC-MSMS. Note, the Total +ve reported DDD+DDE+DDT PQL is reflective of the lowest individual PQL and is therefore simply a sum of the positive individually report DDD+DDE+DDT.
Org-022/025	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS and/or GC-MS/MS. Benzo(a)pyrene TEQ as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater - 2013. For soil results:- 1. 'EQ PQL'values are assuming all contributing PAHs reported as <PQL are actually at the PQL. This is the most conservative approach and can give false positive TEQs given that PAHs that contribute to the TEQ calculation may not be present. 2. 'EQ zero'values are assuming all contributing PAHs reported as <PQL are zero. This is the least conservative approach and is more susceptible to false negative TEQs when PAHs that contribute to the TEQ calculation are present but below PQL. 3. 'EQ half PQL'values are assuming all contributing PAHs reported as <PQL are half the stipulated PQL. Hence a mid-point between the most and least conservative approaches above. Note, the Total +ve PAHs PQL is reflective of the lowest individual PQL and is therefore "Total +ve PAHs" is simply a sum of the positive individual PAHs.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater. Note, the Total +ve Xylene PQL is reflective of the lowest individual PQL and is therefore "Total +ve Xylenes" is simply a sum of the positive individual Xylenes.

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-3	243400-2
Date extracted	-			25/05/2020	1	25/05/2020	25/05/2020		25/05/2020	25/05/2020
Date analysed	-			25/05/2020	1	25/05/2020	25/05/2020		25/05/2020	25/05/2020
TRH C_6 - C_9	mg/kg	25	Org-023	<25	1	<25	<25	0	94	78
TRH C_6 - C_{10}	mg/kg	25	Org-023	<25	1	<25	<25	0	94	78
Benzene	mg/kg	0.2	Org-023	<0.2	1	<0.2	<0.2	0	93	79
Toluene	mg/kg	0.5	Org-023	<0.5	1	<0.5	<0.5	0	98	86
Ethylbenzene	mg/kg	1	Org-023	<1	1	<1	<1	0	97	81
m+p-xylene	mg/kg	2	Org-023	<2	1	<2	<2	0	90	72
o-Xylene	mg/kg	1	Org-023	<1	1	<1	<1	0	98	78
naphthalene	mg/kg	1	Org-023	<1	1	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	111	1	106	102	4	109	99

QUALITY CONTROL: svTRH (C10-C40) in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-2	243400-2
Date extracted	-			25/05/2020	1	25/05/2020	25/05/2020		25/05/2020	25/05/2020
Date analysed	-			26/05/2020	1	26/05/2020	26/05/2020		26/05/2020	26/05/2020
TRH C_{10} - C_{14}	mg/kg	50	Org-020	<50	1	<50	<50	0	83	85
TRH C_{15} - C_{28}	mg/kg	100	Org-020	<100	1	110	120	9	70	89
TRH C_{29} - C_{36}	mg/kg	100	Org-020	<100	1	320	360	12	77	#
TRH >C_{10} -C_{16}	mg/kg	50	Org-020	<50	1	<50	<50	0	83	85
TRH >C_{16} -C_{34}	mg/kg	100	Org-020	<100	1	320	360	12	70	89
TRH >C_{34} -C_{40}	mg/kg	100	Org-020	<100	1	180	220	20	77	#
Surrogate o-Terphenyl	%		Org-020	81	1	74	76	3	102	75

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-2	243400-2
Date extracted	-			25/05/2020	1	25/05/2020	25/05/2020		25/05/2020	25/05/2020
Date analysed	-			25/05/2020	1	25/05/2020	25/05/2020		25/05/2020	25/05/2020
Naphthalene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	100	102
Acenaphthylene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Fluorene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	102	108
Phenanthrene	mg/kg	0.1	Org-022/025	<0.1	1	0.1	0.1	0	104	100
Anthracene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	<0.1	1	0.2	0.2	0	102	104
Pyrene	mg/kg	0.1	Org-022/025	<0.1	1	0.2	0.2	0	102	104
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	0.1	0	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	<0.1	1	0.1	0.1	0	86	90
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	<0.2	1	<0.2	<0.2	0	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	<0.05	1	0.08	0.08	0	108	110
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	102	1	106	107	1	99	99

QUALITY CONTROL: Organochlorine Pesticides in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-2	243400-2
Date extracted	-			25/05/2020	1	25/05/2020	25/05/2020		25/05/2020	25/05/2020
Date analysed	-			25/05/2020	1	25/05/2020	25/05/2020		25/05/2020	25/05/2020
alpha-BHC	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	118	118
HCB	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	118	94
gamma-BHC	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Heptachlor	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	90	74
delta-BHC	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	114	72
Heptachlor Epoxide	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	124	124
gamma-Chlordane	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	126	134
Dieldrin	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	110	100
Endrin	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	102	90
Endosulfan II	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDD	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	126	124
Endrin Aldehyde	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	88	90
Methoxychlor	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	108	1	108	116	7	106	106

QUALITY CONTROL: Organophosphorus Pesticides in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-2	243400-2
Date extracted	-			25/05/2020	1	25/05/2020	25/05/2020		25/05/2020	25/05/2020
Date analysed	-			25/05/2020	1	25/05/2020	25/05/2020		25/05/2020	25/05/2020
Dichlorvos	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	116	120
Dimethoate	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Chlorpyriphos-methyl	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	94	96
Fenitrothion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	108	118
Malathion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	80	97
Chlorpyriphos	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	100	106
Parathion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	100	112
Bromophos-ethyl	mg/kg	0.1	Org-022	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Ethion	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	106	112
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	108	1	108	116	7	106	106

QUALITY CONTROL: PCBs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-2	243400-2
Date extracted	-			25/05/2020	1	25/05/2020	25/05/2020		25/05/2020	25/05/2020
Date analysed	-			25/05/2020	1	25/05/2020	25/05/2020		25/05/2020	25/05/2020
Aroclor 1016	mg/kg	0.1	Org-021	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1221	mg/kg	0.1	Org-021	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1232	mg/kg	0.1	Org-021	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1242	mg/kg	0.1	Org-021	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1248	mg/kg	0.1	Org-021	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aroclor 1254	mg/kg	0.1	Org-021	<0.1	1	<0.1	<0.1	0	112	116
Aroclor 1260	mg/kg	0.1	Org-021	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-021	108	1	108	116	7	106	106

QUALITY CONTROL: Acid Extractable metals in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-2	[NT]
Date prepared	-			25/05/2020	1	25/05/2020	25/05/2020		25/05/2020	[NT]
Date analysed	-			25/05/2020	1	25/05/2020	25/05/2020		25/05/2020	[NT]
Arsenic	mg/kg	4	Metals-020	<4	1	6	7	15	98	[NT]
Cadmium	mg/kg	0.4	Metals-020	<0.4	1	<0.4	<0.4	0	98	[NT]
Chromium	mg/kg	1	Metals-020	<1	1	12	18	40	96	[NT]
Copper	mg/kg	1	Metals-020	<1	1	79	82	4	98	[NT]
Lead	mg/kg	1	Metals-020	<1	1	22	26	17	99	[NT]
Mercury	mg/kg	0.1	Metals-021	<0.1	1	<0.1	0.1	0	79	[NT]
Nickel	mg/kg	1	Metals-020	<1	1	7	8	13	95	[NT]
Zinc	mg/kg	1	Metals-020	<1	1	100	110	10	106	[NT]

Result Definitions

NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.

The recommended maximums for analytes in urine are taken from “2018 TLVs and BEIs”, as published by ACGIH (where available). Limit provided for Nickel is a precautionary guideline as per Position Paper prepared by AIOH Exposure Standards Committee, 2016.

Guideline limits for Rinse Water Quality reported as per analytical requirements and specifications of AS 4187, Amdt 2 2019, Table 7.2

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

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

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

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

Report Comments

TRH_S:
Percent recovery for the surrogate/matrix spike is not possible to report due to interference from analytes (other than those being tested) in sample/s 243400-2ms.

Acid Extractable Metals in Soil: The laboratory RPD acceptance criteria has been exceeded for 243400-1 for Cr. Therefore a triplicate result has been issued as laboratory sample number 243400-7.

Asbestos-ID in soil: NEPM
This report is consistent with the reporting recommendations in the National Environment Protection (Assessment of Site Contamination) Measure, Schedule B1, May 2013. This is reported outside our scope of NATA accreditation.

Note: All samples analysed as received. However, sample 243400-2 is below the minimum 500mL sample volume as per National Environment Protection (Assessment of Site Contamination) Measure, Schedule B1, May 2013.

CONSARA
contaminated sites

Chain of Custody Record

Project No:	C151018
Project/Site:	BANK ST PYRMONT
Sampled By:	R ORGANO
Phone:	0404003394
Page	1 of 1
Number of Eskies:	1

Lab:	ENVIROLAB
Lab Quote No:	
Lab Batch No:	STANDARD
Date Results Required:	
Sample Disposal After:	STANDARD

LAB ID	SAMPLE ID	DATE	MATRIX	CONTAINER TYPE & PRESERVATIVE: Soil 0.1-0.2 L Glass jar, unpreserved	Soil - Plastic bag	Water 0.1-0.2 L Plastic, Filtered, HNO3	Water 0.5-1.0 L Amber glass, unpreserved	Water 40-50ml Glass, unpreserved	Water 0.25-1 L Plastic, unpreserved	Water 0.2-1.0L Plastic, sterile	ANALYSIS REQUIRED: COMBO 6	ASBESTOS - 0.5L NEPM	HOLD
1	TS-01	18/5/2020	SOIL	1	1						X	X	
2	TS-02	↓	↓	1	1						X	X	
3	TS-03			1	1						X	X	
4	TS-04			1	1						X	X	
5	TS-05			1	1						X	X	
6	QC01			1	1						X	X	
			TOTALS										

ENVIROLAB
Envirolab Services
12 Ashley St
Chatswood NSW 2067
Ph: (02) 9910 6200

Job No: 242400

Date Received: 21/05/20
Time Received: 1730
Received by: SB
Temp: Cool/Ambient
Cooling: Ice/Icepack
Security: Intact/Broken/None

Relinquished By:		Received By:	
NAME	R ORGANO	NAME	S.Bolton
SIGNATURE		SIGNATURE	
DATE	21/5/2020	DATE	21/05

Custody Seals Intact	Y	N
Samples Received Chilled	Y	N
Method of Shipment		

NOTES:

CONSARA Pty Ltd ABN 27 161 027 881
Suite 2, Level 2, Unit 6 10 Rodborough Road, Frenchs Forest NSW 2100
PO Box 7360 Warringah Mall NSW 2100

web www.consara.com.au
email
email rebeccaorgano@consara.com.au

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES2017723**	Page	: 1 of 8
Client	: **CONSARA PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: MS REBECCA ORGANO	Contact	: Customer Services ES
Address	: SUITE 2, LEVEL 2, UNIT 6, 10 RODBOROUGH ROAD FRENCHS FOREST 2100	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: +61 02 9451 1549	Telephone	: +61-2-8784 8555
Project	: C151008 BANK ST PYRMONT	Date Samples Received	: 22-May-2020 12:39
Order number	: ----	Date Analysis Commenced	: 26-May-2020
C-O-C number	: ----	Issue Date	: 29-May-2020 14:59
Sampler	: REBECCA ORGANO		
Site	: ----		
Quote number	: EN/222		
No. of samples received	: 1		
No. of samples analysed	: 1		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EP071: Results of sample QC02 have been confirmed by re-extraction and re-analysis.
- EP075(SIM): Poor duplicate precision due to sample heterogeneity. Confirmed by re-extraction and re-analysis.
- EP071: Poor duplicate precision for sample FL-SP-ILS-21 due to sample heterogeneity. Confirmed by re-extraction and re-analysis.

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	QC02	----	----	----	----
				Client sampling date / time	18-May-2020 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2017723-001	--------	--------	--------	--------
					Result	----	----	----	----
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		**35.2**	----	----	----	----
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		**8**	----	----	----	----
Cadmium	7440-43-9	1	mg/kg		<1	----	----	----	----
Chromium	7440-47-3	2	mg/kg		**25**	----	----	----	----
Copper	7440-50-8	5	mg/kg		**63**	----	----	----	----
Lead	7439-92-1	5	mg/kg		**36**	----	----	----	----
Nickel	7440-02-0	2	mg/kg		**8**	----	----	----	----
Zinc	7440-66-6	5	mg/kg		**135**	----	----	----	----
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		**0.1**	----	----	----	----
EP066: Polychlorinated Biphenyls (PCB)									
Total Polychlorinated biphenyls	----	0.1	mg/kg		<0.1	----	----	----	----
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.05	mg/kg		<0.05	----	----	----	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg		<0.05	----	----	----	----
beta-BHC	319-85-7	0.05	mg/kg		<0.05	----	----	----	----
gamma-BHC	58-89-9	0.05	mg/kg		<0.05	----	----	----	----
delta-BHC	319-86-8	0.05	mg/kg		<0.05	----	----	----	----
Heptachlor	76-44-8	0.05	mg/kg		<0.05	----	----	----	----
Aldrin	309-00-2	0.05	mg/kg		<0.05	----	----	----	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg		<0.05	----	----	----	----
^ Total Chlordane (sum)	----	0.05	mg/kg		<0.05	----	----	----	----
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	----	----	----	----
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	----	----	----	----
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	----	----	----	----
Dieldrin	60-57-1	0.05	mg/kg		<0.05	----	----	----	----
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	----	----	----	----
Endrin	72-20-8	0.05	mg/kg		<0.05	----	----	----	----
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	----	----	----	----
^ Endosulfan (sum)	115-29-7	0.05	mg/kg		<0.05	----	----	----	----
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	----	----	----	----
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	----	----	----	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	----	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	QC02	----	----	----	----
				Client sampling date / time	18-May-2020 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2017723-001	--------	--------	--------	--------
					Result	----	----	----	----
EP068A: Organochlorine Pesticides (OC) - Continued									
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	----	----	----	----
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	----	----	----	----
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	----	----	----	----
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg		<0.05	----	----	----	----
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	----	----	----	----
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	----	----	----	----
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	----	----	----	----
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	----	----	----	----
Dimethoate	60-51-5	0.05	mg/kg		<0.05	----	----	----	----
Diazinon	333-41-5	0.05	mg/kg		<0.05	----	----	----	----
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	----	----	----	----
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	----	----	----	----
Malathion	121-75-5	0.05	mg/kg		<0.05	----	----	----	----
Fenthion	55-38-9	0.05	mg/kg		<0.05	----	----	----	----
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	----	----	----	----
Parathion	56-38-2	0.2	mg/kg		<0.2	----	----	----	----
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	----	----	----	----
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	----	----	----	----
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	----	----	----	----
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	----	----	----	----
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	----	----	----	----
Ethion	563-12-2	0.05	mg/kg		<0.05	----	----	----	----
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	----	----	----	----
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	----	----	----	----
EP075(SIM)A: Phenolic Compounds									
Phenol	108-95-2	0.5	mg/kg		<0.5	----	----	----	----
2-Chlorophenol	95-57-8	0.5	mg/kg		<0.5	----	----	----	----
2-Methylphenol	95-48-7	0.5	mg/kg		<0.5	----	----	----	----
3- & 4-Methylphenol	1319-77-3	1	mg/kg		<1	----	----	----	----
2-Nitrophenol	88-75-5	0.5	mg/kg		<0.5	----	----	----	----
2.4-Dimethylphenol	105-67-9	0.5	mg/kg		<0.5	----	----	----	----
2.4-Dichlorophenol	120-83-2	0.5	mg/kg		<0.5	----	----	----	----
2.6-Dichlorophenol	87-65-0	0.5	mg/kg		<0.5	----	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	QC02	----	----	----	----
				Client sampling date / time	18-May-2020 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2017723-001	--------	--------	--------	--------
					Result	----	----	----	----
EP075(SIM)A: Phenolic Compounds - Continued									
4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg		<0.5	----	----	----	----
2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg		<0.5	----	----	----	----
2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg		<0.5	----	----	----	----
Pentachlorophenol	87-86-5	2	mg/kg		<2	----	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	----	----	----	----
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	----	----	----	----
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	----	----	----	----
Fluorene	86-73-7	0.5	mg/kg		<0.5	----	----	----	----
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	----	----	----	----
Anthracene	120-12-7	0.5	mg/kg		<0.5	----	----	----	----
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	----	----	----	----
Pyrene	129-00-0	0.5	mg/kg		<0.5	----	----	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	----	----	----	----
Chrysene	218-01-9	0.5	mg/kg		<0.5	----	----	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	----	----	----	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	----	----	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	----	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	----	----	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	----	----	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	----	----	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	----	----	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	----	----	----	----
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	----	----	----	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	----	----	----	----
C10 - C14 Fraction	----	50	mg/kg		<50	----	----	----	----
C15 - C28 Fraction	----	100	mg/kg		**360**	----	----	----	----
C29 - C36 Fraction	----	100	mg/kg		**590**	----	----	----	----
^ C10 - C36 Fraction (sum)	----	50	mg/kg		**950**	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	----	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	QC02	----	----	----	----
				Client sampling date / time	18-May-2020 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2017723-001	--------	--------	--------	--------
					Result	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
^ **C6 - C10 Fraction minus BTEX (F1)**	C6_C10-BTEX	10	mg/kg		<10	----	----	----	----
>C10 - C16 Fraction	----	50	mg/kg		<50	----	----	----	----
>C16 - C34 Fraction	----	100	mg/kg		**710**	----	----	----	----
>C34 - C40 Fraction	----	100	mg/kg		**530**	----	----	----	----
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		**1240**	----	----	----	----
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	50	mg/kg		<50	----	----	----	----
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	----	----	----	----
Toluene	108-88-3	0.5	mg/kg		<0.5	----	----	----	----
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	----	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	----	----	----	----
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	----	----	----	----
^ **Sum of BTEX**	----	0.2	mg/kg		<0.2	----	----	----	----
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	----	----	----	----
Naphthalene	91-20-3	1	mg/kg		<1	----	----	----	----
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%		**88.4**	----	----	----	----
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**99.1**	----	----	----	----
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**99.9**	----	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**88.2**	----	----	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%		**87.8**	----	----	----	----
2.4.6-Tribromophenol	118-79-6	0.5	%		**61.7**	----	----	----	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**92.5**	----	----	----	----
Anthracene-d10	1719-06-8	0.5	%		**90.4**	----	----	----	----
4-Terphenyl-d14	1718-51-0	0.5	%		**96.5**	----	----	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**93.6**	----	----	----	----
Toluene-D8	2037-26-5	0.2	%		**102**	----	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	QC02	----	----	----	----
				Client sampling date / time	18-May-2020 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2017723-001	--------	--------	--------	--------
					Result	----	----	----	----
EP080S: TPH(V)/BTEX Surrogates - Continued									
4-Bromofluorobenzene	460-00-4	0.2	%		**100**	**----**	**----**	**----**	**----**

Surrogate Control Limits

Sub-Matrix: **SOIL**

Compound	CAS Number	Recovery Limits (%) Low	High
EP066S: PCB Surrogate			
Decachlorobiphenyl	2051-24-3	39	149
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	49	147
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	35	143
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	63	123
2-Chlorophenol-D4	93951-73-6	66	122
2.4.6-Tribromophenol	118-79-6	40	138
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	70	122
Anthracene-d10	1719-06-8	66	128
4-Terphenyl-d14	1718-51-0	65	129
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	73	133
Toluene-D8	2037-26-5	74	132
4-Bromofluorobenzene	460-00-4	72	130

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **ES2017723**	Page	: 1 of 12
Client	: **CONSARA PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: MS REBECCA ORGANO	Contact	: Customer Services ES
Address	: SUITE 2, LEVEL 2, UNIT 6, 10 RODBOROUGH ROAD FRENCHS FOREST 2100	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: +61 02 9451 1549	Telephone	: +61-2-8784 8555
Project	: C151008 BANK ST PYRMONT	Date Samples Received	: 22-May-2020
Order number	: ----	Date Analysis Commenced	: 26-May-2020
C-O-C number	: ----	Issue Date	: 29-May-2020
Sampler	: REBECCA ORGANO		
Site	: ----		
Quote number	: EN/222		
No. of samples received	: 1		
No. of samples analysed	: 1		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
# = Indicates failed QC

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 3041983)									
ES2017680-003	Anonymous	EG005T: Copper	7440-50-8	5	mg/kg	73	67	9.01	0% - 50%
ES2017659-005	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	24	28	15.0	0% - 50%
		EG005T: Nickel	7440-02-0	2	mg/kg	8	9	11.8	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	17	16	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	17	14	19.1	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	24	27	8.42	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	6	<5	0.00	No Limit
ES2017680-003	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	77	87	12.3	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	30	32	7.54	0% - 50%
		EG005T: Arsenic	7440-38-2	5	mg/kg	6	7	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	18	18	0.00	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	94	98	3.75	0% - 50%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 3041986)									
ES2017659-007	Anonymous	EA055: Moisture Content	----	0.1	%	5.4	5.6	1.98	No Limit
ES2017680-001	Anonymous	EA055: Moisture Content	----	0.1	%	20.0	20.3	1.60	0% - 20%
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 3041984)									
ES2017659-005	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
ES2017680-003	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	0.1	<0.1	0.00	No Limit
EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 3038597)									
ES2017673-002	Anonymous	EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3038599)									
ES2017814-001	Anonymous	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3038599) - continued									
ES2017814-001	Anonymous	EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
ES2017673-002	Anonymous	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<1.0	<1.0	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3038599) - continued									
ES2017673-002	Anonymous	EP068: Methoxychlor	72-43-5	0.2	mg/kg	<1.0	<1.0	0.00	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3038599)									
ES2017814-001	Anonymous	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
ES2017673-002	Anonymous	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.25	<0.25	0.00	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<1.0	<1.0	0.00	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<1.0	<1.0	0.00	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<1.0	<1.0	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP075(SIM)A: Phenolic Compounds (QC Lot: 3038595)									
ES2017814-001	Anonymous	EP075(SIM): Phenol	108-95-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): 2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): 2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): 2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): 2.4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): 2.4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): 2.6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): 4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): 2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): 2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	0.00	No Limit
		EP075(SIM): Pentachlorophenol	87-86-5	2	mg/kg	<2	<2	0.00	No Limit
ES2017673-002	Anonymous	EP075(SIM): Phenol	108-95-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): 2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): 2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): 2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): 2.4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): 2.4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): 2.6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): 4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): 2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): 2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	0.00	No Limit
		EP075(SIM): Pentachlorophenol	87-86-5	2	mg/kg	<2	<2	0.00	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3038595)									
ES2017814-001	Anonymous	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3038595) - continued									
ES2017814-001	Anonymous	EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
ES2017673-002	Anonymous	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	2.9	1.1	93.6	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	6.7	# 2.3	96.9	0% - 50%
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	0.9	<0.5	60.7	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	12.8	# 6.1	70.3	0% - 20%
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	5.5	# 2.6	70.2	0% - 50%
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	40.0	# 16.2	84.8	0% - 20%
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	43.5	# 17.0	87.9	0% - 20%
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	28.0	# 10.6	90.0	0% - 20%
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	24.2	# 8.6	94.7	0% - 20%
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	38.8	# 15.1	87.8	0% - 20%
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	14.9	# 5.1	97.8	0% - 20%
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	34.2	# 13.2	88.6	0% - 20%
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	17.7	# 6.5	93.0	0% - 20%
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	4.1	1.5	92.5	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	20.8	# 7.4	95.1	0% - 20%
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	295	# 113	89.0	0% - 20%
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	48.7	# 18.6	89.5	0% - 20%
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3038596)									
ES2017814-001	Anonymous	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
ES2017673-002	Anonymous	EP071: C15 - C28 Fraction	----	100	mg/kg	630	# 1170	59.4	0% - 50%
		EP071: C29 - C36 Fraction	----	100	mg/kg	630	# 1090	53.6	0% - 50%
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3041381)									
ES2017722-001	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.00	No Limit
ES2017726-022	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	31	32	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3038596)									
ES2017814-001	Anonymous	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
ES2017673-002	Anonymous	EP071: >C16 - C34 Fraction	----	100	mg/kg	1130	# 2050	57.4	0% - 20%

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3038596) - continued									
ES2017673-002	Anonymous	EP071: >C34 - C40 Fraction	----	100	mg/kg	420	700	50.7	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3041381)									
ES2017722-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.00	No Limit
ES2017726-022	Anonymous	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	51	51	0.00	No Limit
EP080: BTEXN (QC Lot: 3041381)									
ES2017722-001	Anonymous	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.00	No Limit
ES2017726-022	Anonymous	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	1.8	2.0	11.4	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	7	8	0.00	No Limit

Method Blank (MB) and Laboratory Control Spike (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Spike (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3041983)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	21.7 mg/kg	106	86.0	126
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	4.64 mg/kg	98.9	83.0	113
EG005T: Chromium	7440-47-3	2	mg/kg	<2	43.9 mg/kg	101	76.0	128
EG005T: Copper	7440-50-8	5	mg/kg	<5	32 mg/kg	106	86.0	120
EG005T: Lead	7439-92-1	5	mg/kg	<5	40 mg/kg	105	80.0	114
EG005T: Nickel	7440-02-0	2	mg/kg	<2	55 mg/kg	106	87.0	123
EG005T: Zinc	7440-66-6	5	mg/kg	<5	60.8 mg/kg	103	80.0	122
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3041984)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	2.57 mg/kg	70.6	70.0	105
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 3038597)								
EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	1 mg/kg	102	62.0	126
EP068A: Organochlorine Pesticides (OC) (QCLot: 3038599)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	88.7	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	88.7	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	77.5	67.0	119
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	92.4	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	99.5	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	87.0	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	96.2	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	105	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	87.1	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	87.5	66.0	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	80.7	64.0	116
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	101	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	95.3	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	79.2	67.0	123
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	91.1	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	94.6	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	85.2	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	92.6	62.0	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	90.7	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	99.4	64.0	122
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	88.5	54.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3038599)								

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3038599) - continued								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	92.3	59.0	119
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	89.0	62.0	128
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	77.5	54.0	126
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	76.2	67.0	119
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	90.4	70.0	120
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	97.4	72.0	120
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	84.0	68.0	120
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	102	68.0	122
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	86.4	69.0	117
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	91.6	76.0	118
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	79.8	64.0	122
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	77.9	70.0	116
EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	0.5 mg/kg	82.4	69.0	121
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	92.4	66.0	118
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	80.2	68.0	124
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	84.6	62.0	112
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	95.8	68.0	120
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	80.0	65.0	127
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	65.5	41.0	123
EP075(SIM)A: Phenolic Compounds (QCLot: 3038595)								
EP075(SIM): Phenol	108-95-2	0.5	mg/kg	<0.5	6 mg/kg	106	71.0	125
EP075(SIM): 2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	6 mg/kg	105	72.0	124
EP075(SIM): 2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	6 mg/kg	109	71.0	123
EP075(SIM): 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	12 mg/kg	112	67.0	127
EP075(SIM): 2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	6 mg/kg	83.1	54.0	114
EP075(SIM): 2.4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	6 mg/kg	97.3	68.0	126
EP075(SIM): 2.4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	6 mg/kg	92.3	66.0	120
EP075(SIM): 2.6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	6 mg/kg	94.7	70.0	120
EP075(SIM): 4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	<0.5	6 mg/kg	89.7	70.0	116
EP075(SIM): 2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	6 mg/kg	84.8	54.0	114
EP075(SIM): 2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	6 mg/kg	89.6	60.0	114
EP075(SIM): Pentachlorophenol	87-86-5	2	mg/kg	<2	12 mg/kg	38.7	10.0	57.0
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3038595)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	111	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	103	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	102	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	102	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	105	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	110	77.0	127

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3038595) - continued								
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	104	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	103	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	92.4	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	95.6	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	88.7	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	98.6	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	99.0	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	95.9	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	92.1	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	97.6	63.0	121
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3038596)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	91.0	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	95.2	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	99.7	71.0	129
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3041381)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	115	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3038596)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	90.0	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	102	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	106	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3041381)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	116	68.4	128
EP080: BTEXN (QCLot: 3041381)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	105	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	109	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	111	65.0	117
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	109	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	110	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	83.8	63.0	119

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **SOIL**

Matrix Spike (MS) Report		
Spike	SpikeRecovery(%)	Recovery Limits (%)

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3041983)							
ES2017659-005	Anonymous	EG005T: Arsenic	7440-38-2	50 mg/kg	90.8	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	99.8	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	127	70.0	130
		EG005T: Copper	7440-50-8	250 mg/kg	105	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	98.9	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	100	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	98.0	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3041984)							
ES2017659-005	Anonymous	EG035T: Mercury	7439-97-6	5 mg/kg	90.6	70.0	130
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 3038597)							
ES2017673-002	Anonymous	EP066: Total Polychlorinated biphenyls	----	1 mg/kg	84.1	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3038599)							
ES2017673-002	Anonymous	EP068: gamma-BHC	58-89-9	0.5 mg/kg	93.9	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	90.2	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	96.1	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	108	70.0	130
		EP068: Endrin	72-20-8	2 mg/kg	114	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	91.6	70.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3038599)							
ES2017673-002	Anonymous	EP068: Diazinon	333-41-5	0.5 mg/kg	103	70.0	130
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	94.2	70.0	130
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	89.7	70.0	130
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	99.7	70.0	130
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	103	70.0	130
EP075(SIM)A: Phenolic Compounds (QCLot: 3038595)							
ES2017673-002	Anonymous	EP075(SIM): Phenol	108-95-2	10 mg/kg	88.2	70.0	130
		EP075(SIM): 2-Chlorophenol	95-57-8	10 mg/kg	86.8	70.0	130
		EP075(SIM): 2-Nitrophenol	88-75-5	10 mg/kg	63.2	60.0	130
		EP075(SIM): 4-Chloro-3-methylphenol	59-50-7	10 mg/kg	70.3	70.0	130
		EP075(SIM): Pentachlorophenol	87-86-5	10 mg/kg	33.0	20.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3038595)							
ES2017673-002	Anonymous	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	83.6	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	# Not Determined	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3038596)							
ES2017673-002	Anonymous	EP071: C10 - C14 Fraction	----	523 mg/kg	97.1	73.0	137
		EP071: C15 - C28 Fraction	----	2319 mg/kg	96.4	53.0	131

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*Concentration*	*MS*	*Low*	*High*
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3038596) - continued							
ES2017673-002	Anonymous	EP071: C29 - C36 Fraction	----	1714 mg/kg	93.6	52.0	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3041381)							
ES2017722-001	Anonymous	EP080: C6 - C9 Fraction	----	32.5 mg/kg	113	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3038596)							
ES2017673-002	Anonymous	EP071: >C10 - C16 Fraction	----	860 mg/kg	105	73.0	137
		EP071: >C16 - C34 Fraction	----	3223 mg/kg	100	53.0	131
		EP071: >C34 - C40 Fraction	----	1058 mg/kg	87.5	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3041381)							
ES2017722-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	112	70.0	130
EP080: BTEXN (QCLot: 3041381)							
ES2017722-001	Anonymous	EP080: Benzene	71-43-2	2.5 mg/kg	93.6	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	96.1	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	99.3	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	99.2	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	98.2	70.0	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	78.4	70.0	130

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **ES2017723**	Page	: 1 of 5
Client	: **CONSARA PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: MS REBECCA ORGANO	Telephone	: +61-2-8784 8555
Project	: C151008 BANK ST PYRMONT	Date Samples Received	: 22-May-2020
Site	: ----	Issue Date	: 29-May-2020
Sampler	: REBECCA ORGANO	No. of samples received	: 1
Order number	: ----	No. of samples analysed	: 1

This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.

Brief method summaries and references are also provided to assist in traceability.

Summary of Outliers

Outliers : Quality Control Samples

This report highlights outliers flagged in the Quality Control (QC) Report.

- **NO Method Blank value outliers occur.**
- **NO Laboratory Control outliers occur.**
- **NO Matrix Spike outliers occur.**
- **Duplicate outliers exist - please see following pages for full details.**
- **For all regular sample matrices, NO surrogate recovery outliers occur.**

Outliers : Analysis Holding Time Compliance

- **NO Analysis Holding Time Outliers exist.**

Outliers : Frequency of Quality Control Samples

- **NO Quality Control Sample Frequency Outliers exist.**

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **SOIL**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Duplicate (DUP) RPDs							
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons	ES2017673--002	Anonymous	**Acenaphthylene**	208-96-8	96.9 %	0% - 50%	**RPD exceeds LOR based limits**
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons	ES2017673--002	Anonymous	**Phenanthrene**	85-01-8	70.3 %	0% - 20%	**RPD exceeds LOR based limits**
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons	ES2017673--002	Anonymous	**Anthracene**	120-12-7	70.2 %	0% - 50%	**RPD exceeds LOR based limits**
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons	ES2017673--002	Anonymous	**Fluoranthene**	206-44-0	84.8 %	0% - 20%	**RPD exceeds LOR based limits**
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons	ES2017673--002	Anonymous	**Pyrene**	129-00-0	87.9 %	0% - 20%	**RPD exceeds LOR based limits**
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons	ES2017673--002	Anonymous	**Benz(a)anthracene**	56-55-3	90.0 %	0% - 20%	**RPD exceeds LOR based limits**
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons	ES2017673--002	Anonymous	**Chrysene**	218-01-9	94.7 %	0% - 20%	**RPD exceeds LOR based limits**
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons	ES2017673--002	Anonymous	**Benzo(b+j)fluoranthene**	205-99-2 205-82-3	87.8 %	0% - 20%	**RPD exceeds LOR based limits**
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons	ES2017673--002	Anonymous	**Benzo(k)fluoranthene**	207-08-9	97.8 %	0% - 20%	**RPD exceeds LOR based limits**
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons	ES2017673--002	Anonymous	**Benzo(a)pyrene**	50-32-8	88.6 %	0% - 20%	**RPD exceeds LOR based limits**
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons	ES2017673--002	Anonymous	**Indeno(1.2.3.cd)pyrene**	193-39-5	93.0 %	0% - 20%	**RPD exceeds LOR based limits**
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons	ES2017673--002	Anonymous	**Benzo(g.h.i)perylene**	191-24-2	95.1 %	0% - 20%	**RPD exceeds LOR based limits**
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons	ES2017673--002	Anonymous	**Sum of polycyclic aromatic hydrocarbons**	----	89.0 %	0% - 20%	**RPD exceeds LOR based limits**
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons	ES2017673--002	Anonymous	**Benzo(a)pyrene TEQ (zero)**	----	89.5 %	0% - 20%	**RPD exceeds LOR based limits**
EP080/071: Total Petroleum Hydrocarbons	ES2017673--002	Anonymous	**C15 - C28 Fraction**	----	59.4 %	0% - 50%	**RPD exceeds LOR based limits**
EP080/071: Total Petroleum Hydrocarbons	ES2017673--002	Anonymous	**C29 - C36 Fraction**	----	53.6 %	0% - 50%	**RPD exceeds LOR based limits**
EP080/071: Total Recoverable Hydrocarbons - NEPM 2	ES2017673--002	Anonymous	**>C16 - C34 Fraction**	----	57.4 %	0% - 20%	**RPD exceeds LOR based limits**

Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for ***VOC in soils*** vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / *Container* / Client Sample ID(s)	*Sample Date*	*Extraction / Preparation*			*Analysis*		
		Date extracted	*Due for extraction*	*Evaluation*	*Date analysed*	*Due for analysis*	*Evaluation*
EA055: Moisture Content (Dried @ 105-110°C)							
Soil Glass Jar - Unpreserved (EA055)							
QC02	**18-May-2020**	**----**	----	----	**26-May-2020**	01-Jun-2020	✓
EG005(ED093)T: Total Metals by ICP-AES							
Soil Glass Jar - Unpreserved (EG005T)							
QC02	**18-May-2020**	**26-May-2020**	14-Nov-2020	✓	**27-May-2020**	14-Nov-2020	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG035T: Total Recoverable Mercury by FIMS							
Soil Glass Jar - Unpreserved (EG035T)							
QC02	**18-May-2020**	**26-May-2020**	15-Jun-2020	✓	**28-May-2020**	15-Jun-2020	✓
EP066: Polychlorinated Biphenyls (PCB)							
Soil Glass Jar - Unpreserved (EP066)							
QC02	**18-May-2020**	**26-May-2020**	01-Jun-2020	✓	**28-May-2020**	05-Jul-2020	✓
EP068A: Organochlorine Pesticides (OC)							
Soil Glass Jar - Unpreserved (EP068)							
QC02	**18-May-2020**	**26-May-2020**	01-Jun-2020	✓	**28-May-2020**	05-Jul-2020	✓
EP068B: Organophosphorus Pesticides (OP)							
Soil Glass Jar - Unpreserved (EP068)							
QC02	**18-May-2020**	**26-May-2020**	01-Jun-2020	✓	**28-May-2020**	05-Jul-2020	✓
EP075(SIM)A: Phenolic Compounds							
Soil Glass Jar - Unpreserved (EP075(SIM))							
QC02	**18-May-2020**	**26-May-2020**	01-Jun-2020	✓	**28-May-2020**	05-Jul-2020	✓
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075(SIM))							
QC02	**18-May-2020**	**26-May-2020**	01-Jun-2020	✓	**28-May-2020**	05-Jul-2020	✓
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved (EP080)							
QC02	**18-May-2020**	**26-May-2020**	01-Jun-2020	✓	**27-May-2020**	01-Jun-2020	✓
Soil Glass Jar - Unpreserved (EP071)							
QC02	**18-May-2020**	**26-May-2020**	01-Jun-2020	✓	**28-May-2020**	05-Jul-2020	✓
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Soil Glass Jar - Unpreserved (EP080)							
QC02	**18-May-2020**	**26-May-2020**	01-Jun-2020	✓	**27-May-2020**	01-Jun-2020	✓
Soil Glass Jar - Unpreserved (EP071)							
QC02	**18-May-2020**	**26-May-2020**	01-Jun-2020	✓	**28-May-2020**	05-Jul-2020	✓
EP080: BTEXN							
Soil Glass Jar - Unpreserved (EP080)							
QC02	**18-May-2020**	**26-May-2020**	01-Jun-2020	✓	**27-May-2020**	01-Jun-2020	✓

Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(were) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **SOIL**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP)							
Moisture Content	EA055	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	2	17	**11.76**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	2	13	**15.38**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	1	7	**14.29**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	15	**13.33**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	3	20	**15.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	2	17	**11.76**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	19	**10.53**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
PAH/Phenols (SIM)	EP075(SIM)	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	1	7	**14.29**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
PAH/Phenols (SIM)	EP075(SIM)	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	1	7	**14.29**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
PAH/Phenols (SIM)	EP075(SIM)	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	1	7	**14.29**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Moisture Content	EA055	SOIL	In house: A gravimetric procedure based on weight loss over a 12 hour drying period at 105-110 degrees C. This method is compliant with NEPM (2013) Schedule B(3) Section 6.1 and Table 1 (14 day holding time).
Total Metals by ICP-AES	EG005T	SOIL	In house: Referenced to APHA 3120; USEPA SW 846 - 6010. Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM (2013) Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	In house: Referenced to AS 3550, APHA 3112 Hg - B (Flow-injection (SnCl2) (Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM (2013) Schedule B(3)
Polychlorinated Biphenyls (PCB)	EP066	SOIL	In house: Referenced to USEPA SW 846 - 8270E Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (2013) Schedule B(3) (Method 504)
Pesticides by GCMS	EP068	SOIL	In house: Referenced to USEPA SW 846 - 8270E Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM (2013) Schedule B(3) (Method 504,505)
TRH - Semivolatile Fraction	EP071	SOIL	In house: Referenced to USEPA SW 846 - 8015A Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40. Compliant with NEPM amended 2013.
PAH/Phenols (SIM)	EP075(SIM)	SOIL	In house: Referenced to USEPA SW 846 - 8270E. Extracts are analysed by Capillary GC/MS in Selective Ion Mode (SIM) and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (2013) Schedule B(3) (Method 502 and 507)
TRH Volatiles/BTEX	EP080	SOIL	In house: Referenced to USEPA SW 846 - 8260D. Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. Compliant with NEPM amended 2013.

Preparation Methods	Method	Matrix	Method Descriptions
Hot Block Digest for metals in soils sediments and sludges	EN69	SOIL	In house: Referenced to USEPA 200.2. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM (2013) Schedule B(3) (Method 202)
Methanolic Extraction of Soils for Purge and Trap	ORG16	SOIL	In house: Referenced to USEPA SW 846 - 5030A. 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids	ORG17	SOIL	In house: Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.

CONSARA

Chain of Custody Record

Project No:	C151008
Project/Site:	BANK ST FAIRMONT
Sampled By:	R ORGANO
Phone:	0404003394
Page	1 of 1
Number of Eskies:	1

Lab:	ALS
Lab Quote No:	EM/491/14
Lab Batch No:	
Date Results Required:	STANDARD
Sample Disposal After:	STANDARD

LAB ID	SAMPLE ID	DATE	MATRIX	CONTAINER TYPE & PRESERVATIVE: Soil 0.1-0.2 L Glass jar, unpreserved	Soil - Plastic bag	Water 0.1-0.2 L Plastic, Filtered, HNO3	Water 0.5-1.0 L Amber glass, unpreserved	Water 40-50ml Glass, unpreserved	Water 0.25-1 L Plastic, unpreserved	Water 0.2-1.0L Plastic, sterile	ANALYSIS REQUIRED: Sample ID	HOLD
	QC02	18/5/2020	SOIL	1							X	
			TOTALS									

Environmental Division Sydney
Work Order Reference
ES2017723

Telephone : +61-2-8784 8555

Relinquished By:			Received By:		
NAME	R ORGANO	SIGNATURE	NAME	Aylin	SIGNATURE
DATE	21/5/2020		DATE	22/5/20 12 38	
Custody Seals Intact			Y N		
Samples Received Chilled			Y N		
Method of Shipment					

NOTES:

CONSARA Pty Ltd ABN 27 161 027 881
Suite 2, Level 2, Unit 6 10 Rodborough Road, Frenchs Forest NSW 2100
PO Box 7360 Warringah Mall NSW 2100

web www.consara.com.au
email
email rebeccaorgano@consara.com.au

Appendix I: Imported Materials Supplier Specifications

resource laboratories
AGGREGATE, ROCK, AND SOIL TESTING
ABN: 25 131 532 020
Sydney: 12/1 Boden Road Seven Hills NSW 2147 | PO Box 45 Pendle Hill NSW 2145
Ph: (02) 9674 7711 **| Fax:** (02) 9674 7755 **| Email:** info@resourcelab.com.au

Test Report

Customer: Benedict Industries Pty Ltd
Project: Material Testing
Location: 11 Crozier Road, Belrose NSW 2085

Job number: 11-0001
Report number: 455
Page: 1 of 1

Material Quality Summary

Sampling method: Tested as received

Laboratory sample number		20230				RMS QA Specification R11	
Customer sample number		Bedding Sand					
Date sampled		01/10/2019					
Material description		Crushed concrete/brick, brown				Material for Bed and Haunch Zones	Material for Side and Overlay Zones
Particle size distribution	Test method						
% Passing AS Sieve	T201						
53.0mm							100
19.0mm						100	
13.2mm							
9.5mm		100					
6.7mm		98					
4.75mm		90					
2.36mm		71				100-50	
600µm		43				90-20	
300µm		23				60-10	
150µm		11				25-0	
75µm		6.1				10-0	
Soil index properties							
Liquid limit (%)	T108	n/a					
Plastic limit (%)	T109	n/a					
Plasticity index (%)	T109	NP				≤ 6	2 to 12
Sample history		Air dried					
Preparation		Dry sieved					

Notes: n/a - Liquid limit/plastic limit not obtainable, NP - Non plastic

Approved Signatory: E. Maldonado **Date:** 06/11/2019

NATA ACCREDITED FOR TECHNICAL COMPETENCE

Accredited for compliance with ISO/IEC 17025 - Testing.

NATA Accredited Laboratory Number: **17062**

resource laboratories
AGGREGATE, ROCK, AND SOIL TESTING
ABN: 25 131 532 020
Sydney: 12/1 Boden Road Seven Hills NSW 2147 | PO Box 45 Pendle Hill NSW 2145
Ph: (02) 9674 7711 **| Fax:** (02) 9674 7755 **| Email:** info@resourcelab.com.au

Test Report

Customer: Benedict Industries Pty Ltd
Project: Material Testing
Location: 11 Crozier Road, Belrose NSW 2085

Job Number: 11-0001
Report Number: 469
Page: 1 of 1

Recovered Aggregate

Sampling Method: Tested as received

	Results					The recovered aggregate order 2014	
Laboratory sample no.	20488						
Customer sample no.	BI62-1267						
Date sampled	02/12/2019						
Material description	Crushed concrete/brick, brown					Maximum average concentration for characterisation	Absolute maximum concentration
Mercury (mg/kg)	<0.1					0.5	1
Cadmium (mg/kg)	<0.4					0.5	1.5
Lead (mg/kg)	18					75	150
Arsenic (mg/kg)	<5					20	40
Chromium (total) (mg/kg)	18					60	120
Copper (mg/kg)	17					60	150
Nickel (mg/kg)	10					40	80
Zinc (mg/kg)	45					200	350
Electrical Conductivity (dS/M)	0.67					1.5	3
Metal (%)	0.07					1	2
Plaster (%)	0.00					0.25	0.5
Rubber, plastic, paper, cloth, paint, wood, and other vegetable matter (%)	0.03					0.2	0.3

Test Methods: RMS T105, In-house RL1, Electrical Conductivity: In-house RL3 - NATA Accreditation does not cover the performance of this service. Tested by Australian Laboratory Services, NATA Accredited Laboratory Number 825: EG005(ED093)T-MW: Total Metals by nitric acid microwave digestion / ICP-AES, EG035T-MW: Total Recoverable Mercury by nitric acid microwave digestion / FIMS. Report reference ES1939974

Approved Signatory:  E. Maldonado **Date:** 11/12/2019

SESL AUSTRALIA
Environment & Soil Sciences

Results Summary Profile

Sample Drop Off: 16 Chilvers Road
Thornleigh NSW 2120
Tel: 1300 30 40 80
Fax: 1300 64 46 89

Mailing Address: PO Box 357
Pennant Hills NSW 1715
Em: info@sesl.com.au
Web: www.sesl.com.au

Results and conclusions assume that sampling is representative. This document shall not be reproduced except in full.

