



Detailed Site Investigation

Brymer Development

CMW Geosciences Ltd

Prepared by:

SLR Consulting New Zealand

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Basis of Report

This report has been prepared by SLR Consulting New Zealand (SLR) with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with CMW Geosciences Ltd (the Client). Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of the Client. No warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from SLR.

SLR disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the work.



Executive Summary

SLR Consulting New Zealand (SLR) has been engaged by CMW Geosciences Ltd (the Client) to prepare a Detailed Site Investigation (DSI) to support the fast-track lodgement for a proposed residential development of 81 ha of pastoral land located between Brymer Road, Rotokauri and Whatawhata Road, State Highway 23, Hamilton (the Site).

This DSI addresses data gaps from a previous DSI assessment conducted at the Site by BTW Company (BTW) in 2021, which identified the requirement for additional soil sampling to better identify potential risks to human health and the environment.

The key findings of the BTW DSI are as follows:

- Historical aerial imagery and records from the BTW DSI indicate that the Site was used as pastoral land with farm structures already present in the early 1940's. The BTW DSI reported that the Site had been used for sheep farming between at least 1940's and 1980's. Since mid 1980's the Site had been used for livestock grazing.
- A previous investigation undertaken by BTW in 2021 identified Areas of Concern (AOC), specifically three Stockyard areas (Stockyard 1 – 3), where potential sheep dipping activities had occurred. Arsenic concentrations above the adopted human health criteria were identified in surface soil within each of the Stockyard areas, and asbestos was identified in one soil sample adjacent to building in Stockyard 3. The DSI concluded that further delineation sampling was required, particularly around Stockyards 2 and 3 and in the vicinity of the existing residential dwellings, to better define the extent of contamination.
- There has been minimal change in land use since the 2021 BTW DSI was completed. Small additions and alterations to the small cluster of farm buildings located in the northern and southern areas of the Site, and two dwellings located in the southern area of the Site, appear to have occurred since 2021.

The key findings of this DSI are as follows:

- Soil samples were collected from 42 locations across the Site, targeting the AOC. Thirty samples were analysed from Stockyard 1 – 3 and 12 samples were analysed from around the buildings. The results of the soil analysis indicated the following:
 - Lead exceeded the NESCS SCS for residential 10% produce land use scenario in all four surface sample locations collected adjacent to the cottage.
 - Asbestos was detected above NZ GAMAS in one of the four shallow soil samples collected adjacent to the cottage.
 - Concentrations of one or more selected heavy metals (arsenic, cadmium, copper, lead, nickel and/or zinc) were above the published background concentrations in 15 soil samples collected from Stockyards 1 – 3, but below NESCS SCS for residential 10% produce and Eco-SGV for residential land use scenario.
 - An organochlorine pesticide (OCP) congener (dieldrin) was reported above laboratory limit of reporting (LLOR) in one soil sample collected adjacent to Stockyard 2 (SS20/0.0), but below the respective NESCS SCS criteria.

Based on the findings of this DSI, the following recommendations are made:



- Soil sampling has confirmed HAIL activities (HAIL A8, E1, and HAIL I) have impacted soil across localised areas of the Site (cottage and CCA treated wood in Stockyards 1 - 3) where contaminants were detected above expected background concentrations.
- Selected areas of the Site (cottage and Stockyards 1 - 3) are considered a 'piece of land' under Regulation 5(7) of the NESCS and will require a Restricted Discretionary Activity consent to support soil disturbance and disposal.
- The results of this DSI and the BTW DSI confirm there are localised hotspots of contamination in shallow soil where concentrations exceed the adopted criteria for the protection of human health. This includes the cottage (lead), the implement shed at Stockyard 3 (asbestos), and Stockyards 1-3 (arsenic). Soil from these locations will require appropriate management or remediation. Soils from all other areas of the Site are suitable to remain onsite.
- Localised areas of the Site (cottage and Stockyards 1 - 3) meet the WRC RP definition of contaminated land. However, the proposed soil disturbance can be undertaken as a Permitted Activity (PA) under the WRC RP, provided PA thresholds are met.
- A combined Remedial Action Plan and Contaminated Site Management Plan (RAP-CSMP) will be necessary to establish the required controls for the safe management, including handling and placement of the soils within the halo of the cottage, and for managing unexpected discovery of contaminants, during Site development.

This investigation and associated reporting has been carried out and reviewed by a Suitably Qualified and Experience Practitioner (SQEP) in accordance with the requirements of the NESCS.



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Acronyms and Abbreviations

ACM	Asbestos-containing material
CLMG	Contaminated Land Management Guidelines
CoPC	Contaminants of Potential Concern
CSM	Conceptual Site Model
DSI	Detailed Site Investigation
GAMAS	New Zealand Guidelines for Assessing and Managing Asbestos in Soil
HAIL	Hazardous Activity and Industry List
LoR	Limits of Reporting
MfE	Ministry for the Environment
m asld	Metres above sea level datum
m bgl	Metres below ground level
mg/kg	Milligram / kilogram
NESCS	National Environmental Standards for Assessing and Managing Contaminants in Soil
NZGD	New Zealand Geotechnical Database
OCP	Organochlorine Pesticides
PoL	Piece of Land
PSI	Preliminary Site Investigation
QA/QC	Quality Assurance / Quality Control
SCS	Soil Contaminant Standards
SLR	SLR Consulting New Zealand Limited
SQEP	Suitably Qualified and Experienced Practitioner
WDC	Waikato District Council
WRC	Waikato Regional Council
WANZ	Wells Aotearoa New Zealand



1.0 Introduction

SLR Consulting New Zealand (SLR) has been engaged by CMW Geosciences (The Client) to undertake a Detailed Site Investigation (DSI) to support a proposed residential development of 76.5 ha of pastoral land located between Brymer Road, Rotokauri and Whatawhata Road, State Highway 23, Hamilton (the Site).

The Site location and layout is presented in **Figure 1**.

SLR understands that a fast-track lodgement process is proposed to support future residential development at the Site.

1.1 Purpose and Scope of Works

A DSI was prepared in 2021 by BTW. The BTW DSI identified the requirement for additional soil sampling to better identify potential risks to human health and the environment.

The scope of this DSI has included the following:

- Data gap analysis of the existing DSI.
- Additional soil sampling to better identify potential risk to human health and the environment at selected locations.
- An overall assessment of the applicability of the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NESCS) and Waikato Regional Council (WRC) including preparing a conceptual site model.
- Preparation of this DSI report.

1.2 Project Description

The Brymer Farms Limited development (the Project) is a comprehensively planned, multi-staged residential development providing for the urbanisation and subdivision of the Site. The Project is the subject of a Notice of Decision by the Minister, dated 4 September 2025, to refer the Project. It seeks the land use, environmental, subdivision and associated infrastructure consents required to enable the development to be delivered progressively and in a coordinated manner.

The Project will provide approximately 1,043 residential units, including approximately 248 apartment units, across a range of housing typologies and densities. Housing will comprise a mix of terraced, duplex and detached dwellings, conventional and compact residential lots, irregular lots, and eight larger rural-residential lots. This range of typologies is intended to provide housing choice while enabling the development pattern to respond appropriately to the physical characteristics, environmental features and constraints of the Site.

The Project master plan also provides for two mixed-use commercial sites, identified as C1 and C2, which will form a neighbourhood scale commercial component within the development. C1 will provide approximately 910 m² of ground-floor commercial gross floor area (GFA), with 24 two-bedroom apartments above. C2 will provide approximately 1,274 m² of ground-floor commercial GFA, with 16 two-bedroom apartments above. Both commercial sites will incorporate basement car parking, dedicated vehicle access, servicing areas and landscaping. Collectively, C1 and C2 will provide approximately 2,184 m² of commercial GFA and 40 apartments, supporting the day-to-day needs of residents and contributing to a mixed-use neighbourhood environment.

The Project will be supported by the necessary transport and three-waters infrastructure. Water supply and wastewater servicing will connect to the IAWAI reticulated networks, with



internal reticulation and associated infrastructure established progressively as the Project development is staged. This may include pump stations, storage, reservoirs and mains, where required. Stormwater will be managed through an integrated stormwater management system, with discharge ultimately occurring to the receiving environment within the Waikato District. The stormwater system will incorporate appropriate treatment, attenuation and conveyance measures and will integrate, where appropriate, with proposed wetlands, watercourses, stormwater reserves and other water-sensitive design features throughout the Project development.

Implementation of the Project will require staged development related earthworks to establish suitable building platforms, a well-connected road network, infrastructure corridors, reserves and other components of the master plan. These works will include Site formation, cut and fill, retaining, erosion and sediment control, and other enabling works required to facilitate the staged subdivision and development of the Site. The proposal will also require the undergrounding of existing power lines within the Applicant's site.

A significant component of the Project is the provision and enhancement of open space and ecological values. The development will provide an integrated network of public and recreational open spaces, pedestrian connections, wetlands, watercourses, stormwater reserves, landscaped areas and retained vegetation. Environmental and ecological mitigation and offsetting will also be provided where required to address effects arising from the Project development and to support the protection, restoration and enhancement of ecological values across the Site and wider receiving environment. Where appropriate, these measures will be integrated with the development's open-space and stormwater networks.

The overall open-space and movement network will connect with the surrounding urban environment and existing reserves, including Rakautahi Park, Brymer Glen Reserve, Brymer Park and Te Kootii Park. These connections will provide links between residential neighbourhoods, commercial and community areas, recreational spaces and the wider transport network.

Overall, Brymer is a large scale, comprehensively planned urban development that will enable approximately 1,043 residential units, including approximately 248 apartments, together with approximately 2,184 m² of commercial GFA. The Project encompasses the subdivision and development of the land and the associated development related earthworks, transport and access infrastructure, water supply and wastewater connections to the IAWAI reticulated networks, stormwater management and discharge, ecological mitigation and offsetting, landscaping, open space, recreation, and other supporting infrastructure necessary to establish the new community.