Batch N°: 55252 **Sample N°: 2** **Date Instructions Received: 4/12/19** **Report Status: Final**

Client Name: **Benedict Industries Pty Ltd**
Client Contact: **Floyde Gilbert**
Client Order N°:
Address: **PO Box 431**
FRENCHS FOREST NSW 1640

Project Name: **Run of crush Asb: BI65-1266, BI62-1267, BI69-1268**
SESL Quote N°:
Sample Name: **BI62-1267 Run of crush 02/12/2019**
Description: **Aggregate**
Test Type: **Asb_Agg_ALS**

ASBESTOS DETECTED: NO (LOR 0.1 g/kg)

ASBESTOS (TRACE) DETECTED: NO (LOR 5 fibres)

ASBESTOS TYPE: N/A

SUBSAMPLE WEIGHT (DRY): 494 g

SYNTHETIC MINERAL FIBRE: No (LOR 0.1 g/kg)

ORGANIC FIBRE: No (LOR 0.1 g/kg)

SUBSAMPLE DESCRIPTION: A collection of crushed concrete debris.

COMMENT: No asbestos found, at the reporting limit of 0.1 g/kg, by polarised light microscopy including dispersion training. Sample contains no detectable 'respirable' asbestos fibres.

ANALYTICAL METHOD: Qualitative identification of asbestos in bulk samples using Polarised Light Microscopy and Dispersion Staining Techniques including Synthetic Mineral Fibre and Organic Fibre as per Australian Standard 4964-2004

Analysed by ALS Laboratory Group, NATA # 825, Report # ES1940168

Consultant
Michelle Murphy

Authorised Signatory
Michelle Murphy

Date Report Generated
6/12/2019

Resource Recovery Order under Part 9, Clause 93 of the Protection of the Environment Operations (Waste) Regulation 2014

The recovered aggregate order 2014

Introduction

This order, issued by the Environment Protection Authority (EPA) under clause 93 of the Protection of the Environment Operations (Waste) Regulation 2014 (Waste Regulation), imposes the requirements that must be met by suppliers of recovered aggregate to which 'the recovered aggregate exemption 2014' applies. The requirements in this order apply in relation to the supply of recovered aggregate for application to land as a road making material, or in building, landscaping or construction works.

1. Waste to which this order applies

1.1. This order applies to recovered aggregate. In this order, recovered aggregate means material comprising of concrete, brick, ceramics, natural rock and asphalt processed into an engineered material. This does not include refractory bricks or associated refractory materials, or asphalt that contains coal tar.

2. Persons to whom this order applies

2.1. The requirements in this order apply, as relevant, to any person who supplies recovered aggregate that has been generated, processed or recovered by the person.

2.2. This order does not apply to the supply of recovered aggregate to a consumer for land application at a premises for which the consumer holds a licence under the POEO Act that authorises the carrying out of the scheduled activities on the premises under clause 39 'waste disposal (application to land)' or clause 40 'waste disposal (thermal treatment)' of Schedule 1 of the POEO Act.

3. Duration

3.1. This order commences on 24 November 2014 and is valid until revoked by the EPA by notice published in the Government Gazette.

4. Processor requirements

The EPA imposes the following requirements on any processor who supplies recovered aggregate.

Sampling requirements

4.1. On or before supplying recovered aggregate, the processor must:

4.1.1. Prepare a written sampling plan which includes a description of sample

preparation and storage procedures for the recovered aggregate.

4.1.2. Undertake sampling and testing of the recovered aggregate as required under clauses 4.2 and 4.3 below. The sampling must be carried out in accordance with the written sampling plan and Australian Standard 1141.3.1-2012 Methods for sampling and testing aggregates – Sampling – Aggregates (or equivalent).

4.2. Where the recovered aggregate is generated as part of a continuous process, the processor must undertake the following sampling:

4.2.1. Characterisation of the recovered aggregate by collecting 20 composite samples of the waste and testing each sample for the chemicals and other attributes listed in Column 1 of Table 1. Each composite sample must be taken from a batch, truckload or stockpile that has not been previously sampled for the purposes of characterisation. Characterisation must be conducted for recovered aggregate generated and processed every year following the commencement of the continuous process; and

4.2.2. Routine sampling of the recovered aggregate by collecting either 5 composite samples from every 4,000 tonnes (or part thereof) processed or 5 composite samples every 3 months (whichever is the lesser); and testing each sample for the chemicals and other attributes listed in Column 1 of Table 1 other than those listed as 'not required' in Column 3. Each composite sample must be taken from a batch, truckload or stockpile that has not been previously sampled for the purposes of routine sampling. However, if characterisation sampling occurs at the same frequency as routine sampling, any sample collected and tested for the purposes of characterisation under clause 4.2.1 may be treated as a sample collected and tested for the purposes of routine sampling under clause 4.2.2.

4.3. Where the recovered aggregate is not generated as part of a continuous process, the processor must undertake one-off sampling of a batch, truckload or stockpile of the recovered aggregate, by collecting 10 composite samples from every 4,000 tonnes (or part thereof) processed and testing each sample for the chemicals and other attributes listed in Column 1 of Table 1. The test results for each composite sample must be validated as compliant with the maximum average concentration or other value listed in Column 2 of Table 1 and the absolute maximum concentration or other value listed in Column 4 of Table 1 prior to the supply of the recovered aggregate.

Chemical and other material requirements

4.4. The processor must not supply recovered aggregate to any person if, in relation to any of the chemical and other attributes of the recovered aggregate:

4.4.1. The concentration or other value of that attribute of any sample collected and tested as part of the characterisation, or the routine or one-off sampling, of the recovered aggregate exceeds the absolute maximum concentration or other value listed in Column 4 of Table 1, or

4.4.2. The average concentration or other value of that attribute from the characterisation or one-off sampling of the recovered aggregate (based on the arithmetic mean) exceeds the maximum average concentration or other value listed in Column 2 of Table 1, or

4.4.3. The average concentration or other value of that attribute from the routine sampling of the recovered aggregate (based on the arithmetic mean) exceeds the maximum average concentration or other value

listed in Column 3 of Table 1.

4.5. The absolute maximum concentration or other value of that attribute in any recovered aggregate supplied under this order must not exceed the absolute maximum concentration or other value listed in Column 4 of Table 1.

Table 1

Column 1	Column 2	Column 3	Column 4
Chemicals and other attributes	**Maximum average concentration for characterisation** (mg/kg 'dry weight' unless otherwise specified)	**Maximum average concentration for routine testing** (mg/kg 'dry weight' unless otherwise specified)	**Absolute maximum concentration** (mg/kg 'dry weight' unless otherwise specified)
1. Mercury	0.5	Not required	1
2. Cadmium	0.5	0.5	1.5
3. Lead	75	75	150
4. Arsenic	20	Not required	40
5. Chromium (total)	60	60	120
6. Copper	60	60	150
7. Nickel	40	Not required	80
8. Zinc	200	200	350
9. Electrical Conductivity	1.5 dS/m	1.5dS/m	3 dS/m
10. Metal	1%	1%	2%
11. Plaster	0.25%	0.25%	0.5%
12. Rubber, plastic, paper, cloth, paint, wood and other vegetable matter	0.2%	0.2%	0.3%

Test methods

4.6. The processor must ensure that any testing of samples required by this order is undertaken by analytical laboratories accredited by the National Association of Testing Authorities (NATA), or equivalent.

4.7. The processor must ensure that the chemicals and other attributes (listed in Column 1 of Table 1) in the recovered aggregate it supplies are tested in accordance with the test methods specified below or other equivalent analytical methods. Where an equivalent analytical method is used the detection limit must be equal to or less than that nominated for the given method below.

4.7.1. Test method for measuring the mercury concentration:

4.7.1.1. Analysis using USEPA SW-846 Method 7471B Mercury in solid or semisolid waste (manual cold vapour technique), or an equivalent analytical method with a detection limit < 20% of the stated maximum average concentration in Table 1, Column 2 (i.e. < 0.1 mg/kg dry weight).

4.7.1.2. Report as mg/kg dry weight.

4.7.2. Test methods for measuring chemicals 2 - 8:

4.7.2.1. Sample preparation by digesting using USEPA SW-846 Method 3051A Microwave assisted acid digestion of sediments, sludges, soils, and oils.

4.7.2.2. Analysis using USEPA SW-846 Method 6010C Inductively coupled plasma - atomic emission spectrometry, or an equivalent analytical method with a detection limit < 10% of stated maximum concentration in Table 1, Column 2 (i.e. 1 mg/kg dry weight for lead).

4.7.2.3. Report as mg/kg dry weight.

4.7.3. Test methods for measuring the electrical conductivity:

4.7.3.1. Sample preparation by mixing 1 part recovered aggregate with 5 parts distilled water.

4.7.3.2. Analysis using Method 104 (Electrical Conductivity) in Schedule B (3): Guideline on Laboratory Analysis of Potentially Contaminated Soils, National Environment Protection (Assessment of Site Contamination) Measure 1999 (or an equivalent analytical method).

4.7.3.3. Report deciSiemens per metre (dS/m).

4.7.4. Test method for measuring the attributes 10 - 12:

4.7.4.1. NSW Roads & Traffic Authority Test Method T276 Foreign Materials Content of Recycled Crushed Aggregate (or an equivalent method), for the materials listed in 10 - 12 of Column 1, Table 1.

4.7.4.2. Report as %

Notification

4.8. On or before each transaction, the processor must provide the following to each person to whom the processor supplies the recovered aggregate:

- a written statement of compliance certifying that all the requirements set out in this order have been met;
- a copy of the recovered aggregate exemption, or a link to the EPA website where the recovered aggregate exemption can be found; and
- a copy of the recovered aggregate order, or a link to the EPA website where the recovered aggregate order can be found.

Record keeping and reporting

4.9. The processor must keep a written record of the following for a period of six years:

- the sampling plan required to be prepared under clause 4.1.1;
- all characterisation, routine and/or one-off sampling results in relation to the recovered aggregate supplied;
- the quantity of the recovered aggregate supplied; and
- the name and address of each person to whom the processor supplied the recovered aggregate.

4.10. The processor must provide, on request, the most recent characterisation and sampling (whether routine or one-off or both) results for recovered aggregate supplied to any consumer of the recovered aggregate.

4.11. The processor must notify the EPA within seven days of becoming aware that it has not complied with any requirement in clause 4.1 to 4.7.

5. Definitions

In this order:

application or apply to land means applying to land by:

- spraying, spreading or depositing on the land; or
- ploughing, injecting or mixing into the land; or
- filling, raising, reclaiming or contouring the land.

composite sample means a sample that combines five discrete sub-samples of equal size into a single sample for the purpose of analysis.

consumer means a person who applies, or intends to apply, recovered aggregate to land.

continuous process means a process that produces recovered aggregate on an ongoing basis.

processor means a person who processes, mixes, blends, or otherwise incorporates recovered aggregate into a material in its final form for supply to a consumer.

transaction means:

- in the case of a one-off supply, the supply of a batch, truckload or stockpile of recovered aggregate that is not repeated.
- in the case where the supplier has an arrangement with the recipient for more than one supply of recovered aggregate the first supply of recovered aggregate as required under the arrangement.

Manager Waste Strategy and Innovation

Environment Protection Authority

(by delegation)

Notes

The EPA may amend or revoke this order at any time. It is the responsibility of each of the generator and processor to ensure it complies with all relevant requirements of the most current order. The current version of this order will be available on www.epa.nsw.gov.au

In gazetting or otherwise issuing this order, the EPA is not in any way endorsing the supply or use of this substance or guaranteeing that the substance will confer benefit.

The conditions set out in this order are designed to minimise the risk of potential harm to the environment, human health or agriculture, although neither this order nor the accompanying exemption guarantee that the environment, human health or agriculture will not be harmed.

Any person or entity which supplies recovered aggregate should assess whether the material is fit for the purpose the material is proposed to be used for, and whether this use may cause harm. The supplier may need to seek expert engineering or technical advice.

Regardless of any exemption or order provided by the EPA, the person who causes or permits the application of the substance to land must ensure that the action is lawful and consistent with any other legislative requirements including, if applicable, any development consent(s) for managing operations on the site(s).

The supply of recovered aggregate remains subject to other relevant environmental regulations in the POEO Act and Waste Regulation. For example, a person who pollutes land (s. 142A) or water (s. 120), or causes air pollution through the emission of odours (s. 126), or does not meet the special requirements for asbestos waste (Part 7 of the Waste Regulation), regardless of this order, is guilty of an offence and subject to prosecution.

This order does not alter the requirements of any other relevant legislation that must be met in supplying this material, including for example, the need to prepare a Safety Data Sheet. Failure to comply with the conditions of this order constitutes an offence under clause 93 of the Waste Regulation.

Construction Sciences

Construction Sciences Pty Ltd
ABN: 74 128 806 735

Address:
Unit 1, 140 Industrial Road
Oak Flats NSW 2529

Laboratory: **Wollongong Laboratory**
Phone: 02 4257 4458
Fax: 02 4257 4463
Email: wollongong@constructionsciences.net

ROADBASE ANALYSIS REPORT

Client:	Metropolitan Demolitions and Recycling	Report Number:	10848/R/16561-1
Client Address:	Level 1 396 Princes Hwy, PO Box 154, ST PETERS	Project Number:	10848/P/158
Project:	Metropolitan Demolitions and Recycling	Lot Number:	
Location:	St Peters	Internal Test Request:	10848/T/9904
Supplied To:	n/a	Client Reference/s:	MDR011119
Area Description:		Report Date / Page:	29/11/2019 Page 1 of 1

Lot Number		Specification Number:	MDR St Peters RMS 3051 Ed 5 Nominated PSD
Sampling Method	AS1141.3.1 Cl 9.3	Material Source	St Peters
Date Sampled	1/11/2019	Material Type	DGB20 Recycled Concrete

Sieve Size / Test Result	Unit	10848/S/43550	10848/S/43551	10848/S/43552	10848/S/43553	10848/S/43554	Nominated PSD	Specification Limits
Particle Size Distribution			Method / Details:	T106 + T107				
Percent Passing 26.5mm	%	**100**	**100**	**100**	**100**	**100**	**100**	100 - 100
Percent Passing 19.0mm	%	**99**	**99**	**99**	**99**	**100**	**99**	95 - 100
Percent Passing 13.2mm	%	**85**	**87**	**83**	**84**	**85**	**85**	74 - 90
Percent Passing 9.5mm	%	**76**	**75**	**67**	**71**	**71**	**72**	-
Percent Passing 6.7mm	%	**65**	**65**	**55**	**57**	**60**	**60**	59 - 69
Percent Passing 4.75mm	%	**56**	**55**	**46**	**49**	**51**	**51**	-
Percent Passing 2.36mm	%	**42**	**44**	**35**	**36**	**39**	**39**	35 - 43
Percent Passing 425µm	%	**18**	**21**	**16**	**17**	**19**	**18**	14 - 20
Percent Passing 75µm	%	**5**	**6**	**5**	**5**	**6**	**5**	3 - 7
Percent Passing 13.5µm	%	**2**	**3**	**3**	**3**	**3**	**3**	-
Particle Size Distribution - Ratios			Method / Details:					
A Ratio	%	**44**	**49**	**47**	**47**	**49**		-
B Ratio	%	**26**	**28**	**30**	**30**	**33**		-
C Ratio	%	**47**	**45**	**53**	**54**	**52**		-
Atterberg Limits			Method / Details:	T108, T109 - Drying Method: Oven Dried / Preparation Method: Dry Sieved				
Liquid Limit	%	**Not Obtainable**	**Not Obtainable**	-	-	-		-
Plastic Limit	%	**Not Obtainable**	**Not Obtainable**	-	-	-		<= 20
Plasticity Index	%	**Non-Plastic**	**Non-Plastic**	-	-	-		<= 6
Maximum Dry Compressive Strength			Method / Details:	T114				
Max Dry Comp Strength	MPa	-	**2.3**	-	-	-		>= 1.7
Corresponding MC	%	-	**12.5**	-	-	-		
Mis-shapen Particles			Method / Details:	T213				
Mis-shapen Particles (2:1)	%	**14**	-	-	-	-		<= 35
Wet/Dry Strength Variation			Method / Details:	T215 - Tested In Duplicate				
Nominal Size Fraction	mm	**20**	-	-	-	-		
Test Fraction		**19.0mm - 9.5mm**	-	-	-	-		
Aggregate Wet Strength	kN	**73**	-	-	-	-		>= 70
Aggregate Dry Strength	kN	**112**	-	-	-	-		-
Wet/Dry Strength Variation	%	**35**	-	-	-	-		<= 35

Remarks

NATA

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.
Accredited for compliance with ISO/IEC 17025 - Testing

Accreditation Number: 1986
Corporate Site Number: 10848

Approved Signatory: Eliot O'Donnell
Form ID: I02Rep Rev 2

Construction Sciences

Construction Sciences Pty Ltd
ABN: 74 128 806 735

Address:
Unit 1, 140 Industrial Road
Oak Flats NSW 2529

Laboratory: **Wollongong Laboratory**
Phone: 02 4257 4458
Fax: 02 4257 4463
Email: wollongong@constructionsciences.net

UNCONFINED COMPRESSIVE STRENGTH

Client:	Metropolitan Demolitions and Recycling	Report Number:	10848/R/16103-1
Client Address:	Level 1 396 Princes Hwy, PO Box 154, ST PETERS	Project Number:	10848/P/158
Project:	Metropolitan Demolitions and Recycling	Lot Number:	
Location:	St Peters	Internal Test Request:	10848/T/9904
Supplied To:	n/a	Client Reference/s:	MDR011119
Area Description:		Report Date / Page:	18/11/2019 Page 1 of 1

Test Procedures: T116, T162

Sample Number	10848/S/43550							
ID / Client ID	-							
Lot Number	-							
Material Source	St Peters							
Material Type	DGB20 Recycled Concrete							
Sampling Method	AS1141.3.1 Cl 9.3							
Date Sampled	1/11/2019							
Date Tested	8/11/2019							
Test Age (Days)	7							
Stockpile								
Tonne								
Compactive Effort	Standard							
Number of Layers Used	3							
Stabilising Agent								
Curing Details	7 Day Accelerated							
Portion Preparation Method								
Material Description	Sandy gravel							
Percent Retained on 19mm (%)	0							
Elapsed Time Mixing - Compaction	14 minutes							
Stabilising Agent Content (%)	0.00							
Specimen Capping	No Cap							
Moisture @ Compaction (%)	14.0	13.0						
Moisture @ Test Completion (%)	-	-						
Laboratory Moisture Ratio (%)	-	-						
Achieved Dry Density (t/m³)	1.77	1.78						
Laboratory Density Ratio (%)	100	100						
Specimen UCS (MPa)	1.10	1.15						
Average UCS (MPa)	**1.1**							

Remarks

NATA

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.
Accredited for compliance with ISO/IEC 17025 - Testing

Accreditation Number: 1986
Corporate Site Number: 10848



Approved Signatory: Chris Newman
Form ID: W76ASRep Rev 2

Construction Sciences
Wollongong Laboratory
1/140 Industrial Road, Oak Flats, NSW 2529
Phone : (02) 4257 4458

Report for
Foreign Materials in Crushed Concrete

Client:	Metropolitan Demolitions and Recycling	Report No:	10848/R/1911290120EO
Address:	Level 1 396 Princes Hwy, St Peters, 2044	Project No:	10848/P/158
Project:	Metropolitan Demolitions and Recycling	Request No:	10848/T/9904

Sample No:	10848/S/43550	Client's ID:	MDR011119

Lot No:	MDR011119
Material:	DGB20 Recycled Concrete
Source:	St Peters
Sampling Location:	Stockpile
Specification:	

Sampled By:	Jye Lynch	Method: AS1141.3.1 Cl9.3	Date: 01-Nov-19
Tested By:	Joshua Quinn	Method: T276	Date: 15-Nov-19

Foreign Material

Type I	Metal, Glass, Asphalt, Stone, Ceramics & Slag (other than Blast furnace slag)	**0.0**	**%**
Type II	Plaster, Clay lumps & other friable material.	**0.0**	**%**
Type III	Rubber, Plastic, Bitumen, Paper, Cloth, Paint, Wood & other vegetable matter.	**0.0**	**%**

Lot Remarks:	Ceramic & rubber found.

Corporate Site Number: 10848
Accreditation Number: 1318

NATA
WORLD RECOGNISED ACCREDITATION

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards. Accredited for compliance with ISO/IEC 17025 - Testing

Name: Eliot O'Donnell
Function: Authorised Signatory
Date: 29-Nov-19

SESL AUSTRALIA
Environment & Soil Sciences

Multiple Analysis Profile

Sample Drop Off: 16 Chilvers Road
Thornleigh NSW 2120
Tel: 1300 30 40 80
Fax: 1300 64 46 89
Mailing Address: PO Box 357
Pennant Hills NSW 1715
Em: info@sesl.com.au
Web: www.sesl.com.au

Tests are performed under a quality system certified as complying with ISO 9001: 2008. Results and conclusions assume that sampling is representative. This document shall not be reproduced except in full.

Batch N°: 55232 **Sample N°: 1** **Date Instructions Received: 3/12/19** **Report Status: Final**

Client Name: **Metropolitan Demolitions and Recycling**
Client Contact: **Daniel McPartland**
Client Order N°:
Address: **PO Box 154**
ST PETERS NSW 2044

Project Name: **MDR Stockpile 396 Princes Highway**
SESL Quote N°:
Sample Name: **No.1**
Description: **Aggregate**
Test Type: **RRET_Agg_C**

Analysis	Unit	Result	Maximum Average	Absolute Maximum
Mercury	mg/kg	0.1	0.5	1
Cadmium	mg/kg	<0.1	0.5	1.5
Lead	mg/kg	11.1	75	150
Arsenic	mg/kg	<1	20	40
Chromium	mg/kg	22.4	60	120
Copper	mg/kg	16.9	60	150
Nickel	mg/kg	23.3	40	80
Zinc	mg/kg	41.1	200	350
Electrical Conductivity (EC)	dS/m	0.27	2.5	3
T276 - Metal	%	<0.01	1	2
T276 - Plaster	%	<0.01	0.25	0.5
T276 - Rubber, plastic	%	<0.01	0.2	0.3
paint, wood & other				
vegetable matter				
Asbestos	Detection	Not detected*	-	Not detected
Coal Tar	Detection	Not tested	-	Not detected

Analysed by SESL Australia Pty Ltd NATA #15633

Results for analytes requested for testing on sample provided to SESL's laboratory by the client have been analysed against the NSW EPA The Metropolitan Demolitions recovered aggregate order March 2018 for characterisation analysis.

* Refer to attached asbestos report

Note: The use of exempted material remains subject to other relevant environmental regulations within the Protection of the Environment Operations Act 1997 and Protection of the Environment Operations (waste) Regulation 2014.
This document was prepared by SESL Australia Pty Ltd (SESL) for the sole use of the client. Results for analytes requested haveAbsent been compared to the relevant exemptions issued under Protection of the Environment Operations (waste) Regulation 2014 - Clause 93. The generator, processor and consumer must ensure that they comply with all relevant requirements of the most current exemption.
Any opinions or representation given relate only to the sample material provided to SESL. SESL make no representation as to whether any sample represents the client's product as a whole. SESL can accept no responsibility for the representativeness of samples taken and delivered by the client, When offering opinions as to compliance with the exemption conditions, SESL does not imply fitness for purpose and exempted material remains subject to other relevant provisions of the Protection of the Environment Operations Act 1997 and Protection of the Environment Operations (waste) Regulation 2014.

Consultant: Murphy
Michelle Murphy

Authorised Signatory: Murphy
Michelle Murphy

Date Report Generated
11/12/2019

Resource Recovery Order under Part 9, Clause 93 of the Protection of the Environment Operations (Waste) Regulation 2014

The Metropolitan Demolitions recovered aggregate order March 2018

Introduction

This order, issued by the Environment Protection Authority (EPA) under clause 93 of the Protection of the Environment Operations (Waste) Regulation 2014 (Waste Regulation), imposes the requirements that must be met by suppliers of Metropolitan Demolitions recovered aggregate to which 'the Metropolitan Demolitions recovered aggregate exemption March 2018' applies. The requirements in this order apply in relation to the supply of Metropolitan Demolitions recovered aggregate for application to land in line with the uses described in 'the Metropolitan Demolitions recovered aggregate exemption March 2018'.

1. Waste to which this order applies

1.1. This order applies to Metropolitan Demolitions recovered aggregate. In this order, Metropolitan Demolitions recovered aggregate means material comprising of concrete, brick, ceramics and asphalt processed into an engineered material at Metropolitan Demolitions and Recycling, 396 Princes Hwy St Peters NSW 2044, Environment Protection Licence 11483. This does not include refractory bricks or associated refractory materials, or asphalt that contains coal tar.

2. Persons to whom this order applies

2.1. The requirements in this order apply, as relevant, to any person who supplies Metropolitan Demolitions recovered aggregate that has been generated, processed or recovered by the person.

2.2. This order does not apply to the supply of Metropolitan Demolitions recovered aggregate to a consumer for land application at a premise for which the consumer holds a licence under the POEO Act that authorises the carrying out of the scheduled activities on the premises under clause 39 'waste disposal (application to land)' or clause 40 'waste disposal (thermal treatment)' of Schedule 1 of the POEO Act.

3. Duration

3.1. This order commences on 28 March 2018 and is valid until 28 March 2020 unless revoked by the EPA by notice in writing.

4. Revocation

4.1. 'The Metropolitan Demolitions recovered aggregate order September 2017' which commenced on 21 September 2017 is revoked from 28 March 2018.

5. Processor requirements

The EPA imposes the following requirements on any processor who supplies Metropolitan Demolitions recovered aggregate. The processor in this order is Metropolitan Demolitions and Recycling Pty Ltd, 396 Princes Hwy St Peters NSW 2044, Environment Protection Licence 11483.

General Requirements

5.1. The processor must implement procedures to minimise the potential to receive or process waste containing asbestos. These procedures must be formally documented and the records of compliance must be kept for a period of three years.

Sampling requirements

5.2. On or before supplying Metropolitan Demolitions recovered aggregate, the processor must:

5.2.1. Prepare a written sampling plan which includes a description of sample preparation and storage procedures for Metropolitan Demolitions recovered aggregate.

5.2.2. Undertake sampling and testing of Metropolitan Demolitions recovered aggregate as required under clauses 5.3 and 5.4 below. The sampling must be carried out in accordance with the written sampling plan and Australian Standard 1141.3.1-2012 Methods for sampling and testing aggregates – Sampling – Aggregates (or equivalent).

5.3. Where Metropolitan Demolitions recovered aggregate is generated as part of a continuous process, the processor must undertake the following sampling:

5.3.1. Characterisation of Metropolitan Demolitions recovered aggregate by collecting 20 composite samples of the waste and testing each sample for the chemicals and other attributes listed in Column 1 of Table 1. Each composite sample must be taken from a batch, truckload or stockpile that has not been previously sampled for the purposes of characterisation. Characterisation must be conducted for Metropolitan Demolitions recovered aggregate generated and processed every year following the commencement of the continuous process; and

5.3.2. Routine sampling of Metropolitan Demolitions recovered aggregate by collecting either 5 composite samples from every 4,000 tonnes (or part thereof) processed or 5 composite samples every 3 months (whichever is the lesser); and testing each sample for the chemicals and other attributes listed in Column 1 of Table 1 other than those listed as 'not required' in Column 3. Each composite sample must be taken from a batch, truckload or stockpile that has not been previously sampled for the purposes of routine sampling. However, if characterisation sampling occurs at the same frequency as routine sampling, any sample collected and tested for the purposes of characterisation under clause 5.3.1 may be treated as a sample collected and tested for the purposes of routine sampling under clause 5.3.2.

5.4. Where Metropolitan Demolitions recovered aggregate is not generated as part of a continuous process, the processor must undertake one-off sampling of a batch, truckload or stockpile of Metropolitan Demolitions recovered aggregate,

by collecting 10 composite samples from every 4,000 tonnes (or part thereof) processed and testing each sample for the chemicals and other attributes listed in Column 1 of Table 1. The test results for each composite sample must be validated as compliant with the maximum average concentration or other value listed in Column 2 of Table 1 and the absolute maximum concentration or other value listed in Column 4 of Table 1 prior to the supply of Metropolitan Demolitions recovered aggregate.

Chemical and other material requirements

5.5. The processor must not supply Metropolitan Demolitions recovered aggregate to any person if, in relation to any of the chemical and other attributes of Metropolitan Demolitions recovered aggregate:

5.5.1. The concentration or other value of that attribute of any sample collected and tested as part of the characterisation, or the routine or one-off sampling, of Metropolitan Demolitions recovered aggregate exceeds the absolute maximum concentration or other value listed in Column 4 of Table 1, or

5.5.2. The average concentration or other value of that attribute from the characterisation or one-off sampling of Metropolitan Demolitions recovered aggregate (based on the arithmetic mean) exceeds the maximum average concentration or other value listed in Column 2 of Table 1, or

5.5.3. The average concentration or other value of that attribute from the routine sampling of Metropolitan Demolitions recovered aggregate (based on the arithmetic mean) exceeds the maximum average concentration or other value listed in Column 3 of Table 1.

5.6. The absolute maximum concentration or other value of that attribute in any Metropolitan Demolitions recovered aggregate supplied under this order must not exceed the absolute maximum concentration or other value listed in Column 4 of Table 1.

Table 1

Column 1	**Column 2**	**Column 3**	**Column 4**
Chemicals and other attributes	**Maximum average concentration for characterisation** (mg/kg 'dry weight' unless otherwise specified)	**Maximum average concentration for routine testing** (mg/kg 'dry weight' unless otherwise specified)	**Absolute maximum concentration** (mg/kg 'dry weight' unless otherwise specified)
1. Mercury	0.5	Not required	1
2. Cadmium	0.5	0.5	1.5
3. Lead	75	75	150
4. Arsenic	20	Not required	40
5. Chromium (total)	60	60	120
6. Copper	60	60	150
7. Nickel	40	Not required	80
8. Zinc	200	200	350
9. Electrical Conductivity	2.5 dS/m	2.5 dS/m	3 dS/m
10. Metal	1%	1%	2%
11. Plaster	0.25%	0.25%	0.5%

12. Rubber, plastic, paper, cloth, paint, wood and other vegetable matter	0.2%	0.2%	0.3%

Test methods

5.7. The processor must ensure that any testing of samples required by this order is undertaken by analytical laboratories accredited by the National Association of Testing Authorities (NATA), or equivalent.

5.8. The processor must ensure that the chemicals and other attributes (listed in Column 1 of Table 1) in Metropolitan Demolitions recovered aggregate supplied are tested in accordance with the test methods specified below or other equivalent analytical methods. Where an equivalent analytical method is used the detection limit must be equal to or less than that nominated for the given method below.

5.8.1. Test method for measuring the mercury concentration:

5.8.1.1. Analysis using USEPA SW-846 Method 7471B Mercury in solid or semisolid waste (manual cold vapour technique), or an equivalent analytical method with a detection limit < 20% of the stated maximum average concentration in Table 1, Column 2 (i.e. < 0.1 mg/kg dry weight).

5.8.1.2. Report as mg/kg dry weight.

5.8.2. Test methods for measuring chemicals 2 - 8:

5.8.2.1. Sample preparation by digesting using USEPA SW-846 Method 3051A Microwave assisted acid digestion of sediments, sludges, soils, and oils.

5.8.2.2. Analysis using USEPA SW-846 Method 6010C Inductively coupled plasma - atomic emission spectrometry, or an equivalent analytical method with a detection limit < 10% of stated absolute maximum concentration in Table 1, Column 2 (i.e. 1 mg/kg dry weight for lead).

5.8.2.3. Report as mg/kg dry weight.

5.8.3. Test methods for measuring the electrical conductivity:

5.8.3.1. Sample preparation by mixing 1 part Metropolitan Demolitions recovered aggregate with 5 parts distilled water.

5.8.3.2. Analysis using Method 104 (Electrical Conductivity) in Schedule B (3): Guideline on Laboratory Analysis of Potentially Contaminated Soils, National Environment Protection (Assessment of Site Contamination) Measure 1999 (or an equivalent analytical method).

5.8.3.3. Report deciSiemens per metre (dS/m).

5.8.4. Test method for measuring the attributes 10 - 12:

5.8.4.1. NSW Roads & Traffic Authority Test Method T276 Foreign Materials Content of Recycled Crushed Aggregate (or an equivalent method), for the materials listed in 10 - 12 of Column 1, Table 1.

5.8.4.2. Report as %

Notification

5.9. On or before each transaction, the processor must provide the following to each person to whom the processor supplies Metropolitan Demolitions recovered aggregate:

- a written statement of compliance certifying that all the requirements imposed by the EPA on a processor who supplies Metropolitan Demolitions recovered aggregate have been met;
- a copy of 'the Metropolitan Demolitions recovered aggregate exemption March 2018'; and
- a copy of 'the Metropolitan Demolitions recovered aggregate order March 2018'.

Record keeping and reporting

5.10. The processor must keep a written record of the following for a period of six years:

- the sampling plan required to be prepared under clause 5.2.1;
- all characterisation, routine and/or one-off sampling results in relation to Metropolitan Demolitions recovered aggregate supplied;
- the quantity of Metropolitan Demolitions recovered aggregate supplied; and
- the name and address of each person to whom the processor supplied Metropolitan Demolitions recovered aggregate.

5.11. The processor must provide, on request, the most recent characterisation and sampling (whether routine or one-off or both) results for Metropolitan Demolitions recovered aggregate supplied to any consumer of Metropolitan Demolitions recovered aggregate.

5.12. The processor must notify the EPA within seven days of becoming aware that it has not complied with any requirement in clause 5.1 to 5.8.

6. Definitions

In this order:

application or apply to land means applying to land by:

- spraying, spreading or depositing on the land;
- ploughing, injecting or mixing into the land; or
- filling, raising, reclaiming or contouring the land.

composite sample means a sample that combines five discrete sub-samples of equal size into a single sample for the purpose of analysis.

consumer means a person who applies, or intends to apply, Metropolitan Demolitions recovered aggregate to land.

continuous process means a process that produces Metropolitan Demolitions recovered aggregate on an ongoing basis.

processor means a person who processes, mixes, blends, or otherwise incorporates Metropolitan Demolitions recovered aggregate into a material in its final form for supply to a consumer. The processor in this order is Metropolitan Demolitions and Recycling Pty Ltd, 396 Princes Hwy St Peters NSW 2044, Environment Protection Licence 11483.

transaction means:

- in the case of a one-off supply, the supply of a batch, truckload or stockpile of Metropolitan Demolitions recovered aggregate that is not repeated.

- in the case where the supplier has an arrangement with the recipient for more than one supply of Metropolitan Demolitions recovered aggregate the first supply of Metropolitan Demolitions recovered aggregate as required under the arrangement.



28.03.18

Manager Waste Strategy and Innovation
Environment Protection Authority
(by delegation)

Notes

The EPA may amend or revoke this order at any time. It is the responsibility of the processor to ensure it complies with all relevant requirements of the most current order.

In issuing this order, the EPA is not in any way endorsing the supply or use of this substance or guaranteeing that the substance will confer benefit.

The conditions set out in this order are designed to minimise the risk of potential harm to the environment, human health or agriculture, although neither this order nor the accompanying exemption guarantee that the environment, human health or agriculture will not be harmed.

Any person or entity which supplies Metropolitan Demolitions recovered aggregate should assess whether the material is fit for the purpose the material is proposed to be used for, and whether this use may cause harm. The supplier may need to seek expert engineering or technical advice.

Regardless of any exemption or order provided by the EPA, the person who causes or permits the application of the substance to land must ensure that the action is lawful and consistent with any other legislative requirements including, if applicable, any development consent(s) for managing operations on the site(s).

The supply of Metropolitan Demolitions recovered aggregate remains subject to other relevant environmental regulations in the POEO Act and Waste Regulation. For example, a person who pollutes land (s. 142A) or water (s. 120), or causes air pollution through the emission of odours (s. 126), or does not meet the special requirements for asbestos waste (Part 7 of the Waste Regulation), regardless of this order, is guilty of an offence and subject to prosecution.

This order does not alter the requirements of any other relevant legislation that must be met in supplying this material, including for example, the need to prepare a Safety Data Sheet. Failure to comply with the conditions of this order constitutes an offence under clause 93 of the Waste Regulation.

Resource Recovery Exemption under Part 9, Clauses 91 and 92 of the Protection of the Environment Operations (Waste) Regulation 2014

The Metropolitan Demolitions recovered aggregate exemption March 2018

Introduction

This exemption:

- is issued by the Environment Protection Authority (EPA) under clauses 91 and 92 of the Protection of the Environment Operations (Waste) Regulation 2014 (Waste Regulation); and
- exempts a consumer of Metropolitan Demolitions recovered aggregate from certain requirements under the *Protection of the Environment Operations Act 1997* (POEO Act) and the Waste Regulation in relation to the application of that waste to land, provided the consumer complies with the conditions of this exemption.

This exemption should be read in conjunction with 'the Metropolitan Demolitions recovered aggregate order March 2018'.

1. Waste to which this exemption applies

1.1. This exemption applies to Metropolitan Demolitions recovered aggregate that is, or is intended to be, applied to land for road making activities, or building, landscaping and construction works.

1.2. Metropolitan Demolitions recovered aggregate means material comprising of concrete, brick, ceramics and asphalt processed into an engineered material at Metropolitan Demolitions and Recycling Pty Ltd, 396 Princes Hwy St Peters NSW 2044, Environment Protection Licence 11483. This does not include refractory bricks or associated refractory materials, or asphalt that contains coal tar.

2. Persons to whom this exemption applies

2.1. This exemption applies to any person who applies, or intends to apply, Metropolitan Demolitions recovered aggregate to land as set out in 1.1.

3. Duration

3.1. This exemption commences on 28 March 2018 and is valid until 28 March 2020 unless revoked by the EPA by notice published in the Government Gazette.

4. Premises to which this exemption applies

4.1. This exemption applies to the premises at which the consumer's actual or intended application of Metropolitan Demolitions recovered aggregate is carried out.

5. Revocation

5.1. 'The Metropolitan Demolitions recovered aggregate exemption September 2017' which commenced on 21 September 2017 is revoked from 28 March 2018.

6. Exemption

6.1. Subject to the conditions of this exemption, the EPA exempts each consumer from the following provisions of the POEO Act and the Waste Regulation in relation to the consumer's actual or intended application of Metropolitan Demolitions recovered aggregate to land when used for road making activities, building, landscaping and construction works at the premises:

- section 48 of the POEO Act in respect of the scheduled activities described in clauses 39 and 42 of Schedule 1 of the POEO Act;
- Part 4 of the Waste Regulation;
- section 88 of the POEO Act; and
- clause 109 and 110 of the Waste Regulation.

6.2. The exemption does not apply in circumstances where Metropolitan Demolitions recovered aggregate is received at the premises for which the consumer holds a licence under the POEO Act that authorises the carrying out of the scheduled activities on the premises under clause 39 'waste disposal (application to land)' or clause 40 'waste disposal (thermal treatment)' of Schedule 1 of the POEO Act.

7. Conditions of exemption

The exemption is subject to the following conditions:

7.1. At the time Metropolitan Demolitions recovered aggregate is received at the premises, the material must meet all chemical and other material requirements for Metropolitan Demolitions recovered aggregate which are required on or before the supply of Metropolitan Demolitions recovered aggregate under 'the Metropolitan Demolitions recovered aggregate order March 2018'.

7.2. Metropolitan Demolitions recovered aggregate can only be applied to land in road making activities, building, landscaping and construction works. This approval does not apply to any of the following applications:

7.2.1. Construction of dams or related water storage infrastructure,

7.2.2. Mine site rehabilitation,

7.2.3. Quarry rehabilitation,

7.2.4. Sand dredge pond rehabilitation,

7.2.5. Back filling of quarry voids,

7.2.6. Raising or reshaping of land used for agriculture, and

7.2.7. Construction of roads on private land unless:

(a) Metropolitan Demolitions recovered aggregate is applied only to the minimum extent necessary for the construction of the road, and
(b) a development consent has been granted under the relevant Environmental Planning Instrument (EPI), or
(c) it is to provide access (temporary or permanent) to a development approved by a Council, or
(d) the works are either exempt or complying development.

7.3. The consumer must keep a written record of the following for a period of six years:

- the quantity of any Metropolitan Demolitions recovered aggregate received; and
- the name and address of the supplier of Metropolitan Demolitions recovered aggregate received.

7.4. The consumer must make any records required to be kept under this exemption available to authorised officers of the EPA on request.

7.5. The consumer must ensure that any application of Metropolitan Demolitions recovered aggregate to land must occur within a reasonable period of time after its receipt.

8. Definitions

In this exemption:

application or apply to land means applying to land by:

- spraying, spreading or depositing on the land;
- ploughing, injecting or mixing into the land; or
- filling, raising, reclaiming or contouring the land.

consumer means a person who applies, or intends to apply, Metropolitan Demolitions recovered aggregate to land.



28.03.18

Manager Waste Strategy and Innovation

Environment Protection Authority

(by delegation)

Notes

The EPA may amend or revoke this exemption at any time. It is the responsibility of the consumer to ensure they comply with all relevant requirements of the most current exemption. The current version of this exemption will be available on www.epa.nsw.gov.au

In gazetting or otherwise issuing this exemption, the EPA is not in any way endorsing the use of this substance or guaranteeing that the substance will confer benefit.

The conditions set out in this exemption are designed to minimise the risk of potential harm to the environment, human health or agriculture, although neither this exemption nor the accompanying order guarantee that the environment, human health or agriculture will not be harmed.

The consumer should assess whether or not Metropolitan Demolitions recovered aggregate is fit for the purpose the material is proposed to be used for, and whether this use will cause harm. The consumer may need to seek expert engineering or technical advice.

Regardless of any exemption provided by the EPA, the person who causes or permits the application of the substance to land must ensure that the action is lawful and consistent with any other legislative requirements including, if applicable, any development consent(s) for managing operations on the site(s).

The receipt of Metropolitan Demolitions recovered aggregate remains subject to other relevant environmental regulations in the POEO Act and the Waste Regulation. For example, a person who pollutes land (s. 142A) or water (s. 120), or causes air pollution through the emission of odours (s. 126), or does not meet the special requirements for asbestos waste (Part 7 of the Waste Regulation), regardless of having an exemption, is guilty of an offence and subject to prosecution.

This exemption does not alter the requirements of any other relevant legislation that must be met in utilising this material, including for example, the need to prepare a Safety Data Sheet (SDS).

Failure to comply with the conditions of this exemption constitutes an offence under clause 91 of the Waste Regulation.



Forest Fines®

★★☆☆☆ (1) Write a Review

$48.00 M3

A fine (15mm) honey coloured chip, long lasting mulch derived from sawmill plants; Natural coloured mulches such as Forest Fines® suit Native gardens. This fine textured mulch, easy to spread, soft under-foot and looks great on any garden.

Forest Fines helps save water by keeping the ground moist through the retention of water in early morning periods. One of ANL's most loved decorative mulches, forest fines decorates any garden area that has been depleted over time. Ideal for domestic and commercial applications, Forest Fines helps keep soil insulated at a balanced temperature thus improving the conditions for plants root balls.

Read Full Product Information

LOOKING FOR SOMETHING YOU CAN'T FIND?
ASK US NOW (OUT OF STOCK)

- 1 +

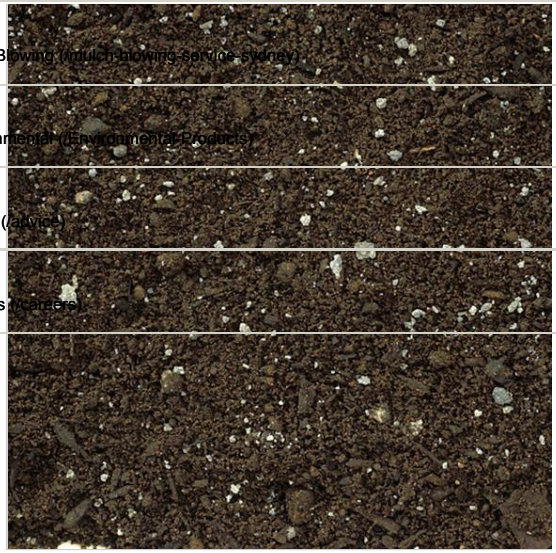
ADD TO CART (/PRODUCTS/GARDEN-M

7 DAY HOME DELIVERY GUARANTEE
We provide a 7 day home delivery service for all of your landscaping and gardening needs. Delivery to NSW only.

INFO | REVIEWS (1) ★★☆☆☆ | FAQS | SHIPPING

A fine (15mm) honey coloured chip, long lasting mulch derived from sawmill plants; Natural coloured mulches such as Forest Fines® suit Native gardens. This fine textured mulch, easy to spread, soft under-foot and looks great on any garden.

Forest Fines helps save water by keeping the ground moist through the retention of water in early morning periods. One of ANL's most loved decorative mulches, forest fines decorates any garden area that has been depleted over time. Ideal for domestic and commercial applications, Forest Fines helps keep soil insulated at a balanced temperature thus improving the conditions for plants root balls.



Premium Garden Mix in Bulka Bag

Write a Review

$102.00 BULKA BAG

Premium Garden Mix is a specialised garden soil containing coarse sand, graded ash, coco peat and composted organics. It can be used for a wide range of purposes including potting up of plants - specifically useful with managing the growth and improvement of Azaleas (), Camellias and indoor plants ().

Read Full Product Information

LOOKING FOR SOMETHING YOU CAN'T FIND?
ASK US NOW (CONTACT)

- 1 +

ADD TO CART (/PRODUCTS/BULKA-BAGS/SOI

7 DAY HOME DELIVERY GUARANTEE
We provide a 7 day home delivery service for all of your landscaping and gardening needs. Delivery to NSW only.

INFO | REVIEWS | FAQS | SHIPPING

Premium Garden Mix is a specialised garden soil containing coarse sand, graded ash, coco peat and composted organics. It can be used for a wide range of purposes including potting up of plants - specifically useful with managing the growth and improvement of Azaleas (), Camellias and indoor plants ().

Created by using 100% green waste ingredients that have been ground into fine particles, composted, matured then using the process of particle separation method with the help of specialised machinery, mixed with coco peat and graded ash to create a product that also contains natural fertiliser to help the improvement of soil areas that have been depleted over time. ANL's Premium Garden Mix can also be used to top up garden areas and help to stabilise ground cover areas that have become hard to maintain, also helping to protect plants against disease.

This product comes in a 1ton/1m3 single use crane lift bag.

CUSTOMERS WHO BOUGHT THIS PRODUCT ALSO BOUGHT





Appendix J: Imported Material Dockets

LAN-04



AUSTRALIAN NATIVE LANDSCAPES PTY LTD

'Everything for your garden'

Ryde

42 001 749 980

Cnr Wicks & Waterloo Roads
NORTH RYDE NSW 2113
Phone: (02) 9887 2788 Fax:
accounts@anlscape.com.au

Date and time	7/05/2020 11:17:42 AM
Invoice No	03-2-00063696
Cashier	Luke Strudwick
Customer Code	CHRISTIECIVILCON
Customer Name	CHRISTIE CIVIL CONTRACTING I
Customer Order	BANK STREET
Phone	9552 3077
Address	5 BANK STREET PYRMONT NSW 0435 211 566

Description	Unit	Qty	Amount
SOGM			
ORGANIC GARDEN MIX DD60		13	$676.00
DELIVERY FEE		1	$60.00*
Account			$736.00

Total **$736.00**

*GST Included $66.90

Change $0.00

Thank You

TAX INVOICE

03-2-00063696

Conditions

The Supplier's responsibility for delivery of materials will cease at the kerbside of the job adress stated, if it is necessary for a vehicle to cross the footpath or to enter upon private property in the course of the effecting delivery, the purchaser will provide safe and adequate access and notwidthstanding will pay for all damage to any public or private property and every injury or wrong

For all products delivered on pallets, if an exchange of pallets does not occur and therefore pallets are owed, pallets not returned within 14 days will incur a $35.00 charge.

ANL

AUSTRALIAN NATIVE LANDSCAPES PTY LTD

'Everything for your garden'

Ryde

42 001 749 980

Cnr Wicks & Waterloo Roads
NORTH RYDE NSW 2113
Phone (02) 9887 2788 Fax
accounts@anlscape.com.au

Date and time	7/05/2020 7:31:01 AM
Invoice No	03-2-00063637
Cashier	Luke Strudwick
Customer Code	CHRISTIECIVILCON
Customer Name	CHRISTIE CIVIL CONTRACTING P.
Customer Order	BANK STREET
Phone	9552 3077
Address	5 BANK STREET PYRMONT NSW 0435 211 566

Description	Unit	Qty	Amount
SOGM			
ORGANIC GARDEN MIX DD60		13	$676.00
DELIVERY FEE		1	$60.00*
Account			$736.00

Total	**$736.00**
*GST Included	$66.90
Change	$0.00

Thank You

TAX INVOICE

03-2-00063637

Conditions

The Supplier's responsibility for delivery of materials will cease at the kerbside of the job adress stated, if it is necessary for a vehicle to cross the footpath or to enter upon private property in the course of the effecting delivery, the purchaser will provide safe and adequate access and notwidthstanding will pay for all damage to any public or private property and every injury or wrong

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ANL

AUSTRALIAN NATIVE LANDSCAPES PTY LTD

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42 001 749 980

Cnr Wicks & Waterloo Roads
NORTH RYDE NSW 2113
Phone (02) 9887 2788 Fax
accounts@anlscape.com.au

Date and time	7/05/2020 6:11:02 AM
Invoice No	03-2-00063620
Cashier	Luke Strudwick
Customer Code	CHRISTIECIVILCON
Customer Name	CHRISTIE CIVIL CONTRACTING I
Customer Order	BANK STREET
Phone	9552 3077
Address	5 BANK STREET PYRMONT NSW 0435 211 566

Description	Unit	Qty	Amount
SOGM			
ORGANIC GARDEN MIX DD60		13	$676.00
DELIVERY FEE		1	$60.00*
Account			$736.00

Total	**$736.00**
*GST Included	$66.90
Change	$0.00

Thank You

TAX INVOICE

03-2-00063620

Conditions

The Supplier's responsibility for delivery of materials will cease at the kerbside of the job adress stated, if it is necessary for a vehicle to cross the footpath or to enter upon private property in the course of the effecting delivery, the purchaser will provide safe and adequate access and notwidthstanding will pay for all damage to any public or private property and every injury or wrong

For all products delivered on pallets, if an exchange of pallets does not occur and therefore pallets are owed, pallets not returned within 14 days will incur a $35.00 charge.

LAN-05

ANL

AUSTRALIAN NATIVE LANDSCAPES PTY LTD

'Everything for your garden'.

Terrey Hills Hut

42 001 749 980

317 Mona Vale Road
Terrey Hills NSW 2084
Phone: 02 8450 1444 Fax:
accounts@anlscape.com.au

Date and time	9/05/2020 7:54:31 AM
Invoice No	01-2-00068985
Cashier	ANL Hut POS User 1
Customer Code	MANNCADPTYLTD
Customer Name	MANN CAD CONSULTANT PTY L
Customer Order	
Phone	9875 5120
Address	5/11 BANKS ST PYRMONT 0425 380 582

Description	Unit	Qty	Amount
SOGM ORGANIC GARDEN MIX	M3	19	[redacted]
Account			
Total			
*GST Included			
Change			

Thank You

TAX INVOICE

01-2-00068985

Conditions

The Supplier's responsibility for delivery of materials will cease at the kerbside of the job adress stated, if it is necessary for a vehicle to cross the footpath or to enter upon private property in the course of the effecting delivery, the purchaser will provide safe and adequate access and notwidthstanding will pay for all damage to any public or private property and every injury or wrong

For all products delivered on pallets, if an exchange of pallets does not occur and therefore pallets are owed, pallets not returned within 14 days will incur a $35.00 charge.

LAN-02



AUSTRALIAN NATIVE LANDSCAPES PTY LTD

'Everything for your garden'

Terrey Hills Hut

42 001 749 960

317 Mona Vale Road
Terrey Hills NSW 2084
Phone 02 9450 1444 Fax
accounts@anlscape.com.au

Date and time	8/05/2020 8 14 30 AM
Invoice No	01-2-00068989
Cashier	ANL Hut POS User 1
Customer Code	MANNCADPTYLTD
Customer Name	MANN CAD CONSULTANT PTY LT
Customer Order	
Phone	9875 5120
Address	5/11 BANKS ST PYRMONT 0425 360 562

Description	Unit	Qty	Amount
SOGM			
ORGANIC GARDEN MIX	M3	18	[redacted]
Account			[redacted]
Total			[redacted]
*GST included			
Change			$0 00

Thank You

TAX INVOICE

01-2-00068989

Conditions

The Supplier's responsibility for delivery of materials will cease at the kerbside of the job adress stated. If it is necessary for a vehicle to cross the footpath or to enter upon private property in the course of the effecting delivery, the purchaser will provide safe and adequate access and notwithstanding will pay for all damage to any public or private property and every injury or wrong

For all products delivered on pallets If an exchange of pallets does not occur and therefore pallets are owed pallets not returned within 14 days will incur a $35 00 charge

ANL

AUSTRALIAN NATIVE LANDSCAPES PTY LTD

'Everything for your garden'.

Terrey Hills Hut

42 001 749 980

317 Mona Vale Road
Terrey Hills NSW 2084
Phone: 02 9450 1444 Fax:
accounts@anlscape.com.au

Date and time	11/05/2020 10:36:10 AM
Invoice No	01-2-00069145
Cashier	ANL Hut POS User 1
Customer Code	MANNCADPTYLTD
Customer Name	MANN CAD CONSULTANT PTY LT
Customer Order	327
Phone	9875 5120
Address	5-11 BANKS STREET PYRMONT 0425 360 582

Description	Unit	Qty	Amount
SOGM ORGANIC GARDEN MIX	M3	13	[redacted]
DD80 DELIVERY FEE	Each	1	[redacted]
Account			[redacted]
Total			
*GST Included			
Change			$0.00

Thank You

TAX INVOICE

01-2-00069145

Conditions

The Supplier's responsibility for delivery of materials will cease at the kerbside of the job adress stated, if it is necessary for a vehicle to cross the footpath or to enter upon private property in the course of the effecting delivery, the purchaser will provide safe and adequate access and notwidthstanding will pay for all damage to any public or private property and every injury or wrong

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ANL

AUSTRALIAN NATIVE LANDSCAPES PTY LTD

'Everything for your garden'.

Terrey Hills Hut

42 001 749 980

317 Mona Vale Road
Terrey Hills NSW 2084
Phone: 02 9450 1444 Fax:
accounts@anlscape.com.au

Date and time	11/05/2020 12:51:11 PM
Invoice No	01-2-00069168
Cashier	ANL Hut POS User 2
Customer Code	MANNCADPTYLTD
Customer Name	MANN CAD CONSULTANT PTY L
Customer Order	PYRMONT 327
Phone	9875 5120
Address	

Description	Unit	Qty	Amount
SOGM ORGANIC GARDEN MIX	M3	6	[redacted]
Account			[redacted]
Total			[redacted]
*GST Included			
Change			$0.00

Thank You

TAX INVOICE

01-2-00069168

Conditions

The Supplier's responsibility for delivery of materials will cease at the kerbside of the job adress stated, if it is necessary for a vehicle to cross the footpath or to enter upon private property in the course of the effecting delivery, the purchaser will provide safe and adequate access and notwidthstanding will pay for all damage to any public or private property and every injury or wrong

For all products delivered on pallets, if an exchange of pallets does not occur and therefore pallets are owed, pallets not returned within 14 days will incur a $35.00 charge.



AUSTRALIAN NATIVE LANDSCAPES PTY LTD

'Everything for your garden'

Terrey Hills Hut

42 001 749 980

317 Mona Vale Road
Terrey Hills NSW 2084
Phone 02 9450 1444 Fax
accounts@anlscape.com.au

Date and time	11/05/2020 8:26:38 AM
Invoice No	01-3-00006912
Cashier	ANL Hut POS User 1
Customer Code	MANNCADPTYLTD
Customer Name	MANN CAD CONSULTANT PTY LT
Customer Order	327
Phone	9875 5120
Address	5-11 BANK STREET PYRMONT 0425 360 562

Description	Unit	Qty	Amount
MFB			
FOREST BLEND	M3	30	[redacted]
Account			[redacted]
Total			[redacted]
*GST Included			[redacted]
Change			$0.00

Thank You

TAX INVOICE

01-3-00006912

Conditions

The Supplier's responsibility for delivery of materials will cease at the kerbside of the job adress stated, if it is necessary for a vehicle to cross the footpath or to enter upon private property in the course of the effecting delivery, the purchaser will provide safe and adequate access and notwidthstanding will pay for all damage to any public or private property and every injury or wrong

For all products delivered on pallets, if an exchange of pallets does not occur and therefore pallets are owed, pallets not returned within 14 days will incur a $35.00 charge.

DELIVERY DOCKET D-148512

BENEDICT

BENEDICT SAND & GRAVEL

PO BOX 431, FRENCHS FOREST NSW 1640
ABN 99 073 763 292 SALES: 9986 3500

DATE:	16/12/2019	TIP TIME:	10 59	W/B NO.:	b-430553
CUSTOMER:	CHRISTIE CIVIL PTY. LTD.			CUST NO:	CHRIS0
ADDRESS:	5 - 11 BANK STREET			SUBURB:	PYRMONT
VEHICLE:	TPN094 / D094			CUSTOMER PO NO.:	BANK STREET

REF. NO.	PRODUCT CODE/DESCRIPTION	JOB NO.	WEIGHT	
526016	R11 REC BEDDING SAND (R11BED)		GROSS	27.86
			TARE	10.48
Delivery Comments:			NETT	17.38
Wait time start:	Wait time end:	Total Wait time: -		

RECEIVED BY	simon	ORDERED BY	SIMON - 0435 211 566
SIGNATURE		EMAIL	simonxin@christiecivil.com.au

All wait time is reviewed by Benedict. Unless otherwise agreed, waiting time is chargeable after 30 minutes and will be invoiced in 15 minute increments.

Our recycled products meet the conditions of the relevant NSW EPA resource recovery orders issued under the POEO (Waste) Regulation.

Please see www.epa.nsw.gov.au and www.benedict.com.au for guidance on the use of natural and recycled products.

ALL RESPONSIBILITY CEASES UPON RECEIPT BY CLIENT

DELIVERY DOCKET D-151564

BENEDICT

BENEDICT SAND & GRAVEL

PO BOX 431, FRENCHS FOREST NSW 1640
ABN 99 073 763 292 SALES: 9986 3500

DATE:	14/01/2020	TIP TIME:	7.29	W/B NO.:	432586
CUSTOMER:	CHRISTIE CIVIL PTY. LTD.			CUST NO:	CHRIS0
ADDRESS:	5 - 11 BANK STREET			SUBURB:	PYRMONT
VEHICLE:	CI73NZ / B074			CUSTOMER PO NO.:	BANK STREET

REF. NO.	PRODUCT CODE/DESCRIPTION	JOB NO.	WEIGHT	
529082	R11 REC BEDDING SAND (R11BED)		GROSS	27.88
			TARE	11.44
			NETT	16.44

Delivery Comments:

Wait time start: **Wait time end:** **Total Wait time: -**

RECEIVED BY ivan ORDERED BY JACK - 0411 684 895

SIGNATURE EMAIL simonxin@christiecivil.com.au

All wait time is reviewed by Benedict. Unless otherwise agreed, waiting time is chargeable after 30 minutes and will be invoiced in 15 minute increments.

Our recycled products meet the conditions of the relevant NSW EPA resource recovery orders issued under the POEO (Waste) Regulation.

Please see www.epa.nsw.gov.au and www.benedict.com.au for guidance on the use of natural and recycled products.

ALL RESPONSIBILITY CEASES UPON RECEIPT BY CLIENT

DELIVERY DOCKET D-152187

BENEDICT SAND & GRAVEL

PO BOX 431, FRENCHS FOREST NSW 1640
ABN 99 073 763 292 SALES: 9986 3500

DATE:	16/01/2020	TIP TIME:	8.50	W/B NO.:	b432900
CUSTOMER:	CHRISTIE CIVIL PTY. LTD.			CUST NO:	CHRIS0
ADDRESS:	5 - 11 BANK STREET			SUBURB:	PYRMONT
VEHICLE:	TF0944 / 944F			CUSTOMER PO NO.:	BANK STREET

REF. NO.	PRODUCT CODE/DESCRIPTION	JOB NO.	WEIGHT	
529704	R11 REC BEDDING SAND (R11BED)		GROSS	27.62
Delivery Comments:			TARE	11.22
Wait time start:	Wait time end:	Total Wait time: -	NETT	16.40

RECEIVED BY	jack	ORDERED BY	JACK - 0411 684 895
SIGNATURE		EMAIL	simonxin@christiecivil.com.au

All wait time is reviewed by Benedict. Unless otherwise agreed, waiting time is chargeable after 30 minutes and will be invoiced in 15 minute increments.
Our recycled products meet the conditions of the relevant NSW EPA resource recovery orders issued under the POEO (Waste) Regulation.
Please see www.epa.nsw.gov.au and www.benedict.com.au for guidance on the use of natural and recycled products.

ALL RESPONSIBILITY CEASES UPON RECEIPT BY CLIENT

DELIVERY DOCKET D-152186

BENEDICT SAND & GRAVEL

PO BOX 431, FRENCHS FOREST NSW 1640
ABN 99 073 763 292 SALES: 9986 3500

DATE:	16/01/2020	TIP TIME:	7.23	W/B NO.:	432005
CUSTOMER:	CHRISTIE CIVIL PTY. LTD.			CUST NO:	CHRIS0
ADDRESS:	5 - 11 BANK STREET			SUBURB:	PYRMONT
VEHICLE:	CI73NZ / B074			CUSTOMER PO NO.:	BANK STREET

REF. NO.	PRODUCT CODE/DESCRIPTION	JOB NO.	WEIGHT	
529703	R11 REC BEDDING SAND (R11BED)		GROSS	27.88
			TARE	11.32
Delivery Comments:			NETT	16.56
Wait time start:	Wait time end:	Total Wait time: -		

RECEIVED BY	jack	ORDERED BY	JACK - 0411 684 895
SIGNATURE		EMAIL	simonxin@christiecivil.com.au

All wait time is reviewed by Benedict. Unless otherwise agreed, waiting time is chargeable after 30 minutes and will be invoiced in 15 minute increments.
Our recycled products meet the conditions of the relevant NSW EPA resource recovery orders issued under the POEO (Waste) Regulation.
Please see www.epa.nsw.gov.au and www.benedict.com.au for guidance on the use of natural and recycled products.

ALL RESPONSIBILITY CEASES UPON RECEIPT BY CLIENT

DELIVERY DOCKET D-152185

BENEDICT SAND & GRAVEL

PO BOX 431, FRENCHS FOREST NSW 1640
ABN 99 073 763 292 SALES: 9986 3500

DATE:	16/01/2020	TIP TIME:	7.02	W/B NO.:	b432879
CUSTOMER:	CHRISTIE CIVIL PTY. LTD.			CUST NO:	CHRIS0
ADDRESS:	5 - 11 BANK STREET			SUBURB:	PYRMONT
VEHICLE:	TF0944 / 944F			CUSTOMER PO NO.:	BANK STREET

REF. NO.	PRODUCT CODE/DESCRIPTION	JOB NO.	WEIGHT	
529702	R11 REC BEDDING SAND (R11BED)		GROSS	27.88
			TARE	11.22
Delivery Comments:			NETT	16.66
Wait time start:	Wait time end:	Total Wait time: -		

RECEIVED BY	jack	ORDERED BY	JACK - 0411 684 895
SIGNATURE		EMAIL	simonxin@christiecivil.com.au

All wait time is reviewed by Benedict. Unless otherwise agreed, waiting time is chargeable after 30 minutes and will be invoiced in 15 minute increments.

Our recycled products meet the conditions of the relevant NSW EPA resource recovery orders issued under the POEO (Waste) Regulation.

Please see www.epa.nsw.gov.au and www.benedict.com.au for guidance on the use of natural and recycled products.

ALL RESPONSIBILITY CEASES UPON RECEIPT BY CLIENT

DELIVERY DOCKET D-153432

BENEDICT

BENEDICT SAND & GRAVEL

PO BOX 431, FRENCHS FOREST NSW 1640
ABN 99 073 763 292 SALES: 9986 3500

DATE: 29/01/2020 TIP TIME: 7.07
CUSTOMER: CHRISTIE CIVIL PTY. LTD.
ADDRESS: 5 - 11 BANK STREET
VEHICLE: RFJ 943 / 943F

W/B NO.: b434093
CUST NO: CHRIS0
SUBURB: PYRMONT
CUSTOMER PO NO.: BANK STREET

REF. NO.	PRODUCT CODE/DESCRIPTION	JOB NO.	WEIGHT	
530957	R11 REC BEDDING SAND (R11BED)		GROSS	31.76
			TARE	11.70
			NETT	20.06

Delivery Comments:

Wait time start: **Wait time end:** **Total Wait time: -**

RECEIVED BY Ilvan ORDERED BY SIMON - 0435 211 566

SIGNATURE EMAIL simonxin@christiecivil.com.au

All wait time is reviewed by Benedict. Unless otherwise agreed, waiting time is chargeable after 30 minutes and will be invoiced in 15 minute increments

Our recycled products meet the conditions of the relevant NSW EPA resource recovery orders issued under the POEO (Waste) Regulation.

Please see www.epa.nsw.gov.au and www.benedict.com.au for guidance on the use of natural and recycled products

ALL RESPONSIBILITY CEASES UPON RECEIPT BY CLIENT

DELIVERY DOCKET D-154870

BENEDICT

BENEDICT SAND & GRAVEL

PO BOX 431, FRENCHS FOREST NSW 1640
ABN 99 073 763 292 SALES: 9986 3500

DATE:	03/02/2020	TIP TIME:	10.06	W/B NO.:	B-434788
CUSTOMER:	CHRISTIE CIVIL PTY. LTD.			CUST NO:	CHRIS0
ADDRESS:	5 - 11 BANK STREET			SUBURB:	PYRMONT
VEHICLE:	AW35BN / B019			CUSTOMER PO NO.:	BANK STREET

REF. NO.	PRODUCT CODE/DESCRIPTION	JOB NO.	WEIGHT	
532403	R11 REC BEDDING SAND (R11BED)		GROSS	27.64
			TARE	11.16
Delivery Comments:			NETT	16.48
Wait time start:	**Wait time end:**	**Total Wait time: -**		

RECEIVED BY	Ivan	ORDERED BY	SIMON - 0435 211 566
SIGNATURE		EMAIL	simonxin@christiecivil.com.au

All wait time is reviewed by Benedict. Unless otherwise agreed, waiting time is chargeable after 30 minutes and will be invoiced in 15 minute increments.

Our recycled products meet the conditions of the relevant NSW EPA resource recovery orders issued under the POEO (Waste) Regulation.

Please see www.epa.nsw.gov.au and www.benedict.com.au for guidance on the use of natural and recycled products.

ALL RESPONSIBILITY CEASES UPON RECEIPT BY CLIENT

DELIVERY DOCKET D-154868

BENEDICT

BENEDICT SAND & GRAVEL

PO BOX 431, FRENCHS FOREST NSW 1640
ABN 99 073 763 292 SALES: 9986 3500

DATE:	03/02/2020	TIP TIME:	9.57	W/B NO.:	b434780
CUSTOMER:	CHRISTIE CIVIL PTY. LTD.			CUST NO:	CHRIS0
ADDRESS:	5 - 11 BANK STREET			SUBURB:	PYRMONT
VEHICLE:	TF0944 / 944F			CUSTOMER PO NO.:	BANK STREET

REF. NO.	PRODUCT CODE/DESCRIPTION	JOB NO.	WEIGHT	
532401	R11 REC BEDDING SAND (R11BED)		GROSS	27.64
			TARE	11.16
Delivery Comments:			NETT	16.48
Wait time start:	**Wait time end:**	**Total Wait time: -**		

RECEIVED BY simon ORDERED BY SIMON - 0435 211 566

SIGNATURE EMAIL simonxin@christiecivil.com.au

All wait time is reviewed by Benedict. Unless otherwise agreed, waiting time is chargeable after 30 minutes and will be invoiced in 15 minute increments.

Our recycled products meet the conditions of the relevant NSW EPA resource recovery orders issued under the POEO (Waste) Regulation.

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ALL RESPONSIBILITY CEASES UPON RECEIPT BY CLIENT

DELIVERY DOCKET D-154869

BENEDICT

BENEDICT SAND & GRAVEL

PO BOX 431, FRENCHS FOREST NSW 1640
ABN 99 073 763 292 SALES: 9986 3500

DATE:	03/02/2020	TIP TIME:	9.49	W/B NO.:	b434704
CUSTOMER:	CHRISTIE CIVIL PTY. LTD.			CUST NO:	CHRIS0
ADDRESS:	5 - 11 BANK STREET			SUBURB:	PYRMONT
VEHICLE:	CC18QT / B003			CUSTOMER PO NO.:	BANK STREET

REF. NO.	PRODUCT CODE/DESCRIPTION	JOB NO.	WEIGHT	
532402	R11 REC BEDDING SAND (R11BED)		GROSS	27.68
			TARE	9.62
Delivery Comments:			NETT	18.06
Wait time start:	**Wait time end:**	**Total Wait time: -**		

RECEIVED BY	ivan	ORDERED BY	SIMON - 0435 211 566
SIGNATURE		EMAIL	simonxin@christiecivil.com.au

All wait time is reviewed by Benedict. Unless otherwise agreed, waiting time is chargeable after 30 minutes and will be invoiced in 15 minute increments.

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ALL RESPONSIBILITY CEASES UPON RECEIPT BY CLIENT

DELIVERY DOCKET D-156305

BENEDICT

BENEDICT SAND & GRAVEL

PO BOX 431, FRENCHS FOREST NSW 1640
ABN 99 073 763 292 SALES: 9986 3500

DATE:	13/02/2020	TIP TIME:	14.07	W/B NO.:	b-435632
CUSTOMER:	CHRISTIE CIVIL PTY. LTD.			CUST NO:	CHRIS0
ADDRESS:	5 - 11 BANK STREET			SUBURB:	PYRMONT
VEHICLE:	VMD999 / V999			CUSTOMER PO NO.:	BANK

REF. NO.	PRODUCT CODE/DESCRIPTION	JOB NO.	WEIGHT	
533846	R11 REC BEDDING SAND (R11BED)		GROSS	20.12
			TARE	8.78
Delivery Comments:			NETT	11.34
Wait time start:	Wait time end:	Total Wait time: -		

RECEIVED BY	ivan	ORDERED BY	SIMON 0435 211 566
SIGNATURE		EMAIL	simonxin@christiecivil.com.au

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ALL RESPONSIBILITY CEASES UPON RECEIPT BY CLIENT

DELIVERY DOCKET D-157481

BENEDICT SAND & GRAVEL

BENEDICT SAND & GRAVEL | PO Box 431 Frenchs Forest NSW 1640 | T 02 9986 3500 | ABN 99 073 763 292

DATE:	21/02/2020	TIP TIME:	7.11	W/B NO.:	b436511
CUSTOMER:	CHRISTIE CIVIL PTY. LTD.			CUST NO:	CHRIS0
ADDRESS:	5 - 11 BANK STREET			SUBURB:	PYRMONT
VEHICLE:	MBH 060 / B060			CUSTOMER PO NO.:	BANK

REF. NO.	PRODUCT CODE/DESCRIPTION	JOB NO.	WEIGHT	
535030	R11 REC BEDDING SAND (R11BED)		GROSS	21.30
			TARE	8.24
Delivery Comments:			NETT	13.06
Wait time start:	**Wait time end:**	**Total Wait time: -**		

RECEIVED BY	ivan	ORDERED BY	SIMON 0435 211 566
SIGNATURE		EMAIL	simonxin@christiecivil.com.au

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ALL RESPONSIBILITY CEASES UPON RECEIPT BY CLIENT

DELIVERY DOCKET D-158224

BENEDICT SAND & GRAVEL

BENEDICT SAND & GRAVEL | PO Box 431 Frenchs Forest NSW 1640 | T 02 9986 3500 | ABN 99 073 763 292

DATE:	25/02/2020	TIP TIME:	7.12	W/B NO.:	B-436905
CUSTOMER:	CHRISTIE CIVIL PTY. LTD.			CUST NO:	CHRIS0
ADDRESS:	5 - 11 BANK STREET			SUBURB:	PYRMONT
VEHICLE:	AW35BN / B019			CUSTOMER PO NO.:	BANK STREET

REF. NO.	PRODUCT CODE/DESCRIPTION	JOB NO.	WEIGHT	
535775	R11 REC BEDDING SAND (R11BED)		GROSS	27.90
			TARE	11.18
Delivery Comments:			NETT	16.72
Wait time start:	**Wait time end:**	**Total Wait time: -**		

RECEIVED BY	Ivan	ORDERED BY	SIMON 0435 211 566
SIGNATURE		EMAIL	simonxin@christiecivil.com.au

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ALL RESPONSIBILITY CEASES UPON RECEIPT BY CLIENT

DELIVERY DOCKET D-159901

BENEDICT SAND & GRAVEL

BENEDICT SAND & GRAVEL | PO Box 431 Frenchs Forest NSW 1640 | T 02 9986 3500 | ABN 99 073 763 292

DATE:	03/03/2020	TIP TIME:	14.33	W/B NO.:	b 438150
CUSTOMER:	CHRISTIE CIVIL PTY. LTD.			CUST NO:	CHRIS0
ADDRESS:	5 - 11 BANK STREET			SUBURB:	PYRMONT
VEHICLE:	SPG 035 / 035S			CUSTOMER PO NO.:	BANK

REF. NO.	PRODUCT CODE/DESCRIPTION	JOB NO.	WEIGHT	
537467	R11 REC BEDDING SAND (R11BED)		GROSS	21.74
Delivery Comments:			TARE	8.12
Wait time start:	**Wait time end:**	**Total Wait time: -**	NETT	13.62

RECEIVED BY	Ivan	ORDERED BY	SIMON 0435 211 566
SIGNATURE		EMAIL	simonxin@christiecivil.com.au

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ALL RESPONSIBILITY CEASES UPON RECEIPT BY CLIENT

DELIVERY DOCKET D-161387

BENEDICT
SAND & GRAVEL

BENEDICT SAND & GRAVEL | PO Box 431 Frenchs Forest NSW 1640 | T 02 9986 3500 | ABN 99 073 763 292

DATE:	13/03/2020	TIP TIME: 7.32	W/B NO.:	b439460
CUSTOMER:	CHRISTIE CIVIL PTY. LTD.		CUST NO:	CHRIS0
ADDRESS:	5 - 11 BANK STREET		SUBURB:	PYRMONT
VEHICLE:	MBH060 / B060		CUSTOMER PO NO.:	BANK STREET

REF. NO.	PRODUCT CODE/DESCRIPTION	JOB NO.	WEIGHT	
538960	R11 REC BEDDING SAND (R11BED)		GROSS	22.92
			TARE	8.40
Delivery Comments:			NETT	14.52
Wait time start:	**Wait time end:**	**Total Wait time: -**		

RECEIVED BY	ivan	ORDERED BY	SIMON - 0435 211 566
SIGNATURE		EMAIL	simonxin@christiecivil.com.au

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ALL RESPONSIBILITY CEASES UPON RECEIPT BY CLIENT

Concrete Recyclers (Group) Pty Ltd
A.B.N: 62 053 809 591
P: 02 8832 7400 F: 02 8832 7491

Delivery Docket

CHRISTIE CIVIL

Zone:

5-11 BANK ST, PYRMONT 2009

Mob: **0420 209 096** TOM CARUANA

PH: 0420 209 096

Docket: **BCL5211137**

Job: **22737**

Date: **21 Jan 20** 12:42 PM

Truck: **BF62UD** Bogie

Product: **75/200AGG 13.25** ton

75/200MM OVERSIZED AGGREGATE

Gross: 22.54 Tare: 9.29 Net: 13.25 ton

Running Total

13.25

Guide only.

Our responsibility ends at the kerbside. If at the request of the customer, the delivery enters the job site, the customer is responsible for providing safe and adequate access to the vehicle. Concrete Recyclers and/or its agents will NOT be liable for any damage or injury to any public or private property. All care will be taken, but any damage will be the responsibility of the customer. This material complies with the EPA "Recovered Aggregate Order 2014". Consumers may view the Recovered Aggregate Order & Exemption 2014 at http://www.epa.nsw.gov.au/wasteregulation/orders-exemptions.htm

Concrete Recyclers (Group) Pty Ltd
A.B.N: 62 053 809 591
P: 02 8832 7400 F: 02 8832 7491

Delivery Docket

CHRISTIE CIVIL

Zone:

5-11 BANK ST, PYRMONT 2009

Mob: 0420 209 096 TOM CARUANA

PH: 0420 209 096

Docket: **BCL5211158**

Job: **22776**

Date: **21 Jan 20** 2:57 PM

Truck: **BF62UD** Bogie

Product: **75/200AGG 13.30** ton

75/200MM OVERSIZED AGGREGATE

Gross: 22.59 Tare: 9.29 Net: 13.30 ton

Running Total

26.55

Guide only.

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Concrete Recyclers (Group) Pty Ltd
A.B.N: 62 053 809 591
P: 02 8832 7400 F: 02 8832 7491

Delivery Docket

CHRISTIE CIVIL

Zone:

5-11 BANK ST, PYRMONT 2009

Mob: 0420 209 096 TOM CARUANA

PH: 0420 209 096

Docket: **BCL5211087**

Date: **21 Jan 20** 7:04 AM

Truck: **BF62UD** Bogie

Product: **75/200AGG 13.25** ton

75/200MM OVERSIZED AGGREGATE

Gross: 22.54 Tare: 9.29 Net: 13.25 ton

Running Total

13.25

Guide only.

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Concrete Recyclers (Group) Pty Ltd
A.B.N: 62 053 809 591
P: 02 8832 7400 F: 02 8832 7491

Delivery Docket

CHRISTIE CIVIL

Zone:

5-11 BANK ST, PYRMONT 2009

Mob: **0420 209 096** TOM CARUANA

PH: 0420 209 096

Docket: **BCL5211199**

Job: **22795**

Date: **22 Jan 20** 8:43 AM

Truck: **BF62UD** Bogie

Product: **75/200AGG 13.40** ton

75/200MM OVERSIZED AGGREGATE

Gross: 22.69 Tare: 9.29 Net: 13.40 ton

Running Total

27.75

Guide only.

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Concrete Recyclers (Group) Pty Ltd
A.B.N: 62 053 809 591
P: 02 8832 7400 F: 02 8832 7491

Delivery Docket

CHRISTIE CIVIL

Zone:

5-11 BANK ST, PYRMONT 2009

Mob: **0420 209 096** TOM CARUANA

PH: 0420 209 096

Docket: **BCL5211231**

Job: **22796**

Date: **22 Jan 20** 10:54 AM

Truck: **BF62UD** Bogie

Product: **75/200AGG 13.10** ton

75/200MM OVERSIZED AGGREGATE

Gross: 22.39 Tare: 9.29 Net: 13.10 ton

Running Total

40.85

Guide only.

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Concrete Recyclers (Group) Pty Ltd
A.B.N: 62 053 809 591
P: 02 8832 7400 F: 02 8832 7491

Delivery Docket

CHRISTIE CIVIL

Zone:
5-11 BANK ST, PYRMONT 2009

Mob: **0420 209 096** TOM CARUANA
PH 0420 209 096

Docket: **BCL5211285**

Job: **22932**

Date: **22 Jan 20** 2:10 PM

Truck: **BF62UD** Bogie

Product: **75/200AGG** **13.25** ton
75/200MM OVERSIZED AGGREGATE

Gross: 22.54 Tare: 9.29 Net: 13.25 ton

Running Total
54.10

Guide only.

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Concrete Recyclers (Group) Pty Ltd
A.B.N: 62 053 809 591
P: 02 8832 7400 F. 02 8832 7491

Delivery Docket

CHRISTIE CIVIL

Zone:

5-11 BANK ST, PYRMONT 2009

Mob: **0420 209 096** TOM CARUANA

PH: 0420 209 096

Docket: **BCL5211163**

Job: **22794**

Date: **22 Jan 20** 6:36 AM

Truck: **BF62UD** Bogie

Product: **75/200AGG 14.35** ton

75/200MM OVERSIZED AGGREGATE

Gross: 23.64 Tare: 9.29 Net: 14.35 ton

Running Total

14.35

Guide only.

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CAB-02

Concrete Recyclers (Group) Pty Lt
A.B.N: 62 053 809 591
P: 02 8832 7400 F: 02 8832 7491

Delivery Docket

CHRISTIE CIVIL

Zone:

5-11 BANK ST, PYRMONT 2009

Mob: **0420 209 096** TOM CARUANA

PH. 0420 209 096

Docket: **BCL5212209**

Job: **23883**

Date: **03 Feb 20** 6:38 AM

Truck: **BF62UD** Bogie

PO. **BANK STREET**

Product: **75/200AGG 13.25** ton

75/200MM OVERSIZED AGGREGATE

Gross: 22.54 Tare: 9.29 Net: 13.25 tc

Running Total

13.25

Guide only.

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GAB-02

Concrete Recyclers (Group) Pty L
A.B.N: 62 053 809 591
P: 02 8832 7400 F: 02 8832 7491

Delivery Docket

CHRISTIE CIVIL

Zone:

5-11 BANK ST, PYRMONT 2009

Mob: **0420 209 096** TOM CARUANA

PH: 0420 209 096

Docket: **BCL5212218**

Job: **23884**

Date: **03 Feb 20** 8:57 AM

Truck: **BF62UD** Bogie

PO: **BANK STREET**

Product: **75/200AGG 13.30** ton

75/200MM OVERSIZED AGGREGATE

Gross: 22.59 Tare: 9.29 Net: 13.30 to

Running Total

26.55

Guide only.

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Concrete Recyclers (Group) Pty Ltd
A.B.N: 62 053 809 591
P: 02 8832 7400 F: 02 8832 7491

Delivery Docket

CHRISTIE CIVIL

Zone:

5-11 BANK ST, PYRMONT 2009

Mob: **+61 0435 211 566** SIMON

PH: +61 0435 211 566

Docket: **BCL5212723**

Job: **24466**

Date: **06 Feb 20** 1:15 PM

Truck: **BF62UD** Bogie

PO: **BANK STREET**

Product: **75/200AGG 13.40** ton

75/200MM OVERSIZED AGGREGATE

Gross: 22.69 Tare: 9.29 Net: 13.40 ton

Running Total

13.40

Guide only.

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ıcrete Recyclers (Group) Pty Ltd
A.B.N: 62 053 809 591
P: 02 8832 7400 F: 02 8832 7491

Delivery Docket

STIE CIVIL

BANK ST, PYRMONT 2009

0420 209 096 TOM CARUANA

420 209 096

ket: **BCL5213082**

24796

: **14 Feb 20** 1:31 PM

k: **BF62UD** Bogie

BANK STREET

duct: **75/200AGG 13.30** ton

00MM OVERSIZED AGGREGATE

ss: 22.59 Tare: 9.29 Net: 13.30 ton

Running Total
39.70
Guide only.

esponsib lity ends at the kerbside. If at the est of the customer, the delivery enters the job the customer is responsible for providing safe and quate access to the vehicle. Concrete Recyclers or its agents will NOT be liable for any damage or y to any publ c or private property. All care will be n, but any damage will be the respons bility of the omer. This material complies w th the EPA cove Aggregate Order 2014". Consumers may v the Recovered Aggregate Order & Exemption 4 at ://www.epa.nsw.gov.au/wasteregulation/orders-mptions.htm



Concrete Recyclers (Group) I
A.B.N: 62 053 809 591
P: 02 8832 7400 F: 02 8832 74

Delivery Docket

CHRISTIE CIVIL

Zone:

5-11 BANK ST, PYRMONT 2009

Mob: **0420 209 096** TOM CARUAI

PH: 0420 209 096

Docket: **BCL5213060**

Job: **24795**

Date: **14 Feb 20** 11:13 AM

Truck: **BF62UD** Bogie

PO: **BANK STREET**

Product: **75/200AGG 13.40** ton

75/200MM OVERSIZED AGGREGATE

Gross: 22.69 Tare: 9.29 Net: 13.4

Running Total
26.40
Guide only.

Our responsib lity ends at the kerbside. If at the request of the customer, the delivery enters the jo site, the customer is responsible for providing safe adequate access to the vehicle. Concrete Recycle and/or its agents will NOT be liable for any damag injury to any publ c or private property. All care will taken, but any damage will be the respons bility of customer. This material complies w th the EPA "Recovered Aggregate Order 2014". Consumers m view the Recovered Aggregate Order & Exemption 2014 at http://www.epa.nsw.gov.au/wasteregulation/orders-exemptions.htm



Concrete Recyclers (Group) Pty Ltd
A.B.N: 62 053 809 591
P: 02 8832 7400 F: 02 8832 7491

Delivery Docket

CHRISTIE CIVIL

Zone:

5-11 BANK ST, PYRMONT 2009

Mob: **0420 209 096** TOM CARUANA

PH: 0420 209 096

Docket: **BCL5213033**

Job: **24794**

Date: **14 Feb 20** 8:46 AM

Truck: **BF62UD** Bogie

PO: **BANK STREET**

Product: **75/200AGG 13.00** ton

75/200MM OVERSIZED AGGREGATE

Gross: 22.29 Tare: 9.29 Net: 13.00 ton

Running Total
13.00
Guide only.

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Concrete Recyclers (Group) Pty Ltd
A.B.N: 62 053 809 591
P: 02 8832 7400 F: 02 8832 7491

Delivery Docket

CHRISTIE CIVIL

Zone:

5-11 BANK ST, PYRMONT 2009

Mob: 0411 726 737 DENNIS

Docket: **BCL5217595**

Date: **27 Mar 20** 7:00 AM

Truck: **BN77GL** Bogie

Product: **20AGGB/C** **13.46** ton

20MM BRICK/CONCRETE AGGREGATE

Gross:22.35 Tare:8.89 Net:13.46 ton

Running Total
13.46

Our responsibility ends at the kerbside. If at the request of the customer, the delivery enters the job site, the customer is responsible for providing safe and adequate access to the vehicle. Concrete Recyclers and/or its agents will NOT be liable for any damage or injury to any public or private property. All care will be taken, but any damage will be the responsibility of the customer. This material complies with the EPA "Recovered Aggregate Order 2014". Consumers may view the Recovered Aggregate Order & Exemption 2014 at http://www.epa.nsw.gov.au/wasteregulation/orders-exemptions.htm

Ivan 27 Mar 20 7:42 AM

Concrete Recyclers (Group) Pty Ltd
A.B.N: 62 053 809 591
P: 02 8832 7400 F: 02 8832 7491

Delivery Docket

CHRISTIE CIVIL

Zone:

5-11 BANK ST, PYRMONT 2009

Mob: 0411 726 737 DENNIS

Docket: **BCL5217612**

Date: **27 Mar 20** 8:42 AM

Truck: **BN77GL** Bogie

Product: **20AGGB/C** **13.61** ton

20MM BRICK/CONCRETE AGGREGATE

Gross:22.50 Tare:8.89 Net:13.61 ton

Running Total
27.07

Our responsibility ends at the kerbside. If at the request of the customer, the delivery enters the job site, the customer is responsible for providing safe and adequate access to the vehicle. Concrete Recyclers and/or its agents will NOT be liable for any damage or injury to any public or private property. All care will be taken, but any damage will be the responsibility of the customer. This material complies with the EPA "Recovered Aggregate Order 2014". Consumers may view the Recovered Aggregate Order & Exemption 2014 at http://www.epa.nsw.gov.au/wasteregulation/orders-exemptions.htm

Ivan 27 Mar 20 9:24 AM

Concrete Recyclers (Group) Pty Ltd
A.B.N: 62 053 809 591
P: 02 8832 7400 F: 02 8832 7491

Delivery Docket

CHRISTIE CIVIL

Zone:

5-11 BANK ST, PYRMONT 2009

Mob: 0411 726 737 DENNIS

Docket: **BCL5217635**

Date: **27 Mar 20** 10:34 AM

Truck: **BN77GL** Bogie

Product: **20AGGB/C 13.61** ton

20MM BRICK/CONCRETE AGGREGATE

Gross:22.50 Tare:8.89 Net:13.61 ton

Running Total
40.68

Our responsibility ends at the kerbside. If at the request of the customer, the delivery enters the job site, the customer is responsible for providing safe and adequate access to the vehicle. Concrete Recyclers and/or its agents will NOT be liable for any damage or injury to any public or private property. All care will be taken, but any damage will be the responsibility of the customer. This material complies with the EPA "Recovered Aggregate Order 2014". Consumers may view the Recovered Aggregate Order & Exemption 2014 at http://www.epa.nsw.gov.au/wasteregulation/orders-exemptions.htm

Concrete Recyclers (Group) Pty Ltd
A.B.N: 62 053 809 591
P: 02 8832 7400 F: 02 8832 7491

Delivery Docket

CHRISTIE CIVIL

Zone:

5-11 BANK ST, PYRMONT 2009

Mob: 0411 726 737 DENNIS

Docket: **BCL5217694**

Date: **27 Mar 20** 2:27 PM

Truck: **CE49TL** Bogie

Product: **20AGGB/C 11.28** ton

20MM BRICK/CONCRETE AGGREGATE

Gross:22.10 Tare:10.82 Net:11.28 ton

Running Total
51.96

Our responsibility ends at the kerbside. If at the request of the customer, the delivery enters the job site, the customer is responsible for providing safe and adequate access to the vehicle. Concrete Recyclers and/or its agents will NOT be liable for any damage or injury to any public or private property. All care will be taken, but any damage will be the responsibility of the customer. This material complies with the EPA "Recovered Aggregate Order 2014". Consumers may view the Recovered Aggregate Order & Exemption 2014 at http://www.epa.nsw.gov.au/wasteregulation/orders-exemptions.htm

Concrete Recyclers (Group) Pty Ltd
A.B.N: 62 053 809 591
P: 02 8832 7400 F: 02 8832 7491

Delivery Docket

CHRISTIE CIVIL

Zone:

5-11 BANK ST, PYRMONT 2009

Mob: 0411 726 737 DENNIS

Docket: **BCL5217785**

Date: **30 Mar 20** 7:27 AM

Truck: **PO1965** Bogie

PO: **BANK STREET**

Product: **20AGGB/C** **12.03** ton

20MM BRICK/CONCRETE AGGREGATE

Gr[illegible]:22.05 Tare:10.02 Net:12.03 ton

Running Total
12.03

Our responsibility ends at the kerbside. If at the request of the customer, the delivery enters the job site, the customer is responsible for providing safe and adequate access to the vehicle. Concrete Recyclers and/or its agents will NOT be liable for any damage or injury to any public or private property. All care will be taken, but any damage will be the responsibility of the customer. This material complies with the EPA "Recovered Aggregate Order 2014". Consumers may view the Recovered Aggregate Order & Exemption 2014 at http://www.epa.nsw.gov.au/wasteregulation/orders-exemptions.htm

Concrete Recyclers (Group) Pty Ltd
A.B.N: 62 053 809 591
P: 02 8832 7400 F: 02 8832 7491

Delivery Docket

CHRISTIE CIVIL

Zone:

5-11 BANK ST, PYRMONT 2009

Mob: 0411 726 737 DENNIS

Docket: **BCL5217803**

Date: **30 Mar 20** 9:06 AM

Truck: **PO1965** Bogie

PO: **BANK STREET**

Product: **20AGGB/C 12.08** ton

20MM BRICK/CONCRETE AGGREGATE

Gross:22.10 Tare:10.02 Net:12.08 ton

Running Total
24.11

Our responsibility ends at the kerbside. If at the request of the customer, the delivery enters the job site, the customer is responsible for providing safe and adequate access to the vehicle. Concrete Recyclers and/or its agents will NOT be liable for any damage or injury to any public or private property. All care will be taken, but any damage will be the responsibility of the customer. This material complies with the EPA "Recovered Aggregate Order 2014". Consumers may view the Recovered Aggregate Order & Exemption 2014 at http://www.epa.nsw.gov.au/wasteregulation/orders-exemptions.htm

Delivery Docket

Metropolitan Demolitions & Recycling Pty Ltd
Rear 396 Princes Highway
St Peters NSW 2044

PHONE: 8595-3440

ABN:63 003 107 980
FAX:9517-9492

WEIGHBRIDGE DOCKET - OFFICE COPY

DATE: 22/02/2020 TIME: 09:47

DOCKET: 20000987-MET.0

CUSTOMER: Christie Civil Pty Ltd
AC NO : 3271

ORDER NO: 5 Bank st Pyrmont

QUOTE: 107714

REGO: SAK440

GROSS: 22.30t
TARE: 10.50t(M)
NETT: 11.80t

Charge Fee:
GST:
==========
Total Price:
==========
Payments:

PRODUCT: DGB-20

Job Daily Total: 0.00t

SITE: 107714 - Christie Civil Ex-Bin & Tipping all sites

DELIVERY DETAILS:

Drivers Name: .....

Signature: .....

This material complies with "The Metropolitan Demolitions & Recycling Pty Ltd Recovered Aggregate Exemption & Order 2018". The Receiver confirms acceptance of the Terms and Conditions as agreed on the Credit Application.