The Project will be implemented through a multi-staged consenting and development framework, enabling subdivision, land use and infrastructure works to proceed progressively while ensuring that each stage is appropriately serviced and integrated with the wider development and surrounding environment.

The Project development will be subject to a comprehensive suite of proposed conditions of consent, including a design guide, developed with input from the Applicant's relevant technical and environmental specialists. These conditions will provide the framework for managing the construction, staging, servicing and operation of the development, including earthworks, transport, three-waters infrastructure, stormwater discharges, ecological effects and offsetting, landscaping and open space, and other potential environmental effects associated with the Project.

Collectively, the master plan, supporting technical assessments and proposed conditions of consent provide an integrated framework for the staged delivery and management of the



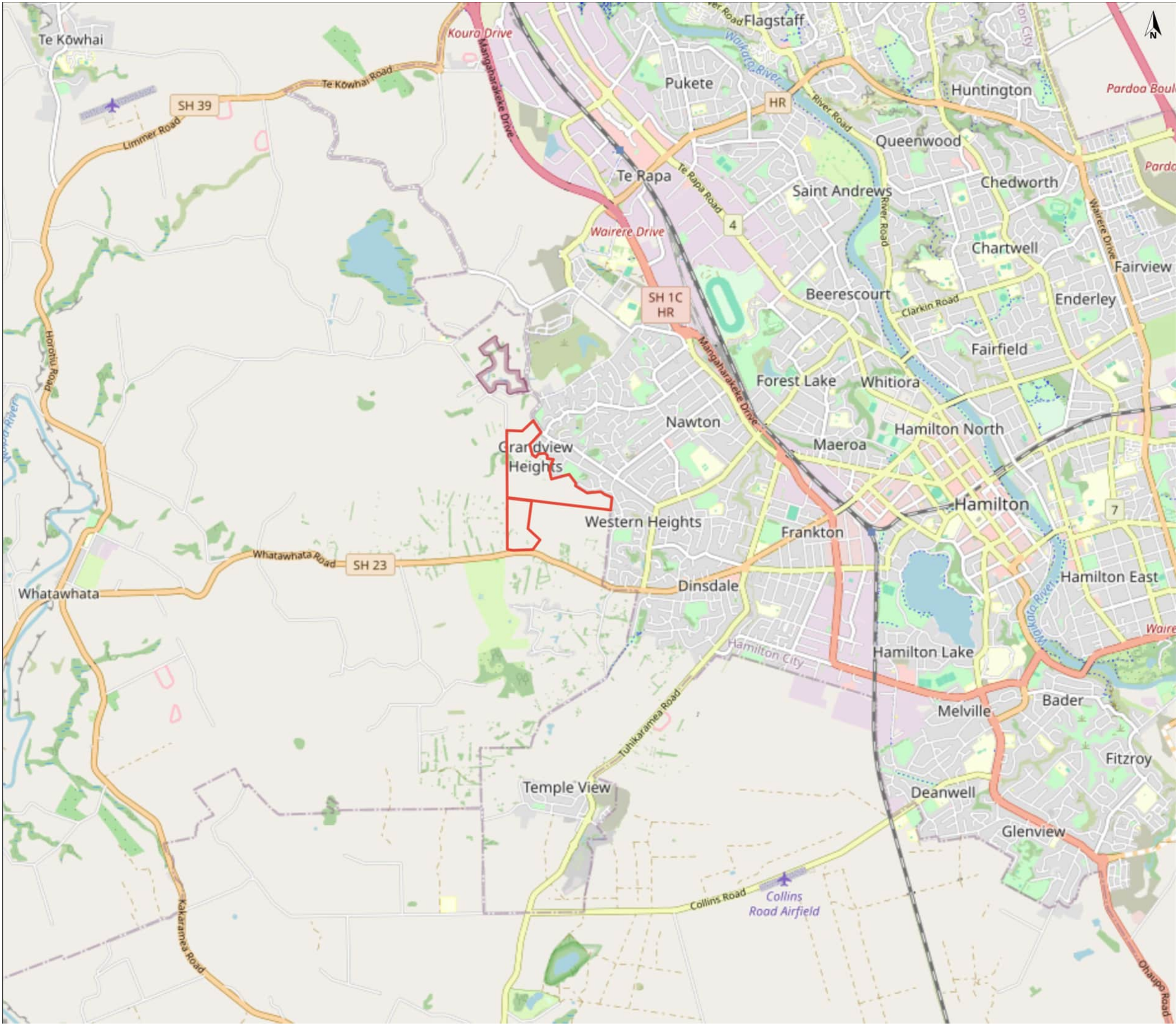
Project, including measures to avoid, remedy or mitigate adverse environmental effects and, where appropriate, provide environmental offsets.

1.3 Report Status

This report has been approved by Nigel Mather, a Suitably Qualified and Experienced Practitioner (SQEP) as outlined in the MfE Contaminated Land Management Guidelines No.5 – Site Investigation and Analysis of Soils, 2021 (CLMG No.5) and the Resource Management (NESC) Regulations, 2011.

This report fulfils the requirements of a DSI as outlined in the MfE CLMG No.1 – Reporting on Contaminated Sites in New Zealand, 2021 (CLMG No.1).





Legend

Site Boundary

0 500 m 1000 m
© OpenStreetMap contributors



Produced by **Datanest.earth**

Title: Site Location and Layout

Client: CMW Geosciences		Size: A3
Project: Brymer Development DSI	Drawn: SH	Figure No.: 1
Date: 13-10-2025	Checked: NM	
Proj No: 810.031825.00001	Scale: 1:44000	Version: 1.0

2.0 Site Identification Summary

The Site is located west of Hamilton, bordered by residential developments to the northeast and pastoral / agricultural land to the west and south. A figure presenting the surrounding environment is provided as **Figure 2**. The Site identification details are provided in **Table 1**.

Table 1: Site Details Summary

Aspect	Detail
Site Locality	81 hectares of pastoral land located between Brymer Road, Rotokauri, and Whatawhata Road, State Highway 23, Hamilton.
Legal Description	Lot 1 DP 87291 Lot 22 DP 79526 Part Lot 2DP 18355 / Allotment 365 Pukete PSH
Total Area	Total of 81 ha
Territorial Authority	City Council: Waikato District Council (WDC) Regional Council: WRC.
Surrounding Land Use	North: Pastoral land with rural residential dwellings beyond.
	East: Residential dwellings.
	South: Whatawhata Road with rural residential dwelling beyond.
	West: Pastural land and agricultural land.
Land Use / Zoning	The Site is zoned 'General Rural Zone (GRUZ)' under the Waikato District Plan - Operative in Part. The northern and southern portion of the Site operates as a livestock farm with associated structures, such as cattle yards and implement sheds, which are located in the north-northeastern and southern portion of the Site. The main residential dwelling and a cottage are situated in the southern portion of the Site. The remaining land comprises open paddocks used for livestock grazing. The middle portion is agricultural land.
Proposed Land Use	We understand that the Site will be redeveloped for residential land use.





Legend

- Site Boundary
- Farm Structures
- Residential Dwelling
- Cottage

0 100 m 200 m
© Mapbox

SLR

Produced by **Datanest.earth**

Title: Surrounding Environment

Client: CMW Geosciences Size: A3

Project: Brymer Development DSI
Drawn: SH
Figure No.: 2

Date: 13-10-2025
Checked: NM

Proj No: 810.031825.00001
Scale: 1:6300
Version: 1.0

2.1 Environmental Features

Environmental features pertaining to the Site have been described in the BTW DSI. The sections below provide details additional to that report, or where conditions were observed to have changed since 2021.

2.1.1 Hydrogeology

A search of the Wells Aotearoa Maps, conducted on 13 October 2025, identified four boreholes within the Site. The use of the bores is unknown and the depth to groundwater was not recorded. Details of the boreholes are presented in **Table 2**.

Table 2: Well Aotearoa Borehole Information

Borehole ID	Location	Bore Depth (m bgl)	Depth to groundwater (m)	Use
72_11240	Southwest	139.50	8.2	Unknown
72_12997	Middle	Unpublished well		
72_12996	North	Unpublished well		
72_11239	Northeast	113.0	25.53	Unknown

3.0 Site History

A review of publicly available information for the Site was undertaken to understand the history of the Site and the nature and location of any potentially contaminating activities. This included a review of:

- BTW DSI
- Site walkover.
- Tenant provided information.

3.1 Previous Environmental Investigations

A DSI was undertaken by BTW Company in 2021 to support the proposed residential development of the Site. The investigation identified several potential HAIL activities, including:

- Storage and application of fertilisers.
- Historical Stockyards with potential livestock dipping and spray race operations.
- Storage of agrichemicals and fuel.
- Proximity to orchards, arable cropping, and sports turf activities.
- Uncontrolled demolition of buildings potentially containing asbestos-containing materials (ACM).
- Potential soil contamination from lead-based paints, offal pits, and septic tank discharges.

The DSI involved a soil sampling programme targeting areas of potential concern:

- A systematic sampling strategy was implemented across the Site to assess cadmium concentrations in soil.



- Three Stockyards were identified where potential sheep dipping activities may have occurred (Stockyard 1 – 3). Targeted sampling was conducted at all three Stockyards to evaluate arsenic and organochlorine levels.
- Samples were collected from a shed located at Stockyard 3 and analysed for the presence of asbestos.