Delivery Docket

Metropolitan Demolitions & Recycling Pty Ltd
Rear 396 Princes Highway
St Peters NSW 2044

PHONE: 8595-3440

ABN:63 003 107 980
FAX:9517-9492

WEIGHBRIDGE DOCKET - CUSTOMER COPY

DOCKET: 20000969-MET.0

DATE: 22/02/2020 TIME: 08:28

CUSTOMER: Christie Civil Pty Ltd
AC NO : 3271

ORDER NO: 5 Bank st Pyrmont QUOTE: 107714

REGO: SAK440

GROSS: 22.46t
TARE: 10.50t(M)
NETT: 11.96t

Charge Fee:
GST:

Total Price:

Payments:

Job Daily Total: 0.00t

PRODUCT: DGB-20

SITE: 107714 - Christie Civil Ex-Bin & Tipping all sites

DELIVERY DETAILS:

Signature: .....

Drivers Name: .....

This material complies with "The Metropolitan Demolitions & Recycling Pty Ltd Recovered Aggregate Exemption & Order 2018". The Receiver confirms acceptance of the Terms and Conditions as agreed on the Credit Application.

Delivery Docket

Metropolitan Demolitions & Recycling Pty Ltd
Rear 396 Princes Highway
St Peters NSW 2044

PHONE: 8595-3440

ABN:63 003 107 980
FAX:9517-9492

WEIGHBRIDGE DOCKET - OFFICE COPY

DOCKET: 20001004-MET.0

DATE: 22/02/2020 TIME: 11:12

CUSTOMER: Christie Civil Pty Ltd
AC NO : 3271

ORDER NO: 5 Bank st Pyrmont QUOTE: 107714

REGO: SAK440

GROSS: 22.14t
TARE: 10.50t(M)
NETT: 11.64t

Charge Fee:
GST:
==========
Total Price:
==========
Payments:

Job Daily Total: 0.00t

PRODUCT: DGB-20

SITE: 107714 - Christie Civil Ex-Bin & Tipping all sites

DELIVERY DETAILS:

Signature: .....

Drivers Name: .....

This material complies with "The Metropolitan Demolitions & Recycling Pty Ltd Recovered Aggregate Exemption & Order 2018". The Receiver confirms acceptance of the Terms and Conditions as agreed on the Credit Application.

Delivery Docket

Metropolitan Demolitions & Recycling Pty Ltd
Rear 396 Princes Highway
St Peters NSW 2044
PHONE: 8595-3440
ABN:63 003 107 980
FAX:9517-9492

WEIGHBRIDGE DOCKET - CUSTOMER COPY

DATE: 4/03/2020 TIME: 13:58

DOCKET: 20002285-MET.0

CUSTOMER: Christie Civil Pty Ltd
AC NO : 3271

ORDER NO: Pyrmont

QUOTE: 107714

REGO: GM5659

GROSS: 21.28t
TARE: 10.20t(M)
NETT: 11.08t

Charge Fee:
GST:

Total Price:

Payments:

PRODUCT: DGB-20

Job Daily Total: 0.00t

SITE: 107714 - Christie Civil Ex-Bin & Tipping all sites

DELIVERY DETAILS:

Drivers Name: .....

Signature: .....

This material complies with "The Metropolitan Demolitions & Recycling Pty Ltd Recovered Aggregate Exemption & Order 2018". The Receiver confirms acceptance of the Terms and Conditions as agreed on the Credit Application.

Delivery Docket

Metropolitan Demolitions & Recycling Pty Ltd
Rear 396 Princes Highway
St Peters NSW 2044
PHONE: 8595-3440
ABN:63 003 107 980
FAX:9517-9492

WEIGHBRIDGE DOCKET - CUSTOMER COPY

DATE: 4/03/2020 TIME: 11:04

DOCKET: 20002248-MET.0

CUSTOMER: Christie Civil Pty Ltd
AC NO : 3271

ORDER NO: Pyrmont QUOTE: 107714

REGO: GM5659

GROSS:	21.38t
TARE:	10.20t(M)
NETT:	11.18t
Charge Fee:	
GST:	
Total Price:	
Payments:	

PRODUCT: DGB-20

Job Daily Total: 0.00t

SITE: 107714 - Christie Civil Ex-Bin & Tipping all sites

DELIVERY DETAILS:

Drivers Name: .....

Signature: .....

This material complies with "The Metropolitan Demolitions & Recycling Pty Ltd Recovered Aggregate Exemption & Order 2018". The Receiver confirms acceptance of the Terms and Conditions as agreed on the Credit Application.

Delivery Docket

Metropolitan Demolitions & Recycling Pty Ltd
Rear 396 Princes Highway
St Peters NSW 2044
PHONE: 8595-3440
ABN:63 003 107 980
FAX:9517-9492

WEIGHBRIDGE DOCKET - CUSTOMER COPY

DATE: 4/03/2020 TIME: 12:33

DOCKET: 20002269-MET.0

CUSTOMER: Christie Civil Pty Ltd
AC NO : 3271

ORDER NO: Pyrmont QUOTE: 107714

REGO: GM5659

GROSS:	20.72t
TARE:	10.20t(M)
NETT:	10.52t
Charge Fee:	
GST:	
Total Price:	
Payments:	

PRODUCT: DGB-20

Job Daily Total: 0.00t

SITE: 107714 - Christie Civil Ex-Bin & Tipping all sites

DELIVERY DETAILS:

Drivers Name: .....

Signature: .....

This material complies with "The Metropolitan Demolitions & Recycling Pty Ltd Recovered Aggregate Exemption & Order 2018". The Receiver confirms acceptance of the Terms and Conditions as agreed on the Credit Application.

Delivery Docket

Metropolitan Demolitions & Recycling Pty Ltd
Rear 396 Princes Highway
St Peters NSW 2044

PHONE: 8595-3440

ABN:63 003 107 980
FAX:9517-9492

WEIGHBRIDGE DOCKET - CUSTOMER COPY

DATE: 4/03/2020 TIME: 07:08

DOCKET: 20002175-MET.0

CUSTOMER: Christie Civil Pty Ltd
AC NO : 3271

ORDER NO: Pyrmont

QUOTE: 107714

REGO: GM5659

GROSS: 21.16t
TARE: 10.20t(M)
NETT: 10.96t

Charge Fee:
GST:

Total Price:

Payments:

PRODUCT: DGB-20

Job Daily Total: 0.00t

SITE: 107714 - Christie Civil Ex-Bin & Tipping all sites

DELIVERY DETAILS:

Drivers Name: .....

Signature: .....

This material complies with "The Metropolitan Demolitions & Recycling Pty Ltd Recovered Aggregate Exemption & Order 2018". The Receiver confirms acceptance of the Terms and Conditions as agreed on the Credit Application.

Delivery Docket

Metropolitan Demolitions & Recycling Pty Ltd
Rear 396 Princes Highway
St Peters NSW 2044

PHONE: 8595-3440

ABN:63 003 107 980
FAX:9517-9492

WEIGHBRIDGE DOCKET - CUSTOMER COPY

DATE: 4/03/2020 TIME: 08:40

DOCKET: 20002205-MET.0

CUSTOMER: Christie Civil Pty Ltd
AC NO : 3271

ORDER NO: pyrmont

QUOTE: 107714

REGO: GM5659

GROSS: 20.72t
TARE: 10.20t(M)
NETT: 10.52t

Charge Fee:
GST:

Total Price:

Payments:

PRODUCT: DGB-20

Job Daily Total: 0.00t

SITE: 107714 - Christie Civil Ex-Bin & Tipping all sites

DELIVERY DETAILS:

Drivers Name: .....

Signature: .....

This material complies with "The Metropolitan Demolitions & Recycling Pty Ltd Recovered Aggregate Exemption & Order 2018". The Receiver confirms acceptance of the Terms and Conditions as agreed on the Credit Application.

Delivery Docket

Metropolitan Demolitions & Recycling Pty Ltd
Rear 396 Princes Highway
St Peters NSW 2044 PHONE: 8595-3440 ABN:63 003 107 980 FAX:9517-9492

WEIGHBRIDGE DOCKET - CUSTOMER COPY

DATE: 14/03/2020 TIME: 12:16 DOCKET: 20003502-MET.0

CUSTOMER: Christie Civil Pty Ltd
AC NO : 3271

ORDER NO: 5 bank st pyrmont QUOTE: 107714

REGO: XN80KW

GROSS: 19.00t
TARE: 10.15t(M)
NETT: 8.85t

Charge Fee:
GST:
Total Price:
Payments:

PRODUCT: Tipping Concrete-Small

Job Daily Total: 0.00t

SITE: 107714 - Christie Civil Ex-Bin & Tipping all sites

DELIVERY DETAILS:

Drivers Name: ..... Signature: .....

This material complies with "The Metropolitan Demolitions & Recycling Pty Ltd Recovered Aggregate Exemption & Order 2018". The Receiver confirms acceptance of the Terms and Conditions as agreed on the Credit Application.

Delivery Docket

Metropolitan Demolitions & Recycling Pty Ltd
Rear 396 Princes Highway
St Peters NSW 2044 PHONE: 8595-3440 ABN:63 003 107 980 FAX:9517-9492

WEIGHBRIDGE DOCKET - CUSTOMER COPY

DATE: 14/03/2020 TIME: 12:25 DOCKET: 20003504-MET.0

CUSTOMER: Christie Civil Pty Ltd
AC NO : 3271

ORDER NO: 5 bank st pyrmont QUOTE: 107714

REGO: XN80KW

GROSS: 21.58t
TARE: 10.15t(M)
NETT: 11.43t

Charge Fee:
GST:
Total Price:
Payments:

PRODUCT: DGB-20

Job Daily Total: 0.00t

SITE: 107714 - Christie Civil Ex-Bin & Tipping all sites

DELIVERY DETAILS:

Drivers Name: ..... Signature: .....

This material complies with "The Metropolitan Demolitions & Recycling Pty Ltd Recovered Aggregate Exemption & Order 2018". The Receiver confirms acceptance of the Terms and Conditions as agreed on the Credit Application.

Metropolitan Demolitions & Recycling Pty Ltd
Rear 396 Princes Highway
St Peters NSW 2044
PHONE: 8595-3440
ABN:63 003 107 980
FAX:9517-9492

WEIGHBRIDGE DOCKET - OFFICE COPY

DATE: 14/03/2020 TIME: 09:35

DOCKET: 20003479-MET.0

CUSTOMER: Christie Civil Pty Ltd
AC NO : 3271

ORDER NO: 5 BANK ST PYRMONT QUOTE: 107714

REGO: XN80KW

GROSS: 21.66t
TARE: 10.15t(M)
NETT: 11.51t

Charge Fee:
GST:
Total Price:
Payments:

PRODUCT: DGB-20

Job Daily Total: 0.00t

SITE: 107714 - Christie Civil Ex-Bin & Tipping all sites

DELIVERY DETAILS:

Drivers Name: .....

Signature: .....

This material complies with "The Metropolitan Demolitions & Recycling Pty Ltd Recovered Aggregate Exemption & Order 2018". The Receiver confirms acceptance of the Terms and Conditions as agreed on the Credit Application.

Delivery Docket

Metropolitan Demolitions & Recycling Pty Ltd
Rear 396 Princes Highway
St Peters NSW 2044
PHONE: 8595-3440
ABN:63 003 107 980
FAX:9517-9492

WEIGHBRIDGE DOCKET - OFFICE COPY

DATE: 14/03/2020 TIME: 08:29

DOCKET: 20003464-MET.0

CUSTOMER: Christie Civil Pty Ltd
C NO : 3271

ORDER NO: 5 bank st pyrmont QUOTE: 107714

REGO: XN80KW

GROSS: 21.86t
TARE: 10.15t(M)
NETT: 11.71t

Charge Fee:
GST:
Total Price:
Payments:

PRODUCT: DGB-20

Job Daily Total: 0.00t

SITE: 107714 - Christie Civil Ex-Bin & Tipping all sites

DELIVERY DETAILS:

Drivers Name: .....

Signature: .....

This material complies with "The Metropolitan Demolitions & Recycling Pty Ltd Recovered Aggregate Exemption & Order 2018". The Receiver confirms acceptance of the Terms and Conditions as agreed on the Credit Application.

Delivery Docket

etropolitan Demolitions & Recycling Pty Ltd
ear 396 Princes Highway
t Peters NSW 2044

PHONE: 8595-3440

ABN:63 003 107 980
FAX:9517-9492

/EIGHBRIDGE DOCKET - OFFICE COPY

DATE: 14/03/2020 TIME: 07:23

CUSTOMER: Christie Civil Pty Ltd
AC NO : 3271

ORDER NO: 5 Bank St Pyrmont QUOTE: 107714

REGO: XN80KW

DOCKET: 20003454-MET.0

GROSS: 21.96t
TARE: 10.15t(M)
NETT: 11.81t

Charge Fee:
GST:
Total Price:
Payments:

Job Daily Total: 0.00t

PRODUCT: DGB-20

SITE: 107714 - Christie Civil Ex-Bin & Tipping all sites

DELIVERY DETAILS:

Signature: .....

Drivers Name: .....

This material complies with "The Metropolitan Demolitions & Recycling Pty Ltd Recovered Aggregate Exemption & Order 2018". The Receiver confirms acceptance of the Terms and Conditions as agreed on the Credit Application.

Delivery Docket

Metropolitan Demolitions & Recycling Pty Ltd
Rear 396 Princes Highway
St Peters NSW 2044

PHONE: 8595-3440

ABN:63 003 107 980
FAX:9517-9492

WEIGHBRIDGE DOCKET - CUSTOMER COPY

DATE: 14/03/2020 TIME: 10:49

CUSTOMER: Christie Civil Pty Ltd
AC NO : 3271

ORDER NO: 5 bank st pyrmont QUOTE: 107714

REGO: XN80KW

DOCKET: 20003489-MET.0

GROSS: 21.46t
TARE: 10.15t(M)
NETT: 11.31t

Charge Fee:
GST:
Total Price:
Payments:

Job Daily Total: 0.00t

PRODUCT: DGB-20

SITE: 107714 - Christie Civil Ex-Bin & Tipping all sites

DELIVERY DETAILS:

Signature: .....

Drivers Name: .....

This material complies with "The Metropolitan Demolitions & Recycling Pty Ltd Recovered Aggregate Exemption & Order 2018". The Receiver confirms acceptance of the Terms and Conditions as agreed on the Credit Application.

JR-05

Delivery Docket

Metropolitan Demolitions & Recycling Pty Ltd
Rear 396 Princes Highway
St Peters NSW 2044

PHONE: 8595-3440

ABN:63 003 107 980
FAX:9517-9492

WEIGHBRIDGE DOCKET - CUSTOMER COPY

DOCKET: 20003945-MET.0

DATE: 19/03/2020 TIME: 07:41

CUSTOMER: Christie Civil Pty Ltd
AC NO : 3271

ORDER NO: 5 Bank St Pyrmont QUOTE: 107714

REGO: XN80KW

GROSS:	21.56t
TARE:	10.15t(M)
NETT:	11.41t
Charge Fee:	
GST:	
Total Price:	
Payments:	
Job Daily Total:	0.00t

PRODUCT: DGB-20

SITE: 107714 - Christie Civil Ex-Bin & Tipping all sites

DELIVERY DETAILS:

Signature: .....

Drivers Name: .....

This material complies with "The Metropolitan Demolitions & Recycling Pty Ltd Recovered Aggregate Exemption & Order 2018". The Receiver confirms acceptance of the Terms and Conditions as agreed on the Credit Application.

Delivery Docket

Metropolitan Demolitions & Recycling Pty Ltd
Rear 396 Princes Highway
St Peters NSW 2044

PHONE: 8595-3440

ABN:63 003 107 980
FAX:9517-9492

WEIGHBRIDGE DOCKET - OFFICE COPY

DOCKET: 20004348-MET.0

DATE: 23/03/2020 TIME: 06:57

CUSTOMER: Christie Civil Pty Ltd
AC NO : 3271

ORDER NO: 5 Bank st pyrmont

QUOTE: 107714

REGO: XN80KW

GROSS: 22.00t
TARE: 10.15t(M)
NETT: 11.85t

Charge Fee:
GST:
Total Price:
Payments:

Job Daily Total: 0.00t

PRODUCT: DGB-20

SITE: 107714 - Christie Civil Ex-Bin & Tipping all sites

DELIVERY DETAILS:

Signature: .....

Drivers Name: .....

This material complies with "The Metropolitan Demolitions & Recycling Pty Ltd Recovered Aggregate Exemption & Order 2018". The Receiver confirms acceptance of the Terms and Conditions as agreed on the Credit Application.

Delivery Docket

Metropolitan Demolitions & Recycling Pty Ltd
Rear 396 Princes Highway
St Peters NSW 2044

PHONE: 8595-3440

ABN:63 003 107 980
FAX:9517-9492

WEIGHBRIDGE DOCKET - OFFICE COPY

DATE: 23/03/2020 TIME: 08:36

DOCKET: 20004381-MET.0

CUSTOMER: Christie Civil Pty Ltd
AC NO : 3271

ORDER NO: 5 Bank St Pyrmont

QUOTE: 107714

REGO: XN80KW

GROSS: 21.96t
TARE: 10.15t(M)
NETT: 11.81t

Charge Fee:
GST:
Total Price:
Payments:

PRODUCT: DGB-20

Job Daily Total: 0.00t

SITE: 107714 - Christie Civil Ex-Bin & Tipping all sites

DELIVERY DETAILS:

Drivers Name: .....

Signature: .....

This material complies with "The Metropolitan Demolitions & Recycling Pty Ltd Recovered Aggregate Exemption & Order 2018". The Receiver confirms acceptance of the Terms and Conditions as agreed on the Credit Application.

Delivery Docket

Metropolitan Demolitions & Recycling Pty Ltd
Rear 396 Princes Highway
St Peters NSW 2044

PHONE: 8595-3440

ABN:63 003 107 980
FAX:9517-9492

WEIGHBRIDGE DOCKET - CUSTOMER COPY

DOCKET: 20004421-MET.0

DATE: 23/03/2020 TIME: 09:55

CUSTOMER: Christie Civil Pty Ltd
AC NO : 3271

ORDER NO: 5 bank st pyrmont

QUOTE: 107714

REGO: XN80KW

GROSS: 21.70t
TARE: 10.15t(M)
NETT: 11.55t

Charge Fee:
GST:

Total Price:

Payments:

Job Daily Total: 0.00t

PRODUCT: DGB-20

SITE: 107714 - Christie Civil Ex-Bin & Tipping all sites

DELIVERY DETAILS:

Drivers Name: .....

Signature: .....

This material complies with "The Metropolitan Demolitions & Recycling Pty Ltd Recovered Aggregate Exemption & Order 2018". The Receiver confirms acceptance of the Terms and Conditions as agreed on the Credit Application.

Delivery Docket

Metropolitan Demolitions & Recycling Pty Ltd
Rear 396 Princes Highway
St Peters NSW 2044

PHONE: 8595-3440

ABN:63 003 107 980
FAX:9517-9492

WEIGHBRIDGE DOCKET - CUSTOMER COPY

DATE: 23/03/2020 TIME: 12:19

DOCKET: 20004480-MET.0

CUSTOMER: Christie Civil Pty Ltd
AC NO : 3271

ORDER NO: 5 bank st pyrmont QUOTE: 107714

REGO: XN80KW

GROSS:	22.50t(M)
TARE:	10.15t(M)
NETT:	12.35t
Charge Fee:	
GST:	
Total Price:	
Payments:	

PRODUCT: DGB-20

Job Daily Total: 0.00t

SITE: 107714 - Christie Civil Ex-Bin & Tipping all sites

DELIVERY DETAILS:

Drivers Name: .....

Signature: .....

This material complies with "The Metropolitan Demolitions & Recycling Pty Ltd Recovered Aggregate Exemption & Order 2018". The Receiver confirms acceptance of the Terms and Conditions as agreed on the Credit Application.

Delivery Docket

Metropolitan Demolitions & Recycling Pty Ltd
Rear 396 Princes Highway
St Peters NSW 2044

PHONE: 8595-3440

ABN:63 003 107 980
FAX:9517-9492

WEIGHBRIDGE DOCKET - OFFICE COPY

DOCKET: 20004505-MET.0

DATE: 23/03/2020 TIME: 13:21

CUSTOMER: Christie Civil Pty Ltd
AC NO : 3271

ORDER NO: 5 bank st pyrmont

QUOTE: 107714

REGO: XN80KW

GROSS: 21.32t
TARE: 10.15t(M)
NETT: 11.17t

Charge Fee:
GST:
Total Price:
Payments:

Job Daily Total: 0.00t

PRODUCT: DGB-20

SITE: 107714 - Christie Civil Ex-Bin & Tipping all sites

DELIVERY DETAILS:

Drivers Name: .....

Signature: .....

This material complies with "The Metropolitan Demolitions & Recycling Pty Ltd Recovered Aggregate Exemption & Order 2018". The Receiver confirms acceptance of the Terms and Conditions as agreed on the Credit Application.

Delivery Docket

Metropolitan Demolitions & Recycling Pty Ltd
Rear 396 Princes Highway
St Peters NSW 2044

PHONE: 8595-3440

ABN:63 003 107 980
FAX:9517-9492

WEIGHBRIDGE DOCKET - OFFICE COPY

DOCKET: 20004523-MET.0

DATE: 23/03/2020 TIME: 14:30

CUSTOMER: Christie Civil Pty Ltd
AC NO : 3271

ORDER NO: 5 banks st pyrmont

QUOTE: 107714

REGO: XN80KW

GROSS: 21.32t
TARE: 10.15t(M)
NETT: 11.17t

Charge Fee:
GST:
Total Price:
Payments:

Job Daily Total: 0.00t

PRODUCT: DGB-20

SITE: 107714 - Christie Civil Ex-Bin & Tipping all sites

DELIVERY DETAILS:

Drivers Name: .....

Signature: .....

This material complies with "The Metropolitan Demolitions & Recycling Pty Ltd Recovered Aggregate Exemption & Order 2018". The Receiver confirms acceptance of the Terms and Conditions as agreed on the Credit Application.

Delivery Docket

Metropolitan Demolitions & Recycling Pty Ltd
Rear 396 Princes Highway
St Peters NSW 2044
PHONE: 8595-3440
ABN:63 003 107 980
FAX:9517-9492

WEIGHBRIDGE DOCKET - CUSTOMER COPY

DATE: 27/03/2020 TIME: 14:20

DOCKET: 20005282-MET.0

CUSTOMER: Christie Civil Pty Ltd
AC NO : 3271

ORDER NO: pyrmont

QUOTE: 107714

REGO: CG72MD

GROSS: 9.98t
TARE: 4.82t(M)
NETT: 5.16t

Charge Fee:
GST:

Total Price:

Payments:

PRODUCT: DGB-20

Job Daily Total: 0.00t

SITE: 107714 - Christie Civil Ex-Bin & Tipping all sites

DELIVERY DETAILS:

Drivers Name: .....

Signature: .....

This material complies with "The Metropolitan Demolitions & Recycling Pty Ltd Recovered Aggregate Exemption & Order 2018". The Receiver confirms acceptance of the Terms and Conditions as agreed on the Credit Application.

Appendix K: Off-site Disposal Dockets

List of Disposal Dockets

17-Dec	18-Dec	19-Dec	12-Mar	13-Mar	24-Mar	30-Mar	17-Apr	20-Apr	19-May
11.12	11.94	10.72	12.06	10.94	10.98	10.68	10.5	9.58	10.26
13	10.48	10.82	12.56	12.28	10.24	10.58	10.86	9.46	11.04
12.82	12.26	11.42	14.98	12.16	11.04	10.74	10.8	10.5	9.48
11.22	12.62	12.68	11.86	11.82	11.46		9.22	11.48	
10.44	12.22	11.54	14.88	11.58	10.1		10.18	10.9	
10.96	12.36	10.7	12.06	12.84	10.68		9.72	10.62	
11.3	11.68	11.8	11.62	11.4	10.52		11.7	10.28	
11.94	9.82	11.48	12.16	12.56	10.1		10.5	10.52	
9.68	9.6	11.74	14.82	10.76			11.2		
10.82	10.08	10.94	14.76				10.04		
10.58	11.4	9.86	12.08				10.3		
12.46	12.2	11.24	11.06				8.88		
11.88	12.26	11.14	10.58						
13.98	13.24	11.24	11.38						
12.82	12.22		11.48						
13.82	12.7		11.24						
11.96	15.12								
11	13.62								
11.7	13.04								
12.02	12.42								
12.42	13.14								
10.68	12.9								
9.96	12.1								
9.06	13.32								
12.34	11.56								
12.12	11.22								
12.12	11.6								
11.58	13.28								
13.24	12.8								
12.58	9.96								
11.62	10.34								
13.42	9.9								
	10.46								
	11.04								
	10.6								
	11.22								
376.66	**426.72**	**157.32**	**199.58**	**106.34**	**85.12**	**32.00**	**123.9**	**83.34**	**30.78**

RESOURCECO MATERIAL SOLUTIONS

VIC OFFICE: Suite 2, Lvl 3, 6 Nexus Crt, Mulgrave VIC 3170 NSW OFFICE: 86 Bourke Rd, Alexandria NSW 2015 PH. 1300 131 222

DATE	17-12-2019	CUSTOMER	christie civil	JOB NO.	75198
PICKUP LOCATION / JOB SITE	5 Bank st Pyrmont	CONTRACTOR NAME		PRINTED DOCKET NO.	06643
TRUCK REGISTRATION	CN 26 LWH	TRAILER REGISTRATION	—	MACHINE TYPE	steel bin
ATTACHMENTS	—				

EQUIPMENT TYPE ☑ TANDEM/BOGEY ☐ TRUCK & TRI TRAILER ☐ TRUCK & 4 AXLE TRAILER ☐ SEMI ☐ TRUCK & 5 AXLE TRAILER ☐ 19M B-DOUBLE ☐ B-DOUBLE ☐ OTHER:

☑ CONTRACT RATE ☐ HOURLY RATE ☐ EPA RATE ☐ NIGHT RATE ☐ TOLLS ☐ SITE ALLOW $_____ PER HOUR

LOAD #	START / PICKUP TIME	FINISH / DELIVERY TIME	WAITING TIME (HRS/MINS)	CLIENT SIGNATURE TO APPROVE WAITING TIME	MATERIAL	m³/Ton	DISPOSAL SITES USED	STEER	DRIVE	TRAILER A	TRAILER B	ALLOWABLE GCM
								ALLOWABLE AXLE READINGS				
								6·5 +	17- +	— +	— =	23·00
1	07·00	08·18			GSW-	11·12	BREEN-Kurnell	6·1	16·8	—	—	22·62
2	09·30	10·33			"	13·00	"	6·2	16·9	—	—	23·00
3	11·30	12·59			"	12·82	"	6·4	16·8	—	—	22·9
4	13·38	15·00			"	11·22	"	6·3	16·9	—	—	22·9
5												
6												
7												
8												
9												
10					Total	48·160	Net weight					

ENTERED
21 DEC 2019
BY: .....

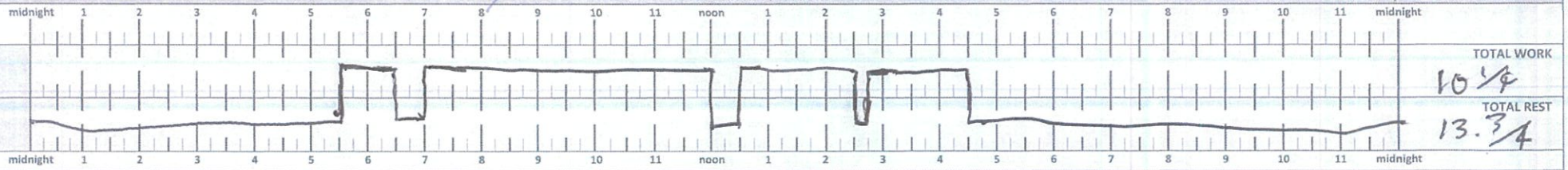
HOURLY HIRE	START		TOTAL BREAKS		FINISH		TOTAL BILLABLE HOURS	

The customer has engaged ResourceCo Material Solutions to provide the service in accordance with ResourceCo Material Solutions Terms & Conditions (available at www.resourceco.com.au)

PICKUP LOCATION			
COMPANY NAME		POSITION	FOREMAN
PRINT NAME	Lewis Ilieski	CUSTOMER SIGNATURE	

DELIVERY LOCATION			
COMPANY NAME		POSITION	
PRINT NAME		CUSTOMER SIGNATURE	

WORK REST RECORD — All drivers to accurately record work and rest hours



TOTAL WORK 10 1/4
TOTAL REST 13.3/4

DRIVER DECLARATION

PRESTART CHECKS COMPLETED - YES ☑ I DECLARE THAT I AM APPROPIATELY LICENCED AND FIT FOR WORK (as per trip planner) - YES ☑ I have provided a service in accordance with ResourceCo Material Solutions Terms & Conditions - YES ☑ (available at www.resourceco.com.au)

DRIVER COMPANY NAME	Railroad transport	DRIVER NAME	David Correll	DRIVER SIGNATURE	David Correll

WHITE – ResourceCo Copy **BLUE** – Pickup Customer Copy **PINK** – Delivery Customer Copy **YELLOW** – Operator Copy

FORM 310 | VERSION 2.0 | 21.6.19 ATTACH ALL WEIGHBRIDGE DOCKETS THIS DOCUMENT IS UNCONTROLLED ONCE PRINTED

BREENRESOURCES

Breen Resources Pty. Ltd.
ABN 31615045497
330 Captain Cook Drive
KURNELL NSW 2231
PHONE: 96688539
EPL: #4608 - Disposal | #20697 - Resour Recovery

DELIVERY DOCKET

Docket:	WBT0029845/1
Date:	17/12/2019 8:01:26 AM
Printed:	17/12/2019 8:01:43 AM
Operator:	Karen
Customer:	RESOURCECO MATERIA SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	CN25LH
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

11.12t

Gross	22.62t
Tare	11.5t
Net	11.12t

Initial Inspection .....
Final Inspection .....
Load Rejected .....
Reason .....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

BREENRESOURCES

Breen Resources Pty. Ltd.
ABN 31615045497
330 Captain Cook Drive
KURNELL NSW 2231
PHONE: 96688539
EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0029898/1
Date:	17/12/2019 10:23:02 AM
Printed:	17/12/2019 10:31:02 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	CN26LH
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

13t

Gross	24.42t
Tare	11.42t
Net	13.00t

Initial Inspection .....
Final Inspection .....
Load Rejected .....
Reason .....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

BREENRESOURCES

Breen Resources Pty. Ltd.
ABN 31615045497
330 Captain Cook Drive
KURNELL NSW 2231
PHONE: 96688539
EPL: #4608 - Disposal | #20697 - Resour Recovery

DELIVERY DOCKET

Docket:	WBT0029957/1
Date:	17/12/2019 12:50:01 P
Printed:	17/12/2019 12:50:07 P
Operator:	Karen
Customer:	RESOURCECO MATERIA SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	CN26LH
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

12.82t

Gross	24.24t
Tare	11.42t
Net	12.82t

Initial Inspection .....
Final Inspection .....
Load Rejected .....
Reason .....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

BREENRESOURCES

Breen Resources Pty. Ltd.
ABN 31615045497
330 Captain Cook Drive
KURNELL NSW 2231
PHONE: 96688539
EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0030001/1
Date:	17/12/2019 2:50:34 PM
Printed:	17/12/2019 2:50:38 PM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	CN26LH
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

11.22t

Gross	22.64t
Tare	11.42t
Net	11.22t

Initial Inspection .....
Final Inspection .....
Load Rejected .....
Reason .....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

RESOURCECO MATERIAL SOLUTIONS

VIC OFFICE: Suite 2, Lvl 3, 6 Nexus Crt, Mulgrave VIC 3170 NSW OFFICE: 86 Bourke Rd, Alexandria NSW 2015 PH. 1300 131 222

DATE	17/12/19.	CUSTOMER	christie civil.	JOB NO.	75798.	PRINTED DOCKET NO. 08619
PICKUP LOCATION / JOB SITE	christie civil / pyrmont			CONTRACTOR NAME	RAILROAD	
TRUCK REGISTRATION	XW03DR.	TRAILER REGISTRATION	—	MACHINE TYPE		ATTACHMENTS

EQUIPMENT TYPE ☐ TANDEM/BOGEY ☐ TRUCK & TRI TRAILER ☑ TRUCK & 4 AXLE TRAILER ☐ SEMI ☐ TRUCK & 5 AXLE TRAILER ☐ 19M B-DOUBLE ☐ B-DOUBLE ☐ OTHER:

☐ CONTRACT RATE ☐ HOURLY RATE ☐ EPA RATE ☐ NIGHT RATE ☐ TOLLS ☐ SITE ALLOW $_____ PER HOUR

LOAD #	START / PICKUP TIME	FINISH / DELIVERY TIME	WAITING TIME (HRS/MINS)	CLIENT SIGNATURE TO APPROVE WAITING TIME	MATERIAL	m³/Ton	DISPOSAL SITES USED	STEER	DRIVE	TRAILER A	TRAILER B	ALLOWABLE GCM
								ALLOWABLE AXLE READINGS				
								6.5 +	16.5 +	— +	— +	— = —
1	7.00	8.50			QSW.	10.4	Breen/Kornell	5.0.	15.4.			
2	10.00.	11.10.			QSW.	10.9.	〃 〃	5.0.	16.1			
3	1.15	2.30			QSW	11.1	〃 〃	5.0	16.4			
4												
5												
6												
7												
8												
9												
10												

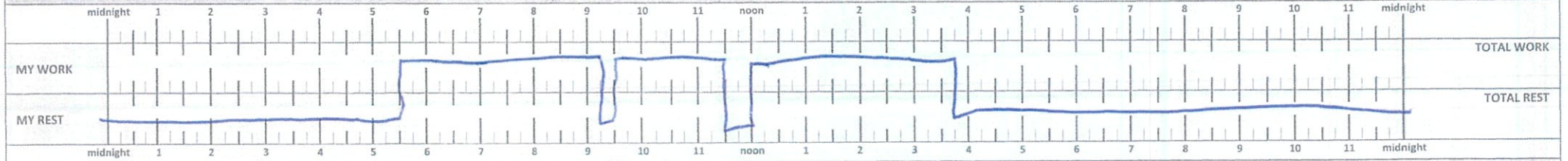
HOURLY HIRE	START	530 AM	TOTAL BREAKS		FINISH	3.45 pm.	TOTAL BILLABLE HOURS	

The customer has engaged ResourceCo Material Solutions to provide the service in accordance with ResourceCo Material Solutions Terms & Conditions (available at www.resourceco.com.au)

PICKUP LOCATION			
COMPANY NAME	"	POSITION	FOREMAN
PRINT NAME	LOUIE ILIESKI	CUSTOMER SIGNATURE	

DELIVERY LOCATION			
COMPANY NAME		POSITION	
PRINT NAME		CUSTOMER SIGNATURE	

WORK REST RECORD — All drivers to accurately record work and rest hours



DRIVER DECLARATION

PRESTART CHECKS COMPLETED - YES ☑ I DECLARE THAT I AM APPROPIATELY LICENCED AND FIT FOR WORK (as per trip planner) - YES ☑ I have provided a service in accordance with ResourceCo Material Solutions Terms & Conditions - YES ☑ (available at www.resourceco.com.au)

DRIVER COMPANY NAME	RAILROAD	DRIVER NAME	M. ALNAJJAR	DRIVER SIGNATURE	

WHITE – ResourceCo Copy BLUE – Pickup Customer Copy PINK – Delivery Customer Copy YELLOW – Operator Copy

FORM 310 | VERSION 2.0 | 21.6.19 ATTACH ALL WEIGHBRIDGE DOCKETS THIS DOCUMENT IS UNCONTROLLED ONCE PRINTED

BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0029863/1
Date:	17/12/2019 8:38:00 AM
Printed:	17/12/2019 8:38:06 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	XN03DR
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

10.44t

Gross	21.02t
Tare	10.58t
Net	10.44t

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0029913/1
Date:	17/12/2019 10:59:07 AM
Printed:	17/12/2019 10:59:13 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	XN03DR
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

10.96t

Gross	21.54t
Tare	10.58t
Net	10.96t

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0029990/1
Date:	17/12/2019 2:18:21 PM
Printed:	17/12/2019 2:18:26 PM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	XN03DR
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

11.3t

Gross	21.88t
Tare	10.58t
Net	11.30t

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

RESOURCECO MATERIAL SOLUTIONS

VIC OFFICE: Suite 2, Lvl 3, 6 Nexus Crt, Mulgrave VIC 3170 NSW OFFICE: 86 Bourke Rd, Alexandria NSW 2015 PH. 1300 131 222

DATE	17-12-2019	CUSTOMER	Christie Civil PTY LTD	JOB NO.	75198
PICKUP LOCATION / JOB SITE	5 Bank St. Pyrmont	CONTRACTOR NAME	ResourceCo	PRINTED DOCKET NO.	15002
TRUCK REGISTRATION	XN46DR	TRAILER REGISTRATION	–	MACHINE TYPE	Bogie
ATTACHMENTS					

EQUIPMENT TYPE ☑ TANDEM/BOGEY ☐ TRUCK & TRI TRAILER ☐ TRUCK & 4 AXLE TRAILER ☐ SEMI ☐ TRUCK & 5 AXLE TRAILER ☐ 19M B-DOUBLE ☐ B-DOUBLE ☐ OTHER:

☐ CONTRACT RATE ☐ HOURLY RATE ☐ EPA RATE ☐ NIGHT RATE ☐ TOLLS ☐ SITE ALLOW $_____ PER HOUR

LOAD #	START / PICKUP TIME	FINISH / DELIVERY TIME	WAITING TIME (HRS/MINS)	CLIENT SIGNATURE TO APPROVE WAITING TIME	MATERIAL	m³/Ton	DISPOSAL SITES USED	STEER	DRIVE	TRAILER A	TRAILER B	ALLOWABLE GCM
								ALLOWABLE AXLE READINGS				
								6.5 +	16.5 +	N/A +	N/A =	23
1	7:00	8:50			GSW	11.5t	Breen group	6.5	16.5	–	–	23
2	9:40	10:40			GSW	10t	Breen group	6	16	–	–	22
3	12:15	1:20			GSW	10.5t	Breen group	6	16.5	–	–	22.5
4	2:20	4:00			GSW	11t	Breen group					
5												
6												
7												
8												
9												
10												

× (4 Loads)

HOURLY HIRE	START		TOTAL BREAKS		FINISH		TOTAL BILLABLE HOURS	

The customer has engaged ResourceCo Material Solutions to provide the service in accordance with ResourceCo Material Solutions Terms & Conditions (available at www.resourceco.com.au)

PICKUP LOCATION			
COMPANY NAME	Christie Civil PTY LTD	POSITION	FOREMAN
PRINT NAME	LOUIS ILIEVSKI	CUSTOMER SIGNATURE	

DELIVERY LOCATION			
COMPANY NAME	Breen Group Kurnell	POSITION	
PRINT NAME		CUSTOMER SIGNATURE	

WORK REST RECORD — All drivers to accurately record work and rest hours

midnight 1 2 3 4 5 6 7 8 9 10 11 noon 1 2 3 4 5 6 7 8 9 10 11 midnight

MY WORK — TOTAL WORK

MY REST — TOTAL REST

midnight 1 2 3 4 5 6 7 8 9 10 11 noon 1 2 3 4 5 6 7 8 9 10 11 midnight

DRIVER DECLARATION

PRESTART CHECKS COMPLETED - YES ☑ I DECLARE THAT I AM APPROPIATELY LICENCED AND FIT FOR WORK (as per trip planner) - YES ☑ I have provided a service in accordance with ResourceCo Material Solutions Terms & Conditions (available at www.resourceco.com.au) - YES ☑

DRIVER COMPANY NAME	Qube	DRIVER NAME	YASIR ALI KHAN	DRIVER SIGNATURE	

WHITE – ResourceCo Copy BLUE – Pickup Customer Copy ATTACH ALL WEIGHBRIDGE DOCKETS PINK – Delivery Customer Copy YELLOW – Operator Copy

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BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0029859/1
Date:	17/12/2019 8:32:29 AM
Printed:	17/12/2019 8:32:35 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	XN46DR
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

11.94t

Gross	**23.8t**
Tare	**11.86t**
Net	**11.94t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE; 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0029904/1
Date:	17/12/2019 10:34:07 AM
Printed:	17/12/2019 10:34:15 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	XN46DR
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

9.68t

Gross	**21.54t**
Tare	**11.86t**
Net	**9.68t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resourc Recovery

DELIVERY DOCKET

Docket:	WBT0029966/1
Date:	17/12/2019 1:07:29 PM
Printed:	17/12/2019 1:07:34 PM
Operator:	Karen
Customer:	RESOURCECO MATERIA SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	XN46DR
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

10.82t

Gross	**22.68t**
Tare	**11.86t**
Net	**10.82t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0030019/1
Date:	17/12/2019 3:30:19 PM
Printed:	17/12/2019 3:30:26 PM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	XN46DR
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

10.58t

Gross	**22.44t**
Tare	**11.86t**
Net	**10.58t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

RESOURCECO MATERIAL SOLUTIONS

VIC OFFICE: Suite 2, Lvl 3, 6 Nexus Crt, Mulgrave VIC 3170 NSW OFFICE: 86 Bourke Rd, Alexandria NSW 2015 PH. 1300 131 222

DATE	17/12/19	CUSTOMER	Christie Civil	JOB NO.	75198	PRINTED DOCKET NO.	17424
PICKUP LOCATION / JOB SITE	5 Bank ST pyrmont			CONTRACTOR NAME	Resourceco		
TRUCK REGISTRATION	XN49DR	TRAILER REGISTRATION	—	MACHINE TYPE	Bogie	ATTACHMENTS	✓

EQUIPMENT TYPE ☑ TANDEM/BOGEY ☐ TRUCK & TRI TRAILER ☐ TRUCK & 4 AXLE TRAILER ☐ SEMI ☐ TRUCK & 5 AXLE TRAILER ☐ 19M B-DOUBLE ☐ B-DOUBLE ☐ OTHER: _____

☐ CONTRACT RATE ☐ HOURLY RATE ☐ EPA RATE ☐ NIGHT RATE ☐ TOLLS ☐ SITE ALLOW $_____ PER HOUR

LOAD #	START / PICKUP TIME	FINISH / DELIVERY TIME	WAITING TIME (HRS/MINS)	CLIENT SIGNATURE TO APPROVE WAITING TIME	MATERIAL	m³/Ton	DISPOSAL SITES USED	STEER	DRIVE	TRAILER A	TRAILER B	ALLOWABLE GCM
								ALLOWABLE AXLE READINGS				
								6.5 +	17.0 +	— +	— =	23
1	7:00	8:40			GSW	12.04	Breen Kurnell	6.5	16.5	—	—	22.5
2	9:45	10:40			GSW	11.8	Breen Kurnell	6.5	16.5	—	—	23.0
3	11:25	12:30			GSW	12.0	Breen Kurnell	6.5	17.0	—	—	23.0
4	1:15				GSW	12.0	Breen Kurnell	6.5	16.9	—	—	23.0
5												
6												
7												
8												
9												
10												

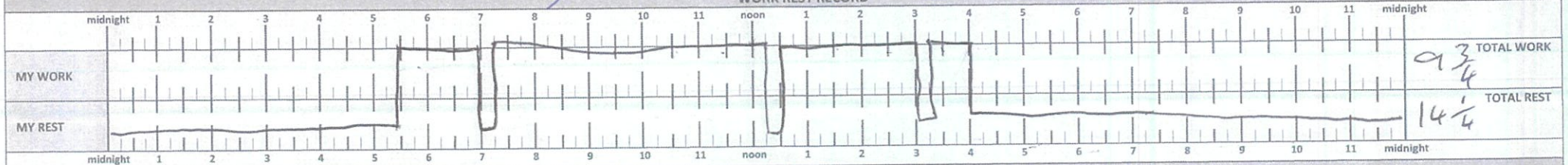
HOURLY HIRE	START		TOTAL BREAKS		FINISH		TOTAL BILLABLE HOURS	

The customer has engaged ResourceCo Material Solutions to provide the service in accordance with ResourceCo Material Solutions Terms & Conditions (available at www.resourceco.com.au)

PICKUP LOCATION			
COMPANY NAME		POSITION	FOREMAN
PRINT NAME	Louie Ilieski	CUSTOMER SIGNATURE	

DELIVERY LOCATION			
COMPANY NAME		POSITION	
PRINT NAME		CUSTOMER SIGNATURE	

WORK REST RECORD — All drivers to accurately record work and rest hours



DRIVER DECLARATION

PRESTART CHECKS COMPLETED - YES ☑ I DECLARE THAT I AM APPROPIATELY LICENCED AND FIT FOR WORK (as per trip planner) - YES ☑ I have provided a service in accordance with ResourceCo Material Solutions Terms & Conditions - YES (available at www.resourceco.com.au) ☐

DRIVER COMPANY NAME	Resourceco	DRIVER NAME	Con Multari	DRIVER SIGNATURE	

WHITE – ResourceCo Copy **BLUE** – Pickup Customer Copy **PINK** – Delivery Customer Copy **YELLOW** – Operator Copy

FORM 310 | VERSION 2.0 | 21.6.19

ATTACH ALL WEIGHBRIDGE DOCKETS

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BREENRESOURCES

Breen Resources Pty. Ltd.
ABN 31615045497
330 Captain Cook Drive
KURNELL NSW 2231
PHONE: 96688539
EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0029862/1
Date:	17/12/2019 8:36:38 AM
Printed:	17/12/2019 8:46:13 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	XN49DR
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

12.46t

Gross	23.04t
Tare	10.58t
Net	12.46t

Initial Inspection .....
Final Inspection .....
Load Rejected .....
Reason .....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

BREENRESOURCES

Breen Resources Pty. Ltd.
ABN 31615045497
330 Captain Cook Drive
KURNELL NSW 2231
PHONE: 96688539
EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0029906/1
Date:	17/12/2019 10:35:55 AM
Printed:	17/12/2019 10:36:03 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	XN49DR
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

11.88t

Gross	22.46t
Tare	10.58t
Net	11.88t

Initial Inspection .....
Final Inspection .....
Load Rejected .....
Reason .....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

BREENRESOURCES

Breen Resources Pty. Ltd.
ABN 31615045497
330 Captain Cook Drive
KURNELL NSW 2231
PHONE: 96688539
EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0029950/1
Date:	17/12/2019 12:26:23 PM
Printed:	17/12/2019 12:26:28 PM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	XN49DR
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

13.98t

Gross	24.56t
Tare	10.58t
Net	13.98t

Initial Inspection .....
Final Inspection .....
Load Rejected .....
Reason .....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

BREENRESOURCES

Breen Resources Pty. Ltd.
ABN 31615045497
330 Captain Cook Drive
KURNELL NSW 2231
PHONE: 96688539
EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0029989/1
Date:	17/12/2019 2:14:17 PM
Printed:	17/12/2019 2:14:22 PM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	XN49DR
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

12.82t

Gross	23.4t
Tare	10.58t
Net	12.82t

Initial Inspection .....
Final Inspection .....
Load Rejected .....
Reason .....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

RESOURCECO MATERIAL SOLUTIONS

533.

VIC OFFICE: Suite 2, Lvl 3, 6 Nexus Crt, Mulgrave VIC 3170 NSW OFFICE: 86 Bourke Rd, Alexandria NSW 2015 PH. 1300 131 222

DATE	17/12/19.	CUSTOMER	Christie Civil.	JOB NO.	75198.	PRINTED DOCKET NO.	00843
PICKUP LOCATION / JOB SITE	5 Bank St Pyrmont			CONTRACTOR NAME	Resource Co GE Hughes		
TRUCK REGISTRATION	XN50DR	TRAILER REGISTRATION		MACHINE TYPE		ATTACHMENTS	

EQUIPMENT TYPE ☑ TANDEM/BOGEY ☐ TRUCK & TRI TRAILER ☐ TRUCK & 4 AXLE TRAILER ☐ SEMI ☐ TRUCK & 5 AXLE TRAILER ☐ 19M B-DOUBLE ☐ B-DOUBLE ☐ OTHER:

☐ CONTRACT RATE ☐ HOURLY RATE ☐ EPA RATE ☐ NIGHT RATE ☐ TOLLS ☐ SITE ALLOW $_____ PER HOUR

LOAD #	START / PICKUP TIME	FINISH / DELIVERY TIME	WAITING TIME (HRS/MINS)	CLIENT SIGNATURE TO APPROVE WAITING TIME	MATERIAL	m³/Ton	DISPOSAL SITES USED	STEER	DRIVE	TRAILER A	TRAILER B	ALLOWABLE GCM
								ALLOWABLE AXLE READINGS				
1	7.50	9.20			General Soil.	21.64??	Soil waste.	6.5	17.2	23.20		
2	10.18	11.29				22.78		6.5	16.0	22.78		
3	13.11	14.30				21.82		6.5	15.5	21.82		
4												
5												
6												
7												
8												
9												
10												

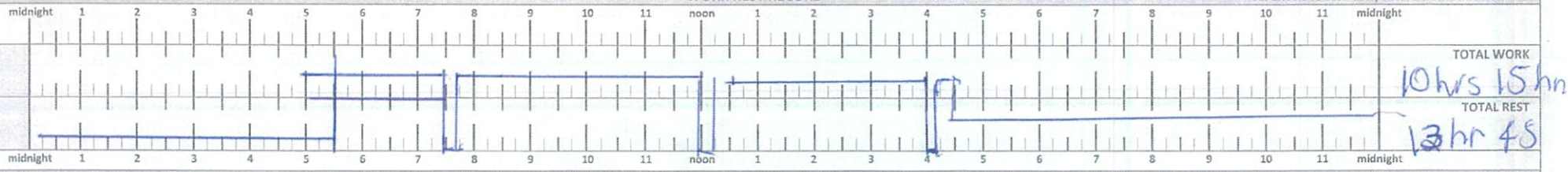
HOURLY HIRE	START	7.00	TOTAL BREAKS	45min.	FINISH	14.30	TOTAL BILLABLE HOURS	

The customer has engaged ResourceCo Material Solutions to provide the service in accordance with ResourceCo Material Solutions Terms & Conditions (available at www.resourceco.com.au)

PICKUP LOCATION			
COMPANY NAME		POSITION	
PRINT NAME		CUSTOMER SIGNATURE	

DELIVERY LOCATION			
COMPANY NAME		POSITION	
PRINT NAME		CUSTOMER SIGNATURE	

WORK REST RECORD — All drivers to accurately record work and rest hours



TOTAL WORK 10hrs 15hn

TOTAL REST 13hr 45

DRIVER DECLARATION

PRESTART CHECKS COMPLETED - YES ☑ I DECLARE THAT I AM APPROPIATELY LICENCED AND FIT FOR WORK (as per trip planner) - YES ☑ I have provided a service in accordance with ResourceCo Material Solutions Terms & Conditions (available at www.resourceco.com.au) - YES ☑

DRIVER COMPANY NAME		DRIVER NAME	Carmee Crebbin	DRIVER SIGNATURE	

WHITE – ResourceCo Copy **BLUE** – Pickup Customer Copy **PINK** – Delivery Customer Copy **YELLOW** – Operator Copy

FORM 310 | VERSION 2.0 | 21.6.19 ATTACH ALL WEIGHBRIDGE DOCKETS THIS DOCUMENT IS UNCONTROLLED ONCE PRINTED

BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0029873/1
Date:	17/12/2019 9:09:39 AM
Printed:	17/12/2019 9:09:44 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	XN50DR
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

13.82t

Gross	**24.64t**
Tare	**10.82t**
Net	**13.82t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30
"Your Partners In Material Management"

BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0029928/1
Date:	17/12/2019 11:34:05 AM
Printed:	17/12/2019 11:34:10 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	XN50DR
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

11.96t

Gross	**22.78t**
Tare	**10.82t**
Net	**11.96t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0029993/1
Date:	17/12/2019 2:21:30 PM
Printed:	17/12/2019 2:21:36 PM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	XN50DR
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

11t

Gross	**21.82t**
Tare	**10.82t**
Net	**11.00t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

RESOURCECO MATERIAL SOLUTIONS

VIC OFFICE: Suite 2, Lvl 3, 6 Nexus Crt, Mulgrave VIC 3170 NSW OFFICE: 86 Bourke Rd, Alexandria NSW 2015 PH. 1300 131 222

DATE	17/12/19	CUSTOMER	Christie Cwal Pty Ltd.	JOB NO.	75198	PRINTED DOCKET NO. 16331
PICKUP LOCATION / JOB SITE	5 Bank St Pyrmont.	CONTRACTOR NAME	Resourceco.			
TRUCK REGISTRATION	CN35RK	TRAILER REGISTRATION		MACHINE TYPE		ATTACHMENTS

EQUIPMENT TYPE ☑ TANDEM/BOGEY ☐ TRUCK & TRI TRAILER ☐ TRUCK & 4 AXLE TRAILER ☐ SEMI ☐ TRUCK & 5 AXLE TRAILER ☐ 19M B-DOUBLE ☐ B-DOUBLE ☐ OTHER:

☐ CONTRACT RATE ☐ HOURLY RATE ☐ EPA RATE ☐ NIGHT RATE ☐ TOLLS ☐ SITE ALLOW $_____ PER HOUR

LOAD #	START / PICKUP TIME	FINISH / DELIVERY TIME	WAITING TIME (HRS/MINS)	CLIENT SIGNATURE TO APPROVE WAITING TIME	MATERIAL	m³/Ton	DISPOSAL SITES USED	STEER	+	DRIVE	+	TRAILER A	+	TRAILER B	=	ALLOWABLE GCM
								ALLOWABLE AXLE READINGS								
1	7:15	9:06	30-		GSW	11:70	Breen Kurnell									
2	10:00	11:25	5-		" "	12:02	" "									
3	12:05	13:50	10-		" "	12:42	" "									
4																
5																
6																
7																
8																
9																
10																

HOURLY HIRE	START		TOTAL BREAKS		FINISH		TOTAL BILLABLE HOURS	

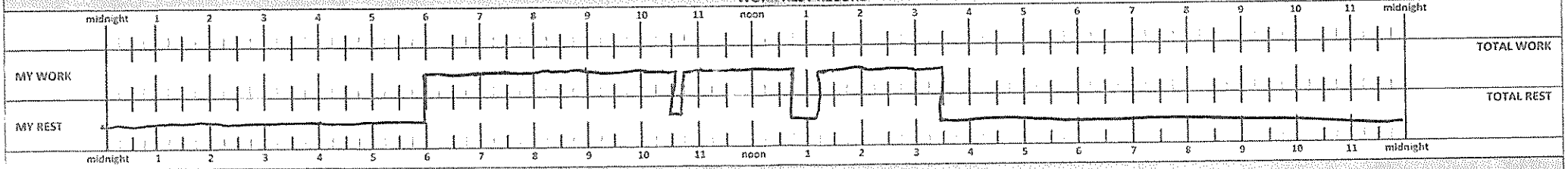
The customer has engaged ResourceCo Material Solutions to provide the service in accordance with ResourceCo Material Solutions Terms & Conditions (available at www.resourceco.com.au)

PICKUP LOCATION			
COMPANY NAME		POSITION	
PRINT NAME		CUSTOMER SIGNATURE	

DELIVERY LOCATION			
COMPANY NAME		POSITION	
PRINT NAME		CUSTOMER SIGNATURE	

WORK REST RECORD

All drivers to accurately record work and rest hours



DRIVER DECLARATION

PRESTART CHECKS COMPLETED - YES ☐ I DECLARE THAT I AM APPROPIATELY LICENCED AND FIT FOR WORK (as per trip planner) - YES ☐ I have provided a service in accordance with ResourceCo Material Solutions Terms & Conditions - YES ☐ (available at www.resourceco.com.au)

DRIVER COMPANY NAME	Resourceco.	DRIVER NAME	John Manna	DRIVER SIGNATURE	

WHITE – ResourceCo Copy BLUE – Pickup Customer Copy PINK – Delivery Customer Copy YELLOW – Operator Copy

FORM 310 | VERSION 2.0 | 21.6.19

ATTACH ALL WEIGHBRIDGE DOCKETS

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BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0029866/1
Date:	17/12/2019 8:48:58 AM
Printed:	17/12/2019 8:49:07 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	CN35RK
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

11.7t

Gross	**22.78t**
Tare	**11.08t**
Net	**11.70t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0029916/1
Date:	17/12/2019 11:10:17 AM
Printed:	17/12/2019 11:10:24 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	CN35RK
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

12.02t

Gross	**23.1t**
Tare	**11.08t**
Net	**12.02t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0029976/1
Date:	17/12/2019 1:37:38 PM
Printed:	17/12/2019 1:37:43 PM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	CN35RK
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

12.42t

Gross	**23.5t**
Tare	**11.08t**
Net	**12.42t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

RESOURCECO MATERIAL SOLUTIONS

VIC OFFICE: Suite 2, Lvl 3, 6 Nexus Crt, Mulgrave VIC 3170 NSW OFFICE: 86 Bourke Rd, Alexandria NSW 2015 PH. 1300 131 222

DATE	17/12/19	CUSTOMER	Christie civil	JOB NO.	75198
PICKUP LOCATION / JOB SITE		CONTRACTOR NAME	Qube	PRINTED DOCKET NO.	06589
TRUCK REGISTRATION	XN48GT	TRAILER REGISTRATION		MACHINE TYPE	SCANIA
ATTACHMENTS					

EQUIPMENT TYPE ☒ TANDEM/BOGEY ☐ TRUCK & TRI TRAILER ☐ TRUCK & 4 AXLE TRAILER ☐ SEMI ☐ TRUCK & 5 AXLE TRAILER ☐ 19M B-DOUBLE ☐ B-DOUBLE ☐ OTHER:

☐ CONTRACT RATE ☐ HOURLY RATE ☐ EPA RATE ☐ NIGHT RATE ☐ TOLLS ☐ SITE ALLOW $_____ PER HOUR

LOAD #	START / PICKUP TIME	FINISH / DELIVERY TIME	WAITING TIME (HRS/MINS)	CLIENT SIGNATURE TO APPROVE WAITING TIME	MATERIAL	m³/Ton	DISPOSAL SITES USED	STEER	DRIVE	TRAILER A	TRAILER B	ALLOWABLE GCM
								ALLOWABLE AXLE READINGS				
1	830	1000			GSW	20.7		6.5	15.1			20.7
2	1110	12.15			"	21.5		600	15.3			21.5
3	1310	1505			"	19.8		"	15.1			20.0
4												
5												
6												
7												
8												
9												
10												

3 - Loads

HOURLY HIRE	START		TOTAL BREAKS		FINISH		TOTAL BILLABLE HOURS	

The customer has engaged ResourceCo Material Solutions to provide the service in accordance with ResourceCo Material Solutions Terms & Conditions (available at www.resourceco.com.au)

PICKUP LOCATION			
COMPANY NAME		POSITION	
PRINT NAME		CUSTOMER SIGNATURE	

DELIVERY LOCATION			
COMPANY NAME		POSITION	
PRINT NAME		CUSTOMER SIGNATURE	

WORK REST RECORD — All drivers to accurately record work and rest hours

midnight 1 2 3 4 5 6 7 8 9 10 11 noon 1 2 3 4 5 6 7 8 9 10 11 midnight

MY WORK — TOTAL WORK

MY REST — TOTAL REST

midnight 1 2 3 4 5 6 7 8 9 10 11 noon 1 2 3 4 5 6 7 8 9 10 11 midnight

DRIVER DECLARATION

PRESTART CHECKS COMPLETED - YES ☒ I DECLARE THAT I AM APPROPIATELY LICENCED AND FIT FOR WORK (as per trip planner) - YES ☒ I have provided a service in accordance with ResourceCo Material Solutions Terms & Conditions - YES (available at www.resourceco.com.au) ☒

DRIVER COMPANY NAME	Qube	DRIVER NAME	Ramzi	DRIVER SIGNATURE	

WHITE – ResourceCo Copy **BLUE** – Pickup Customer Copy **PINK** – Delivery Customer Copy **YELLOW** – Operator Copy

FORM 310 | VERSION 2.0 | 21.6.19

ATTACH ALL WEIGHBRIDGE DOCKETS

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BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0029939/1
Date:	17/12/2019 11:57:23 AM
Printed:	17/12/2019 11:57:32 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	XN48GT
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

10.68t

Gross	21.46t
Tare	10.78t
Net	10.68t

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0029880/1
Date:	17/12/2019 9:24:39 AM
Printed:	17/12/2019 9:38:02 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	XN48GT
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

9.96t

Gross	20.74t
Tare	10.78t
Net	9.96t

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0030000/1
Date:	17/12/2019 2:47:26 PM
Printed:	17/12/2019 2:47:30 PM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	XN48GT
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

9.06t

Gross	19.84t
Tare	10.78t
Net	9.06t

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

RESOURCECO MATERIAL SOLUTIONS

VIC OFFICE: Suite 2, Lvl 3, 6 Nexus Crt, Mulgrave VIC 3170 NSW OFFICE: 86 Bourke Rd, Alexandria NSW 2015 PH. 1300 131 222

DATE	17.12.19	CUSTOMER	Christie civil pty	JOB NO.	75198	PRINTED DOCKET NO.	16056
PICKUP LOCATION / JOB SITE	5 Bank st pymont			CONTRACTOR NAME	Qube		
TRUCK REGISTRATION	CN81RH	TRAILER REGISTRATION	X	MACHINE TYPE		ATTACHMENTS	

EQUIPMENT TYPE ☒ TANDEM/BOGEY ☐ TRUCK & TRI TRAILER ☐ TRUCK & 4 AXLE TRAILER ☐ SEMI ☐ TRUCK & 5 AXLE TRAILER ☐ 19M B-DOUBLE ☐ B-DOUBLE ☐ OTHER:

☐ CONTRACT RATE ☐ HOURLY RATE ☐ EPA RATE ☐ NIGHT RATE ☐ TOLLS ☐ SITE ALLOW $_____ PER HOUR

LOAD #	START / PICKUP TIME	FINISH / DELIVERY TIME	WAITING TIME (HRS/MINS)	CLIENT SIGNATURE TO APPROVE WAITING TIME	MATERIAL	m³/Ton	DISPOSAL SITES USED	STEER	DRIVE	TRAILER A	TRAILER B	ALLOWABLE GCM
								ALLOWABLE AXLE READINGS				
								6.5 +	16.5 +	X +	X =	23.00
1	6:45	8:40			GSW	12:20	Breen Kurnell	6.5		X	X	23.00
2	9:40	10:45			〃	12:12	〃	6.5		X	X	22.92
3	12:10	1:20			〃	12:12	〃	6.5		X	X	22.92
4	2:10	3:25			〃	12:20	〃	6.5		X	X	23.00
5												
6												
7												
8												
9												
10												

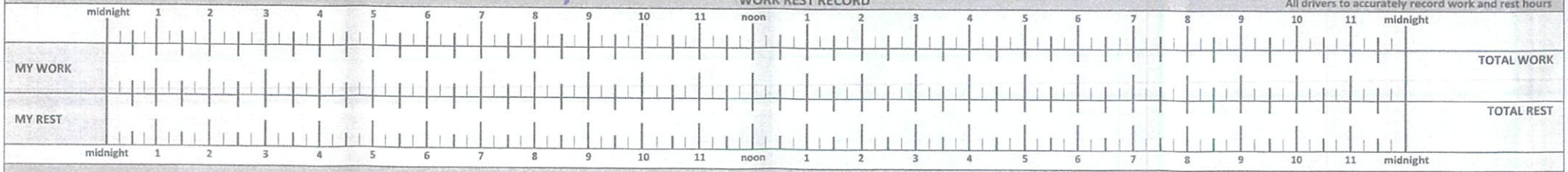
HOURLY HIRE	START	5:15	TOTAL BREAKS		FINISH	5:15	TOTAL BILLABLE HOURS	

The customer has engaged ResourceCo Material Solutions to provide the service in accordance with ResourceCo Material Solutions Terms & Conditions (available at www.resourceco.com.au)

PICKUP LOCATION			
COMPANY NAME		POSITION	FOREMAN
PRINT NAME	Louie Iliesu	CUSTOMER SIGNATURE	

DELIVERY LOCATION			
COMPANY NAME		POSITION	
PRINT NAME		CUSTOMER SIGNATURE	

WORK REST RECORD — All drivers to accurately record work and rest hours



DRIVER DECLARATION

PRESTART CHECKS COMPLETED - YES ☒ I DECLARE THAT I AM APPROPIATELY LICENCED AND FIT FOR WORK (as per trip planner) - YES ☒ I have provided a service in accordance with ResourceCo Material Solutions Terms & Conditions (available at www.resourceco.com.au) - YES ☒

DRIVER COMPANY NAME	Qube	DRIVER NAME	Welam Irlea	DRIVER SIGNATURE	

WHITE – ResourceCo Copy **BLUE** – Pickup Customer Copy **PINK** – Delivery Customer Copy **YELLOW** – Operator Cor

FORM 310 | VERSION 2.0 | 21.6.19

ATTACH ALL WEIGHBRIDGE DOCKETS

THIS DOCUMENT IS UNCONTROLLED ONCE PRIN

(1)

BREENRESOURCES

Breen Resources Pty. Ltd.
ABN 31615045497
330 Captain Cook Drive
KURNELL NSW 2231
PHONE: 96688539
EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0029854/1
Date:	17/12/2019 8:20:36 AM
Printed:	17/12/2019 8:20:41 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	CN81RH
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

12.34t

Gross	**23.16t**
Tare	**10.82t**
Net	**12.34t**

Initial Inspection .....
Final Inspection .....
Load Rejected .....
Reason .....
.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

(2)

BREENRESOURCES

Breen Resources Pty. Ltd.
ABN 31615045497
330 Captain Cook Drive
KURNELL NSW 2231
PHONE: 96688539
EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0029901/1
Date:	17/12/2019 10:27:03 AM
Printed:	17/12/2019 10:27:14 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	CN81RH
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

12.12t

Gross	**22.94t**
Tare	**10.82t**
Net	**12.12t**

Initial Inspection .....
Final Inspection .....
Load Rejected .....
Reason .....
.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

(3)

BREENRESOURCES

Breen Resources Pty. Ltd.
ABN 31615045497
330 Captain Cook Drive
KURNELL NSW 2231
PHONE: 96688539
EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0029964/1
Date:	17/12/2019 1:02:19 PM
Printed:	17/12/2019 1:02:25 PM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	CN81RH
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

12.12t

Gross	**22.94t**
Tare	**10.82t**
Net	**12.12t**

Initial Inspection .....
Final Inspection .....
Load Rejected .....
Reason .....
.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

(4)

BREENRESOURCES

Breen Resources Pty. Ltd.
ABN 31615045497
330 Captain Cook Drive
KURNELL NSW 2231
PHONE: 96688539
EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0030011/1
Date:	17/12/2019 3:11:53 PM
Printed:	17/12/2019 3:11:58 PM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	CN81RH
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

11.58t

Gross	**22.4t**
Tare	**10.82t**
Net	**11.58t**

Initial Inspection .....
Final Inspection .....
Load Rejected .....
Reason .....
.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

RESOURCECO MATERIAL SOLUTIONS

VIC OFFICE: Suite 2, Lvl 3, 6 Nexus Crt, Mulgrave VIC 3170 NSW OFFICE: 86 Bourke Rd, Alexandria NSW 2015 PH. 1300 131 222

DATE	17-12-19	CUSTOMER	Christie Civil	JOB NO.	PRINTED DOCKET NO. 16823
PICKUP LOCATION / JOB SITE	5 Bank St Pyrmont	CONTRACTOR NAME	Resourceco		
TRUCK REGISTRATION	XNL49 GT	TRAILER REGISTRATION	N/A	MACHINE TYPE	ATTACHMENTS

EQUIPMENT TYPE ☑ TANDEM/BOGEY ☐ TRUCK & TRI TRAILER ☐ TRUCK & 4 AXLE TRAILER ☐ SEMI ☐ TRUCK & 5 AXLE TRAILER ☐ 19M B-DOUBLE ☐ B-DOUBLE ☐ OTHER:

☐ CONTRACT RATE ☐ HOURLY RATE ☐ EPA RATE ☐ NIGHT RATE ☐ TOLLS ☐ SITE ALLOW $_____ PER HOUR

LOAD #	START / PICKUP TIME	FINISH / DELIVERY TIME	WAITING TIME (HRS/MINS)	CLIENT SIGNATURE TO APPROVE WAITING TIME	MATERIAL	m³/Ton	DISPOSAL SITES USED	STEER (ALLOWABLE AXLE READINGS)	DRIVE (ALLOWABLE AXLE READINGS)	TRAILER A (ALLOWABLE AXLE READINGS)	TRAILER B (ALLOWABLE AXLE READINGS)	ALLOWABLE GCM
								6.5 +	16.5 +	+	= 23	
1	7.20	8.15			G5W	13.24	Brea	6	16.1			23
2	9.50	10.45			"	12.58	"	6	16.5			23
3	12.15	1.10			"	11.62	"	6	16.1			23
4	3pm	3.10			"		"					
5												
6												
7												
8												
9												
10												

HOURLY HIRE	START	7am	TOTAL BREAKS		FINISH	4PM	TOTAL BILLABLE HOURS	

The customer has engaged ResourceCo Material Solutions to provide the service in accordance with ResourceCo Material Solutions Terms & Conditions (available at www.resourceco.com.au)

PICKUP LOCATION			
COMPANY NAME		POSITION	FOREMAN
PRINT NAME	Louis Iliesk	CUSTOMER SIGNATURE	

DELIVERY LOCATION			
COMPANY NAME		POSITION	
PRINT NAME		CUSTOMER SIGNATURE	

WORK REST RECORD — All drivers to accurately record work and rest hours

midnight 1 2 3 4 5 6 7 8 9 10 11 noon 1 2 3 4 5 6 7 8 9 10 11 midnight

MY WORK — TOTAL WORK

MY REST — TOTAL REST

midnight 1 2 3 4 5 6 7 8 9 10 11 noon 1 2 3 4 5 6 7 8 9 10 11 midnight

DRIVER DECLARATION

PRESTART CHECKS COMPLETED - YES ☑ I DECLARE THAT I AM APPROPIATELY LICENCED AND FIT FOR WORK (as per trip planner) - YES ☐ I have provided a service in accordance with ResourceCo Material Solutions Terms & Conditions - YES ☑ (available at www.resourceco.com.au)

DRIVER COMPANY NAME	Resource Co	DRIVER NAME	Ahmed	DRIVER SIGNATURE	

WHITE – ResourceCo Copy **BLUE** – Pickup Customer Copy **PINK** – Delivery Customer Copy **YELLOW** – Operator Copy

FORM 310 | VERSION 2.0 | 21.6.19 ATTACH ALL WEIGHBRIDGE DOCKETS THIS DOCUMENT IS UNCONTROLLED ONCE PRINTED

BREENRESOURCES

Breen Resources Pty. Ltd.
ABN 31615045497
330 Captain Cook Drive
KURNELL NSW 2231
PHONE: 96688539
EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0029855/1
Date:	17/12/2019 8:22:10 AM
Printed:	17/12/2019 8:44:17 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	XN49GT
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

13.24t

Gross	24.14t
Tare	10.9t
Net	13.24t

Initial Inspection .....
Final Inspection .....
Load Rejected .....
Reason .....
.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

BREENRESOURCES

Breen Resources Pty. Ltd.
ABN 31615045497
330 Captain Cook Drive
KURNELL NSW 2231
PHONE: 96688539
EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0029908/1
Date:	17/12/2019 10:46:44 AM
Printed:	17/12/2019 10:46:51 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	XN49GT
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

12.58t

Gross	23.48t
Tare	10.9t
Net	12.58t

Initial Inspection .....
Final Inspection .....
Load Rejected .....
Reason .....
.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

BREENRESOURCES

Breen Resources Pty. Ltd.
ABN 31615045497
330 Captain Cook Drive
KURNELL NSW 2231
PHONE: 96688539
EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0029968/1
Date:	17/12/2019 1:11:36 PM
Printed:	17/12/2019 1:11:44 PM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	XN49GT
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

11.62t

Gross	22.52t
Tare	10.9t
Net	11.62t

Initial Inspection .....
Final Inspection .....
Load Rejected .....
Reason .....
.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

BREENRESOURCES

Breen Resources Pty. Ltd.
ABN 31615045497
330 Captain Cook Drive
KURNELL NSW 2231
PHONE: 96688539
EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0030007/1
Date:	17/12/2019 3:01:48 PM
Printed:	17/12/2019 3:01:55 PM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	XN49GT
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

13.42t

Gross	24.32t
Tare	10.9t
Net	13.42t

Initial Inspection .....
Final Inspection .....
Load Rejected .....
Reason .....
.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

RESOURCECO MATERIAL SOLUTIONS

VIC OFFICE: Suite 2, Lvl 3, 6 Nexus Crt, Mulgrave VIC 3170 NSW OFFICE: 86 Bourke Rd, Alexandria NSW 2015 PH. 1300 131 222

DATE	18-12-2019	CUSTOMER	CHRISTIE civil PTY LTD	JOB NO.	75198	PRINTED DOCKET NO.	06644
PICKUP LOCATION / JOB SITE	5 Bank st Pymont			CONTRACTOR NAME	Railroad transport PTY LTD		
TRUCK REGISTRATION	CN 26 LH	TRAILER REGISTRATION	—	MACHINE TYPE	Steel bin	ATTACHMENTS	—

EQUIPMENT TYPE ☑ TANDEM/BOGEY ☐ TRUCK & TRI TRAILER ☐ TRUCK & 4 AXLE TRAILER ☐ SEMI ☐ TRUCK & 5 AXLE TRAILER ☐ 19M B-DOUBLE ☐ B-DOUBLE ☐ OTHER:

☑ CONTRACT RATE ☐ HOURLY RATE ☐ EPA RATE ☐ NIGHT RATE ☐ TOLLS ☐ SITE ALLOW $_____ PER HOUR

LOAD #	START / PICKUP TIME	FINISH / DELIVERY TIME	WAITING TIME (HRS/MINS)	CLIENT SIGNATURE TO APPROVE WAITING TIME	MATERIAL	m³/Ton	DISPOSAL SITES USED	STEER	DRIVE	TRAILER A	TRAILER B	ALLOWABLE GCM
								ALLOWABLE AXLE READINGS				
								6.5 +	17- +	— +	— =	23-00
1	07-00	08-02			GSW-	11.94	Breen Kurnell	6.3	16.6			22.7
2	09-00	10-00			" "	10.48	" "	6-	16.5			22.3
3	10-45	10-51			" "	12.26	" "	6.4	16.5			22.9
4	12.30	13.35			" "	12.62	" "	6.5	16.7			22.7
5	14.20	15.30			" "	12.22	" "	6.3	16.8			22.86
6												
7												
8												
9												
10												

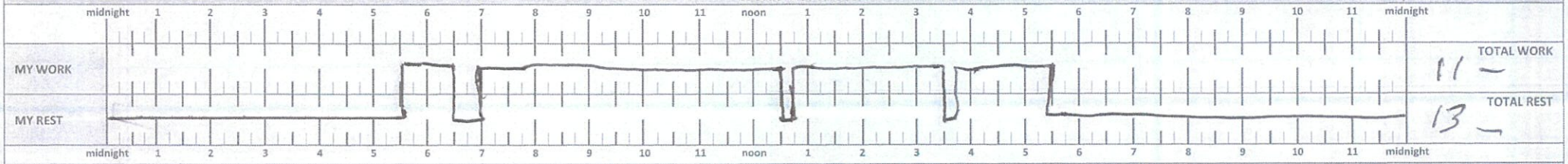
HOURLY HIRE	START		TOTAL BREAKS		FINISH		TOTAL BILLABLE HOURS	

ENTERED 24 DEC 2019

The customer has engaged ResourceCo Material Solutions to provide the service in accordance with ResourceCo Material Solutions Terms & Conditions (available at www.resourceco.com.au)

PICKUP LOCATION				DELIVERY LOCATION			
COMPANY NAME		POSITION		COMPANY NAME	PY.	POSITION	
PRINT NAME	[illegible]	CUSTOMER SIGNATURE		PRINT NAME		CUSTOMER SIGNATURE	

WORK REST RECORD — All drivers to accurately record work and rest hours



TOTAL WORK 11 —

TOTAL REST 13 —

DRIVER DECLARATION

PRESTART CHECKS COMPLETED - YES ☑ I DECLARE THAT I AM APPROPIATELY LICENCED AND FIT FOR WORK (as per trip planner) - YES ☑ I have provided a service in accordance with ResourceCo Material Solutions Terms & Conditions - YES (available at www.resourceco.com.au) ☑

DRIVER COMPANY NAME	Railroad Transport	DRIVER NAME	DAVID Gorrell	DRIVER SIGNATURE	David Gorrell.

WHITE – ResourceCo Copy **BLUE** – Pickup Customer Copy **PINK** – Delivery Customer Copy **YELLOW** – Operator Copy

FORM 310 | VERSION 2.0 | 21.6.19 ATTACH ALL WEIGHBRIDGE DOCKETS THIS DOCUMENT IS UNCONTROLLED ONCE PRINTED

BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0030075/1
Date:	18/12/2019 7:55:44 AM
Printed:	18/12/2019 7:55:49 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	CN26LH
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

11.94t

Gross	**23.36t**
Tare	**11.42t**
Net	**11.94t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30
"Your Partners in Material Management"

BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0030127/1
Date:	18/12/2019 9:51:08 AM
Printed:	18/12/2019 9:51:14 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	CN26LH
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

10.48t

Gross	**21.9t**
Tare	**11.42t**
Net	**10.48t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0030181/1
Date:	18/12/2019 11:37:02 AM
Printed:	18/12/2019 11:37:07 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	CN26LH
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

12.26t

Gross	**23.68t**
Tare	**11.42t**
Net	**12.26t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0030227/1
Date:	18/12/2019 1:26:07 PM
Printed:	18/12/2019 1:26:12 PM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	CN26LH
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

12.62t

Gross	**24.04t**
Tare	**11.42t**
Net	**12.62t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0030286/1
Date:	18/12/2019 3:26:09 PM
Printed:	18/12/2019 3:26:14 PM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN.	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	CN26LH
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

12.22t

Gross	**23.64t**
Tare	**11.42t**
Net	**12.22t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 4:00
Saturday 6:15 1:30
"Your Partners in Material Management"

RESOURCECO MATERIAL SOLUTIONS

VIC OFFICE: Suite 2, Lvl 3, 6 Nexus Crt, Mulgrave VIC 3170 NSW OFFICE: 86 Bourke Rd, Alexandria NSW 2015 PH. 1300 131 222

DATE	18/12/19.	CUSTOMER	Christie civil	JOB NO.	75798.	PRINTED DOCKET NO.	08620
PICKUP LOCATION / JOB SITE	Pyrmont			CONTRACTOR NAME	RAI Road.		
TRUCK REGISTRATION	XN03DR	TRAILER REGISTRATION	—	MACHINE TYPE	Bogie.	ATTACHMENTS	

EQUIPMENT TYPE ☑ TANDEM/BOGEY ☐ TRUCK & TRI TRAILER ☑ TRUCK & 4 AXLE TRAILER ☐ SEMI ☐ TRUCK & 5 AXLE TRAILER ☐ 19M B-DOUBLE ☐ B-DOUBLE ☐ OTHER:

☐ CONTRACT RATE ☐ HOURLY RATE ☐ EPA RATE ☐ NIGHT RATE ☐ TOLLS ☐ SITE ALLOW $_____ PER HOUR

LOAD #	START / PICKUP TIME	FINISH / DELIVERY TIME	WAITING TIME (HRS/MINS)	CLIENT SIGNATURE TO APPROVE WAITING TIME	MATERIAL	m³/Ton	DISPOSAL SITES USED	STEER	DRIVE	TRAILER A	TRAILER B	ALLOWABLE GCM
								ALLOWABLE AXLE READINGS				
								6.5 +	16.5 +	— +	— =	—
1	1045	1145			ASW.	11.6	Breen/Kurnell	5.0	16.5			
2	1110	2.30			ASW	11.7	= =	5.0	16.5			
3												
4												
5												
6												
7												
8												
9												
10												

ENTERED
21 DEC 2019
PY.

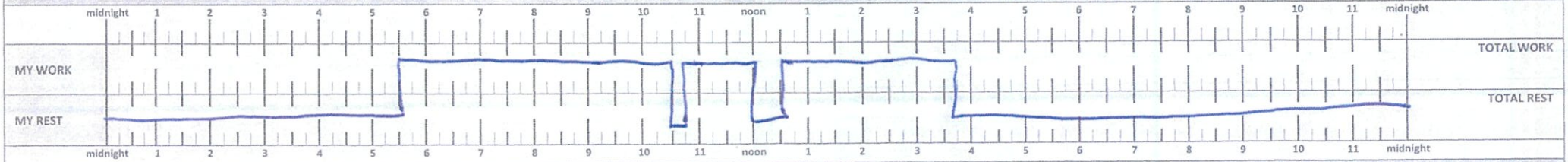
HOURLY HIRE	START	530 Am.	TOTAL BREAKS		FINISH	3.45 PM.	TOTAL BILLABLE HOURS	

The customer has engaged ResourceCo Material Solutions to provide the service in accordance with ResourceCo Material Solutions Terms & Conditions (available at www.resourceco.com.au)

PICKUP LOCATION			
COMPANY NAME		POSITION	
PRINT NAME	IVAN	CUSTOMER SIGNATURE	

DELIVERY LOCATION			
COMPANY NAME		POSITION	
PRINT NAME		CUSTOMER SIGNATURE	

WORK REST RECORD — All drivers to accurately record work and rest hours



DRIVER DECLARATION

PRESTART CHECKS COMPLETED - YES ☑ I DECLARE THAT I AM APPROPIATELY LICENCED AND FIT FOR WORK (as per trip planner) - YES ☑ I have provided a service in accordance with ResourceCo Material Solutions Terms & Conditions - YES ☑ (available at www.resourceco.com.au)

DRIVER COMPANY NAME	RAI Road	DRIVER NAME	M. AL NAJJAR	DRIVER SIGNATURE	

WHITE – ResourceCo Copy BLUE – Pickup Customer Copy PINK – Delivery Customer Copy YELLOW – Operator Copy

FORM 310 | VERSION 2.0 | 21.6.19 ATTACH ALL WEIGHBRIDGE DOCKETS THIS DOCUMENT IS UNCONTROLLED ONCE PRINTED

BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0030253/1
Date:	18/12/2019 2:18:02 PM
Printed:	18/12/2019 2:18:07 PM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	XN03DR
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

12.36t

Gross	**22.94t**
Tare	**10.58t**
Net	**12.36t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30
"Your Partners In Material Management"

BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0030180/1
Date:	18/12/2019 11:32:29 AM
Printed:	18/12/2019 11:32:33 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	XN03DR
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

11.68t

Gross	**22.26t**
Tare	**10.58t**
Net	**11.68t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30
"Your Partners In Material Management"

RESOURCECO MATERIAL SOLUTIONS

VIC OFFICE: Suite 2, Lvl 3, 6 Nexus Crt, Mulgrave VIC 3170 NSW OFFICE: 86 Bourke Rd, Alexandria NSW 2015 PH. 1300 131 222

DATE	18-12-2019	CUSTOMER	Christie Civil PTY LTD	JOB NO.	75198	PRINTED DOCKET NO.	15003
PICKUP LOCATION / JOB SITE	5 bank St Pyrmont			CONTRACTOR NAME	ResourceCo		
TRUCK REGISTRATION	XN46DR	TRAILER REGISTRATION	—	MACHINE TYPE	Bogie	ATTACHMENTS	

EQUIPMENT TYPE ☑ TANDEM/BOGEY ☐ TRUCK & TRI TRAILER ☐ TRUCK & 4 AXLE TRAILER ☐ SEMI ☐ TRUCK & 5 AXLE TRAILER ☐ 19M B-DOUBLE ☐ B-DOUBLE ☐ OTHER:

☐ CONTRACT RATE ☐ HOURLY RATE ☐ EPA RATE ☐ NIGHT RATE ☐ TOLLS ☐ SITE ALLOW $_____ PER HOUR

LOAD #	START / PICKUP TIME	FINISH / DELIVERY TIME	WAITING TIME (HRS/MINS)	CLIENT SIGNATURE TO APPROVE WAITING TIME	MATERIAL	m³/Ton	DISPOSAL SITES USED	STEER	DRIVE	TRAILER A	TRAILER B	ALLOWABLE GCM
								ALLOWABLE AXLE READINGS				
								6.5 +	16.5 +	— +	— =	23
1	7:00	8:40			GSW	11t	Breen group	6.5	16.5	—	—	25
2	9:25	10:45			GSW	10t	Breen group	6	16	—	—	22
3	12:20	1:30			GSW	10.5	Breen group	6.5	16.5	—	—	22.5
4	2:25	3:45			GSW	11t	Breen group	6.5	16.5	—	—	23
5												
6												
7												
8												
9												
10												

ENTERED 21 DEC 2019

HOURLY HIRE	START	7:00	TOTAL BREAKS	1 Hour	FINISH	4:00 pm	TOTAL BILLABLE HOURS	

The customer has engaged ResourceCo Material Solutions to provide the service in accordance with ResourceCo Material Solutions Terms & Conditions (available at www.resourceco.com.au)

PICKUP LOCATION			
COMPANY NAME	Christie Civil PTY LTD	POSITION	
PRINT NAME		CUSTOMER SIGNATURE	

DELIVERY LOCATION			
COMPANY NAME	Breen group Kurnell	POSITION	
PRINT NAME		CUSTOMER SIGNATURE	

WORK REST RECORD — All drivers to accurately record work and rest hours

midnight 1 2 3 4 5 6 7 8 9 10 11 noon 1 2 3 4 5 6 7 8 9 10 11 midnight

MY WORK — TOTAL WORK

MY REST — TOTAL REST

midnight 1 2 3 4 5 6 7 8 9 10 11 noon 1 2 3 4 5 6 7 8 9 10 11 midnight

DRIVER DECLARATION

PRESTART CHECKS COMPLETED - YES ☑ I DECLARE THAT I AM APPROPIATELY LICENCED AND FIT FOR WORK (as per trip planner) - YES ☑ I have provided a service in accordance with ResourceCo Material Solutions Terms & Conditions (available at www.resourceco.com.au) - YES ☑

DRIVER COMPANY NAME	Qube	DRIVER NAME	YASIR ALI KHAN	DRIVER SIGNATURE	

WHITE – ResourceCo Copy BLUE – Pickup Customer Copy PINK – Delivery Customer Copy YELLOW – Operator Copy

FORM 310 | VERSION 2.0 | 21.6.19 ATTACH ALL WEIGHBRIDGE DOCKETS THIS DOCUMENT IS UNCONTROLLED ONCE PRINTED

BREENRESOURCES

Breen Resources Pty. Ltd.
ABN 31615045497
330 Captain Cook Drive
KURNELL NSW 2231
PHONE: 96688539
EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0030088/1
Date:	18/12/2019 8:21:42 AM
Printed:	18/12/2019 8:22:00 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	XN46DR
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

9.82t

Gross	21.68t
Tare	11.86t
Net	9.82t

Initial Inspection .....
Final Inspection .....
Load Rejected .....
Reason .....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

BREENRESOURCES

Breen Resources Pty. Ltd.
ABN 31615045497
330 Captain Cook Drive
KURNELL NSW 2231
PHONE: 96688539
EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0030145/1
Date:	18/12/2019 10:23:52 AM
Printed:	18/12/2019 10:23:57 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	XN46DR
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

9.6t

Gross	21.46t
Tare	11.86t
Net	9.60t

Initial Inspection .....
Final Inspection .....
Load Rejected .....
Reason .....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

BREENRESOURCES

Breen Resources Pty. Ltd.
ABN 31615045497
330 Captain Cook Drive
KURNELL NSW 2231
PHONE: 96688539
EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0030222/1
Date:	18/12/2019 1:15:04 PM
Printed:	18/12/2019 1:15:10 PM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	XN46DR
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

10.08t

Gross	21.94t
Tare	11.86t
Net	10.08t

Initial Inspection .....
Final Inspection .....
Load Rejected .....
Reason .....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

BREENRESOURCES

Breen Resources Pty. Ltd.
ABN 31615045497
330 Captain Cook Drive
KURNELL NSW 2231
PHONE: 96688539
EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0030279/1
Date:	18/12/2019 3:15:34 PM
Printed:	18/12/2019 3:15:40 PM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	XN46DR
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

11.4t

Gross	23.26t
Tare	11.86t
Net	11.40t

Initial Inspection .....
Final Inspection .....
Load Rejected .....
Reason .....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

RESOURCECO MATERIAL SOLUTIONS

VIC OFFICE: Suite 2, Lvl 3, 6 Nexus Crt, Mulgrave VIC 3170 NSW OFFICE: 86 Bourke Rd, Alexandria NSW 2015 PH. 1300 131 222

DATE	18/12/19	CUSTOMER	Christie Coal Pty Ltd.	JOB NO.	75198	PRINTED DOCKET NO.	16332
PICKUP LOCATION / JOB SITE	5 Bank St. Pyrmont.			CONTRACTOR NAME	Resourceco.		
TRUCK REGISTRATION	CN35RK	TRAILER REGISTRATION		MACHINE TYPE		ATTACHMENTS	

EQUIPMENT TYPE ☑ TANDEM/BOGEY ☐ TRUCK & TRI TRAILER ☐ TRUCK & 4 AXLE TRAILER ☐ SEMI ☐ TRUCK & 5 AXLE TRAILER ☐ 19M B-DOUBLE ☐ B-DOUBLE ☐ OTHER:

☐ CONTRACT RATE ☐ HOURLY RATE ☐ EPA RATE ☐ NIGHT RATE ☐ TOLLS ☐ SITE ALLOW $_____ PER HOUR

LOAD #	START / PICKUP TIME	FINISH / DELIVERY TIME	WAITING TIME (HRS/MINS)	CLIENT SIGNATURE TO APPROVE WAITING TIME	MATERIAL	m³/Ton	DISPOSAL SITES USED	STEER	DRIVE	TRAILER A	TRAILER B	ALLOWABLE GCM
								ALLOWABLE AXLE READINGS				
1	7:30	8:55	15-		GSW —	12:20	Kurrell					
2	9:55	11:30	10-		" "	12:26	" "					
3	12:15	14:15	10-		" "	13:24	" "					
4												
5												
6												
7												
8												
9												
10												

ENTERED
21 DEC 2019
BY: .....