The key findings were:

- Cadmium concentrations were reported below human health criteria.
- Arsenic concentrations in all three Stockyards exceeded the residential and commercial soil contaminant standards (SCS). High concentrations of arsenic in Stockyards 2 and 3 were reported to be likely related to historical insecticide use, or chromated copper arsenate (CCA) treated wood, with the DSI reporting that the source of arsenic at Stockyard 1 was highly unlikely to be from sheep dipping activities.
- Organochlorines were detected below analytical limits.
- Deteriorated ACM was found in a shed. One sample collected adjacent to the shed recorded asbestos detection, but below SGV.

The DSI concluded that further delineation sampling is required, particularly around Stockyards 2 and 3 and in the vicinity of the existing residential dwelling, to better define the extent of contamination and inform future Site management and remediation planning.

3.2 Site Walkover Observations

A Site walkover was undertaken by SLR staff on 1 and 2 October 2025. Photos of the Site walkover are presented in **Appendix A**.

The following observations were made during the walkover:

- The topography of the Site is undulating land with a number of gullies dissecting the Site within the northern portion and predominantly flat land within the middle and southern portion of the Site (*Photo 1 – 3*).
- The northern and southern portion of the Site comprises paddocks separated by fences with cattle present. The middle and northeastern portion of the Site comprises agricultural land.
- A residential dwelling and a cottage are located south of the Site. Residential dwellings located to the southwest and identified on BTW DSI aerial imagery it is made of rock and was observed to be in good condition (*Photo 7 and 8*). An outlet was observed adjacent to the residential dwelling representing a discharge point for the catchpit within the garage area. General refuse (tires, plastics, medical bottle for sheep) was observed around the cottage residential dwelling (*Photos 8, 13 and 17*).
- The cottage located in the southeast area identified on the BTW DSI aerial imagery is made of timber and was observed to be in deteriorated condition. Paint flakes were observed on the ground adjacent to the dwelling (*Photo 10 – 12*).
- A farm structure identified in the BTW DSI aerial image was observed to be in deteriorated condition. The shed and the farm structures are constructed of timber. Fertilisers, disease treatment products and fuel are stored in small quantities within the shed (*Photo 14 – 18*).
- A farm structure was observed to be constructed of timber. A spray unit, potentially used for insecticide spraying activities was observed within the farm (*Photo 19 – 23*).



3.3 Tenant Provided Information

The following information was provided by the tenant who lives in the residential dwelling, in addition to the previously reported information in the BTW DSI:

- The residential dwelling was constructed in 1977 and was owned by a vet. The land was used for sheep farming for the duration of landownership by the vet.
- The garage of the residential dwelling and the woolshed (*Feature 12*) have been used as a workshop for developing medicine to treat eczema and sheep diseases.
- Between 1980's and early 2020's, the dwellings remained unoccupied, and the land was used for livestock grazing.

4.0 Key PSI Findings

4.1 Site History Summary

Based on a review of the BTW DSI and information collected as part of this assessment, the following can be summarised:

- The Site has been used for sheep farming between at least 1940's and 1980's. Since mid 1980's the Site had been used for livestock grazing.
- Changes to the Site over the period of time covered by historic aerial images are largely limited to the development of a small cluster of farm buildings located in the northern and southern areas of the Site, and two dwellings located in the southern area of the Site constructed in the 1940's and 1970's.
- The Site walkover identified the cottage to be in deteriorated condition with paint flakes observed on the ground.
- There are three Stockyards across the Site, with historic use unknown.
- Sheep dipping was reported to have occurred historically at the site at the location of the old woolshed. The old woolshed was located on the City side of what is now Highgrove Drive i.e. off the Site. It is unknown if sheep dipping had occurred at the Site in the area of the Stockyards 1 - 3.
- Two offal pits were reported to have existed on Site, which have not been used in more than 20 years and was only used for animals and not for other waste materials.

4.2 Summary of Potential HAIL Activities

Based on the BTW DSI and background information reviewed as part of this DSI, the following HAIL activities have been potentially identified at the Site:

- *E1: Asbestos products manufacture or disposal, including sites with buildings known to be in a deteriorated condition* – associated with degradation of asbestos containing materials potentially present onsite given the age of the current buildings at the Site.
- *A8: Livestock dip or spray race operations* – associated with sheep farming.
- *A10: Persistent pesticide bulk storage or use, including sport turfs, market gardens, orchards, glass houses or spray sheds.*
 - Assessed as incomplete in the BTW DSI and as part of this DSI, which have reported organochlorine pesticides and heavy metal concentrations below the human health criteria across the Site and in Stockyards 1 – 3.



- *I: Any other land that has been subject to the intentional or accidental release of a hazardous substance in sufficient quantity that it could be a risk to human health or the environment – associated with:*
 - The degradation of potential lead-based paint around the cottage at the Site.
 - The elevated concentrations of arsenic in shallow soils within the Stockyards 1 – 3 as reported in the BTW DSI.
 - Accumulation of cadmium in soils from the repeated use of superphosphate across pastoral land was assessed as incomplete in the in the BTW DSI, which reported cadmium concentrations not exceeding the NESCS SCS for the most stringent residential land use criteria.

Contaminants of potential concern (CoPC) associated with the above HAIL activities include:

- Heavy metals (arsenic, cadmium, chromium, copper, lead, nickel and zinc).
- Organochlorine pesticides (OCPs).
- Asbestos.
- Polycyclic aromatic hydrocarbons (PAH).



5.0 Initial Conceptual Site Model

An initial Conceptual Site Model (CSM) (**Table 3**), based on the review of background information as part of this DSI and the BTW DSI, provides a detailed description of the identified potential sources, pathways and receptors, and a qualitative assessment of complete or potentially complete source-pathway receptor (SPR) linkages. A risk is only present if there is a complete SPR linkage. The CSM detailed in **Table 3** is not intended to be an exhaustive assessment of all potential SPR linkages. The CSM has been developed based on available information, any omissions are not indicative of no risk.

Table 3: Tabulated Initial Conceptual Site Model

Activity Identified	Potential HAIL Reference	Location On Site	Potential Contaminants	Pathway	Receptor	Discussion and SPR Linkage
Current buildings with potential asbestos containing materials	E1: <i>Asbestos products manufacture or disposal including sites with buildings containing asbestos products known to be in a deteriorated condition.</i>	Residential dwelling and cottage	Asbestos	Inhalation	Site users and maintenance/ excavation workers	Potentially Complete Determination of whether the SPR linkage is complete requires soil sampling and analysis to assess the concentrations in soil, and a risk assessment to determine the potential risk to human health and the environment.
Farming activities including superphosphate use	I: <i>Any other land that has been subject to the intentional or accidental release of a hazardous substance in sufficient quantity that it could be a risk to human health or the environment.</i>	Pastural areas of the Site	Cadmium	Direct contact, inhalation and/or ingestion	Site users and maintenance/ excavation workers	Incomplete Assessed as incomplete in the BTW DSI and not investigated further as part of this DSI.
				Leaching to groundwater	Environmental	
Degradation of potential lead-based paint on the farm buildings		Current buildings and farm structures	Lead	Direct contact, inhalation and/or ingestion	Site users and maintenance/ excavation workers	Potentially Complete Determination of whether the SPR linkage is complete requires soil sampling and analysis to



Activity Identified	Potential HAIL Reference	Location On Site	Potential Contaminants	Pathway	Receptor	Discussion and SPR Linkage
				Leaching to groundwater	Environmental	assess the concentrations in soil, and a risk assessment to determine the potential risk to human health and the environment.
Farming Infrastructure including CCA treated wood		Farm structures	Chromated Copper Arsenate	Direct contact, inhalation and/or ingestion	Site users and maintenance/ excavation workers	Potentially Complete Determination of whether the SPR linkage is complete requires soil sampling and analysis to assess the concentrations in soil, and a risk assessment to determine the potential risk to human health and the environment.
				Leaching to groundwater	Environmental	
Sheep farming activities in 1980's	A8: <i>Livestock dip or spray race operations</i>	Farm structures	Heavy metals Organochloride pesticides	Direct contact, inhalation and/or ingestion	Site users and maintenance/ excavation workers	Potentially Complete Determination of whether the SPR linkage is complete requires soil sampling and analysis to assess the concentrations in soil, and a risk assessment to determine the potential risk to human health and the environment.
				Leaching to groundwater	Environmental	



6.0 Detailed Site Investigation

Soil sampling at the Site was undertaken on 1 and 2 October 2025. Soil sampling was targeted to areas of potential environmental concern, as identified as part of the Preliminary Site Investigation (PSI) portion of this report, and previous investigations. Four areas of potential environmental concern were identified. The works involved the collection of the following samples:

- **Area of Concern (AOC) 1 (Stockyard 1):** Collection of samples from eight locations around the perimeter of the Stockyard:
 - Samples were collected from depths of 0.0 – 0.15 m and 0.3 – 0.4 m below ground level (bgl).
- **AOC 2 (Stockyard 2):** Collection of samples in 15 locations:
 - Five samples within the Stockyard run.
 - Five delineation samples east and west of the Stockyard run fence.
 - Five samples around the perimeter of the Stockyard fence.
 - Samples were collected from depths of 0.0 – 0.2 m, 0.4 – 0.5 m and 0.8 – 1.0m bgl.
- **AOC 3 (Stockyard 3):** Collection of soil samples from 11 locations:
 - Three samples within the Stockyard run.
 - Six delineation samples north and south of the Stockyard fence run.
 - Two samples adjacent to buildings.
 - Samples were collected from depths of 0.0 – 0.2 m, 0.4 – 0.5 m and 0.8 – 1.0m bgl.
- **Residential dwelling and cottage:** Collection of eight samples from around the dwelling and the cottage:
 - Samples were collected from depths of 0.0 – 0.15 m and 0.3 – 0.4 m bgl.

Sample locations are presented in **Figure 3**. Soil logging and sample information is presented in **Appendix B**

Soil sampling was undertaken in general accordance with the Contaminated Land Management Guidelines No.5 Site Investigation and Analysis of Soils (MfE, 1999, revised 2021). The methodology for the soil sampling is set out below.