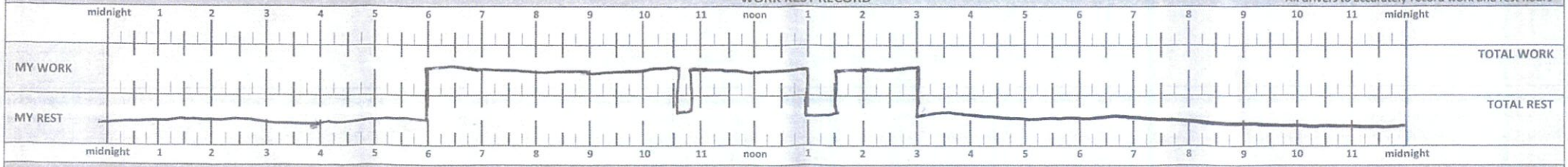
HOURLY HIRE	START		TOTAL BREAKS		FINISH		TOTAL BILLABLE HOURS	

The customer has engaged ResourceCo Material Solutions to provide the service in accordance with ResourceCo Material Solutions Terms & Conditions (available at www.resourceco.com.au)

PICKUP LOCATION			
COMPANY NAME		POSITION	
PRINT NAME		CUSTOMER SIGNATURE	

DELIVERY LOCATION			
COMPANY NAME		POSITION	
PRINT NAME		CUSTOMER SIGNATURE	

WORK REST RECORD — All drivers to accurately record work and rest hours



DRIVER DECLARATION

PRESTART CHECKS COMPLETED - YES ☑ I DECLARE THAT I AM APPROPIATELY LICENCED AND FIT FOR WORK (as per trip planner) - YES ☑ I have provided a service in accordance with ResourceCo Material Solutions Terms & Conditions (available at www.resourceco.com.au) - YES ☑

DRIVER COMPANY NAME	Resourceco.	DRIVER NAME	John Hanna	DRIVER SIGNATURE	

WHITE – ResourceCo Copy **BLUE** – Pickup Customer Copy **PINK** – Delivery Customer Copy **YELLOW** – Operator Copy

FORM 310 | VERSION 2.0 | 21.6.19 ATTACH ALL WEIGHBRIDGE DOCKETS THIS DOCUMENT IS UNCONTROLLED ONCE PRINTED

BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0030095/1
Date:	18/12/2019 8:36:54 AM
Printed:	18/12/2019 8:37:02 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	CN35RK
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

12.2t

Gross	**23.28t**
Tare	**11.08t**
Net	**12.20t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0030175/1
Date:	18/12/2019 11:18:25 AM
Printed:	18/12/2019 11:18:29 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	CN35RK
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

12.26t

Gross	**23.34t**
Tare	**11.08t**
Net	**12.26t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0030240/1
Date:	18/12/2019 1:51:47 PM
Printed:	18/12/2019 1:51:51 PM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	CN35RK
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

13.24t

Gross	**24.32t**
Tare	**11.08t**
Net	**13.24t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

RESOURCECO MATERIAL SOLUTIONS

VIC OFFICE: Suite 2, Lvl 3, 6 Nexus Crt, Mulgrave VIC 3170 NSW OFFICE: 86 Bourke Rd, Alexandria NSW 2015 PH. 1300 131 222

DATE	18-12-19	CUSTOMER	Christie Civil	JOB NO.	PRINTED DOCKET NO. 16824
PICKUP LOCATION / JOB SITE	5 Bank St Pyrmont			CONTRACTOR NAME	Resourceco
TRUCK REGISTRATION	XN49GT	TRAILER REGISTRATION	N/A	MACHINE TYPE	ATTACHMENTS

EQUIPMENT TYPE ☑ TANDEM/BOGEY ☐ TRUCK & TRI TRAILER ☐ TRUCK & 4 AXLE TRAILER ☐ SEMI ☐ TRUCK & 5 AXLE TRAILER ☐ 19M B-DOUBLE ☐ B-DOUBLE ☐ OTHER:

☐ CONTRACT RATE ☐ HOURLY RATE ☐ EPA RATE ☐ NIGHT RATE ☐ TOLLS ☐ SITE ALLOW $_____ PER HOUR

LOAD #	START / PICKUP TIME	FINISH / DELIVERY TIME	WAITING TIME (HRS/MINS)	CLIENT SIGNATURE TO APPROVE WAITING TIME	MATERIAL	m³/Ton	DISPOSAL SITES USED	STEER	DRIVE	TRAILER A	TRAILER B	ALLOWABLE GCM
								ALLOWABLE AXLE READINGS				
								6.5 +	16.5 +	+	=	23
1	7.0	8am			GSW	23	Breen Kurnell	6.5	16.1			22
2	9.10	10am			〃	〃	〃	〃	16.5			23
3	11.10	12.10			〃	〃	〃	〃	〃			〃
4	1.25	2.30			〃	〃	〃	〃	〃			〃
5												
6												
7												
8												
9												
10												

ENTERED
21 DEC 2019

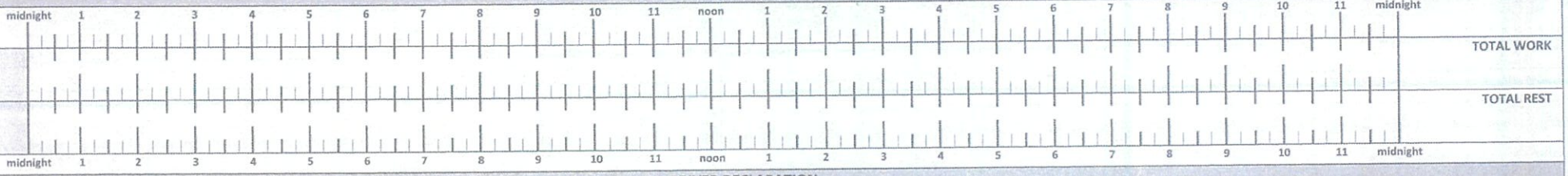
HOURLY HIRE	START	7am	TOTAL BREAKS		FINISH	4pm	PY TOTAL BILLABLE HOURS****	

The customer has engaged ResourceCo Material Solutions to provide the service in accordance with ResourceCo Material Solutions Terms & Conditions (available at www.resourceco.com.au)

PICKUP LOCATION			
COMPANY NAME	IVM	POSITION	
PRINT NAME		CUSTOMER SIGNATURE	

DELIVERY LOCATION			
COMPANY NAME		POSITION	
PRINT NAME		CUSTOMER SIGNATURE	

WORK REST RECORD — All drivers to accurately record work and rest hours



DRIVER DECLARATION

PRESTART CHECKS COMPLETED - YES ☑ I DECLARE THAT I AM APPROPIATELY LICENCED AND FIT FOR WORK (as per trip planner) - YES ☑ I have provided a service in accordance with ResourceCo Material Solutions Terms & Conditions (available at www.resourceco.com.au) - YES ☑

DRIVER COMPANY NAME	Resourceco	DRIVER NAME	Ahmed	DRIVER SIGNATURE	

WHITE – ResourceCo Copy **BLUE** – Pickup Customer Copy **PINK** – Delivery Customer Copy **YELLOW** – Operator Copy

FORM 310 | VERSION 2.0 | 21.6.19

ATTACH ALL WEIGHBRIDGE DOCKETS

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BREENRESOURCES

Breen Resources Pty. Ltd.
ABN 31615045497
330 Captain Cook Drive
KURNELL NSW 2231
PHONE: 96688539
EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0030078/1
Date:	18/12/2019 8:00:26 AM
Printed:	18/12/2019 8:00:31 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	XN49GT
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

12.22t

Gross	**23.12t**
Tare	**10.9t**
Net	**12.22t**

Initial Inspection .....
Final Inspection .....
Load Rejected .....
Reason .....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

BREENRESOURCES

Breen Resources Pty. Ltd.
ABN 31615045497
330 Captain Cook Drive
KURNELL NSW 2231
PHONE: 96688539
EPL: #4608 - Disposal | #20697 - Resour Recovery

DELIVERY DOCKET

Docket:	WBT0030129/1
Date:	18/12/2019 9:59:20 AM
Printed:	18/12/2019 9:59:24 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	XN49GT
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

12.7t

Gross	**23.6t**
Tare	**10.9t**
Net	**12.70t**

Initial Inspection .....
Final Inspection .....
Load Rejected .....
Reason .....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

BREENRESOURCES

Breen Resources Pty. Ltd.
ABN 31615045497
330 Captain Cook Drive
KURNELL NSW 2231
PHONE: 96688539
EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0030193/1
Date:	18/12/2019 12:10:06 PM
Printed:	18/12/2019 12:10:11 PM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	XN49GT
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

15.12t

Gross	**26.02t**
Tare	**10.9t**
Net	**15.12t**

Initial Inspection .....
Final Inspection .....
Load Rejected .....
Reason .....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

BREENRESOURCES

Breen Resources Pty. Ltd.
ABN 31615045497
330 Captain Cook Drive
KURNELL NSW 2231
PHONE: 96688539
EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0030254/1
Date:	18/12/2019 2:18:52 PM
Printed:	18/12/2019 2:18:57 PM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	XN49GT
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

13.62t

Gross	**24.52t**
Tare	**10.9t**
Net	**13.62t**

Initial Inspection .....
Final Inspection .....
Load Rejected .....
Reason .....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

RESOURCECO MATERIAL SOLUTIONS

VIC OFFICE: Suite 2, Lvl 3, 6 Nexus Crt, Mulgrave VIC 3170 NSW OFFICE: 86 Bourke Rd, Alexandria NSW 2015 PH. 1300 131 222

DATE	18/12/19	CUSTOMER	Christie Civil	JOB NO.	75198
PICKUP LOCATION / JOB SITE	5 Bank ST Pyrmont	CONTRACTOR NAME	Resourceco	PRINTED DOCKET NO.	17425
TRUCK REGISTRATION	XY49DR	TRAILER REGISTRATION	—	MACHINE TYPE	Bogie
ATTACHMENTS					

EQUIPMENT TYPE ☑ TANDEM/BOGEY ☐ TRUCK & TRI TRAILER ☐ TRUCK & 4 AXLE TRAILER ☐ SEMI ☐ TRUCK & 5 AXLE TRAILER ☐ 19M B-DOUBLE ☐ B-DOUBLE ☐ OTHER:

☐ CONTRACT RATE ☐ HOURLY RATE ☐ EPA RATE ☐ NIGHT RATE ☐ TOLLS ☐ SITE ALLOW $_____ PER HOUR

LOAD #	START / PICKUP TIME	FINISH / DELIVERY TIME	WAITING TIME (HRS/MINS)	CLIENT SIGNATURE TO APPROVE WAITING TIME	MATERIAL	m³/Ton	DISPOSAL SITES USED	STEER	DRIVE	TRAILER A	TRAILER B	ALLOWABLE GCM
								ALLOWABLE AXLE READINGS				
								6.5 +	17.0 +	— +	— =	23
1	7:00	8:10			GSW	13.94	Breen Kurnell	6.5	16.9	—	—	22.9
2	9:20	10:25			GSW	12.0	Breen Kurnell	6.5	17.0	—	—	23.0
3	11:15	12:45			GSW	12.5	Breen Kurnell	6.5	16.8	—	—	22.9
4	1:25	2:30			GSW	12.4	Breen Kurnell	6.5	17.0	—	—	23.0
5												
6												
7												
8												
9												
10							ENTERED					

HOURLY HIRE	START		TOTAL BREAKS		FINISH	21 DEC 2019	TOTAL BILLABLE HOURS	

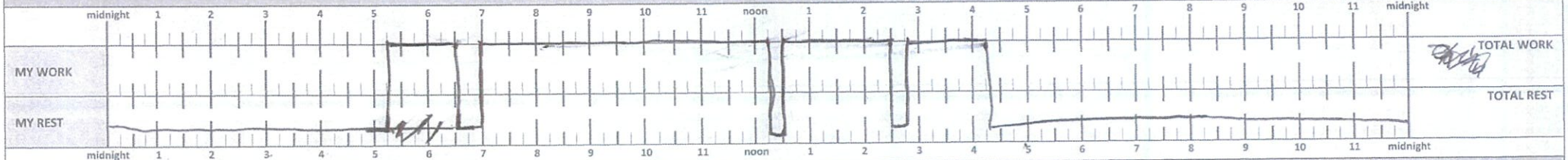
The customer has engaged ResourceCo Material Solutions to provide the service in accordance with ResourceCo Material Solutions Terms & Conditions (available at www.resourceco.com.au)

BY: .....

PICKUP LOCATION			
COMPANY NAME		POSITION	
PRINT NAME		CUSTOMER SIGNATURE	

DELIVERY LOCATION			
COMPANY NAME		POSITION	
PRINT NAME		CUSTOMER SIGNATURE	

WORK REST RECORD — All drivers to accurately record work and rest hours



DRIVER DECLARATION

PRESTART CHECKS COMPLETED - YES ☑ I DECLARE THAT I AM APPROPIATELY LICENCED AND FIT FOR WORK (as per trip planner) - YES ☑ I have provided a service in accordance with ResourceCo Material Solutions Terms & Conditions - YES ☑ (available at www.resourceco.com.au)

DRIVER COMPANY NAME	Resourceco	DRIVER NAME	Con Multari	DRIVER SIGNATURE	

WHITE – ResourceCo Copy **BLUE** – Pickup Customer Copy **PINK** – Delivery Customer Copy **YELLOW** – Operator Copy

FORM 310 | VERSION 2.0 | 21.6.19 ATTACH ALL WEIGHBRIDGE DOCKETS THIS DOCUMENT IS UNCONTROLLED ONCE PRINTED

BREENRESOURCES

Breen Resources Pty. Ltd.
ABN 31615045497
330 Captain Cook Drive
KURNELL NSW 2231
PHONE: 96688539
EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0030076/1
Date:	18/12/2019 7:56:39 AM
Printed:	18/12/2019 7:56:46 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	XN49DR
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

13.04t

Gross	23.62t
Tare	10.58t
Net	13.04t

Initial Inspection .....
Final Inspection .....
Load Rejected .....
Reason .....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

BREENRESOURCES

Breen Resources Pty. Ltd.
ABN 31615045497
330 Captain Cook Drive
KURNELL NSW 2231
PHONE: 96688539
EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0030141/1
Date:	18/12/2019 10:19:42 AM
Printed:	18/12/2019 10:19:50 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	XN49DR
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

12.42t

Gross	23t
Tare	10.58t
Net	12.42t

Initial Inspection .....
Final Inspection .....
Load Rejected .....
Reason .....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

BREENRESOURCES

Breen Resources Pty. Ltd.
ABN 31615045497
330 Captain Cook Drive
KURNELL NSW 2231
PHONE: 96688539
EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0030204/1
Date:	18/12/2019 12:38:55 PM
Printed:	18/12/2019 12:39:07 PM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	XN49DR
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

13.14t

Gross	23.72t
Tare	10.58t
Net	13.14t

Initial Inspection .....
Final Inspection .....
Load Rejected .....
Reason .....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

BREENRESOURCES

Breen Resources Pty. Ltd.
ABN 31615045497
330 Captain Cook Drive
KURNELL NSW 2231
PHONE: 96688539
EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0030257/1
Date:	18/12/2019 2:21:52 PM
Printed:	18/12/2019 2:21:58 PM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	XN49DR
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

12.9t

Gross	23.48t
Tare	10.58t
Net	12.90t

Initial Inspection .....
Final Inspection .....
Load Rejected .....
Reason .....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

RESOURCECO MATERIAL SOLUTIONS

VIC OFFICE: Suite 2, Lvl 3, 6 Nexus Crt, Mulgrave VIC 3170 NSW OFFICE: 86 Bourke Rd, Alexandria NSW 2015 10.9 TARE PH. 1300 131 222

DATE	18/12/2019	CUSTOMER	Christie Civil	JOB NO.	75198
PICKUP LOCATION / JOB SITE	5 Bank st Pyrmont Syd	CONTRACTOR NAME	Hughes Engineering	PRINTED DOCKET NO.	26854
TRUCK REGISTRATION	ZM84AS	TRAILER REGISTRATION	T	MACHINE TYPE	ATTACHMENTS

EQUIPMENT TYPE ☑ TANDEM/BOGEY ☐ TRUCK & TRI TRAILER ☐ TRUCK & 4 AXLE TRAILER ☐ SEMI ☐ TRUCK & 5 AXLE TRAILER ☐ 19M B-DOUBLE ☐ B-DOUBLE ☐ OTHER:

☐ CONTRACT RATE ☐ HOURLY RATE ☐ EPA RATE ☐ NIGHT RATE ☐ TOLLS ☐ SITE ALLOW $_____ PER HOUR

LOAD #	START / PICKUP TIME	FINISH / DELIVERY TIME	WAITING TIME (HRS/MINS)	CLIENT SIGNATURE TO APPROVE WAITING TIME	MATERIAL	m³/Ton	DISPOSAL SITES USED	STEER	DRIVE	TRAILER A	TRAILER B	ALLOWABLE GCM
								ALLOWABLE AXLE READINGS				
								6.5 +	16.5 +	16 +		=
1	0615	1010			L+SW	12.00	Breen RS Kw.	6.5	12.00			12.00
2	1010	1320			〃	12.00	〃	6.5	12.00			12.00
3	1320				〃		〃	6.5	12.1			12.1
4												
5												
6												
7												
8												
9												
10												

ENTERED 21 DEC 2019

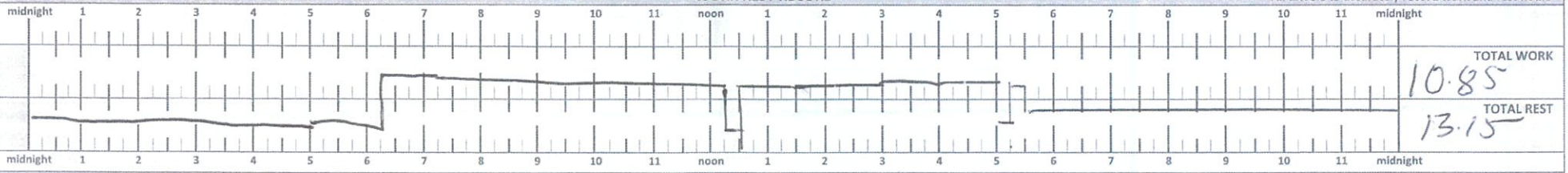
HOURLY HIRE	START	0615	TOTAL BREAKS	1/15M / 1/15M	FINISH	1730	TOTAL BILLABLE HOURS	10.85 HRS

The customer has engaged ResourceCo Material Solutions to provide the service in accordance with ResourceCo Material Solutions Terms & Conditions (available at www.resourceco.com.au)

PICKUP LOCATION			
COMPANY NAME		POSITION	
PRINT NAME		CUSTOMER SIGNATURE	

DELIVERY LOCATION			
COMPANY NAME		POSITION	
PRINT NAME		CUSTOMER SIGNATURE	

WORK REST RECORD — All drivers to accurately record work and rest hours



TOTAL WORK 10.85

TOTAL REST 13.15

DRIVER DECLARATION

PRESTART CHECKS COMPLETED - YES ☑ I DECLARE THAT I AM APPROPIATELY LICENCED AND FIT FOR WORK (as per trip planner) - YES ☑ I have provided a service in accordance with ResourceCo Material Solutions Terms & Conditions (available at www.resourceco.com.au) - YES ☑

DRIVER COMPANY NAME	Hughes Engineering	DRIVER NAME	John Gray	DRIVER SIGNATURE	

WHITE – ResourceCo Copy BLUE – Pickup Customer Copy PINK – Delivery Customer Copy YELLOW – Operator Copy

ATTACH ALL WEIGHBRIDGE DOCKETS

THIS DOCUMENT IS UNCONTROLLED ONCE PRINTED

BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0030128/1
Date:	18/12/2019 9:53:50 AM
Printed:	18/12/2019 9:53:55 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	CM84AS
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

12.1t

Gross	**23.06t**
Tare	**10.96t**
Net	**12.10t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0030220/1
Date:	18/12/2019 1:12:19 PM
Printed:	18/12/2019 1:12:23 PM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	CM84AS
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

13.32t

Gross	**24.28t**
Tare	**10.96t**
Net	**13.32t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0030288/1
Date:	18/12/2019 3:31:18 PM
Printed:	18/12/2019 3:31:23 PM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	CM84AS
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

11.56t

Gross	**22.52t**
Tare	**10.96t**
Net	**11.56t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

RESOURCECO MATERIAL SOLUTIONS

VIC OFFICE: Suite 2, Lvl 3, 6 Nexus Crt, Mulgrave VIC 3170 NSW OFFICE: 86 Bourke Rd, Alexandria NSW 2015 PH. 1300 131 222

DATE	18.12.19	CUSTOMER	Christie civil	JOB NO.	75198
PICKUP LOCATION / JOB SITE	5 Bank st pyrmont			CONTRACTOR NAME	Qube
TRUCK REGISTRATION	CN81RH	TRAILER REGISTRATION	X	MACHINE TYPE		ATTACHMENTS	F3531791

PRINTED DOCKET NO. 16057

EQUIPMENT TYPE ☒ TANDEM/BOGEY ☐ TRUCK & TRI TRAILER ☐ TRUCK & 4 AXLE TRAILER ☐ SEMI ☐ TRUCK & 5 AXLE TRAILER ☐ 19M B-DOUBLE ☐ B-DOUBLE ☐ OTHER:

☐ CONTRACT RATE ☐ HOURLY RATE ☐ EPA RATE ☐ NIGHT RATE ☒ TOLLS ☐ SITE ALLOW $_____ PER HOUR

LOAD #	START / PICKUP TIME	FINISH / DELIVERY TIME	WAITING TIME (HRS/MINS)	CLIENT SIGNATURE TO APPROVE WAITING TIME	MATERIAL	m³/Ton	DISPOSAL SITES USED	STEER	DRIVE	TRAILER A	TRAILER B	ALLOWABLE GCM
								ALLOWABLE AXLE READINGS				
								6.5 +	16.5 +	X +	X =	23.00
1	7:00	8:25			GSW	11.22	Kwmell Brown	6.5	16.0	X	X	22.04
2	9:20	10:35			〃	11.60	〃	6.5	16.2	X	X	22.42
3	12:20	1:30			〃	13.28	〃	6.5	16.5	X	X	24.00
4	2:20	3:30			〃	12.20	〃	6.5	16.5	X	X	23.00
5												
6												
7												
8												
9												
10												

ENTERED 21 DEC 2019

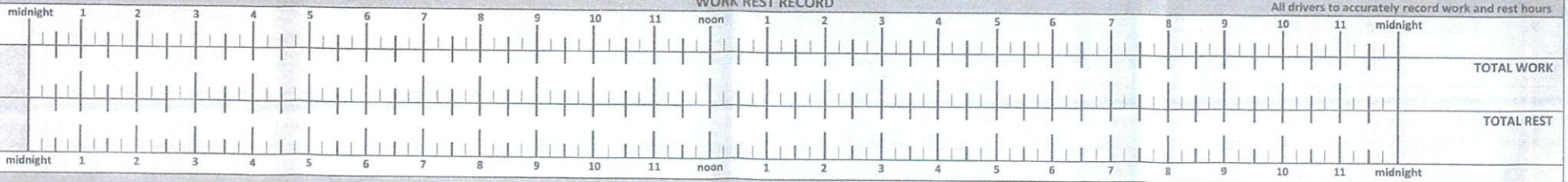
HOURLY HIRE	START	5:15	TOTAL BREAKS		FINISH	5:30	TOTAL BILLABLE HOURS	

The customer has engaged ResourceCo Material Solutions to provide the service in accordance with ResourceCo Material Solutions Terms & Conditions (available at www.resourceco.com.au)

PICKUP LOCATION			
COMPANY NAME		POSITION	
PRINT NAME	[illegible]	CUSTOMER SIGNATURE	[signature]

DELIVERY LOCATION			
COMPANY NAME		POSITION	
PRINT NAME		CUSTOMER SIGNATURE	

WORK REST RECORD — All drivers to accurately record work and rest hours



DRIVER DECLARATION

PRESTART CHECKS COMPLETED - YES ☒ I DECLARE THAT I AM APPROPIATELY LICENCED AND FIT FOR WORK (as per trip planner) - YES ☒ I have provided a service in accordance with ResourceCo Material Solutions Terms & Conditions - YES ☒ (available at www.resourceco.com.au)

DRIVER COMPANY NAME	Qube	DRIVER NAME	Nelson Tolen	DRIVER SIGNATURE	[signature]

WHITE – ResourceCo Copy **BLUE** – Pickup Customer Copy **PINK** – Delivery Customer Copy **YELLOW** – Operator Copy

FORM 310 | VERSION 2.0 | 21.6.19

ATTACH ALL WEIGHBRIDGE DOCKETS

(1)

BREENRESOURCES

Breen Resources Pty. Ltd.
ABN 31615045497
330 Captain Cook Drive
KURNELL NSW 2231
PHONE: 96688539
EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0030081/1
Date:	18/12/2019 8:02:46 AM
Printed:	18/12/2019 8:02:52 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	CN81RH
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

11.22t

Gross	**22.04t**
Tare	**10.82t**
Net	**11.22t**

Initial Inspection .....
Final Inspection .....
Load Rejected .....
Reason .....
.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

(2)

BREENRESOURCES

Breen Resources Pty. Ltd.
ABN 31615045497
330 Captain Cook Drive
KURNELL NSW 2231
PHONE: 96688539
EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0030135/1
Date:	18/12/2019 10:09:20 AM
Printed:	18/12/2019 10:09:29 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	CN81RH
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

11.6t

Gross	**22.42t**
Tare	**10.82t**
Net	**11.60t**

Initial Inspection .....
Final Inspection .....
Load Rejected .....
Reason .....
.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

(3)

BREENRESOURCES

Breen Resources Pty. Ltd.
ABN 31615045497
330 Captain Cook Drive
KURNELL NSW 2231
PHONE: 96688539
EPL: #4608 - Disposal | #20697 - Resour Recovery

DELIVERY DOCKET

Docket:	WBT0030223/1
Date:	18/12/2019 1:16:17 PM
Printed:	18/12/2019 1:16:23 PM
Operator:	Karen
Customer:	RESOURCECO MATERIA SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	CN81RH
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

13.28t

Gross	**24.1t**
Tare	**10.82t**
Net	**13.28t**

Initial Inspection .....
Final Inspection .....
Load Rejected .....
Reason .....
.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

(4)

BREENRESOURCES

Breen Resources Pty. Ltd.
ABN 31615045497
330 Captain Cook Drive
KURNELL NSW 2231
PHONE: 96688539
EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0030280/1
Date:	18/12/2019 3:16:27 PM
Printed:	18/12/2019 3:16:32 PM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	CN81RH
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

12.8t

Gross	**23.62t**
Tare	**10.82t**
Net	**12.80t**

Initial Inspection .....
Final Inspection .....
Load Rejected .....
Reason .....
.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

RESOURCECO
MATERIAL SOLUTIONS

NSW POSTAL
PO Box 7064
Alexandria Business Hub NSW 2015
Ph: 1300 131 222
Email: enquiries@resourceco.com.au
ABN 84 608 316 687

VIC POSTAL
Building 2, Level 3
Suite 46, 1 Ricketts Road, Mt Waverley VIC 3149
Ph: 03 8787 8805 Fax: 03 9543 5033
Email: enquiries@resourceco.com.au
ABN 84 608 316 687

Order Number 75198 **Date** 18.12.19 **Booking Number** 0160248

CUSTOMER Christie civil Pty Ltd E3532891

JOB SITE ADDRESS 5 Bank St Pyrmont

CONTRACTOR NAME Qube DRIVER NAME Sam. G

TRUCK REGO XN 21 DJ TRAILER REGO -

EQUIPMENT TYPE: TANDEM [X] TRUCK & TRI TRAILER [ ] TRUCK & 4 AXLE TRAILER [ ] SEMI [ ]
TRUCK & 5 AXLE TRAILER [ ] 19M B-DOUBLE [ ] B-DOUBLE [ ] OTHER

TRUCK/COMBINATION TARE 11.76 GVM/GCM PAYLOAD 11t

Loads	M3/Ton	Total	Material	Disposal/Supply Site Address
(1)	9.96	21.70	GSW	Breen Group Kurnell
11	10.34	22.08	11	11
11	~~9~~ 9.90	21.64	11	11

START TIME 6:00 FINISH TIME 16.15 TOTAL HOURS

[ ] CONTRACT RATE [ ] HOURLY RATE [ ] ROCK RATE [ ] EPA RATE [ ] NIGHT RATE [ ] TOLLS

Service acceptance (Job Site - material received or removed from site)

The Customer has retained ResourceCo Material Solutions to provide the services in accordance with the Customer Order between the Customer and ResourceCo Material Solutions and ResourceCo Material Solutions terms and Conditions (available at www.resourceco.com.au). The Operator agrees to perform or has performed a portion of the services as ResourceCo Material Solutions sub-contractor using the equipment and at the rates detailed in the Booking, and in accordance with the ResourceCo Material Solutions Independent Contractor Agreement.

CUSTOMER SIGNATURE PRINT NAME Wade DATE

COMPANY NAME POSITION

Service acceptance (Supplier site - material supplier or material receiver site)

The Customer has retained ResourceCo Material Solutions to provide the services in accordance with the Customer Order and ResourceCo Material Solutions Terms and Conditions (available at www.resourceco.com. au). The Operator agrees to perform or has performed a portion of the services as ResourceCo Material Solutions sub-contractor using the equipment and at the rates detailed in the Booking, and in accordance with the ResourceCo Material Solutions Independent Contractor Agreement.

DISPOSAL SITE SIGNATURE PRINT NAME DATE

COMPANY NAME POSITION

Service acceptance (Supplier Site - material supplier or material receiver site)

	Yes	No
1. Was a Site Risk Assessment completed for the site?	[✓]	[ ]
2. Does the operator have the appropriate license/qualifications to operate this vehicle?	[✓]	[ ]
3. Is the vehicle serviced & maintained as per manufacturer's standards?	[✓]	[ ]
4. I have completed my daily vehicle checklist to verify that the vehicle is roadworthy to the limits of the checklist?	[✓]	[ ]
5. Are all insurances and registrations current including Public Liability, Work Cover, and Third Party/Comprehensive insurance?	[✓]	[ ]
6. I have had sufficient rest breaks and I am free from any drugs or alcohol?	[✓]	[ ]
7. I am "Fit For Work"?	[✓]	[ ]
8. I have reviewed the allocated work and agree that I have sufficient hours to complete the task taking into account speed & fatigue requirements?	[✓]	[ ]

ENTERED BY: 21 DEC 2019

By signing the operator confirms that a Site Risk Assessment was completed prior to commencement of services. Services were provided in-line with the ResourceCo Material Solutions compliance standards and in accordance with Occupational Health and Safety, Road Safety Laws and any other governing laws and regulations. ResourceCo Material Solutions may from time to time audit compliance with these requirements and take necessary action to rectify any non-compliance.

OPERATOR SIGNATURE DATE 18.12.19

WHITE - ResourceCo Material Solutions BLUE - Customer PINK - Disposal/Supply Site YELLOW - Contractor

BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0030098/1
Date:	18/12/2019 8:39:48 AM
Printed:	18/12/2019 8:40:03 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	XN21DS
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

9.96t

Gross	**21.7t**
Tare	**11.74t**
Net	**9.96t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0030176/1
Date:	18/12/2019 11:19:09 AM
Printed:	18/12/2019 11:19:14 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	XN21DS
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

10.34t

Gross	**22.08t**
Tare	**11.74t**
Net	**10.34t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0030241/1
Date:	18/12/2019 1:53:51 PM
Printed:	18/12/2019 1:54:06 PM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	XN21DS
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

9.9t

Gross	**21.64t**
Tare	**11.74t**
Net	**9.90t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

RESOURCECO
MATERIAL SOLUTIONS

NSW POSTAL
PO Box 7064
Alexandria Business Hub NSW 2015
Ph: 1300 131 222
Email: enquiries@resourceco.com.au
ABN 84 608 316 687

VIC POSTAL
Building 2, Level 3
Suite 46, 1 Ricketts Road, Mt Waverley VIC 3149
Ph: 03 8787 8805 Fax: 03 9543 5033
Email: enquiries@resourceco.com.au
ABN 84 608 316 687

Order Number 75198 Date 18/12/19 Booking Number 0160668
F3533683

CUSTOMER Christie Civil

JOB SITE ADDRESS 5 Bank st, Pymont

CONTRACTOR NAME ResourceCo DRIVER NAME Matt Ledger

TRUCK REGO CW 25 LL TRAILER REGO

EQUIPMENT TYPE: TANDEM [X] TRUCK & TRI TRAILER [ ] TRUCK & 4 AXLE TRAILER [ ] SEMI [ ]
TRUCK & 5 AXLE TRAILER [ ] 19M B-DOUBLE [ ] B-DOUBLE [ ] OTHER

TRUCK/COMBINATION TARE 11.5 GVM/GCM 23 PAYLOAD 11.7

Loads	M3/Ton	Total	Material	Disposal/Supply Site Address
x1	10.46	21.96	〃	〃
x2	11.04	22.54	〃	〃
x3	10.60	22.1	6SW/ACAA	
~~x4~~	~~11.28~~	~~22.1~~		
x4	11.22	22.72	〃	〃

ENTERED
21 DEC 2019
BY:

START TIME 7.00 FINISH TIME 2.00 TOTAL HOURS

[ ] CONTRACT RATE [ ] HOURLY RATE [ ] ROCK RATE [ ] EPA RATE [ ] NIGHT RATE [ ] TOLLS

Service acceptance (Job Site - material received or removed from site)

The Customer has retained ResourceCo Material Solutions to provide the services in accordance with the Customer Order between the Customer and ResourceCo Material Solutions and ResourceCo Material Solutions terms and Conditions (available at www.resourceco.com.au). The Operator agrees to perform or has performed a portion of the services as ResourceCo Material Solutions sub-contractor using the equipment and at the rates detailed in the Booking, and in accordance with the ResourceCo Material Solutions Independent Contractor Agreement.

CUSTOMER SIGNATURE PRINT NAME Ivan DATE 18/12/19

COMPANY NAME POSITION

Service acceptance (Supplier site - material supplier or material receiver site)

The Customer has retained ResourceCo Material Solutions to provide the services in accordance with the Customer Order and ResourceCo Material Solutions Terms and Conditions (available at www.resourceco.com. au). The Operator agrees to perform or has performed a portion of the services as ResourceCo Material Solutions sub-contractor using the equipment and at the rates detailed in the Booking, and in accordance with the ResourceCo Material Solutions Independent Contractor Agreement.

DISPOSAL SITE SIGNATURE PRINT NAME DATE

COMPANY NAME POSITION

Service acceptance (Supplier Site - material supplier or material receiver site)

	Yes	No
1. Was a Site Risk Assessment completed for the site?	[ ]	[ ]
2. Does the operator have the appropriate license/qualifications to operate this vehicle?	[ ]	[ ]
3. Is the vehicle serviced & maintained as per manufacturer's standards?	[ ]	[ ]
4. I have completed my daily vehicle checklist to verify that the vehicle is roadworthy to the limits of the checklist?	[ ]	[ ]
5. Are all insurances and registrations current including Public Liability, Work Cover, and Third Party/Comprehensive insurance?	[ ]	[ ]
6. I have had sufficient rest breaks and I am free from any drugs or alcohol?	[ ]	[ ]
7. I am "Fit For Work"?	[ ]	[ ]
8. I have reviewed the allocated work and agree that I have sufficient hours to complete the task taking into account speed & fatigue requirements?	[ ]	[ ]

By signing the operator confirms that a Site Risk Assessment was completed prior to commencement of services. Services were provided in-line with the ResourceCo Material Solutions compliance standards and in accordance with Occupational Health and Safety, Road Safety Laws and any other governing laws and regulations. ResourceCo Material Solutions may from time to time audit compliance with these requirements and take necessary action to rectify any non-compliance.

OPERATOR SIGNATURE DATE 18/12/19

WHITE - ResourceCo Material Solutions BLUE - Customer PINK - Disposal/Supply Site YELLOW - Contractor

BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0030094/1
Date:	18/12/2019 8:35:38 AM
Printed:	18/12/2019 8:35:45 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	CN25LH
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

10.46t

Gross	**21.96t**
Tare	**11.5t**
Net	**10.46t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30
"Your Partners In Material Management"

BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0030156/1
Date:	18/12/2019 10:39:25 AM
Printed:	18/12/2019 10:39:41 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	CN25LH
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

11.04t

Gross	**22.54t**
Tare	**11.5t**
Net	**11.04t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30
"Your Partners In Material Management"

BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0030216/1
Date:	18/12/2019 1:07:17 PM
Printed:	18/12/2019 1:07:23 PM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	CN25LH
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

10.6t

Gross	**22.1t**
Tare	**11.5t**
Net	**10.60t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30
"Your Partners In Material Management"

BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0030272/1
Date:	18/12/2019 3:01:12 PM
Printed:	18/12/2019 3:01:17 PM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	CN25LH
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

11.22t

Gross	**22.72t**
Tare	**11.5t**
Net	**11.22t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30

RESOURCECO MATERIAL SOLUTIONS

VIC OFFICE: Suite 2, Lvl 3, 6 Nexus Crt, Mulgrave VIC 3170 NSW OFFICE: 86 Bourke Rd, Alexandria NSW 2015 PH. 1300 131 222

DATE	19/12/19.	CUSTOMER	Christie Civil.	JOB NO.	75198
PICKUP LOCATION / JOB SITE	5 Banks St Prymont	CONTRACTOR NAME	Resource Co GE Hughes	PRINTED DOCKET NO.	00845
TRUCK REGISTRATION	CM88AS	TRAILER REGISTRATION		MACHINE TYPE	ATTACHMENTS

EQUIPMENT TYPE ☑ TANDEM/BOGEY ☐ TRUCK & TRI TRAILER ☐ TRUCK & 4 AXLE TRAILER ☐ SEMI ☐ TRUCK & 5 AXLE TRAILER ☐ 19M B-DOUBLE ☐ B-DOUBLE ☐ OTHER:

☐ CONTRACT RATE ☐ HOURLY RATE ☐ EPA RATE ☐ NIGHT RATE ☐ TOLLS ☐ SITE ALLOW $_____ PER HOUR

LOAD #	START / PICKUP TIME	FINISH / DELIVERY TIME	WAITING TIME (HRS/MINS)	CLIENT SIGNATURE TO APPROVE WAITING TIME	MATERIAL	m³/Ton	DISPOSAL SITES USED	STEER	DRIVE	TRAILER A	TRAILER B	ALLOWABLE GCM
								ALLOWABLE AXLE READINGS				
								+	+	+	=	
1	9:00	10:30			Soil Waste	22-36	Breen	6.5		15.9		N107
2												
3												
4												
5												
6												
7												
8												
9												
10												

ENTERED 21 DEC 2019 PY

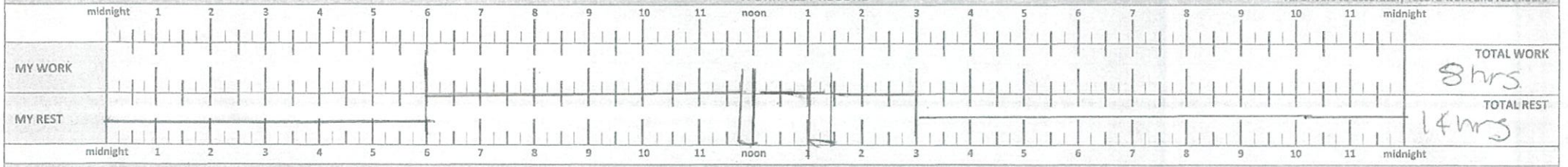
HOURLY HIRE	START	9:00.	TOTAL BREAKS		FINISH	10:30.	TOTAL BILLABLE HOURS	

The customer has engaged ResourceCo Material Solutions to provide the service in accordance with ResourceCo Material Solutions Terms & Conditions (available at www.resourceco.com.au)

PICKUP LOCATION			
COMPANY NAME	✓	POSITION	✓
PRINT NAME	✓	CUSTOMER SIGNATURE	✓

DELIVERY LOCATION			
COMPANY NAME		POSITION	
PRINT NAME		CUSTOMER SIGNATURE	

WORK REST RECORD — All drivers to accurately record work and rest hours



TOTAL WORK 8 hrs

TOTAL REST 14 hrs

DRIVER DECLARATION

PRESTART CHECKS COMPLETED - YES ☑ I DECLARE THAT I AM APPROPIATELY LICENCED AND FIT FOR WORK (as per trip planner) - YES ☑ I have provided a service in accordance with ResourceCo Material Solutions Terms & Conditions (available at www.resourceco.com.au) - YES ☑

DRIVER COMPANY NAME		DRIVER NAME	Carmen Crebbin	DRIVER SIGNATURE	

WHITE – ResourceCo Copy **BLUE** – Pickup Customer Copy **PINK** – Delivery Customer Copy **YELLOW** – Operator Copy

ATTACH ALL WEIGHBRIDGE DOCKETS

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BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0030404/1
Date:	19/12/2019 10:15:40 AM
Printed:	19/12/2019 10:15:47 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	CM88AS
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

10.72t

Gross	22.36t
Tare	11.64t
Net	10.72t

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30
"Your Partners In Material Management"

RESOURCECO MATERIAL SOLUTIONS

VIC OFFICE: Suite 2, Lvl 3, 6 Nexus Crt, Mulgrave VIC 3170 NSW OFFICE: 86 Bourke Rd, Alexandria NSW 2015 PH. 1300 131 222

DATE	19.12.2019	CUSTOMER	Christie civil	JOB NO.	75198
PICKUP LOCATION / JOB SITE	5 Bank st Pymont			CONTRACTOR NAME	Railroad transport
TRUCK REGISTRATION	CN 26 LM	TRAILER REGISTRATION	—	MACHINE TYPE	Steel bin

PRINTED DOCKET NO. 06645

ATTACHMENTS —

EQUIPMENT TYPE ☑ TANDEM/BOGEY ☐ TRUCK & TRI TRAILER ☐ TRUCK & 4 AXLE TRAILER ☐ SEMI ☐ TRUCK & 5 AXLE TRAILER ☐ 19M B-DOUBLE ☐ B-DOUBLE ☐ OTHER:

☑ CONTRACT RATE ☐ HOURLY RATE ☐ EPA RATE ☐ NIGHT RATE ☐ TOLLS ☐ SITE ALLOW $_____ PER HOUR

LOAD #	START / PICKUP TIME	FINISH / DELIVERY TIME	WAITING TIME (HRS/MINS)	CLIENT SIGNATURE TO APPROVE WAITING TIME	MATERIAL	m³/Ton	DISPOSAL SITES USED	STEER	DRIVE	TRAILER A	TRAILER B	ALLOWABLE GCM
								ALLOWABLE AXLE READINGS				
								6.5 +	17 - +	— +	— =	23.00
1	07:00	08:10			GSW-	10.82	BREEN Kurnell	6.5	16.5			22.5
2	09:11	10:38			" "	11.42	" "	6.3	16.4			22.3
3												
4												
5												
6												
7												
8												
9												
10												

ENTERED
21 DEC 2019
BY

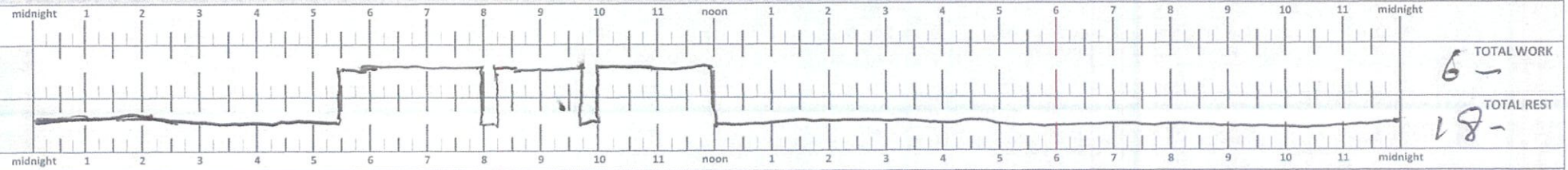
HOURLY HIRE	START		TOTAL BREAKS		FINISH		TOTAL BILLABLE HOURS	

The customer has engaged ResourceCo Material Solutions to provide the service in accordance with ResourceCo Material Solutions Terms & Conditions (available at www.resourceco.com.au)

PICKUP LOCATION			
COMPANY NAME		POSITION	
PRINT NAME		CUSTOMER SIGNATURE	

DELIVERY LOCATION			
COMPANY NAME		POSITION	
PRINT NAME		CUSTOMER SIGNATURE	

WORK REST RECORD — All drivers to accurately record work and rest hours



TOTAL WORK 6 —

TOTAL REST 18 —

DRIVER DECLARATION

PRESTART CHECKS COMPLETED - YES ☑ I DECLARE THAT I AM APPROPIATELY LICENCED AND FIT FOR WORK (as per trip planner) - YES ☑ I have provided a service in accordance with ResourceCo Material Solutions Terms & Conditions - YES (available at www.resourceco.com.au) ☑

DRIVER COMPANY NAME	Railroad transport	DRIVER NAME	DAVID Correll	DRIVER SIGNATURE	David Correll

WHITE – ResourceCo Copy **BLUE** – Pickup Customer Copy **PINK** – Delivery Customer Copy **YELLOW** – Operator Copy

ATTACH ALL WEIGHBRIDGE DOCKETS

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BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WB10030342/1
Date:	19/12/2019 7:58:10 AM
Printed:	19/12/2019 7:58:16 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	CN26LH
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL GENERAL SOLID

10.82t

Gross	**22.24t**
Tare	**11.42t**
Net	**10.82t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30
"Your Partners In Material Management"

BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WB10030413/1
Date:	19/12/2019 10:30:07 AM
Printed:	19/12/2019 10:30:34 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	CN26LH
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

11.42t

Gross	**22.84t**
Tare	**11.42t**
Net	**11.42t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30
"Your Partners In Material Management"

RESOURCECO MATERIAL SOLUTIONS

VIC OFFICE: Suite 2, Lvl 3, 6 Nexus Crt, Mulgrave VIC 3170 NSW OFFICE: 86 Bourke Rd, Alexandria NSW 2015 PH. 1300 131 222

DATE	19/12/19	CUSTOMER	christie civil	JOB NO.	75198.	PRINTED DOCKET NO.	08621
PICKUP LOCATION / JOB SITE	Pyrmont			CONTRACTOR NAME	Rail Road		
TRUCK REGISTRATION	XN03DR	TRAILER REGISTRATION	—	MACHINE TYPE	Bogie	ATTACHMENTS	

EQUIPMENT TYPE ☑ TANDEM/BOGEY ☐ TRUCK & TRI TRAILER ☐ TRUCK & 4 AXLE TRAILER ☐ SEMI ☐ TRUCK & 5 AXLE TRAILER ☐ 19M B-DOUBLE ☐ B-DOUBLE ☐ OTHER:

☐ CONTRACT RATE ☐ HOURLY RATE ☐ EPA RATE ☐ NIGHT RATE ☐ TOLLS ☐ SITE ALLOW $_____ PER HOUR

LOAD #	START / PICKUP TIME	FINISH / DELIVERY TIME	WAITING TIME (HRS/MINS)	CLIENT SIGNATURE TO APPROVE WAITING TIME	MATERIAL	m³/Ton	DISPOSAL SITES USED	STEER	DRIVE	TRAILER A	TRAILER B	ALLOWABLE GCM
								ALLOWABLE AXLE READINGS				
								6.5 +	16.5 +	+	=	
1	7.00.	8.30			ASW	12.1	Breen/Kurnell	5.0	17.0			
2	9.20.	10.30			ASW	12.1	= =	5.0	17.0			
3	[illegible]											
4												
5												
6												
7												
8												
9												
10												

ENTERED
21 DEC 2019
BY:

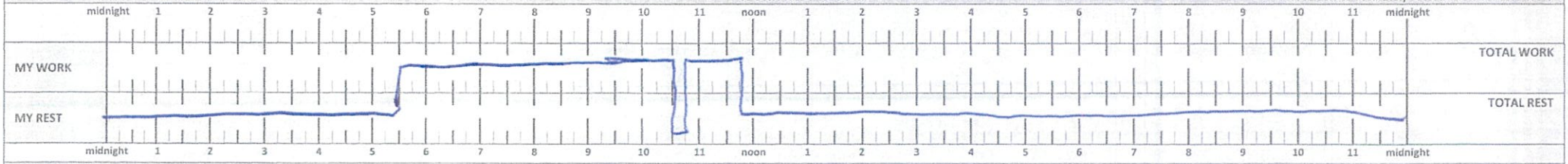
HOURLY HIRE	START	530 Am.	TOTAL BREAKS		FINISH	1145	TOTAL BILLABLE HOURS	

The customer has engaged ResourceCo Material Solutions to provide the service in accordance with ResourceCo Material Solutions Terms & Conditions (available at www.resourceco.com.au)

PICKUP LOCATION			
COMPANY NAME		POSITION	
PRINT NAME	IVAN	CUSTOMER SIGNATURE	

DELIVERY LOCATION			
COMPANY NAME		POSITION	
PRINT NAME		CUSTOMER SIGNATURE	

WORK REST RECORD — All drivers to accurately record work and rest hours



DRIVER DECLARATION

PRESTART CHECKS COMPLETED - YES ☑ I DECLARE THAT I AM APPROPIATELY LICENCED AND FIT FOR WORK (as per trip planner) - YES ☑ I have provided a service in accordance with ResourceCo Material Solutions Terms & Conditions (available at www.resourceco.com.au) - YES ☑

DRIVER COMPANY NAME	Rail Road	DRIVER NAME	M. ALWAJJAR	DRIVER SIGNATURE	

WHITE – ResourceCo Copy BLUE – Pickup Customer Copy PINK – Delivery Customer Copy YELLOW – Operator Copy

FORM 310 | VERSION 2.0 | 21.6.19 ATTACH ALL WEIGHBRIDGE DOCKETS THIS DOCUMENT IS UNCONTROLLED ONCE PRINTED

BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WB10030351/1
Date:	19/12/2019 8:16:46 AM
Printed:	19/12/2019 8:16:51 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	XN03DR
Contract No:	CON 000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

12.68t

Gross	**23.26t**
Tare	**10.58t**
Net	**12.68t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 4:00
Saturday 6:15 - 1:30
"Your Partners In Material Management"

BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0030412/1
Date:	19/12/2019 10:28:34 AM
Printed:	19/12/2019 10:29:07 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	XN03DR
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

11.54t

Gross	**22.12t**
Tare	**10.58t**
Net	**11.54t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30
"Your Partners In Material Management"

RESOURCECO MATERIAL SOLUTIONS

VIC OFFICE: Suite 2, Lvl 3, 6 Nexus Crt, Mulgrave VIC 3170 NSW OFFICE: 86 Bourke Rd, Alexandria NSW 2015 PH. 1300 131 222

DATE	19.12.19	CUSTOMER	Christie civil	JOB NO.	75148
PICKUP LOCATION / JOB SITE	5 Bank st formant			CONTRACTOR NAME	Qube
TRUCK REGISTRATION	CN81RH	TRAILER REGISTRATION	~~FT~~ X	MACHINE TYPE		ATTACHMENTS	

PRINTED DOCKET NO. 16058

EQUIPMENT TYPE ☐ TANDEM/BOGEY ☐ TRUCK & TRI TRAILER ☒ TRUCK & 4 AXLE TRAILER ☐ SEMI ☐ TRUCK & 5 AXLE TRAILER ☐ 19M B-DOUBLE ☐ B-DOUBLE ☐ OTHER:

☐ CONTRACT RATE ☐ HOURLY RATE ☐ EPA RATE ☐ NIGHT RATE ☐ TOLLS ☐ SITE ALLOW $_____ PER HOUR

LOAD #	START / PICKUP TIME	FINISH / DELIVERY TIME	WAITING TIME (HRS/MINS)	CLIENT SIGNATURE TO APPROVE WAITING TIME	MATERIAL	m³/Ton	DISPOSAL SITES USED	STEER	DRIVE	TRAILER A	TRAILER B	ALLOWABLE GCM
								ALLOWABLE AXLE READINGS				
								6.5 +	16.5 +	X +	X =	23.00
1	7:00	8:15			GSW	10.70	Breen Kurnell	6.5	15.6	X	X	21.52
2	9:20	11:00			=	12.20	=	6.5	16.5	X	X	23.00
3												
4												
5												
6												
7												
8												
9												
10												

ENTERED
21 DEC 2019
BY:

HOURLY HIRE	START	5:30	TOTAL BREAKS		FINISH	5:15	TOTAL BILLABLE HOURS	

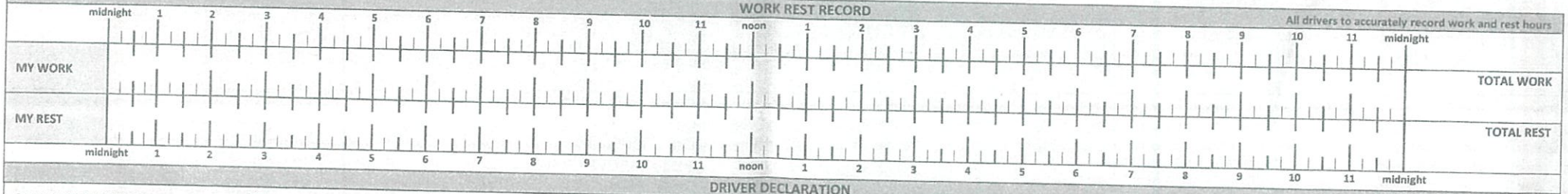
The customer has engaged ResourceCo Material Solutions to provide the service in accordance with ResourceCo Material Solutions Terms & Conditions (available at www.resourceco.com.au)

PICKUP LOCATION			
COMPANY NAME		POSITION	
PRINT NAME	IVAN	CUSTOMER SIGNATURE	

DELIVERY LOCATION			
COMPANY NAME		POSITION	
PRINT NAME		CUSTOMER SIGNATURE	

WORK REST RECORD

All drivers to accurately record work and rest hours



DRIVER DECLARATION

PRESTART CHECKS COMPLETED - YES ☒ I DECLARE THAT I AM APPROPIATELY LICENCED AND FIT FOR WORK (as per trip planner) - YES ☒ I have provided a service in accordance with ResourceCo Material Solutions Terms & Conditions (available at www.resourceco.com.au) - YES ☒

DRIVER COMPANY NAME	Qube	DRIVER NAME	Welam Tefera	DRIVER SIGNATURE	

WHITE – ResourceCo Copy **BLUE** – Pickup Customer Copy **PINK** – Delivery Customer Copy **YELLOW** – Operator Copy

FORM 310 | VERSION 2.0 | 21.6.19

ATTACH ALL WEIGHBRIDGE DOCKETS

1

BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0030340/1
Date:	19/12/2019 7:56:46 AM
Printed:	19/12/2019 7:56:52 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	CN81RH
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

10.7t

Gross	21.52t
Tare	10.82t
Net	10.70t

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30
"Your Partners In Material Management"

2

BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0030418/1
Date:	19/12/2019 10:36:22 AM
Printed:	19/12/2019 10:36:35 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 5[illegible]
Suburb:	SA
Destination:	L1SR
Vehicle:	CN81RH
Contract No:	[illegible]
Order No:	(3) PYRMONT

3

CONTAMINATED SOIL - GENERAL SOLID

11.8t

Gross	22.62t
Tare	10.82t
Net	11.80t

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30
"Your Partners In M[illegible]rial Management"

RESOURCECO MATERIAL SOLUTIONS

VIC OFFICE: Suite 2, Lvl 3, 6 Nexus Crt, Mulgrave VIC 3170 NSW OFFICE: 86 Bourke Rd, Alexandria NSW 2015 PH. 1300 131 222

DATE	19/12/19	CUSTOMER	Christie Civil	JOB NO.	75198	PRINTED DOCKET NO.	17426
PICKUP LOCATION / JOB SITE	5 Bank St Pyrmont			CONTRACTOR NAME	Resourceco		
TRUCK REGISTRATION	XN49DR	TRAILER REGISTRATION	—	MACHINE TYPE	Bogie	ATTACHMENTS	

EQUIPMENT TYPE ☑ TANDEM/BOGEY ☐ TRUCK & TRI TRAILER ☐ TRUCK & 4 AXLE TRAILER ☐ SEMI ☐ TRUCK & 5 AXLE TRAILER ☐ 19M B-DOUBLE ☐ B-DOUBLE ☐ OTHER:

☐ CONTRACT RATE ☐ HOURLY RATE ☐ EPA RATE ☐ NIGHT RATE ☐ TOLLS ☐ SITE ALLOW $_____ PER HOUR

LOAD #	START / PICKUP TIME	FINISH / DELIVERY TIME	WAITING TIME (HRS/MINS)	CLIENT SIGNATURE TO APPROVE WAITING TIME	MATERIAL	m³/Ton	DISPOSAL SITES USED	STEER	DRIVE	TRAILER A	TRAILER B	ALLOWABLE GCM
								ALLOWABLE AXLE READINGS				
								6.5 +	17 +	— +	— =	23
1	7:00	8:10			GSW	11.48	Breen Kurnell	6.5	16.8	—	—	22.08
2	9:15				GSW	12.0	Breen Kurnell	6.5	17.0	—	—	23.0
3												
4												
5												
6												
7												
8												
9												
10												

ENTERED
21 DEC 2019
BY:

HOURLY HIRE	START		TOTAL BREAKS		FINISH		TOTAL BILLABLE HOURS	

The customer has engaged ResourceCo Material Solutions to provide the service in accordance with ResourceCo Material Solutions Terms & Conditions (available at www.resourceco.com.au)

PICKUP LOCATION			
COMPANY NAME		POSITION	
PRINT NAME	IVAN	CUSTOMER SIGNATURE	

DELIVERY LOCATION			
COMPANY NAME		POSITION	
PRINT NAME		CUSTOMER SIGNATURE	

WORK REST RECORD — All drivers to accurately record work and rest hours



DRIVER DECLARATION

PRESTART CHECKS COMPLETED - YES ☑ I DECLARE THAT I AM APPROPIATELY LICENCED AND FIT FOR WORK (as per trip planner) - YES ☑ I have provided a service in accordance with ResourceCo Material Solutions Terms & Conditions (available at www.resourceco.com.au) - YES ☑

DRIVER COMPANY NAME	Resourceco	DRIVER NAME	Con Multari	DRIVER SIGNATURE	

WHITE – ResourceCo Copy **BLUE** – Pickup Customer Copy **PINK** – Delivery Customer Copy **YELLOW** – Operator Copy

ATTACH ALL WEIGHBRIDGE DOCKETS

THIS DOCUMENT IS UNCONTROLLED ONCE PRINTED

BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0030343/1
Date:	19/12/2019 7:59:11 AM
Printed:	19/12/2019 7:59:16 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	XN49DR
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

11.48t

Gross	**22.06t**
Tare	**10.58t**
Net	**11.48t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 4:00
Saturday 6:15 - 1:30
"Your Partners In Material Management"

BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0030403/1
Date:	19/12/2019 10:12:07 AM
Printed:	19/12/2019 10:12:11 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	XN49DR
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

11.74t

Gross	**22.32t**
Tare	**10.58t**
Net	**11.74t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday Friday 6:15 - 4:00
Saturday 6:15 - 1:30
"Your Partners In Material Management"

RESOURCECO MATERIAL SOLUTIONS

VIC OFFICE: Suite 2, Lvl 3, 6 Nexus Crt, Mulgrave VIC 3170 NSW OFFICE: 86 Bourke Rd, Alexandria NSW 2015 TARe 10.96 PH. 1300 131 222

DATE	19/12/2019	CUSTOMER	alt Ristic civil	JOB NO.	75148
PICKUP LOCATION / JOB SITE	5, Bank st Pyrmont NSW Syd	CONTRACTOR NAME	Hughes engineering	PRINTED DOCKET NO.	26855
TRUCK REGISTRATION		TRAILER REGISTRATION		MACHINE TYPE	ATTACHMENTS

EQUIPMENT TYPE ☒ TANDEM/BOGEY ☐ TRUCK & TRI TRAILER ☐ TRUCK & 4 AXLE TRAILER ☐ SEMI ☐ TRUCK & 5 AXLE TRAILER ☐ 19M B-DOUBLE ☐ B-DOUBLE ☐ OTHER:

☐ CONTRACT RATE ☐ HOURLY RATE ☐ EPA RATE ☐ NIGHT RATE ☐ TOLLS ☐ SITE ALLOW $_____ PER HOUR

LOAD #	START / PICKUP TIME	FINISH / DELIVERY TIME	WAITING TIME (HRS/MINS)	CLIENT SIGNATURE TO APPROVE WAITING TIME	MATERIAL	m³/Ton	DISPOSAL SITES USED	STEER	DRIVE	TRAILER A	TRAILER B	ALLOWABLE GCM
								ALLOWABLE AXLE READINGS				
								6.5 +	16.5 +	+	=	
1	0614	09.00			4SW	12.00	BReen Resource	6.5	12.00			12.00
2	09.00	11.15										
3												
4												
5												
6					per out of mat. onsite							
7												
8												
9												
10												

ENTERED 21 DEC 2019 BY:.....

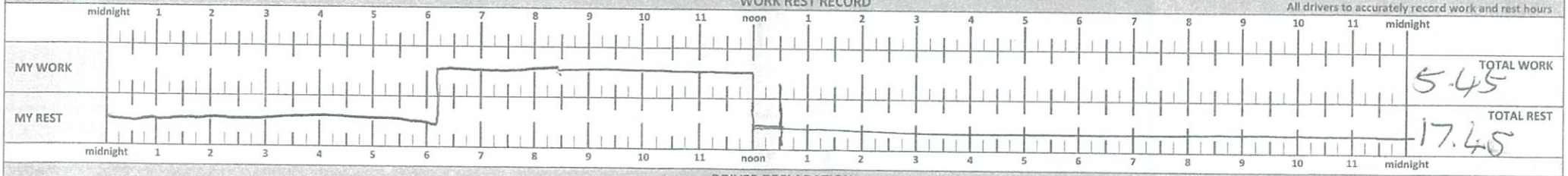
HOURLY HIRE	START	0615	TOTAL BREAKS	1/30M	FINISH	12.30	TOTAL BILLABLE HOURS	5.45

The customer has engaged ResourceCo Material Solutions to provide the service in accordance with ResourceCo Material Solutions Terms & Conditions (available at www.resourceco.com.au)

PICKUP LOCATION			
COMPANY NAME		POSITION	
PRINT NAME		CUSTOMER SIGNATURE	

DELIVERY LOCATION			
COMPANY NAME		POSITION	
PRINT NAME		CUSTOMER SIGNATURE	

WORK REST RECORD — All drivers to accurately record work and rest hours



DRIVER DECLARATION

PRESTART CHECKS COMPLETED - YES ☑ I DECLARE THAT I AM APPROPIATELY LICENCED AND FIT FOR WORK (as per trip planner) - YES ☑ I have provided a service in accordance with ResourceCo Material Solutions Terms & Conditions (available at www.resourceco.com.au) - YES ☑

DRIVER COMPANY NAME	Hughes eryineerwy	DRIVER NAME	John Grey	DRIVER SIGNATURE	

WHITE – ResourceCo Copy BLUE – Pickup Customer Copy PINK – Delivery Customer Copy YELLOW – Operator Copy

FORM 310 | VERSION 2.0 | 21.6.19 ATTACH ALL WEIGHBRIDGE DOCKETS THIS DOCUMENT IS UNCONTROLLED ONCE PRINTED

BREEN RESOURCES

Breen Resources Pty. Ltd.
ABN 31615045497

330 Captain Cook Drive
KURNELL NSW 2231
PHONE: 96688539
EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0030362/1
Date:	19/12/2019 8:47:46 AM
Printed:	19/12/2019 8:47:55 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	CM84AS
Contract No:	CON 000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

10.94t

Gross	21.9t
Tare	10.96t
Net	10.94t

Initial Inspection .....
Final Inspection .....
Load Rejected .....
Reason .....
.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30
"Your Partners In Material Management"

RESOURCECO
MATERIAL SOLUTIONS

NSW POSTAL
PO Box 7064
Alexandria Business Hub NSW 2015
Ph: 1300 131 222
Email: enquiries@resourceco.com.au
ABN 84 608 316 687

VIC POSTAL
Building 2, Level 3
Suite 46, 1 Ricketts Road, Mt Waverley VIC 3149
Ph: 03 8787 8805 Fax: 03 9543 5033
Email: enquiries@resourceco.com.au
ABN 84 608 316 687

Order Number 75198 **Date** 19. 12. 19 **Booking Number** 0160249

CUSTOMER Christie civil pty Ltd

JOB SITE ADDRESS 5 bank St Pyrmont

CONTRACTOR NAME qube DRIVER NAME Sam. G

TRUCK REGO XN 21 DS TRAILER REGO –

EQUIPMENT TYPE: TANDEM [X] TRUCK & TRI TRAILER [ ] TRUCK & 4 AXLE TRAILER [ ] SEMI [ ]
TRUCK & 5 AXLE TRAILER [ ] 19M B-DOUBLE [ ] B-DOUBLE [ ] OTHER

TRUCK/COMBINATION TARE 11. 74 GVM/GCM PAYLOAD 11. 00

Loads	M3/Ton	Total	Material	Disposal/Supply Site Address
(1)	9.86	21.60	GSW	Bleen Group Hurstell
"	11.24	22.98	"	"

ENTERED
* No More 2 Material
17 DEC 2019
BY:

START TIME 7:00 FINISH TIME TOTAL HOURS

[ ] CONTRACT RATE [ ] HOURLY RATE [ ] ROCK RATE [ ] EPA RATE [ ] NIGHT RATE [ ] TOLLS

Service acceptance (Job Site - material received or removed from site)

The Customer has retained ResourceCo Material Solutions to provide the services in accordance with the Customer Order between the Customer and ResourceCo Material Solutions and ResourceCo Material Solutions terms and Conditions (available at www.resourceco.com.au). The Operator agrees to perform or has performed a portion of the services as ResourceCo Material Solutions sub-contractor using the equipment and at the rates detailed in the Booking, and in accordance with the ResourceCo Material Solutions Independent Contractor Agreement.

CUSTOMER SIGNATURE PRINT NAME DATE

COMPANY NAME POSITION

Service acceptance (Supplier site - material supplier or material receiver site)

The Customer has retained ResourceCo Material Solutions to provide the services in accordance with the Customer Order and ResourceCo Material Solutions Terms and Conditions (available at www.resourceco.com. au). The Operator agrees to perform or has performed a portion of the services as ResourceCo Material Solutions sub-contractor using the equipment and at the rates detailed in the Booking, and in accordance with the ResourceCo Material Solutions Independent Contractor Agreement.

DISPOSAL SITE SIGNATURE PRINT NAME DATE

COMPANY NAME POSITION

Service acceptance (Supplier Site - material supplier or material receiver site)

	Yes	No
1. Was a Site Risk Assessment completed for the site?	✓	
2. Does the operator have the appropriate license/qualifications to operate this vehicle?	✓	
3. Is the vehicle serviced & maintained as per manufacturer's standards?	✓	
4. I have completed my daily vehicle checklist to verify that the vehicle is roadworthy to the limits of the checklist?	✓	
5. Are all insurances and registrations current including Public Liability, Work Cover, and Third Party/Comprehensive insurance?	✓	
6. I have had sufficient rest breaks and I am free from any drugs or alcohol?	✓	
7. I am "Fit For Work"?	✓	
8. I have reviewed the allocated work and agree that I have sufficient hours to complete the task taking into account speed & fatigue requirements?	✓	

By signing the operator confirms that a Site Risk Assessment was completed prior to commencement of services. Services were provided in-line with the ResourceCo Material Solutions compliance standards and in accordance with Occupational Health and Safety, Road Safety Laws and any other governing laws and regulations. ResourceCo Material Solutions may from time to time audit compliance with these requirements and take necessary action to rectify any non-compliance.

OPERATOR SIGNATURE DATE 19. 12. 19

WHITE - ResourceCo Material Solutions **BLUE** - Customer **PINK** - Disposal/Supply Site **YELLOW** - Contractor

BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0030360/1
Date:	19/12/2019 8:33:06 AM
Printed:	19/12/2019 8:33:12 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	XN21DS
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

9.86t

Gross	**21.6t**
Tare	**11.74t**
Net	**9.86t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30
"Your Partners In Material Management"

BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0030419/1
Date:	19/12/2019 10:37:43 AM
Printed:	19/12/2019 10:38:19 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	XN21DS
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

11.24t

Gross	**22.98t**
Tare	**11.74t**
Net	**11.24t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30
"Your Partners In Material Management"

RESOURCECO
MATERIAL SOLUTIONS

NSW POSTAL
PO Box 7064
Alexandria Business Hub NSW 2015
Ph: 1300 131 222
Email: enquiries@resourceco.com.au
ABN 84 608 316 687

VIC POSTAL
Building 2, Level 3
Suite 46, 1 Ricketts Road, Mt Waverley VIC 3149
Ph: 03 8787 8805 Fax: 03 9543 5033
Email: enquiries@resourceco.com.au
ABN 84 608 316 687

Order Number 75198 Date 19/12/19 Booking Number 0160669

E3535653

CUSTOMER Christies Civil

JOB SITE ADDRESS S Bank st

CONTRACTOR NAME ResourceCo DRIVER NAME Matt Veige

TRUCK REGO CN 75 LH TRAILER REGO

EQUIPMENT TYPE: TANDEM [X] TRUCK & TRI TRAILER [ ] TRUCK & 4 AXLE TRAILER [ ] SEMI [ ]
TRUCK & 5 AXLE TRAILER [ ] 19M B-DOUBLE [ ] B-DOUBLE [ ] OTHER

TRUCK/COMBINATION TARE 11.5 GVM/GCM 23 PAYLOAD 11.7

Loads	M3/Ton	Total	Material	Disposal/Supply Site Address
x1	11.14	22.64	GSW/C	
x2	11.24	22.74	"	"

ENTERED
21 DEC 2019
BY:

START TIME 7.00 FINISH TIME TOTAL HOURS

[ ] CONTRACT RATE [ ] HOURLY RATE [ ] ROCK RATE [ ] EPA RATE [ ] NIGHT RATE [ ] TOLLS

Service acceptance (Job Site - material received or removed from site)

The Customer has retained ResourceCo Material Solutions to provide the services in accordance with the Customer Order between the Customer and ResourceCo Material Solutions and ResourceCo Material Solutions terms and Conditions (available at www.resourceco.com.au). The Operator agrees to perform or has performed a portion of the services as ResourceCo Material Solutions sub-contractor using the equipment and at the rates detailed in the Booking, and in accordance with the ResourceCo Material Solutions Independent Contractor Agreement.

CUSTOMER SIGNATURE PRINT NAME DATE

COMPANY NAME POSITION

Service acceptance (Supplier site - material supplier or material receiver site)

The Customer has retained ResourceCo Material Solutions to provide the services in accordance with the Customer Order and ResourceCo Material Solutions Terms and Conditions (available at www.resourceco.com.au). The Operator agrees to perform or has performed a portion of the services as ResourceCo Material Solutions sub-contractor using the equipment and at the rates detailed in the Booking, and in accordance with the ResourceCo Material Solutions Independent Contractor Agreement.

DISPOSAL SITE SIGNATURE PRINT NAME DATE

COMPANY NAME POSITION

Service acceptance (Supplier Site - material supplier or material receiver site)

	Yes	No
1. Was a Site Risk Assessment completed for the site?	[ ]	[ ]
2. Does the operator have the appropriate license/qualifications to operate this vehicle?	[ ]	[ ]
3. Is the vehicle serviced & maintained as per manufacturer's standards?	[ ]	[ ]
4. I have completed my daily vehicle checklist to verify that the vehicle is roadworthy to the limits of the checklist?	[ ]	[ ]
5. Are all insurances and registrations current including Public Liability, Work Cover, and Third Party/Comprehensive insurance?	[ ]	[ ]
6. I have had sufficient rest breaks and I am free from any drugs or alcohol?	[ ]	[ ]
7. I am "Fit For Work"?	[ ]	[ ]
8. I have reviewed the allocated work and agree that I have sufficient hours to complete the task taking into account speed & fatigue requirements?	[ ]	[ ]

By signing the operator confirms that a Site Risk Assessment was completed prior to commencement of services. Services were provided in-line with the ResourceCo Material Solutions compliance standards and in accordance with Occupational Health and Safety, Road Safety Laws and any other governing laws and regulations. ResourceCo Material Solutions may from time to time audit compliance with these requirements and take necessary action to rectify any non-compliance.

OPERATOR SIGNATURE DATE 19/12/19

BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0030350/1
Date:	19/12/2019 8:13:13 AM
Printed:	19/12/2019 8:13:19 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	8460831668/
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	CN25LH
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

11.14t

Gross	**22.64t**
Tare	**11.5t**
Net	**11.14t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30
"Your Partners In Material Management"

BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0030400/1
Date:	19/12/2019 10:05:53 AM
Printed:	19/12/2019 10:05:58 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	8460831668/
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	CN25LH
Contract No:	CON-000243
Order No:	(3) PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

11.24t

Gross	**22.74t**
Tare	**11.5t**
Net	**11.24t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30
"Your Partners In Material Management"

RESOURCECO MATERIAL SOLUTIONS

VIC OFFICE: Suite 2, Lvl 3, 6 Nexus Crt, Mulgrave VIC 3170 NSW OFFICE: 86 Bourke Rd, Alexandria NSW 2015 PH. 1300 131 222

DATE	12-3-20	CUSTOMER	Christie Civil	JOB NO.	75198	PRINTED DOCKET NO.	15514
PICKUP LOCATION / JOB SITE	Bank St Pyrmont.			CONTRACTOR NAME	Michael Rossato		
TRUCK REGISTRATION	XW 51NX	TRAILER REGISTRATION		MACHINE TYPE	Bogie Tipper.	ATTACHMENTS	

EQUIPMENT TYPE ☐ TANDEM/BOGEY ☐ TRUCK & TRI TRAILER ☐ TRUCK & 4 AXLE TRAILER ☐ SEMI ☐ TRUCK & 5 AXLE TRAILER ☐ 19M B-DOUBLE ☐ B-DOUBLE ☐ OTHER: Bogie.

☑ CONTRACT RATE ☐ HOURLY RATE ☐ EPA RATE ☐ NIGHT RATE ☑ TOLLS ☐ SITE ALLOW $_____ PER HOUR

LOAD #	START / PICKUP TIME	FINISH / DELIVERY TIME	WAITING TIME (HRS/MINS)	CLIENT SIGNATURE TO APPROVE WAITING TIME	MATERIAL	m³/Ton	DISPOSAL SITES USED
1	7.15	8.38			GSW	14.58	Breen Resources.
2	9.58	11.20			GSW	12.56	" "
3	12.35	1.35			GSW	12.06	" "
4							
5							
6							
7							
8							
9							
10							

ENTERED
14 MAR 2020
BY:.....

STEER	DRIVE	TRAILER A	TRAILER B	ALLOWABLE GCM
ALLOWABLE AXLE READINGS				
+	+	+	=	

M1 TOLLS TO BE ADVISED

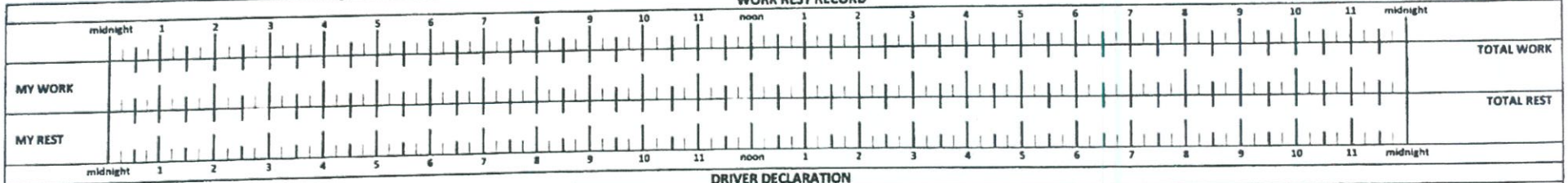
HOURLY HIRE	START		TOTAL BREAKS		FINISH		TOTAL BILLABLE HOURS	

The customer has engaged ResourceCo Material Solutions to provide the service in accordance with ResourceCo Material Solutions Terms & Conditions (available at www.resourceco.com.au)

PICKUP LOCATION			
COMPANY NAME	Christie Civil	POSITION	
PRINT NAME	Dennis Wang	CUSTOMER SIGNATURE	

DELIVERY LOCATION			
COMPANY NAME		POSITION	
PRINT NAME		CUSTOMER SIGNATURE	

WORK REST RECORD — All drivers to accurately record work and rest hours



DRIVER DECLARATION

PRESTART CHECKS COMPLETED - YES ☑ I DECLARE THAT I AM APPROPIATELY LICENCED AND FIT FOR WORK (as per trip planner) - YES ☐ I have provided a service in accordance with ResourceCo Material Solutions Terms & Conditions - YES ☐ (available at www.resourceco.com.au)

DRIVER COMPANY NAME	E&M Excavations PT	DRIVER NAME	Michael Rossato	DRIVER SIGNATURE	M. Rossato

WHITE – ResourceCo Copy BLUE – Pickup Customer Copy PINK – Delivery Customer Copy YELLOW – Operator Copy

ATTACH ALL WEIGHBRIDGE DOCKETS THIS DOCUMENT IS UNCONTROLLED ONCE PRINTED

RESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket	WB10040765/1
Date	12/03/2020 1:23:12 PM
Printed	12/03/2020 1:23:17 PM
Operator	Karen
Customer	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb	SA
Destination	L1SR
Vehicle	XN51NX
Contract No	CON 000304
Order No	PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

12.06t

Gross	21.86t
Tare	9.80t
Net	12.06t

Initial Inspection

Final Inspection

Load Rejected

Reason

Operating Times:
Monday - Friday 6:15 - 4.00
Saturday 6:15 - 1:30
"Your Partners in Material Management"

RESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket	WB10040715/1
Date	12/03/2020 11:18:01 AM
Printed	12/03/2020 11:18:12 AM
Operator	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	XN51NX
Contract No:	CON 000304
Order No	PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

12.56t

Gross	22.36t
Tare	9.80t
Net	12.56t

Initial Inspection

Final Inspection

Load Rejected

Reason

Operating Times:
Monday - Friday 6:15 - 4.00
Saturday 6:15 - 1:30

RESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WB10040652/1
Date	12/03/2020 8:38:34 AM
Printed	12/03/2020 8:52:17 AM
Operator	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	XN51NX
Contract No:	CON-000304
Order No	PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

14.98t

Gross	24.78t
Tare	9.80t
Net	14.98t

Initial Inspection

Final Inspection

Load Rejected

Reason

Operating Times:
Monday - Friday 6:15 - 4.00
Saturday 6:15 - 1:30

RESOURCECO
MATERIAL SOLUTIONS

NSW POSTAL
PO Box 7064
Alexandria Business Hub NSW 2015
Ph: 1300 131 222
Email: enquiries@resourceco.com.au

VIC POSTAL
Building 2, Level 3
Suite 46, 1 Ricketts Road, Mt Waverley VIC 3149
Ph: 03 8787 8805 Fax: 03 9543 5033
Email: enquiries@resourceco.com.au
ABN 84 608 316 687

Order Number 75198 **Date** 12/3/20 **Booking Number** 0150482

CUSTOMER CHRISTIE CIVIL

JOB SITE ADDRESS 5 BANK ST PYMONT

CONTRACTOR NAME EPIC TIPPERZ DRIVER NAME MICHAEL

TRUCK REGO EPIK TRAILER REGO

EQUIPMENT TYPE: TANDEM [X] TRUCK & TRI TRAILER [ ] TRUCK & 4 AXLE TRAILER [ ] SEMI [ ]
TRUCK & 5 AXLE TRAILER [ ] 19M B-DOUBLE [ ] B-DOUBLE [ ] OTHER

TRUCK/COMBINATION TARE 10 GVM/GCM 23.00 PAYLOAD 12.50

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
4	4	GSW	KURNELL	

ENTERED
14 MAR 2020
BY:

*	14.88T
*	11.86T
*	12.06T
*	11.62T

REST
* 830AM - 845AM
* 1245PM - 100PM

START TIME 700AM FINISH TIME TOTAL HOURS

[X] CONTRACT RATE [ ] HOURLY RATE [ ] ROCK RATE [ ] EPA RATE [ ] NIGHT RATE [ ] TOLLS

Service acceptance (Job Site - material received or removed from site)

The Customer has retained ResourceCo Material Solutions to provide the services in accordance with the Customer Order between the Customer and ResourceCo Material Solutions and ResourceCo Material Solutions terms and Conditions (available at www.resourceco.com.au). The Operator agrees to perform or has performed a portion of the services as ResourceCo Material Solutions sub-contractor using the equipment and at the rates detailed in the Booking, and in accordance with the ResourceCo Material Solutions Independent Contractor Agreement.

CUSTOMER SIGNATURE [signature] PRINT NAME IVAN DATE 12/3/20

COMPANY NAME POSITION

Service acceptance (Supplier site - material supplier or material receiver site)

The Customer has retained ResourceCo Material Solutions to provide the services in accordance with the Customer Order and ResourceCo Material Solutions Terms and Conditions (available at www.resourceco.com.au). The Operator agrees to perform or has performed a portion of the services as ResourceCo Material Solutions sub-contractor using the equipment and at the rates detailed in the Booking, and in accordance with the ResourceCo Material Solutions Independent Contractor Agreement.

DISPOSAL SITE SIGNATURE PRINT NAME DATE

COMPANY NAME POSITION

Service acceptance (Supplier Site - material supplier or material receiver site)

	Yes	No
1. Was a Site Risk Assessment completed for the site?	✓	
2. Does the operator have the appropriate license/qualifications to operate this vehicle?		
3. Is the vehicle serviced & maintained as per manufacturer's standards?		
4. I have completed my daily vehicle checklist to verify that the vehicle is roadworthy to the limits of the checklist?		
5. Are all insurances and registrations current including Public Liability, Work Cover, and Third Party/Comprehensive insurance?		
6. I have had sufficient rest breaks and I am free from any drugs or alcohol?		
7. I am "Fit For Work"?		
8. I have reviewed the allocated work and agree that I have sufficient hours to complete the task taking into account speed & fatigue requirements?		

By signing the operator confirms that a Site Risk Assessment was completed prior to commencement of services. Services were provided in-line with the ResourceCo Material Solutions compliance standards and in accordance with Occupational Health and Safety, Road Safety Laws and any other governing laws and regulations. ResourceCo Material Solutions may from time to time audit compliance with these requirements and take necessary action to rectify any non-compliance.

OPERATOR SIGNATURE [signature] **DATE** 12/3/20

WHITE - ResourceCo Material Solutions BLUE - Customer PINK - Disposal/Supply Site YELLOW - Contractor

BREEN RESOURCES

Breen Resources Pty. Ltd.
ABN 31615045497
330 Captain Cook Drive
KURNELL NSW 2231
PHONE: 96688539
EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WB1004/804/1
Date:	12/03/2020 3:29:15 PM
Printed:	12/03/2020 3:29:19 PM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	LPIK
Contract No:	CON 000304
Order No:	PYRMONT

CONTAMINATED SOIL GENERAL SOLID

11.62t

Gross	22.20t
Tare	10.58t
Net	11.62t

Initial Inspection
Final Inspection
Load Rejected
Reason

Operating Times
Monday Friday 6:15 4:00
Saturday 6:15 1:30
"Your Partners in Material Management"

BREEN RESOURCES

Breen Resources Pty. Ltd.
ABN 31615045497
330 Captain Cook Drive
KURNELL NSW 2231
PHONE: 96688539
EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WB1004/706/1
Date:	12/03/2020 10:57:16 AM
Printed:	12/03/2020 10:57:34 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	LPIK
Contract No:	CON 000304
Order No:	PYRMONT

CONTAMINATED SOIL GENERAL SOLID

11.86t

Gross	22.44t
Tare	10.58t
Net	11.86t

Initial Inspection
Final Inspection
Load Rejected
Reason

Operating Times
Monday Friday 6:15 4:00
Saturday 6:15 1:30
"Your Partners in Material Management"

BREEN RESOURCES

Breen Resources Pty. Ltd.
ABN 31615045497
330 Captain Cook Drive
KURNELL NSW 2231
PHONE. 96688539
EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WB1004/644/1
Date:	12/03/2020 8:21:54 AM
Printed:	12/03/2020 8:42:42 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	LPIK
Contract No:	CON 000304
Order No:	PYRMONT

CONTAMINATED SOIL GENERAL SOLID

14.88t

Gross	25.46t
Tare	10.58t
Net	14.88t

Initial Inspection
Final Inspection
Load Rejected
Reason

Operating Times
Monday Friday 6:15 4:00
Saturday 6:15 1:30
"Your Partners in Material Management"

BREEN RESOURCES

Breen Resources Pty. Ltd.
ABN 31615045497
330 Captain Cook Drive
KURNELL NSW 2231
PHONE: 96688539
EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WB1004/710/1
Date:	12/03/2020 1:37:20 PM
Printed:	12/03/2020 1:37:30 PM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	LPIK
Contract No:	CON 000304
Order No:	PYRMONT

CONTAMINATED SOIL GENERAL SOLID

12.06t

Gross	22.64t
Tare	10.58t
Net	12.06t

Initial Inspection
Final Inspection
Load Rejected
Reason

Operating Times
Monday Friday 6:15 4:00
Saturday 6:15 1:30
"Your Partners in Material Management"

RESOURCECO MATERIAL SOLUTIONS

Order Number 75198 Date 12.03.20 Booking Number 0153785

CUSTOMER CHRISTIE CITY

JOB SITE ADDRESS 5 BANK ST PYRMONT

CONTRACTOR NAME BE GROUT NSW P/L DRIVER NAME SAL HEVRO

TRUCK REGO CIC 33W TRAILER REGO N/A

EQUIPMENT TYPE: TANDEM ☒ TRUCK & TRI TRAILER ☐ TRUCK & 4 AXLE TRAILER ☐ SEMI ☐

TRUCK & 5 AXLE TRAILER ☐ 19M B-DOUBLE ☐ B-DOUBLE ☐ OTHER

TRUCK/COMBINATION TARE 9.4 tone GVM/GCM 23.00 tone PAYLOAD 12.8 tone.

Loads	M3/Ton	Total	Material	Disposal/Supply Site Address
1	12 m³	12 m³	GSW	Breen Kurnell 330 Captain Cook Drive
2	12m³	24 m³	GSW	"
3	12m³	36 m³	GSW	"
[illegible]				

3 x loads to breen.

ENTERED
14 MAR 2020
BY:

START TIME 07:00 FINISH TIME 14.30 pm TOTAL HOURS —

☒ CONTRACT RATE ☐ HOURLY RATE ☐ ROCK RATE ☐ EPA RATE ☐ NIGHT RATE ☒ TOLLS

Service acceptance (Job Site - material received or removed from site)

The Customer has retained ResourceCo Material Solutions to provide the services in accordance with the Customer Order between the Customer and ResourceCo Material Solutions and ResourceCo Material Solutions terms and Conditions (available at www.resourceco.com.au). The Operator agrees to perform or has performed a portion of the services as ResourceCo Material Solutions sub-contractor using the equipment and at the rates detailed in the Booking, and in accordance with the ResourceCo Material Solutions Independent Contractor Agreement.

CUSTOMER SIGNATURE [signature] PRINT NAME [illegible] DATE

COMPANY NAME POSITION

Service acceptance (Supplier site - material supplier or material receiver site)

The Customer has retained ResourceCo Material Solutions to provide the services in accordance with the Customer Order and ResourceCo Material Solutions Terms and Conditions (available at www.resourceco.com. au). The Operator agrees to perform or has performed a portion of the services as ResourceCo Material Solutions sub-contractor using the equipment and at the rates detailed in the Booking, and in accordance with the ResourceCo Material Solutions Independent Contractor Agreement.

DISPOSAL SITE SIGNATURE PRINT NAME DATE

COMPANY NAME POSITION

Service acceptance (Supplier Site - material supplier or material receiver site)

	Yes	No
1. Was a Site Risk Assessment completed for the site?	☒	☐
2. Does the operator have the appropriate license/qualifications to operate this vehicle?	☒	☐
3. Is the vehicle serviced & maintained as per manufacturer's standards?	☒	☐
4. I have completed my daily vehicle checklist to verify that the vehicle is roadworthy to the limits of the checklist?	☒	☐
5. Are all insurances and registrations current including Public Liability, Work Cover, and Third Party/Comprehensive insurance?	☒	☐
6. I have had sufficient rest breaks and I am free from any drugs or alcohol?	☒	☐
7. I am "Fit For Work"?	☒	☐
8. I have reviewed the allocated work and agree that I have sufficient hours to complete the task taking into account speed & fatigue requirements?	☒	☐

By signing the operator confirms that a Site Risk Assessment was completed prior to commencement of services. Services were provided in-line with the ResourceCo Material Solutions compliance standards and in accordance with Occupational Health and Safety, Road Safety Laws and any other governing laws and regulations. ResourceCo Material Solutions may from time to time audit compliance with these requirements and take necessary action to rectify any non-compliance.

OPERATOR SIGNATURE [signature] DATE 12.08.20

WHITE - ResourceCo Material Solutions BLUE - Customer PINK - Disposal/Supply Site YELLOW - Contractor

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0040647/1
Date:	12/03/2020 8:31:30 AM
Printed:	12/03/2020 8:48:16 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	CK33WI
Contract No:	CON-000304
Order No:	PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

14.76t

Gross	**24.38t**
Tare	**9.62t**
Net	**14.76t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30
...erial Management"

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0040766/1
Date:	12/03/2020 1:24:13 PM
Printed:	12/03/2020 1:24:33 PM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	CK33WI
Contract No:	CON-000304
Order No:	PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

14.82t

Gross	**24.44t**
Tare	**9.62t**
Net	**14.82t**

itial Inspection .....

nal Inspection .....

ad Rejected .....

ason .....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30
...erial Management"

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0040714/1
Date:	12/03/2020 11:17:18 AM
Printed:	12/03/2020 11:17:23 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	CK33WI
Contract No:	CON-000304
Order No:	PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

12.16t

Gross	**21.78t**
Tare	**9.62t**
Net	**12.16t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30
"Your Partners in Material Management"

RESOURCECO
MATERIAL SOLUTIONS

NSW POSTAL
PO Box 7064
Alexandria Business Hub NSW 2015
Ph: 1300 131 222
Email: enquiries@resourceco.com.au
ABN 84 608 316 687

VIC POSTAL
Building 2, Level 3
Suite 46, 1 Ricketts Road, Mt Waverley VIC 3149
Ph: 03 8787 8805 Fax: 03 9543 5033
Email: enquiries@resourceco.com.au
ABN 84 608 316 687

Order Number 75198 **Date** 12-3-20 **Booking Number** 0154310

CUSTOMER CHRISTIE CIVIL

JOB SITE ADDRESS 5 BANK STREET PYRMONT

CONTRACTOR NAME SWIFT / SYDNEY TIPPERS DRIVER NAME DAVID

TRUCK REGO [redacted] XNO96M TRAILER REGO [redacted]

EQUIPMENT TYPE: TANDEM ☐ TRUCK & TRI TRAILER ☐ TRUCK & 4 AXLE TRAILER ☐ SEMI ☐
TRUCK & 5 AXLE TRAILER ☐ 19M B-DOUBLE ☐ B-DOUBLE ☐ OTHER BOGEY

TRUCK/COMBINATION TARE 11 GVM/GCM 23 TON PAYLOAD

Loads	M3/Ton	Total	Material	Disposal/Supply Site Address
1	23	12.80	GSW	BREEN RESOURCES / KORWELL
2	23	11.06	GSW	" "
3	23	10.58	GSW	" "

RMS - STOP

ENTERED
14 MAR 2020
BY: .....

START TIME 0615 FINISH TIME 1500 TOTAL HOURS

☐ CONTRACT RATE ☐ HOURLY RATE ☐ ROCK RATE ☐ EPA RATE ☐ NIGHT RATE ☑ TOLLS

Service acceptance (Job Site - material received or removed from site)

The Customer has retained ResourceCo Material Solutions to provide the services in accordance with the Customer Order between the Customer and ResourceCo Material Solutions and ResourceCo Material Solutions terms and Conditions (available at www.resourceco.com.au). The Operator agrees to perform or has performed a portion of the services as ResourceCo Material Solutions sub-contractor using the equipment and at the rates detailed in the Booking, and in accordance with the ResourceCo Material Solutions Independent Contractor Agreement.

CUSTOMER SIGNATURE ..... PRINT NAME ..... DATE .....

COMPANY NAME ..... POSITION .....

Service acceptance (Supplier site - material supplier or material receiver site)

The Customer has retained ResourceCo Material Solutions to provide the services in accordance with the Customer Order and ResourceCo Material Solutions Terms and Conditions (available at www.resourceco.com.au). The Operator agrees to perform or has performed a portion of the services as ResourceCo Material Solutions sub-contractor using the equipment and at the rates detailed in the Booking, and in accordance with the ResourceCo Material Solutions Independent Contractor Agreement.

DISPOSAL SITE SIGNATURE ..... PRINT NAME ..... DATE .....

COMPANY NAME ..... POSITION .....

Service acceptance (Supplier Site - material supplier or material receiver site)

	Yes	No
1. Was a Site Risk Assessment completed for the site?	☑	☐
2. Does the operator have the appropriate license/qualifications to operate this vehicle?	☐	☐
3. Is the vehicle serviced & maintained as per manufacturer's standards?	☐	☐
4. I have completed my daily vehicle checklist to verify that the vehicle is roadworthy to the limits of the checklist?	☐	☐
5. Are all insurances and registrations current including Public Liability, Work Cover, and Third Party/Comprehensive insurance?	☐	☐
6. I have had sufficient rest breaks and I am free from any drugs or alcohol?	☑	☐
7. I am "Fit For Work"?	☑	☐
8. I have reviewed the allocated work and agree that I have sufficient hours to complete the task taking into account speed & fatigue requirements?	☐	☐

By signing the operator confirms that a Site Risk Assessment was completed prior to commencement of services. Services were provided in-line with the ResourceCo Material Solutions compliance standards and in accordance with Occupational Health and Safety, Road Safety Laws and any other governing laws and regulations. ResourceCo Material Solutions may from time to time audit compliance with these requirements and take necessary action to rectify any non-compliance.