6.1 Sampling Methodology

The following methodology was adopted during the soil sampling works:

- A stainless-steel trowel and a hand auger were used to collect surface and sub-surface soil samples.
- All soil samples were subject to a screening for visual and olfactory evidence of contamination.
- A clean pair of nitrile gloves were worn at each location to collect each soil sample to limit the potential for cross-contamination.



- Soil samples were placed directly in laboratory supplied sample jars and identified with a unique sample identifier, which was documented on the sample label, and chain of custody form.
- All soil samples were placed in an ice-cooled storage box (i.e., chilly bin) immediately after collection and transported under chain of custody documentation to the analytical laboratory.
- All field sampling equipment was decontaminated prior to use at each soil sample location to limit the potential for cross-contamination. Decontamination of field equipment involved: wash with clean potable water, scrubbing in a detergent solution (Decon 90) and potable water, and a final rinse in clean water.
- The soil samples were transported under full Chain of Custody documentation to Hill Laboratories, Hamilton. The soils were analysed as per the analytical schedule in **Appendix D**.

The laboratory analytical schedule selected was based on the likely CoPC associated with current and historic activities undertaken, and observations during the walkover at the Site.

6.2 Sampling Observations

A photographic log documenting sampling observations and the typical soil profile as encountered at the Site is presented in **Appendix A**, with soil logs presented in **Appendix B** and are described below:

- Surface soils were relatively uniform across the Site and consisted of brown clayey silts underlain by orange-brown silts.
- The targeted sampling depth was reached at all locations.
- Groundwater was not encountered during soil sampling.
- External paint on the cottage was observed to be in deteriorated condition.
- No potential asbestos-containing materials (PACM) were observed during the Site walkover.
- No refuse of uncontrolled fill was observed in any of the areas that were subject to soil sampling.

6.3 QA/QC Sample Results

A relative percentage difference (RPD) was calculated for each duplicate pair to obtain a quantitative measure of the accuracy of the results obtained. A RPD range of 30% - 50% is generally considered acceptable (based on the requirements of MfE CLMG No.5). Validation and interpretation of the QA/QC data was undertaken by calculating the RPD for each duplicate pair.

As part of the soil sampling works, two QA/QC duplicate samples were collected and scheduled for the same suite as the primary sample.

The RPD calculations presented in **Table 4** and **Table 5** illustrate that the variance between the primary and duplicate samples was calculated as less than 50% in all primary and duplicate sample pairs analysed.



Table 4: QAQC1 Relative Percentage Difference Calculations

Analyte	SS18/0.0	QAQC1	RPD (%)
Arsenic	8	8	0
Cadmium	0.12	0.13	8
Chromium	15	16	6.5
Copper	17	18	5.7
Lead	20	21	4.9
Nickel	5	5	0
Zinc	35	34	2.9

Note: All values in mg/kg

NC – not calculated as all results recorded below limit of reporting

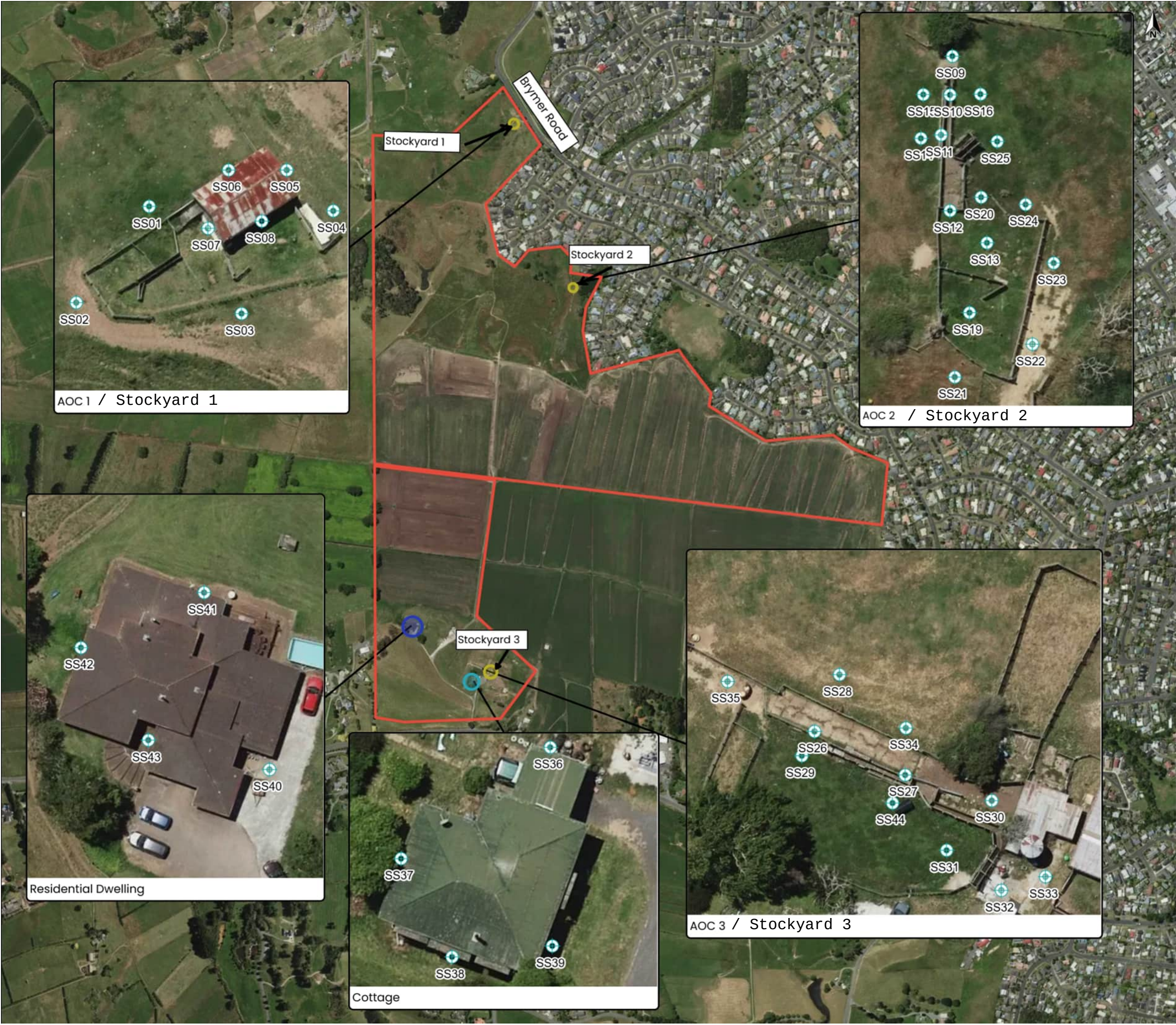
Table 5: QAQC2 Relative Percentage Difference Calculations

Analyte	SS13/0.0	QAQC2	RPD (%)
All OCPs	< LLOR	< LLOR	NC

Note: All values in mg/kg

NC – not calculated as all results recorded below limit of reporting (LLOR)





Legend

- Sample Locations
- Site Boundary
- Stockyards 1, 2, and 3
- Residential Dwelling
- Cottage

0 100 m 200 m
LINZ CC BY 4.0 © Imagery Basemap contributors

SLR

Produced by **Datanest.earth**

Title: Sample Location Plan		
Client: CMW Geosciences		Size: A3
Project: Brymer Development DSI	Drawn: LL	Figure No.: 3
Date: 11-09-2025	Checked: NM	
Proj No: 810.031825.00001	Scale: 1:9000	Version: 1.0

6.4 Evaluation Criteria

The soil sample results have been screened against the following criteria:

Human Health Guidelines

- NESCS SCS: National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NESCS) Soil Contaminant Standards (SCS) for a Residential 10% Produce Land Use. The Residential land use scenario is considered appropriate as a conservative assessment of risk to future Site users as well as excavation and maintenance workers.
 - The NESCS SCS definition for Residential land use scenario is “Standard residential lot, for single dwelling sites with gardens, including home-ground produce consumption (10 per cent)”.
- NEPM: Australian National Environmental Protection Council National Environmental Protection Measures (Assessment of Site Contamination), 1999 (amendment No.1, 2013) – Schedule B(1), Health Investigation Level B (HIL-A) Standard Residential.
 - This guideline was utilised for human health criteria that are not included in the NESCS SCS.
- NZ GAMAS: New Zealand Guidelines for Assessing and Managing Asbestos in Soil (NZ GAMAS, November 2017), using ‘Residential’. Combined Fibrous Asbestos + Asbestos Fines and/or asbestos containing material (ACM bonded) as % of Total Sample % w/w.

Environmental Criteria

- Eco SGV: Manaaki Whenua Landcare Research Ecological Soil Guideline Values for the Protection of Ecological Receptors (ECO-SGVs). Prepared June 2022 (Envirolink Grant: 2214-MLDC162). Using the protection of 60% produce use in a Residential land use category.
 - This guideline is used to assess the risk to terrestrial ecological receptors.

Predicted Background Concentrations (PBC)

- Predicted Background Concentrations (PBC): Natural Background Concentrations in the Waikato region (Waikato Regional Council).

Landfill Acceptance Criteria

- Waikato Cleanfill Acceptance Criteria. Guidelines as provided by WRC.
- Gleeson Managed Fill Acceptance Criteria. Guidelines used as an example of a local managed fill location.

6.5 Soil Sampling Results

A summary of the soil sampling results is presented in **Table 7 and 8**. A summary of the results for heavy metals in relation to the adopted assessment criteria is also presented in **Table 6**. The full results are contained in the laboratory analysis reports provided in **Appendix C**.



6.5.1 Residential Dwelling and Cottage

Residential Dwelling

- Asbestos was not detected in any of the analysed samples.
- Concentrations of lead was below the NESCS SCS for residential 10% produce and Eco-SGV for residential land use in all of the samples analysed.
- The concentration of lead was reported above the regional background criteria (20 mg/kg) in all samples analysed, with the concentrations ranging from 29 mg/kg (SS40/0.0) to 47 mg/kg (SS42/0.0).

Cottage

- Chrysotile (white asbestos) was detected above NZ GAMAS in one surface sample analysed (SS37/0.0) at concentration 0.003 % w/w in the form of combined fibrous asbestos and asbestos fines. The corresponding shallow sub-surface sample analysed (SS37/0.4) recorded no detection of asbestos.
- Concentrations of lead exceeded the NESCS SCS for residential 60% produce scenario in all four shallow soil samples analysed, with concentrations ranging from 360 mg/kg (SS36/0.0) to 1,360 mg/kg (SS37/0.0). The corresponding shallow sub-surface sample analysed (SS37/0.4) recorded no exceedances of the NESCS SCS for residential 60% produce scenario.
- All samples analysed reported concentrations of heavy metals below the Eco-SGV for residential land use.
- The concentration of lead was reported above the regional background criteria (20 mg/kg) with the concentrations in sub-surface samples ranging from 41 mg/kg (SS36/0.4) to 174 mg/kg (SS39/0.4).

6.5.2 Stockyard Areas

Table 6: Summary of Heavy Metal Soil Analytical Results

Analyte	Minimum Recorded Concentration (mg/kg)	Maximum Recorded Concentration (mg/kg)	Number of Recorded Exceedances		
			NESCCS SCS	Eco SGV	Background Concentrations
Arsenic	3	15	0	0	13
Cadmium	0.12	0.68	0	0	10
Chromium	6	18	0	0	0
Copper	5	35	0	0	3
Lead	4	360	0	0	10
Nickel	3	6	0	0	0
Zinc	35	178	0	0	11

Stockyard 1

- All heavy metal concentrations were below NESCS SCS for residential land use and and Eco-SGV 60% produce for residential land use in all soil samples analysed.



- Concentrations of one or more selected heavy metals (arsenic, cadmium, lead and/or zinc) were above the published background concentrations in all four surface soil samples analysed.

Stockyard 2

- All heavy metal concentrations were below NESCS SCS for residential land use and Eco-SGV 60% produce for residential land use in all soil samples analysed.
- Concentrations of one or more selected heavy metals (arsenic, cadmium, lead and/or zinc) were above the published background concentrations in six out of 17 surface soil samples analysed.
- Dieldrin was reported above the laboratory limit of reporting (LLOR) in one surface sample analysed (SS20/0.0), and below the respective NESCS SCS criteria.
- All other OCPs were detected below LLOR in all other samples analysed.

Stockyard 3

- All heavy metal concentrations were below NESCS SCS for residential and Eco-SGV 60% produce for residential land use in all soil samples analysed.
- Concentrations of one or more selected heavy metals (arsenic, cadmium, copper, lead and/or zinc) were above the published background concentrations in all surface soil samples analysed.
- All OCP congeners were below LLOR in all samples analysed.



¹ Refer to the laboratory certificate for full analytical results. Criteria adopted from the following guidelines:
² Human Health Criteria for Residential (100% protection) Land use selected in accordance with CLM2 No. 2 (MIE, 2011).
³ NEPM (2013) Criteria for Human Health, HIL (A/Residential) from Table 2.4.
⁴ Background: Walkato, AE - Natural background concentrations in the Walkato region.
⁵ Landcare Research (2019). UPDATED user guide: Background soil concentrations and soil guideline values for the
⁶ NZ GAMAS (2024) - Commercial/Industrial Criteria
⁷ Walkato Regional Council, Walkato client acceptance criteria.
⁸ Gleeson Mandated Fill Acceptance criteria.

Table 8 - Soil Analytical Results



Analyte		SS36	SS36	SS37	SS37	SS38	SS38	SS39	SS39	SS40	SS41	SS42	SS43						
Depth (m)		0.0	0.4	0.0	0.4	0.0	0.4	0.0	0.4	0.0	0.0	0.0	0.0						
Sampled Date		1/10/2025	1/10/2025	1/10/2025	1/10/2025	1/10/2025	1/10/2025	1/10/2025	1/10/2025	1/10/2025	1/10/2025	1/10/2025	1/10/2025						
Soil Description		SILT	SILT	SILT	SILT	SILT	SILT	SILT	SILT	GRAVEL	SILT	SILT	SILT						
Sample Location		Cottage								Residential Dwelling									
Asbestos	Units																		
Presence/absence	N/A	Asbestos NOT detected.	-	Chrysotile (White Asbestos) detected.	-	Asbestos NOT detected.	-	Asbestos NOT detected.	-	Asbestos NOT detected.	Asbestos NOT detected.	Asbestos NOT detected.	Asbestos NOT detected.	-	-	-	Presence / Absence	-	-
Form	N/A	-	-	ACM debris	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Combined FA + AF	% w/w	< 0.001	-	0.003	-	< 0.001	-	< 0.001	-	< 0.001	< 0.001	< 0.001	< 0.001	-	-	-	0.001	-	-
ACM (bonded)	% w/w	< 0.001	-	< 0.001	-	< 0.001	-	< 0.001	-	< 0.001	< 0.001	< 0.001	< 0.001	-	-	-	0.01	-	-
Heavy Metals (total recoverable)																			
Lead	mg/kg	360	41	1,360	49	870	56	720	174	29	39	47	44	210 ¹	2,500	20	-	76	250

Notes:
Refer to the laboratory certificate for full analytical results. Criteria adopted from the following guidelines:
¹ Human Health Criteria for Residential (10% produce) Land use selected in accordance with CLMG No. 2 (ME, 2011).
² NEPM 2013 Criteria for Human Health - HIL A (Residential) from table Table 2.
³ Background: Waikato, All - Natural background concentrations in the Waikato region.
⁴ Landcare Research (2019). UPDATED user guide: Background soil concentrations and soil guideline values for the protection of ecological receptors (Eco-SVG) - Consultation draft. (Envirolink Grant: 1935-GSDC156).
⁵ NZ GAMAS (2024) - Commercial/Industrial Criteria
⁶ Waikato Regional Council, Waikato cleanfill acceptance criteria.
⁷ Gleeson Managed Fill Acceptance criteria.

7.0 Discussion

7.1 Soil Contamination

The soil sampling plan of this DSI was developed on the basis of the identified gaps within the BTW DSI. Specifically, sampling was targeted around the residential dwelling, cottage and areas of concern around Stockyards 1 – 3.

Stockyards 1, 2, and 3

Elevated concentrations of arsenic were reported within the perimeter of Stockyards 1, 2, and 3 in the BTW DSI. BTW concluded the source of these exceeding arsenic concentrations were related to treated timber at Stockyard 1, and a combination of timber and sheep treatment activities at Stockyard 2 and 3. Further delineation of heavy metal concentrations in soil, to determine the source, horizontal and vertical extent of the elevated arsenic was recommended. Due to the historical sheep farming activities identified as part of the BTW DSI, OCPs had been investigated within the Stockyard areas and was not identified above laboratory analytical limits.

Selected samples collected as part of this DSI were analysed for OCPs. Analytical results of from Stockyards 1 – 3 did not identify concentrations of OCPs above the LOR. Dieldrin was reported above the LOR in one shallow soil sample from Stockyard 2 (SS20/0.0) but below the NESCS SCS for residential land use and Eco-SGV 60% produce for residential land use scenario.

Soil sample locations to assess heavy metals in Stockyards 1 – 3 were strategically placed to delineate the exceeding heavy metal (arsenic) concentrations reported in the BTW DSI. Concentrations of heavy metals in soil samples at the Stockyards generally exceed the WRC background soil concentration values but are below the NESCS SCS. High arsenic concentrations within Stockyards 1, 2, and 3 were reported above the NESCS SCS in the BTW DSI. It is considered likely that the high arsenic in the BTW report relates to location of samples (directly beneath treated timber structures or at a location of former in ground treated timber), or natural variability in arsenic concentrations throughout the Stockyards.

Analysis of the delineated samples with the adopted assessment criteria indicate that *HAIL A8* and *I* is more likely than not to have occurred at the Site in sufficient quantities to pose a risk to human health within and immediately surrounding (localised halos) the Stockyards.

Residential Dwelling and Cottage

Further investigation was recommended in the BTW DSI to confirm *HAIL E1*, and *I*, regarding the potential for asbestos and lead based paint contamination in soils surrounding the residential dwelling and cottage. Soil samples collected during the sampling event of this DSI reported the presence of asbestos in the form of asbestos fine and asbestos fibres in one soil sample (SS37/0.0) adjacent west of the cottage. Concentrations of asbestos in SS37/0.0 was reported above the NZ GAMAS criteria as low level asbestos contamination (0.003% w/w). The presence of asbestos was not detected in any of the four samples analysed around the residential dwelling.

Concentrations of lead exceeded the human health criteria in all four surface samples around the cottage. Analytical data indicate that the concentration of lead generally decreased with depth and it is concluded that *HAIL I and E1* is more likely than not to have occurred at the Site in sufficient quantities to pose a risk to human health localised in the top 0.4 m of soil within the halo of the cottage.



Asbestos was not detected in samples collected around the residential dwelling, and the lead concentrations were below the NESCS for residential land use, and Eco-SGV 60% produce for residential land.

Overall Discussion

Overall, the Site is considered suitable for the proposed fast track application for the proposed residential development. Localised soil remediation or management will be required around the Stockyards and cottage.

With the exception of the isolated areas of elevated asbestos, lead and arsenic, soils are considered suitable to be retained and re-used on Site. Should off-site disposal be required, excavated material is suitable for disposal as cleanfill (subject to acceptance of the receiving facility).