OPERATOR SIGNATURE [signature] **DATE** 12-03-20

BREEN RESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0040763/1
Date:	12/03/2020 1:13:59 PM
Printed:	12/03/2020 1:14:08 PM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	XN09GM1
Contract No:	CON-000304
Order No:	PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

10.58t

Gross	**22.10t**
Tare	**11.52t**
Net	**10.58t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

Operating Times:
Monday - Friday 6:15 4:00
Saturday 6:15 1:30
"Your Partners In Material Management"

BREEN RESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0040711/1
Date:	12/03/2020 11:06:11 AM
Printed:	12/03/2020 11:06:23 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	XN09GM1
Contract No:	CON-000304
Order No:	PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

11.06t

Gross	**22.58t**
Tare	**11.52t**
Net	**11.06t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

Operating Times:
Monday - Friday 6:15 4:00
Saturday 6:15 1:30
"Your Partners In Material Management"

BREEN RESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0040670/1
Date:	12/03/2020 9:18:26 AM
Printed:	12/03/2020 9:30:50 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	XN09GM1
Contract No:	CON-000304
Order No:	PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

12.8t

Gross	**24.32t**
Tare	**11.52t**
Net	**12.80t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

Operating Times:
Monday - Friday 6:15 4:00
Saturday 6:15 1:30
"Your Partners In Material Management"

RESOURCECO
MATERIAL SOLUTIONS

NSW POSTAL
PO Box 7064
Alexandria Business Hub NSW 2015
Ph: 1300 131 222
Email: enquiries@resourceco.com.au
ABN 84 608 316 687

VIC POSTAL
Building 2, Level 3
Suite 46, 1 Ricketts Road, Mt Waverley VIC 3149
Ph: 03 8787 8805 Fax: 03 9543 5033
Email: enquiries@resourceco.com.au
ABN 84 608 316 687

Order Number 75198 **Date** 12-3-20 **Booking Number** 0154371

CUSTOMER christie civil

JOB SITE ADDRESS 5 bank st Pymont

CONTRACTOR NAME Swift Transport DRIVER NAME Abdul Nawas

TRUCK REGO CQ10AK TRAILER REGO N/A

EQUIPMENT TYPE: TANDEM ☑ TRUCK & TRI TRAILER ☑ TRUCK & 4 AXLE TRAILER ☐ SEMI ☐

TRUCK & 5 AXLE TRAILER ☐ 19M B-DOUBLE ☐ B-DOUBLE ☐ OTHER

TRUCK/COMBINATION TARE 18T GVM/GCM 30T PAYLOAD 48T

Loads	M3/Ton	Total	Material	Disposal/Supply Site Address
1	11.38T	23.02T	gsw	BReen captain cook drive
2	11.48T	23.12T	gsw	BReen captain cook drive
3	11.24T	22.88T	gsw	BReen captain cook drive

Kurnell

ENTERED
14 MAR 2020
BY:

START TIME 10am FINISH TIME 4PM TOTAL HOURS

☑ CONTRACT RATE ☐ HOURLY RATE ☐ ROCK RATE ☐ EPA RATE ☐ NIGHT RATE ☑ TOLLS

Service acceptance (Job Site - material received or removed from site)

The Customer has retained ResourceCo Material Solutions to provide the services in accordance with the Customer Order between the Customer and ResourceCo Material Solutions and ResourceCo Material Solutions terms and Conditions (available at www.resourceco.com.au). The Operator agrees to perform or has performed a portion of the services as ResourceCo Material Solutions sub-contractor using the equipment and at the rates detailed in the Booking, and in accordance with the ResourceCo Material Solutions Independent Contractor Agreement.

CUSTOMER SIGNATURE PRINT NAME Dennis Wang DATE 12/3/20

COMPANY NAME Christie Civil POSITION Site Engineer

Service acceptance (Supplier site - material supplier or material receiver site)

The Customer has retained ResourceCo Material Solutions to provide the services in accordance with the Customer Order and ResourceCo Material Solutions Terms and Conditions (available at www.resourceco.com.au). The Operator agrees to perform or has performed a portion of the services as ResourceCo Material Solutions sub-contractor using the equipment and at the rates detailed in the Booking, and in accordance with the ResourceCo Material Solutions Independent Contractor Agreement.

DISPOSAL SITE SIGNATURE PRINT NAME DATE

COMPANY NAME POSITION

Service acceptance (Supplier Site - material supplier or material receiver site)

	Yes	No
1. Was a Site Risk Assessment completed for the site?	☑	☐
2. Does the operator have the appropriate license/qualifications to operate this vehicle?	☑	☐
3. Is the vehicle serviced & maintained as per manufacturer's standards?	☑	☐
4. I have completed my daily vehicle checklist to verify that the vehicle is roadworthy to the limits of the checklist?	☑	☐
5. Are all insurances and registrations current including Public Liability, Work Cover, and Third Party/Comprehensive insurance?	☑	☐
6. I have had sufficient rest breaks and I am free from any drugs or alcohol?	☑	☐
7. I am "Fit For Work"?	☑	☐
8. I have reviewed the allocated work and agree that I have sufficient hours to complete the task taking into account speed & fatigue requirements?	☑	☐

By signing the operator confirms that a Site Risk Assessment was completed prior to commencement of services. Services were provided in-line with the ResourceCo Material Solutions compliance standards and in accordance with Occupational Health and Safety, Road Safety Laws and any other governing laws and regulations. ResourceCo Material Solutions may from time to time audit compliance with these requirements and take necessary action to rectify any non-compliance.

OPERATOR SIGNATURE **DATE** 12-3-20

WHITE - ResourceCo Material Solutions BLUE - Customer PINK - Disposal/Supply Site YELLOW - Contra

BREEN RESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0040712/1
Date:	12/03/2020 11:12:18 AM
Printed:	12/03/2020 11:21:46 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	CQ10AK
Contract No:	CON 000304
Order No:	PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

11.38t

Gross	**23.02t**
Tare	**11.64t**
Net	**11.38t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 4:00
Saturday 6:15 1:30
"Your Partners In Material Management"

BREEN RESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0040756/1
Date:	12/03/2020 1:05:04 PM
Printed:	12/03/2020 1:08:59 PM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	CQ10AK
Contract No:	CON-000304
Order No:	PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

11.48t

Gross	**23.12t**
Tare	**11.64t**
Net	**11.48t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 1:30
"Your Partners In Material Management"

BREEN RESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0040782/1
Date:	12/03/2020 2:42:48 PM
Printed:	12/03/2020 2:43:03 PM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	CQ10AK
Contract No:	CON-000304
Order No:	PYRMONT

CONTAMINATED SOIL GENERAL SOLID

11.24t

Gross	**22.88t**
Tare	**11.64t**
Net	**11.24t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday Friday 6:15 4:00
Saturday 6:15 1:30

RESOURCECO
MATERIAL SOLUTIONS

NSW POSTAL
PO Box 7064
Alexandria Business Hub NSW 2015
Ph: 1300 131 222
Email: enquiries@resourceco.com.au
ABN 84 608 314 687

VIC POSTAL
Building 2, Level 3
Suite 46, 1 Ricketts Road, Mt Waverley VIC 3149
Ph: 03 8787 8805 Fax: 03 9543 5033
Email: enquiries@resourceco.com.au
ABN 84 608 314 687

Order Number 75198 **Date** 13/3/20 **Booking Number** 0150483

CUSTOMER CHRISTIE CIVIL

JOB SITE ADDRESS 5 BANK ST CYMONT

CONTRACTOR NAME EPIK TIPPERZ DRIVER NAME MICHAEL

TRUCK REGO EPIK TRAILER REGO

EQUIPMENT TYPE: TANDEM [X] TRUCK & TRI TRAILER [ ] TRUCK & 4 AXLE TRAILER [ ] SEMI [ ]
TRUCK & 5 AXLE TRAILER [ ] 19M B-DOUBLE [ ] B-DOUBLE [ ] OTHER

TRUCK/COMBINATION TARE 16 GVM/GCM 98.50 PAYLOAD 32.50

[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
3		3	GSW	KURNELL

ENTERED
14 MAR 2020
BY:

* 10.99T
* 12.16T
* 12.28T

START TIME 700AM FINISH TIME TOTAL HOURS

[X] CONTRACT RATE [ ] HOURLY RATE [ ] ROCK RATE [ ] EPA RATE [ ] NIGHT RATE [ ] TOLLS

Service acceptance (Job Site - material received or removed from site)

The Customer has retained ResourceCo Material Solutions to provide the services in accordance with the Customer Order between the Customer and ResourceCo Material Solutions and ResourceCo Material Solutions terms and Conditions (available at www.resourceco.com.au). The Operator agrees to perform or has performed a portion of the services as ResourceCo Material Solutions sub-contractor using the equipment and at the rates detailed in the Booking, and in accordance with the ResourceCo Material Solutions Independent Contractor Agreement.

CUSTOMER SIGNATURE PRINT NAME IVAN DATE

COMPANY NAME POSITION

Service acceptance (Supplier site - material supplier or material receiver site)

The Customer has retained ResourceCo Material Solutions to provide the services in accordance with the Customer Order and ResourceCo Material Solutions Terms and Conditions (available at www.resourceco.com.au). The Operator agrees to perform or has performed a portion of the services as ResourceCo Material Solutions sub-contractor using the equipment and at the rates detailed in the Booking, and in accordance with the ResourceCo Material Solutions Independent Contractor Agreement.

DISPOSAL SITE SIGNATURE PRINT NAME DATE

COMPANY NAME POSITION

Service acceptance (Supplier Site - material supplier or material receiver site)

	Yes	No
1. Was a Site Risk Assessment completed for the site?	✓	
2. Does the operator have the appropriate license/qualifications to operate this vehicle?	✓	
3. Is the vehicle serviced & maintained as per manufacturer's standards?	✓	
4. I have completed my daily vehicle checklist to verify that the vehicle is roadworthy to the limits of the checklist?	✓	
5. Are all insurances and registrations current including Public Liability, Work Cover, and Third Party/Comprehensive insurance?	✓	
6. I have had sufficient rest breaks and I am free from any drugs or alcohol?	✓	
7. I am "Fit For Work"?	✓	
8. I have reviewed the allocated work and agree that I have sufficient hours to complete the task taking into account speed & fatigue requirements?	✓	

By signing the operator confirms that a Site Risk Assessment was completed prior to commencement of services. Services were provided in-line with the ResourceCo Material Solutions compliance standards and in accordance with Occupational Health and Safety, Road Safety Laws and any other governing laws and regulations. ResourceCo Material Solutions may from time to time audit compliance with these requirements and take necessary action to rectify any non-compliance.

OPERATOR SIGNATURE M Romeo **DATE** 13/3/20

WHITE - ResourceCo Material Solutions BLUE - Customer PINK - Disposal/Supply Site YELLOW - Contractor

RESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WB10040851/1
Date:	13/03/2020 8:15:19 AM
Printed:	13/03/2020 8:15:26 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	EPIK
Contract No:	CON 000304
Order No:	PYRMONT

CONTAMINATED SOIL GENERAL SOLID

10.94t

Gross	21.52t
Tare	10.58t
Net	10.94t

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

Operating Times:
Monday Friday 6:15 4.00
Saturday 6:15 1.30
"Your Partners in Material Management"

RESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WB10040924/1
Date:	13/03/2020 12:11:24 PM
Printed:	13/03/2020 12:11:29 PM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	EPIK
Contract No:	CON 000304
Order No:	PYRMONT

CONTAMINATED SOIL GENERAL SOLID

12.28t

Gross	22.86t
Tare	10.58t
Net	12.28t

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

Operating Times:
Monday Friday 6:15 4.00
Saturday 6:15 1.30
"Your Partners in Material Management"

RESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WB10040884/1
Date:	13/03/2020 10:09:58 AM
Printed:	13/03/2020 10:10:15 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	EPIK
Contract No:	CON 000304
Order No:	PYRMONT

CONTAMINATED SOIL GENERAL SOLID

12.16t

Gross	22.74t
Tare	10.58t
Net	12.16t

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

Operating Times:
Monday Friday 6:15 4:00
Saturday 6:15 1.30
"Your Partners in Material Management"

RESOURCECO
MATERIAL SOLUTIONS

NSW POSTAL
PO Box 7064
Alexandria Business Hub NSW 2015
Ph: 1300 131 222
Email: enquiries@resourceco.com.au
ABN 84 608 316 687

VIC POSTAL
Building 2, Level 3
Suite 46, 1 Ricketts Road, Mt Waverley VIC 3149
Ph: 03 8787 8805 Fax: 03 9543 5033
Email: enquiries@resourceco.com.au
ABN 84 608 316 687

Order Number 75655 **Date** 13-3-20 **Booking Number** 0157396

CUSTOMER Christie Civil

JOB SITE ADDRESS 5 Bank ST Pyrmont

CONTRACTOR NAME Premier Plant hire DRIVER NAME Glen H

TRUCK REGO SCA022 TRAILER REGO —

EQUIPMENT TYPE: TANDEM [x] TRUCK & TRI TRAILER [ ] TRUCK & 4 AXLE TRAILER [ ] SEMI [ ]
TRUCK & 5 AXLE TRAILER [ ] 19M B-DOUBLE [ ] B-DOUBLE [ ] OTHER

TRUCK/COMBINATION TARE 11 GVM/GCM 23 PAYLOAD 12

Loads	M3/Ton	Total	Material	Disposal/Supply Site Address
730	11.8	22.8	CSW	Breen Resource
930	12.8	23.8	"	Kurnell
1145	12.0	23.0	"	"

ENTERED
14 MAR 2020
BY:

TOLLS = M4 x 1 CCT x 2 ED x 3

START TIME 700 FINISH TIME 130 TOTAL HOURS 6 1/2

[x] CONTRACT RATE [ ] HOURLY RATE [ ] ROCK RATE [ ] EPA RATE [ ] NIGHT RATE [ ] TOLLS

Service acceptance (Job Site - material received or removed from site)

The Customer has retained ResourceCo Material Solutions to provide the services in accordance with the Customer Order between the Customer and ResourceCo Material Solutions and ResourceCo Material Solutions terms and Conditions (available at www.resourceco.com.au). The Operator agrees to perform or has performed a portion of the services as ResourceCo Material Solutions sub-contractor using the equipment and at the rates detailed in the Booking, and in accordance with the ResourceCo Material Solutions Independent Contractor Agreement.

CUSTOMER SIGNATURE PRINT NAME DATE

COMPANY NAME POSITION

Service acceptance (Supplier site - material supplier or material receiver site)

The Customer has retained ResourceCo Material Solutions to provide the services in accordance with the Customer Order and ResourceCo Material Solutions Terms and Conditions (available at www.resourceco.com. au). The Operator agrees to perform or has performed a portion of the services as ResourceCo Material Solutions sub-contractor using the equipment and at the rates detailed in the Booking, and in accordance with the ResourceCo Material Solutions Independent Contractor Agreement.

DISPOSAL SITE SIGNATURE PRINT NAME DATE

COMPANY NAME POSITION

Service acceptance (Supplier Site - material supplier or material receiver site)

	Yes	No
1. Was a Site Risk Assessment completed for the site?	✓	
2. Does the operator have the appropriate license/qualifications to operate this vehicle?	✓	
3. Is the vehicle serviced & maintained as per manufacturer's standards?	✓	
4. I have completed my daily vehicle checklist to verify that the vehicle is roadworthy to the limits of the checklist?	✓	
5. Are all insurances and registrations current including Public Liability, Work Cover, and Third Party/Comprehensive insurance?	✓	
6. I have had sufficient rest breaks and I am free from any drugs or alcohol?	✓	
7. I am "Fit For Work"?	✓	
8. I have reviewed the allocated work and agree that I have sufficient hours to complete the task taking into account speed & fatigue requirements?	✓	

By signing the operator confirms that a Site Risk Assessment was completed prior to commencement of services. Services were provided in-line with the ResourceCo Material Solutions compliance standards and in accordance with Occupational Health and Safety, Road Safety Laws and any other governing laws and regulations. ResourceCo Material Solutions may from time to time audit compliance with these requirements and take necessary action to rectify any non-compliance.

OPERATOR SIGNATURE **DATE**

WHITE - ResourceCo Material Solutions **BLUE** - Customer **PINK** - Disposal/Supply Site **YELLOW** - Contractor

BREEN RESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WB10040852/1
Date:	13/03/2020 8:16:29 AM
Printed:	13/03/2020 8:25:50 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	SCA022
Contract No:	CON-000304
Order No:	PYRMONT

CONTAMINATED SOIL GENERAL SOLID

11.82t

Gross	22.82t
Tare	11.00t
Net	11.82t

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday Friday 6:15 4:00
Saturday 6:15 - 1:30
"Your Partners In Material Management"

BREEN RESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WB10040940/1
Date:	13/03/2020 1:01:37 PM
Printed:	13/03/2020 1:01:49 PM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	SCA022
Contract No:	CON-000304
Order No:	PYRMONT

CONTAMINATED SOIL GENERAL SOLID

11.58t

Gross	22.58t
Tare	11.00t
Net	11.58t

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday Friday 6:15 4:00
Saturday 6:15 - 1:30
"Your Partners In Material Management"

BREEN RESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal ¦ #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WB10040894/1
Date:	13/03/2020 10:40:14 AM
Printed:	13/03/2020 10:44:30 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608831668/
Address:	PO BOX 542
Suburb:	SA
Destination:	LISR
Vehicle:	SCA022
Contract No:	CON 000304
Order No	PYRMONT

CONTAMINATED SOIL GENERAL SOLID

12.84t

Gross	23.84t
Tare	11.00t
Net	12.84t

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday Friday 6:15 4:00
Saturday 6:15 1:30
"Your Partners in Material Management"

RESOURCECO
MATERIAL SOLUTIONS

NSW POSTAL
PO Box 7064
Alexandria Business Hub NSW 2015
Ph: 1300 131 222
Email: enquiries@resourceco.com.au
ABN 84 608 316 687

VIC POSTAL
Building 2, Level 3
Suite 46, 1 Ricketts Road, Mt Waverley VIC 3149
Ph: 03 8787 8805 Fax: 03 9543 5033
Email: enquiries@resourceco.com.au
ABN 84 608 316 687

Order Number 75655 **Date** 13/3/20 **Booking Number** 0157395

CUSTOMER CHRISTIE CIVIL

JOB SITE ADDRESS BANK ST / PYRMONT

CONTRACTOR NAME RESOURCECO DRIVER NAME BEN HYLAND

TRUCK REGO SCA 003 TRAILER REGO

EQUIPMENT TYPE: TANDEM ☐ TRUCK & TRI TRAILER ☐ TRUCK & 4 AXLE TRAILER ☐ SEMI ☐
TRUCK & 5 AXLE TRAILER ☐ 19M B-DOUBLE ☐ B-DOUBLE ☐ OTHER BOGIE

TRUCK/COMBINATION TARE 11·2 GVM/GCM 23 PAYLOAD

Loads	M3/Ton	Total	Material	Disposal/Supply Site Address
1		11·4	G/SOLID	BREEN GROUP / KURNELL
2		12·5	G/SOLID	BREEN GROUP / KURNELL
3		10·7	G/SOLID	BREEN GROUP / KURNELL
				(NO MORE @ MATERIAL)
				M4/M4 TUNNEL X 2
				CROSS CITY TUNNEL X 2

START TIME 7.00AM FINISH TIME TOTAL HOURS

☑ CONTRACT RATE ☐ HOURLY RATE ☐ ROCK RATE ☐ EPA RATE ☐ NIGHT RATE ☑ TOLLS

Service acceptance (Job Site - material received or removed from site)

The Customer has retained ResourceCo Material Solutions to provide the services in accordance with the Customer Order between the Customer and ResourceCo Material Solutions and ResourceCo Material Solutions terms and Conditions (available at www.resourceco.com.au). The Operator agrees to perform or has performed a portion of the services as ResourceCo Material Solutions sub-contractor using the equipment and at the rates detailed in the Booking, and in accordance with the ResourceCo Material Solutions Independent Contractor Agreement.

CUSTOMER SIGNATURE PRINT NAME DATE 13/3/20

COMPANY NAME POSITION

Service acceptance (Supplier site - material supplier or material receiver site)

The Customer has retained ResourceCo Material Solutions to provide the services in accordance with the Customer Order and ResourceCo Material Solutions Terms and Conditions (available at www.resourceco.com. au). The Operator agrees to perform or has performed a portion of the services as ResourceCo Material Solutions sub-contractor using the equipment and at the rates detailed in the Booking, and in accordance with the ResourceCo Material Solutions Independent Contractor Agreement.

DISPOSAL SITE SIGNATURE PRINT NAME DATE 13/3/20

COMPANY NAME POSITION

Service acceptance (Supplier Site - material supplier or material receiver site)

	Yes	No
1. Was a Site Risk Assessment completed for the site?	☑	☐
2. Does the operator have the appropriate license/qualifications to operate this vehicle?	☑	☐
3. Is the vehicle serviced & maintained as per manufacturer's standards?	☑	☐
4. I have completed my daily vehicle checklist to verify that the vehicle is roadworthy to the limits of the checklist?	☑	☐
5. Are all insurances and registrations current including Public Liability, Work Cover, and Third Party/Comprehensive insurance?	☑	☐
6. I have had sufficient rest breaks and I am free from any drugs or alcohol?	☑	☐
7. I am "Fit For Work"?	☑	☐
8. I have reviewed the allocated work and agree that I have sufficient hours to complete the task taking into account speed & fatigue requirements?	☑	☐

By signing the operator confirms that a Site Risk Assessment was completed prior to commencement of services. Services were provided in-line with the ResourceCo Material Solutions compliance standards and in accordance with Occupational Health and Safety, Road Safety Laws and any other governing laws and regulations. ResourceCo Material Solutions may from time to time audit compliance with these requirements and take necessary action to rectify any non-compliance.

OPERATOR SIGNATURE **DATE** 13/3/20

WHITE - ResourceCo Material Solutions **BLUE** - Customer **PINK** - Disposal/Supply Site **YELLOW** - Contractor

BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0040847/1
Date:	13/03/2020 8:08:37 AM
Printed:	13/03/2020 8:22:27 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	LISR
Vehicle:	SCA003
Contract No:	CON-000304
Order No:	PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

11.4t

Gross	22.68t
Tare	11.28t
Net	11.40t

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30
"Your Partners In Material Management"

BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0040895/1
Date:	13/03/2020 10:47:44 AM
Printed:	13/03/2020 10:47:58 AM
Operator:	Lisa
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	LISR
Vehicle:	SCA003
Contract No:	CON 000304
Order No:	PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

12.56t

Gross	23.84t
Tare	11.28t
Net	12.56t

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30
"Your Partners In Material Management"

BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0040948/1
Date:	13/03/2020 1:21:27 PM
Printed:	13/03/2020 1:21:32 PM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	SCA003
Contract No:	CON-000304
Order No:	PYRMONT

CONTAMINATED SOIL - GENERAL SOLID

10.76t

Gross	22.04t
Tare	11.28t
Net	10.76t

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 4:00
Saturday 6:15 1:30
"Your Partners In Material Management"

RESOURCECO
MATERIAL SOLUTIONS

Building 2, level 3
Suite 46, 1 Ricketts Road, Mt Waverley VIC 3149
Ph: +61 3 8787 8805 Fax: +61 3 9543 5033
Email: enquiries@resourceco.com.au
ABN 45 068 976 803

Order Number 75198 **Date** 24.03.2020 **Booking Number** 0066835

CUSTOMER

JOB SITE 5 banks st Pyrmont

DISPOSAL/SUPPLIER SITE 330 captian cook Drive kurnell

CONTRACTOR NAME Resourceco OPERATOR Christie civil

REGO SCA025 EQUIPMENT TYPE Truck

☑ TANDEM ONLY ☐ TRUCK & 3 AXLE TRAILER ☐ TRUCK & 4 AXLE TRAILER ☐ SEMI

Loads	M3/Ton	Total	Material	Disposal/Supply Site Address
2.21				
8:30	10:24			
10:30	10:98			
12:30	11:46			
2:15	11:04			

START TIME 7:00 AM FINISH TIME 2:00PM TOTAL HOURS

☐ CONTRACT RATE ☐ HOURLY RATE ☐ ROCK RATE ☐ EPA RATE ☐ NIGHT RATE ☑ TOLLS

Service acceptance (Job Site - material received or removed from site)

The Customer has retained ResourceCo Material Solutions to provide the services in accordance with the Customer Order between the Customer and ResourceCo Material Solutions and ResourceCo Material Solutions terms and Conditions (available at www.resourceco.com.au). The Operator agrees to perform or has performed a portion of the services as ResourceCo Material Solutions sub-contractor using the equipment and at the rates detailed in the Booking, and in accordance with the ResourceCo Material Solutions Independent Contractor Agreement.

CUSTOMER SIGNATURE PRINT NAME DATE

COMPANY NAME POSITION

Service acceptance (Supplier site - material supplier or material receiver site)

The Customer has retained ResourceCo Material Solutions to provide the services in accordance with the Customer Order and ResourceCo Material Solutions Terms and Conditions (available at www.resourceco.com. au). The Operator agrees to perform or has performed a portion of the services as ResourceCo Material Solutions sub-contractor using the equipment and at the rates detailed in the Booking, and in accordance with the ResourceCo Material Solutions Independent Contractor Agreement.

DISPOSAL SITE SIGNATURE PRINT NAME DATE

COMPANY NAME POSITION

Contractor Compliance Statement

	Yes	No
1. Was a Site Risk Assessment completed for the site?	☐	☐
2. Does the operator have the appropriate license/qualifications to operate this vehicle?	☐	☐
3. Is the vehicle serviced & maintained as per manufacturer's standards?	☐	☐
4. Are all insurances and registrations current including Public Liability, Work Cover, and Third Party/Comprehensive insurance?	☐	☐
5. Was the daily checklist completed successfully?	☐	☐

If YES to all then proceed with task in a safe manner.
If NO to any issue then report to ResourceCo Material Solutions Supervisor before proceeding

By signing the operator confirms that a Site Risk Assessment was completed prior to commencement of services. Services were provided in-line with the ResourceCo Material Solutions compliance standards and in accordance with Occupational Health and Safety, Road Safety Laws and any other governing laws and regulations. ResourceCo Material Solutions may from time to time audit compliance with these requirements and take necessary action to rectify any non-compliance.

OPERATOR SIGNATURE N.J.S **DATE** 24.03.2020

WHITE - ResourceCo Material Solutions **BLUE** - Customer **PINK** - Disposal/Supply Site **YELLOW** - Contractor

BREEN RESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0042312/1
Date:	24/03/2020 10:34:31 AM
Printed:	24/03/2020 10:34:40 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	SCA025
Contract No:	CON-000315

CONTAMINATED SOIL - GENERAL SOLID

10.98t

Gross	**21.92t**
Tare	**10.94t**
Net	**10.98t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30
"Your Partners In Material Management"

BREEN RESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0042235/1
Date:	24/03/2020 8:09:35 AM
Printed:	24/03/2020 8:09:43 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	SCA025
Contract No:	CON-000315

CONTAMINATED SOIL - GENERAL SOLID

10.24t

Gross	**21.18t**
Tare	**10.94t**
Net	**10.24t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30
"Your Partners In Material Management"

BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0042409/1
Date:	24/03/2020 2:02:28 PM
Printed:	24/03/2020 2:02:31 PM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	SCA025
Contract No:	CON-000315

CONTAMINATED SOIL - GENERAL SOLID

11.04t

Gross	**21.98t**
Tare	**10.94t**
Net	**11.04t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30
"Your Partners In Material Management"

BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0042369/1
Date:	24/03/2020 12:19:10 PM
Printed:	24/03/2020 12:19:15 PM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	SCA025
Contract No:	CON-000315

CONTAMINATED SOIL - GENERAL SOLID

11.46t

Gross	**22.40t**
Tare	**10.94t**
Net	**11.46t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 4:00
Saturday 6:15 - 1:30
"Your Partners In Material Management"

BREENRESOURCES

Breen Resources Pty. Ltd.
ABN 31615045497
330 Captain Cook Drive
KURNELL NSW 2231
PHONE: 96688539
EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WB10042237/1
Date:	24/03/2020 8:13:03 AM
Printed:	24/03/2020 8:13:17 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	CM91HK
Contract No:	CON 000315

CONTAMINATED SOIL - GENERAL SOLID

10.1t

Gross	**22.42t**
Tare	**12.32t**
Net	**10.10t**

Initial Inspection .....
Final Inspection .....
Load Rejected .....
Reason .....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30
"Your Partners In Material Management"

BREENRESOURCES

Breen Resources Pty. Ltd.
ABN 31615045497
330 Captain Cook Drive
KURNELL NSW 2231
PHONE: 96688539
EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WB10042298/1
Date:	24/03/2020 10:05:55 AM
Printed:	24/03/2020 10:06:07 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	CM91HK
Contract No:	CON 000315

CONTAMINATED SOIL - GENERAL SOLID

10.68t

Gross	**23.00t**
Tare	**12.32t**
Net	**10.68t**

Initial Inspection .....
Final Inspection .....
Load Rejected .....
Reason .....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30
"Your Partners In Material Management"

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ABN 31615045497
330 Captain Cook Drive
KURNELL NSW 2231
PHONE: 96688539
EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WB10042366/1
Date:	24/03/2020 11:58:00 AM
Printed:	24/03/2020 12:15:51 PM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	CM91HK
Contract No:	CON 000315

CONTAMINATED SOIL - GENERAL SOLID

10.52t

Gross	***22.84t**
Tare	**12.32t**
Net	**10.52t**

Initial Inspection .....
Final Inspection .....
Load Rejected .....
Reason .....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30
"Your Partners In Material Management"

* = Manually Entered

BREENRESOURCES

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ABN 31615045497
330 Captain Cook Drive
KURNELL NSW 2231
PHONE: 96688539
EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WB10042410/1
Date:	24/03/2020 2:04:26 PM
Printed:	24/03/2020 2:04:30 PM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	CM91HK
Contract No:	CON 000315

CONTAMINATED SOIL - GENERAL SOLID

10.1t

Gross	**22.42t**
Tare	**12.32t**
Net	**10.10t**

Initial Inspection .....
Final Inspection .....
Load Rejected .....
Reason .....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30
"Your Partners In Material Management"

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Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0043150/1
Date:	30/03/2020 1:08:01 PM
Printed:	30/03/2020 1:08:27 PM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	GM5659
Contract No:	CON 000315

CONTAMINATED SOIL - GENERAL SOLID

10.68t

Gross	**20.92t**
Tare	**10.24t**
Net	**10.68t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30
"Your Partners In Material Management"

BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0043119/1
Date:	30/03/2020 10:53:49 AM
Printed:	30/03/2020 10:53:54 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	GM5659
Contract No:	CON 000315

CONTAMINATED SOIL - GENERAL SOLID

10.58t

Gross	**20.82t**
Tare	**10.24t**
Net	**10.58t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30
"Your Partners In Material Management"

BREENRESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0043069/1
Date:	30/03/2020 8:19:25 AM
Printed:	30/03/2020 8:32:30 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	GM5659
Contract No:	CON 000315

CONTAMINATED SOIL - GENERAL SOLID

10.74t

Gross	**20.98t**
Tare	**10.24t**
Net	**10.74t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30
"Your Partners In Material Management"

BREEN**RESOURCES**

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WB10043196/1
Date:	30/03/2020 3:31:29 PM
Printed:	30/03/2020 3:31:36 PM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	GM5659
Contract No:	CON-000315

CONTAMINATED SOIL - GENERAL SOLID

11.04t

Gross	**21.28t**
Tare	**10.24t**
Net	**11.04t**

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:

Monday - Friday 6:15 - 4:00

Saturday 6:15 - 1:30

"Your Partners In Material Management"

EN RESOURCES

reen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

8 - Disposal | #20697 - Resource Recovery

TAX INVOICE

	WB10045637/1
	17/04/2020 8:15:18 AM
	17/04/2020 8:33:42 AM
	Karen
	CHRISTIE CIVIL PTY LTD
BN:	74096455346
	Unit 4, 7-29 Bridge Road
	NSW
	LISR
	JIC104
	CON 000337

IATED SOIL - GENERAL SOLID

	21.10t	
	10.60t	$/TONNE
	10.50t	

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GST

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.....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30
artners In Material Management"

BREEN RESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

TAX INVOICE

Docket:	WB10045636/1
Date:	17/04/2020 8:12:36 AM
Printed:	17/04/2020 8:13:02 AM
Operator:	Karen
Customer:	CHRISTIE CIVIL PTY LTD
Customer ABN:	74096455346
Address:	Unit 4, 7-29 Bridge Road
Suburb:	NSW
Destination:	LISR
Vehicle:	GM5659
Contract No:	CON-000337

CONTAMINATED SOIL - GENERAL SOLID

10.86t

Gross	21.10t	
Tare	10.24t	$/TONNE
Net	10.86t	

Totals

Total Excl. GST

GST

Total Incl. GST

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30
"Your Partners In Material Management"

BREEN **RESOURCES**

Breen Resources Pty. Ltd.
ABN 31615045497
330 Captain Cook Drive
KURNELL NSW 2231
PHONE: 96688539
EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WB10045802/1
Date:	17/04/2020 3:12:27 PM
Printed:	17/04/2020 3:12:36 PM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	LISR
Vehicle:	HC104
Contract No:	CON 000336

CONTAMINATED SOIL - GENERAL SOLID

10.8t

Gross	21.40t
Tare	10.60t
Net	10.80t

Initial Inspection
Final Inspection
Load Rejected
Reason

Operating Times:
Monday Friday 6:15 4:00
Saturday 6:15 1:30
"Your Partners In Material Management"

OnSite: 0419 624 162
min: 0439 463 397 /Fax: 02 4502 8292
PO Box 115, Windsor, NSW, 2756
Email: jkcam@bigpond.net.au

DOCKET NO: 2113

JIVI

MONT

( ) BOBCAT

	TONNES	DOCKET NO.

L TONNES:

H TIME: 3:30 PM

S/BREAKS:

S:

T:

e-Start Checklist

Visibility / Electrical System / Hydraulics	✓
Steering, Gauges, Warning Devices	✓
Tyres, Nuts, Damage, Wear, etc	✓

arried out in a satisfactory manner. While on hire
or responsibility for damage to hirer's property.

BREEN **RESOURCES**

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT0045810/1
Date:	17/04/2020 3:35:32 PM
Printed:	17/04/2020 3:35:40 PM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	MRT445
Contract No:	CON-000336

CONTAMINATED SOIL - GENERAL SOLID

Gross	19.68t
Tare	10.46t
Net	9.22t

9.22t

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:

Monday - Friday 6:15 - 4:00

Saturday 6:15 - 1:30

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BREEN RESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WB10045703/1
Date:	17/04/2020 10:56:41 AM
Printed:	17/04/2020 10:56:47 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
State:	SA
Destination:	LISR
Vehicle:	JJC104
Contract No:	CON 000336

CONTAMINATED SOIL - GENERAL SOLID

	10.18t
Gross	20.78t
Tare	10.60t
Net	10.18t

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30
"Your Partners in Material Management"

BREEN RESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WB10045756/1
Date:	17/04/2020 1:12:35 PM
Printed:	17/04/2020 1:12:42 PM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
State:	SA
Destination:	LISR
Vehicle:	JJC104
Contract No:	CON 000336

CONTAMINATED SOIL - GENERAL SOLID

	9.72t
Gross	20.32t
Tare	10.60t
Net	9.72t

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30
"Your Partners in Material Management"

...ployee Nomination...

If your employer intends to enrol to participa... JobKeep...

...ete form

RESOURCES

Resources Pty Ltd.

N 31615045497

aptain Cook Drive

RNELL NSW 2231

ONE: 96688539

sposal | #20697 - Resource Recovery

LIVERY DOCKET

WB10045702/1
17/04/2020 10:55:40 AM
17/04/2020 10:55:45 AM
Karen
RESOURCECO MATERIAL SOLUTIONS PTY LTD

84608316687
PO BOX 542
SA
LISR
GM5659
CON 000336

SOIL GENERAL SOLID

21.94t
10.24t
11.70t

Operating Times
ay Friday 6:15 4:00
turday 6:15 1:30
rs In Material Management"

RESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WB10045805/1
Date:	17/04/2020 3:22:15 PM
Printed:	17/04/2020 3:22:31 PM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	LISR
Vehicle:	GM5659
Contract No:	CON 000336

CONTAMINATED SOIL GENERAL SOLID

10.5t

Gross	20.74t
Tare	10.24t
Net	10.50t

Initial Inspection
Final Inspection
Load Rejected
Reason

Operating Times
Monday - Friday 6:15 4:00
Saturday 6:15 1:30
"Your Partners In Material Management"

RESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WB10045751/1
Date:	17/04/2020 1:07:09 PM
Printed:	17/04/2020 1:07:21 PM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	LISR
Vehicle:	GM5659
Contract No:	CON 000336

CONTAMINATED SOIL GENERAL SOLID

11.26t

Gross	21.50t
Tare	10.24t
Net	11.26t

Initial Inspection
Final Inspection
Load Rejected
Reason

Operating Times
Monday Friday 6:15 4:00
Saturday 6:15 1:30
"Your Partners In Material Management"

RESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WB100457 23/1
Date:	17/04/2020 11:36:39 AM
Printed:	17/04/2020 11:37:21 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	LISR
Vehicle:	MRT445
Contract No:	CON 000336

CONTAMINATED SOIL GENERAL SOLID

10.04t

Gross	20.50t
Tare	10.46t
Net	10.04t ✓

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:

Monday Friday 6:15 4:00

Saturday 6:15 1:30

"Your Partners In Material Management"

RESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WB100456 74/2
Date:	17/04/2020 8:22:00 AM
Printed:	17/04/2020 9:46:10 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	LISR
Vehicle:	MRT445
Contract No:	CON 000336

CONTAMINATED SOIL GENERAL SOLID

10.3t

Gross	*20.76t
Tare	10.46t
Net	10.30t ✓

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:

Monday Friday 6:15 4:00

Saturday 6:15 1:30

"Your Partners In Material Management"

RESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WBT045765/1
Date:	17/04/2020 1:38:35 PM
Printed:	17/04/2020 1:38:41 PM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	LISR
Vehicle:	MRT445
Contract No:	CON-000336

CONTAMINATED SOIL - GENERAL SOLID

8.88t

Gross	19.34t
Tare	10.46t
Net	8.88t

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:

Monday Friday 6:15 - 4:00

Saturday 6:15 1:30

"Your Partners In Material Management"

BREEN RESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WB10050599/1
Date:	19/05/2020 12:48:46 PM
Printed:	19/05/2020 12:48:52 PM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	LISR
Vehicle:	HC104
Contract No:	CON 000364

CONTAMINATED SOIL - GENERAL SOLID

10.26t

Gross	20.86t
Tare	10.60t
Net	10.26t

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30
"Your Partners In Material Management"

BREEN RESOURCES

Breen Resources Pty. Ltd.

ABN 31615045497

330 Captain Cook Drive

KURNELL NSW 2231

PHONE: 96688539

EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WB10050560/1
Date:	19/05/2020 10:52:40 AM
Printed:	19/05/2020 10:52:50 AM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD

Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	LISR
Vehicle:	HC104
Contract No:	CON 000364

CONTAMINATED SOIL - GENERAL SOLID

11.04t

Gross	21.64t
Tare	10.60t
Net	11.04t

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30
"Your Partners In Material Management"

BREEN RESOURCES

Breen Resources Pty. Ltd.
ABN 31615045497
330 Captain Cook Drive
KURNELL NSW 2231
PHONE: 96688539
EPL: #4608 - Disposal | #20697 - Resource Recovery

DELIVERY DOCKET

Docket:	WB10050654/1
Date:	19/05/2020 3:12:23 PM
Printed:	19/05/2020 3:12:31 PM
Operator:	Karen
Customer:	RESOURCECO MATERIAL SOLUTIONS PTY LTD
Customer ABN:	84608316687
Address:	PO BOX 542
Suburb:	SA
Destination:	L1SR
Vehicle:	JJC104
Contract No:	CON-000364

CONTAMINATED SOIL - GENERAL SOLID

9.48t

Gross	20.08t
Tare	10.60t
Net	9.48t

Initial Inspection .....

Final Inspection .....

Load Rejected .....

Reason .....

.....

Operating Times:
Monday - Friday 6:15 - 4:00
Saturday 6:15 - 1:30
"Your Partners In Material Management"

Appendix L: Specification for Geofabric Marker Layer

MASTATEX™ ORANGE



mastaTEX™ Orange is a high quality staple fibre geotextile, designed for separating contaminated and non-contaminated soils. Due to its bright Orange colouring, mastaTEX™ Orange is most commonly used as a warning layer in areas which are liable to future excavations.

mastaTEX™ Orange provides the same performance as other geotextiles in the mastaTEX™ range

APPLICATIONS

- Segregation of contaminated soil
- Filtration
- Warning Layer

SPECIFICATIONS

INDEX PROPERTIES	TEST METHOD	UNITS	GFO3	GFO6
Material	-	-	PET Staple Fibre	PET Staple Fibre
Wide Strip Tensile Strength	AS3706.2A	kN/m	8.1	8.1
Grab Tensile Strength	AS3706.2B	N	500	500
Pore Size	AS3706.7	mm	0.12	0.12
Nominal Flow Rate	AS3706.9	L/m2/s	240	240
Mass	AS 3760.1	gsm	140	140
DIMENSIONS				
Width	-	m	3	6
Length	-	m	150	150
Roll Diameter	-	mm	400	400

*Specifications as per manufacturer

PRODUCT		DIMENSIONS		
CODE	GRADE	WIDTH (m)	LENGTH (m)	MATERIAL
GFO3	FW	3	150	PET Staple Fibre
GFO6	FW	6	150	PET Staple Fibre

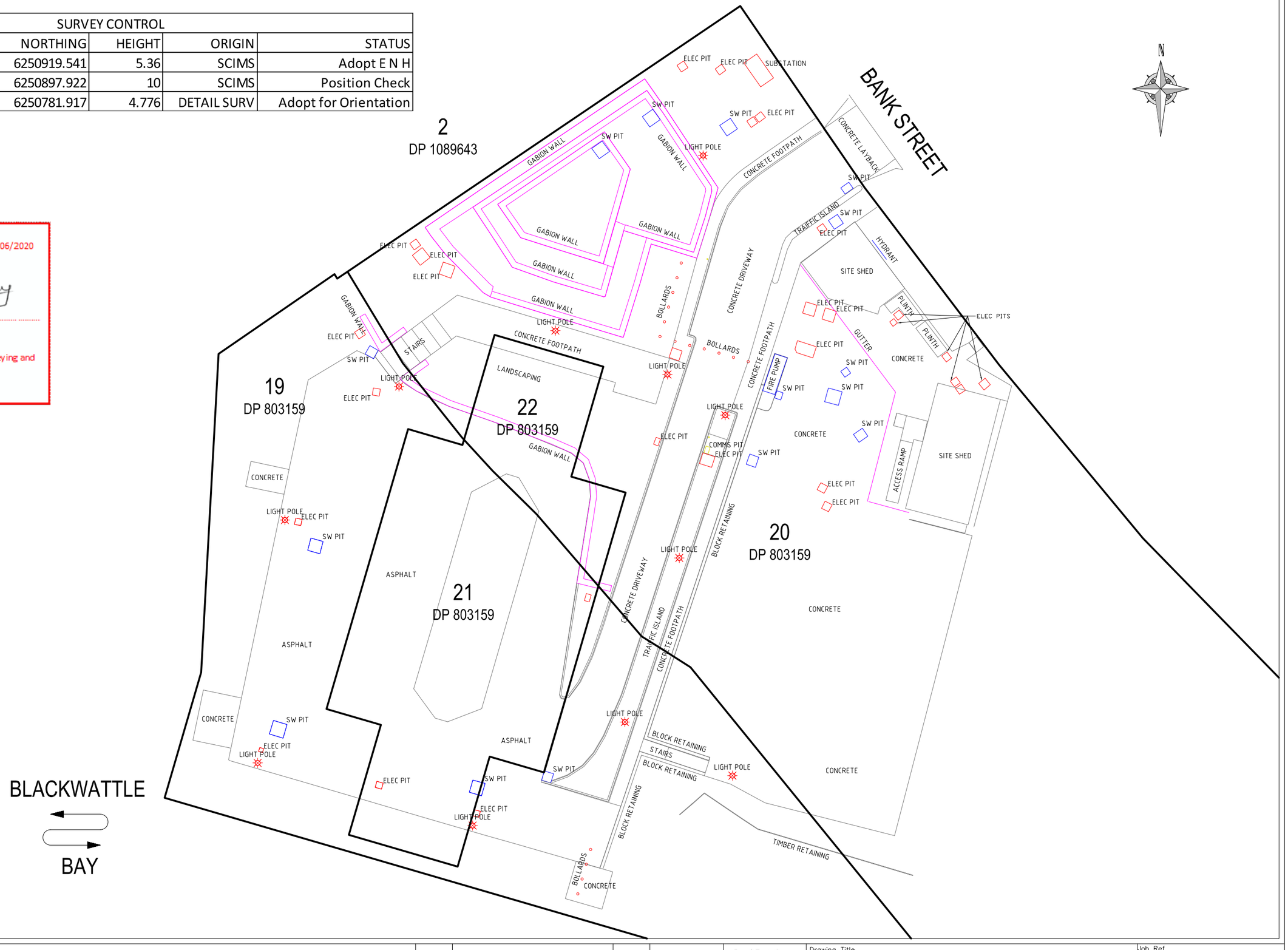
Appendix M: Final Registered Survey Plans

SURVEY CONTROL					
NAME	EASTING	NORTHING	HEIGHT	ORIGIN	STATUS
SS 32843	332363.188	6250919.541	5.36	SCIMS	Adopt E N H
SS 122447	332367.668	6250897.922	10	SCIMS	Position Check
BM 1	332528.134	6250781.917	4.776	DETAIL SURV	Adopt for Orientation

RBS Job#: 19151 Date: 22/06/2020

Alan Bardsley

ALAN BARDSLEY
Surveyor Registered under the Surveying and Spatial Information Act, 2002
ID No. 432



RESULTS BASED SURVEYING

RESULTS BASED SURVEYING
48 GLEN AVE
Randwick 2031
Phone: 0448873032
Web www.ResultsBasedSurveying.com.au

Rev	Description	Date
1.0	First Issue	22/6/20

Drawn	R. CELINSKI	Drawing Title	WORK AS EXECUTED
Date	22/6/20	Job Ref	19151
Hor Datum	MGA94	Project Name	BANK ST COMMERCIAL WHARF
Vert Datum	AHD	Drawing No	04
Scale	NTS	Location	5–11 BANK STREET PYRMONT
		Client	CHRISTIE CIVIL

BLUE NUMBERS ARE ASBUILT
DEPTH BELOW FINISHED LEVEL.
GPS DATA SUPPLIED BY CHRISTIE CIVIL

RESULTS BASED SURVEYING

Glen Avenue, Randwick 2031
ABN 65 625 476 404

Phone: 0424 393 554
Web www.ResultsBasedSurveying.com.au

Drawn:	Ben Leach			
Date:	14 / 5 / 2020			
Hor Datum:	MGA94			
Vert Datum:	AHD			
Scale:	NTS	Rev	Description	Date

Project Name	Drawing Title	Drawing No
BANK ST WHARF - CHRISTIE CIVIL	GEOFAB CAPPING ASBUILT	19151.104
		Job Ref



RESULTS BASED SURVEYING

Glen Avenue, Randwick 2031
ABN 65 625 476 404

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Drawn:	Ben Leach			
Date:	27 / 5 / 2020			
Hor Datum:	MGA94			
Vert Datum:	AHD			
Scale:	NTS	Rev	Description	Date

Project Name

BANK ST WHARF - CHRISTIE CIVIL

Drawing Title

WAE - FINISHED SURFACE SPOTHEIGHTS

Drawing No

19151.107

Job Ref



RESULTS BASED SURVEYING

Glen Avenue, Randwick 2031
ABN 65 625 476 404

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Drawn:	Ben Leach			
Date:	27 / 5 / 2020			
Hor Datum:	MGA94			
Vert Datum:	AHD			
Scale:	NTS	Rev	Description	Date

Project Name

BANK ST WHARF - CHRISTIE CIVIL

Drawing Title

WAE - FINISHED SURFACE CONTOURS

Drawing No

19151.107

Job Ref