7.2 NESCS

Based on the findings of this investigation, it is more likely than not that an activity listed on the HAIL (*HAIL A8, E1 and I*) has been or is being undertaken within localised areas of the Site. This is associated with the elevated asbestos and lead concentrations reported at the four surface soils adjacent to the cottage, and elevated arsenic concentrations associated with CCA treated wood within the Stockyard areas. These areas of the Site are considered to be a 'piece of land' under Regulation 5(7) and the provisions of the NESCS will apply to future development at the locations where HAIL activities have been identified.

It is noted that the concentrations of OCPs in soil across the Stockyard areas, as well as lead in soils associated with the residential dwelling, do not exceed the adopted soil criteria for the proposed development, and therefore do not meet the definition of a *HAIL I*.

The identified Pieces of Land within the Site comprise an area of approximately 1,500 m². Under Regulation 8(3) of the NESCS, the permitted activity thresholds for these areas allow a maximum of 75 m³ of soil disturbance and 15 m³ of soil removal from the Site within a 12-month period. Additional requirements of Regulation 8(3) include that the duration of the activity must not exceed two months and that disturbed areas must be reinstated to an erosion-resistant state within one month of completion.

It is estimated that approximately 1,850 m³ of soil within the identified Pieces of Land will require disturbance and off-site disposal as part of the proposed remedial works. These volumes exceed the permitted activity thresholds specified in Regulation 8(3).

As the proposed earthworks are not expected to comply with the permitted activity requirements, the works will require resource consent under the NESCS as a Restricted Discretionary Activity.

7.3 Waikato Regional Council Regional Plan (WRC RP)

The WRC RP glossary definition of a contaminated land:

Contaminated land means land of one of the following kinds:

- a) If there is an applicable national environmental standard on contaminants in soil, the land is more contaminated than the standard allows; or
- b) If there is no applicable national environmental standard on contaminants in soil, the land has a hazardous substance in or on it that:
 - i. has significant adverse effects on the environment; or



- ii. is reasonably likely to have significant adverse effects on the environment.

Based on the analytical results, lead concentrations exceed the NESCS SCS at four locations around the cottage. The concentrations of asbestos exceeds the NZ BRANZ criteria in one surface sample collected adjacent to the cottage. Furthermore, arsenic concentrations had exceeded the NESCS SCS within the Stockyard areas of the Site in the BTW Company DSI report, and delineation samples collected as part of this DSI were below the NESCS SCS in the areas of the Stockyard 1 – 3, indicating a localised elevation/variation in concentrations of arsenic. Therefore, the cottage area and the Stockyard areas where CCA treated wood are used meet the WRC RP definition of contaminated land.

Soil disturbance can be undertaken as a Permitted activity under Rule 5.3.4.6 as long as the following conditions are met:

- a) Any discharge to air arising from the activity shall comply with the conditions and standards and terms in Section 6.1.8 except where the matters addressed in Section 6.1.8 are already addressed by conditions on resource consents for the Site.
- b) No contaminants from the remediation of the contaminated land shall be discharged into water or onto land unless discharged to a landfill authorised in Section 5.2.7.
- c) The Waikato Regional Council shall be provided with the following reports prepared in compliance with Contaminated Land Management Guideline No.1: Reporting on Contaminated Sites in New Zealand (Ministry for the Environment, Wellington, NZ, updated October 2003) prior to commencement of land remediation:
 - i. Detailed site investigation report; and
 - ii. Site remedial action plan
- d) After remediation is completed, copies of the following reports prepared in compliance with Contaminated Land Management Guideline No.1: Reporting on Contaminated Sites in New Zealand (Ministry for the Environment, Wellington, NZ, updated October 2003) must be provided to the Waikato Regional Council:
 - i. Site validation report; and
 - ii. Ongoing monitoring and management plan.
- e) Any updates of these reports shall be provided to the Waikato Regional Council if a change in investigation, remediation and monitoring strategy occurs.

It is expected that the soil disturbance works can be undertaken to comply with the conditions of Rule 5.3.4.6 and therefore the works can be undertaken as a Permitted Activity.



8.0 Revised Conceptual Site Model

This CSM (**Table 9**) is based on the results of soil sampling undertaken at the Site as part of this DSI, and previous sampling conducted as part of the BTW DSI. The CSM has been developed based on available information, any omissions are not indicative of no risk.

Table 9: Revised Conceptual Site Model

Activity Identified	Potential HAIL Reference	Location On Site	Potential Contaminants	Pathway	Receptor	Discussion and SPR Linkage
Current buildings with potential asbestos containing materials	E1: <i>Asbestos products manufacture or disposal including sites with buildings containing asbestos products known to be in a deteriorated condition</i>	Residential dwelling and the cottage	Asbestos	Inhalation	Site users and maintenance/excavation workers	Complete Asbestos was not observed during the site walkover however, Chrysotile (White asbestos) asbestos was detected above the NZ BRANZ criteria in one surface soil sample adjacent to the cottage. The corresponding sub-surface location did not detect the presence of asbestos. The risk to human health can be effectively managed through targeted soil management and remediation work.
Historic sheep farming activities Farming Infrastructure including CCA treated wood	A8: <i>Livestock dip or spray race operations</i> I: <i>Any other land that has been subject to the intentional or accidental release of a hazardous substance in sufficient quantity that it could be a risk to human health or the environment.</i>	Stockyard 1 – 3	Heavy metals Organochlorine Pesticides (OCPs)	Direct contact, inhalation and/or ingestion	Site users and maintenance/excavation workers	Complete Arsenic was detected above the predicted background concentrations and above the adopted NESCS SCS within all three Stockyards. The elevated concentrations appear variable and limited to within and immediately surrounding the Stockyards. There is no corresponding presence of OCPs which suggests the source of contamination is primarily from use of treated timber. Although the pathways is complete, the risk to human health can be effectively managed through targeted soil management and remediation work.
				Leaching to surface water	Environmental	Highly Unlikely No assessment of groundwater or leachable concentration of heavy metals or OCPs had been undertaken (by Toxicity Characteristic Leaching Procedure [TCLP]). However, the concentration of contaminants were below the adopted environmental and ecological criteria in sampling conducted as part of this DSI, and the sampling across both the BTW DSI and this DSI has shown a marked reduction in heavy metal concentrations with depth.
Degradation of potential lead-based paint on the residential dwelling and the cottage	I: <i>Any other land that has been subject to the intentional or accidental release of a hazardous substance in sufficient quantity that it could be a risk to human health or the environment.</i>	Current buildings and farm structures	Lead	Direct contact, inhalation and/or ingestion	Site users and maintenance/excavation workers	Complete Concentrations of lead were detected above regional background criteria. Moreover, lead exceeded the NESCS SCS in four surface samples adjacent to the cottage, but were below the NESCS SCS in the corresponding subsurface locations. Although the pathways is complete, the risk to human health can be effectively managed through targeted soil management and remediation work.
				Leaching to surface water	Environmental	Incomplete No assessment of groundwater or leachable concentrations of lead had been undertaken (by Toxicity Characteristic Leaching Procedure [TCLP]). However, the concentrations of lead were reported below the adopted environmental and ecological criteria, and lead concentrations around the cottage showed a marked decrease in concentration with depth.



9.0 Conclusion

SLR has been engaged by CMW Geosciences to prepare a DSI to support the fast-track lodgement for a proposed residential development at 76.5 ha of pastoral land located between Brymer Road, Rotokauri and Whatawhata Road, State Highway 23, Hamilton (the Site).

This DSI covers data gaps from the previous DSI conducted at the Site by BTW in 2021. The key findings of this DSI are as follows:

- The Site had been used for sheep farming between at least 1940's and 1980's. Since mid 1980's the Site had been used for livestock grazing.
- A previous investigation undertaken by BTW in 2021 identified AOC, specifically three Stockyard areas (Stockyard 1 – 3), where potential sheep dipping activities had occurred. Arsenic concentrations above the adopted human health criteria were identified in surface soil within each of the Stockyard areas, and asbestos was identified in one soil sample adjacent to building in Stockyard 3.
- The Site walkover identified the cottage to be in deteriorated condition with paint flakes observed on the ground.
- The following HAIL activities are more likely than not to have occurred at the Site:
 - E1: *Asbestos products manufacture or disposal, including Sites with buildings known to be in a deteriorated condition* – associated with degradation of asbestos containing materials potentially present onsite given the age of the current buildings at the Site.
 - A8: *Livestock dip or spray race operations* – associated with sheep farming.
 - I: *Any other land that has been subject to the intentional or accidental release of a hazardous substance in sufficient quantity that it could be a risk to human health or the environment* – associated with:
 - The degradation of potential lead-based paint around the residential dwelling, cottage and farm structures at the Site.
 - Accumulation of arsenic from CCA treated wood.
- Thirty samples were analysed from Stockyards 1 – 3 and 12 samples were analysed from around the buildings. The results of the soil analysis indicated the following:
 - Lead exceeded the NESCS SCS for residential land use scenario in all four surface sample locations collected adjacent to the cottage.
 - Asbestos was detected above NZ GAMAS in one shallow soil sample collected adjacent to the cottage.
 - Concentrations of one or more selected heavy metals (arsenic, cadmium, copper, lead, nickel and/or zinc) were above the published background concentrations in 15 soil samples collected from Stockyards 1 – 3 but were below the NESCS SCS for residential 10% produce and Eco-SGV for residential land use scenario. An OCP congener (dieldrin) was reported above the LLOR in one soil sample analysed, but below the respective NESCS SCS criteria.

Based on the findings of this DSI, the following recommendations are made:



- Soil sampling has confirmed HAIL activities (HAIL A8, E1, and I) have impacted soil across localised areas of the Site (cottage and CCA treated wood in Stockyards 1 - 3) where contaminants were detected above expected background concentrations.
- Selected areas of the Site (cottage and Stockyards 1 - 3) are considered a 'piece of land' under Regulation 5(7) of the NESCS and will require a Restricted Discretionary Activity consent to support soil disturbance and disposal.
- The results of this DSI and the BTW DSI confirm there are localised hotspots of contamination in shallow soil where concentrations exceed the adopted criteria for the protection of human health. This includes the cottage (lead), the implement shed at Stockyard 3 (asbestos), and Stockyards 1-3 (arsenic). Soil from these locations will require appropriate management or remediation. Soils from all other areas of the Site are suitable to remain onsite.
- Localised areas of the Site (cottage and Stockyards 1 - 3) meet the WRC RP definition of contaminated land. However the proposed soil disturbance can be undertaken as a Permitted Activity (PA) under the WRC RP, provided PA thresholds are met.
- A combined Remedial Action Plan and Contaminated Site Management Plan (RAP-CSMP) will be necessary to establish the required controls for the safe management, including handling and placement of the soils within the halo of the cottage and from the three stockyards, and for managing unexpected discovery of contaminants, during Site development.



10.0 References

BTW Company, 2021. Detailed Investigation (DSI) at Brymer Road, Rotokauri (210406 Rev 2 – 30/07/2021).

Geological and Nuclear Sciences [GNS]. New Zealand Geology Web Map. Retrieved from <http://data.gns.cri.nz/geology/>, accessed October 2025.

Google® EarthTM Pro (2024).

Manaaki Whenua Landcare Research Ecological Soil Guideline Values for the Protection of Ecological Receptors (ECO-SGVs), 2022.

Ministry for the Environment, 2003. Contaminated Land Management Guidelines No. 2: Hierarchy and Application in New Zealand of Environmental Guideline Values (revised 2011). Ministry for the Environment, Wellington, New Zealand.

Ministry for the Environment. 2011. Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011. Ministry for the Environment, Wellington, New Zealand.

Ministry for the Environment. 2011. Methodology for Deriving Standards for Contaminants in soil to Protect Human Health. Ministry for the Environment, Wellington, New Zealand.

Ministry for the Environment, 2021. Contaminated Land Management Guidelines No. 1: Reporting on contaminated sites in New Zealand (revised 2021). Ministry for the Environment, Wellington, New Zealand.

Ministry for the Environment, 2021. Contaminated Land Management Guidelines No. 5: Site investigation and analysis of soils (revised 2021). Ministry for the Environment, Wellington, New Zealand.

New Zealand Guidelines for Assessing and Managing Asbestos in Soil, November 2017 (NZ GAMAS).

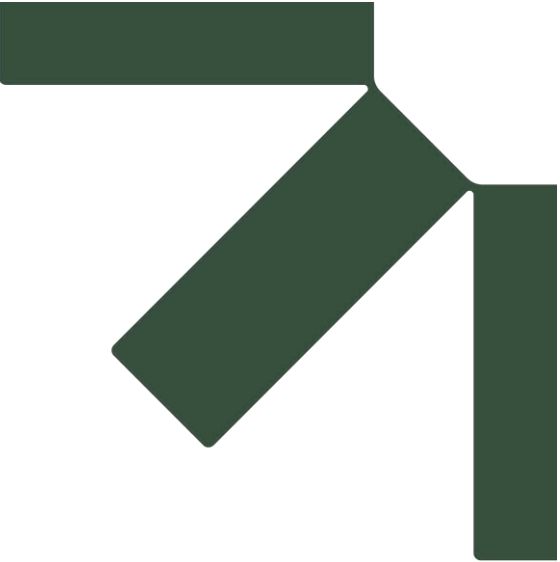
Retrolens (2023). Retrieved from <http://retrolens.nz> and licensed by LINZ CC-BY 3.0, accessed October 2025.

Waikato Regional Council. (2023). Natural background concentrations in the Waikato region. Retrieved from <https://www.waikatoregion.govt.nz/services/regional-services/waste-hazardous-substances-and-contaminated-sites/contaminated-sites/natural-background-concentrations/>, accessed October 2025.

Waikato Regional Plan – Reprinted April 2012. 5 Land and Soil Module. Waikato Regional Council.

Wells Aotearoa New Zealand, 2024. Retrieved from <https://wellsnz.teurukahika.nz/>





Appendix A Photolog

Detailed Site Investigation

Brymer Development

CMW Geosciences Ltd

SLR Project No.: 810.031825.00001

12 August 2026

Photolog

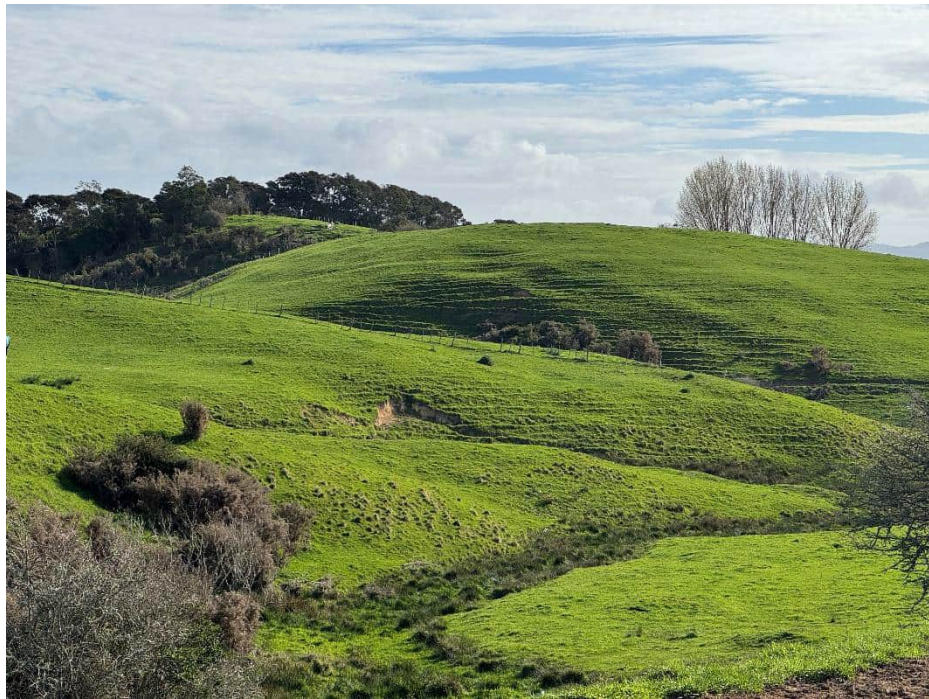
Photo 1: General topography of the Site, facing north (1 October 2025). 	Photo 2: General topography of the Site, facing east (1 October 2025). 	Photo 3: General topography of the Site, facing west (1 October 2025). 
Photo 4: General soils encountered at Site; brown clayey silts (1 October 2025). 	Photo 5: General soils encountered at Site; brown clayey silts with some gravel (1 October 2025). 	Photo 6: General soils encountered at Site; brown clayey silts with some gravel (1 October 2025). 



Photo 7: Residential dwelling, facing south (1 October 2025).



Photo 8: Residential dwelling and the location of the catchpit, facing west (1 October 2025).



Photo 9: Discharge point adjacent to residential dwelling, facing west (1 October 2025)



Photo 10: Cottage, facing west (1 October 2025).



Photo 11: Degradation of potential lead-based paint (1 October 2025).



Photo 12: Visible pain flakes on the ground (1 October 2025).



Photo 13: Rubbish located adjacent to a cottage, facing south (1 October 2025).



Photo 14: Farm sheds located within Stockyard 3 (1 October 2025).



Photo 15: Farm structures within Stockyard 3 (1 October 2025).



Photo 16: Farm structures within Stockyard 3 (1 October 2025).



Photo 17: Medicinal bottle observed on ground adjacent to Farm sheds within Stockyard 3 (1 October 2025).



Photo 18: Storage shed within Stockyard 3 (1 October 2025).



Photo 19: Storage shed within Stockyard 1 (1 October 2025).

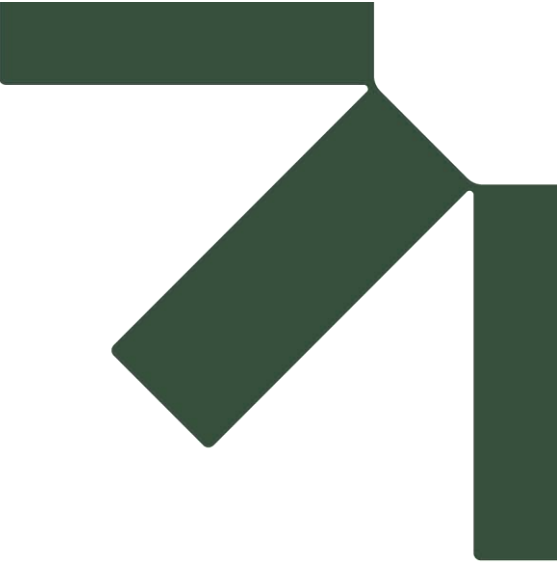


Photo 20: Farm Structures within Stockyard 2 (2 October 2025).



Photo 21: Spray unit observed within Stockyard 2 (2 October 2025).





Appendix B Soil Logs

Detailed Site Investigation

Brymer Development

CMW Geosciences Ltd

SLR Project No.: 810.031825.00001

12 August 2026



Borehole No: SS01

UTM	: 60H	Driller Rig	: Hand Auger	Job Number	: 810.031825.00001
Latitude	: -37.77958	Driller Supplier	:	Client	: CMW Geosciences
Longitude	: 175.21885	Logged By	: SH	Project	: Brymer Development DSI
Elevation	: Not Surveyed	Reviewed By	:	Location	: Brymer Road, Grandview Heights, Hamilton, New Zealand
Total Depth	: 0.4 m	Date	: 01/10/2025	Loc Comment	:

PID (ppm)	Sample	Moisture	Water Level	Depth (m)	Graphic Log	LITHOLOGICAL DESCRIPTION	COMMENTS / CONTAMINANT INDICATORS	Well Diagram	Elevation (m)
		M				TOPSOIL Clayey SILT, Dark brown, low plasticity, Rootlets, moist, firm			
		M				Clayey SILT, Orange and light brown, medium plasticity, moist, stiff			
						SS01 Terminate at 0.4 m (Target depth was reached at 0.4 m.)			

UTM : 60H	Driller Rig : Hand Auger	Job Number : 810.031825.00001
Latitude : -37.77968	Driller Supplier :	Client : CMW Geosciences
Longitude : 175.21875	Logged By : SH	Project : Brymer Development DSI
Elevation : Not Surveyed	Reviewed By :	Location : Brymer Road, Grandview Heights, Hamilton, New Zealand
Total Depth : 0.4 m	Date : 01/10/2025	Loc Comment :

PID (ppm)	Sample	Moisture	Water Level	Depth (m)	Graphic Log	LITHOLOGICAL DESCRIPTION	COMMENTS / CONTAMINANT INDICATORS	Well Diagram	Elevation (m)
		M				Clayey SILT, Orangish brown, medium plasticity, Gravel (m), moist, stiff			
		M				Silty CLAY, Orange, high plasticity, moist, very stiff			
						SS02 Terminate at 0.4 m (Target depth was reached at 0.4 m.)			

UTM : 60H	Driller Rig : Hand Auger	Job Number : 810.031825.00001
Latitude : -37.77969	Driller Supplier :	Client : CMW Geosciences
Longitude : 175.21897	Logged By : SH	Project : Brymer Development DSI
Elevation : Not Surveyed	Reviewed By :	Location : Brymer Road, Grandview Heights, Hamilton, New Zealand
Total Depth : 0.4 m	Date : 01/10/2025	Loc Comment :

PID (ppm)	Sample	Moisture	Water Level	Depth (m)	Graphic Log	LITHOLOGICAL DESCRIPTION	COMMENTS / CONTAMINANT INDICATORS	Well Diagram	Elevation (m)
		M				TOPSOIL Clayey SILT, Dark brown, medium plasticity, Rootlets, moist, firm			
		M				Clayey SILT, Orange and light brown, high plasticity, moist, firm			
						SS03 Terminate at 0.4 m (Target depth was reached at 0.4 m.)			



Borehole No: SS04

UTM : 60H	Driller Rig : Hand Auger	Job Number : 810.031825.00001
Latitude : -37.77959	Driller Supplier :	Client : CMW Geosciences
Longitude : 175.21909	Logged By : SH	Project : Brymer Development DSI
Elevation : Not Surveyed	Reviewed By :	Location : Brymer Road, Grandview Heights, Hamilton, New Zealand
Total Depth : 0.4 m	Date : 01/10/2025	Loc Comment :

PID (ppm)	Sample	Moisture	Water Level	Depth (m)	Graphic Log	LITHOLOGICAL DESCRIPTION	COMMENTS / CONTAMINANT INDICATORS	Well Diagram	Elevation (m)
		M				TOPSOIL Clayey SILT, Dark brown, medium plasticity, Rootlets, moist, firm			
		M				Clayey SILT, Orangish brown, medium plasticity, moist, firm			
						SS04 Terminate at 0.4 m (Target depth was reached at 0.4 m.)			



UTM	: 60H	Driller Rig	: Hand Auger	Job Number	: 810.031825.00001
Latitude	: -37.77954	Driller Supplier	:	Client	: CMW Geosciences
Longitude	: 175.21903	Logged By	: SH	Project	: Brymer Development DSI
Elevation	: Not Surveyed	Reviewed By	:	Location	: Brymer Road, Grandview Heights, Hamilton, New Zealand
Total Depth	: 0.4 m	Date	: 01/10/2025	Loc Comment	:

PID (ppm)	Sample	Moisture	Water Level	Depth (m)	Graphic Log	LITHOLOGICAL DESCRIPTION	COMMENTS / CONTAMINANT INDICATORS	Well Diagram	Elevation (m)
		M				TOPSOIL Clayey SILT, Dark brown, medium plasticity, Rootlets, moist, soft			
		M				Clayey SILT, Dark brown and orange, medium plasticity, moist, soft			
						SS05 Terminate at 0.4 m (Target depth was reached at 0.4 m.)			

UTM : 60H	Driller Rig : Hand Auger	Job Number : 810.031825.00001
Latitude : -37.77954	Driller Supplier :	Client : CMW Geosciences
Longitude : 175.21895	Logged By : SH	Project : Brymer Development DSI
Elevation : Not Surveyed	Reviewed By :	Location : Brymer Road, Grandview Heights, Hamilton, New Zealand
Total Depth : 0.4 m	Date : 01/10/2025	Loc Comment :

PID (ppm)	Sample	Moisture	Water Level	Depth (m)	Graphic Log	LITHOLOGICAL DESCRIPTION	COMMENTS / CONTAMINANT INDICATORS	Well Diagram	Elevation (m)
		M				TOPSOIL Clayey SILT, Dark brown, medium plasticity, Rootlets, moist, firm			
		M				Clayey SILT, Light brown, high plasticity, moist, firm			
						SS06 Terminate at 0.4 m (Target depth was reached at 0.4 m.)			

UTM : 60H	Driller Rig : Hand Auger	Job Number : 810.031825.00001
Latitude : -37.77960	Driller Supplier :	Client : CMW Geosciences
Longitude : 175.21892	Logged By : SH	Project : Brymer Development DSI
Elevation : Not Surveyed	Reviewed By :	Location : Brymer Road, Grandview Heights, Hamilton, New Zealand
Total Depth : 0.4 m	Date : 01/10/2025	Loc Comment :

PID (ppm)	Sample	Moisture	Water Level	Depth (m)	Graphic Log	LITHOLOGICAL DESCRIPTION	COMMENTS / CONTAMINANT INDICATORS	Well Diagram	Elevation (m)
		M				TOPSOIL Clayey SILT, Dark brown, medium plasticity, Rootlets, moist, firm			
		M				Clayey SILT, Orange and brown, medium plasticity, moist, stiff			
						SS07 Terminate at 0.4 m (Target depth was reached at 0.4 m.)			

UTM : 60H	Driller Rig : Hand Auger	Job Number : 810.031825.00001
Latitude : -37.77960	Driller Supplier :	Client : CMW Geosciences
Longitude : 175.21899	Logged By : SH	Project : Brymer Development DSI
Elevation : Not Surveyed	Reviewed By :	Location : Brymer Road, Grandview Heights, Hamilton, New Zealand
Total Depth : 0.4 m	Date : 01/10/2025	Loc Comment :

PID (ppm)	Sample	Moisture	Water Level	Depth (m)	Graphic Log	LITHOLOGICAL DESCRIPTION	COMMENTS / CONTAMINANT INDICATORS	Well Diagram	Elevation (m)
		M				TOPSOIL Clayey SILT, Dark brown, medium plasticity, Rootlets, moist, firm			
		M				Clayey SILT, Orange and brown, medium plasticity, moist, firm			
						SS08 Terminate at 0.4 m (Target depth was reached at 0.4 m.)			

UTM : 60H	Driller Rig : Hand Auger	Job Number : 810.031825.00001
Latitude : -37.78299	Driller Supplier :	Client : CMW Geosciences
Longitude : 175.22060	Logged By : SH	Project : Brymer Development DSI
Elevation : Not Surveyed	Reviewed By :	Location : Brymer Road, Grandview Heights, Hamilton, New Zealand
Total Depth : 1 m	Date : 02/10/2025	Loc Comment :

PID (ppm)	Sample	Moisture	Water Level	Depth (m)	Graphic Log	LITHOLOGICAL DESCRIPTION	COMMENTS / CONTAMINANT INDICATORS	Well Diagram	Elevation (m)
		M				FILL Gravelly SILT, Dark brown, low plasticity, Rootlets, moist, firm			
		M		0.5		Clayey SILT, Orangish brown, medium plasticity, moist, stiff			
		M				Silty CLAY, Orangish brown and orange, high plasticity, moist, firm			
						SS09 Terminate at 1 m (Target depth was reached at 1 m.)			

UTM : 60H	Driller Rig : Hand Auger	Job Number : 810.031825.00001
Latitude : -37.78303	Driller Supplier :	Client : CMW Geosciences
Longitude : 175.22059	Logged By : SH	Project : Brymer Development DSI
Elevation : Not Surveyed	Reviewed By :	Location : Brymer Road, Grandview Heights, Hamilton, New Zealand
Total Depth : 1 m	Date : 02/10/2025	Loc Comment :

PID (ppm)	Sample	Moisture	Water Level	Depth (m)	Graphic Log	LITHOLOGICAL DESCRIPTION	COMMENTS / CONTAMINANT INDICATORS	Well Diagram	Elevation (m)
		M				TOPSOIL Clayey SILT, Dark brown, low plasticity, Rootlets, moist, firm			
		M				SILT, Orangish brown, low plasticity, moist			
				0.5		Clayey SILT, Orangish brown, medium plasticity, firm			
		M				Silty CLAY, Light brown mottled orange, high plasticity, moist, stiff			
						SS10 Terminate at 1 m (Target depth was reached at 1 m.)			

UTM : 60H	Driller Rig : Hand Auger	Job Number : 810.031825.00001
Latitude : -37.78308	Driller Supplier :	Client : CMW Geosciences
Longitude : 175.22058	Logged By : SH	Project : Brymer Development DSI
Elevation : Not Surveyed	Reviewed By :	Location : Brymer Road, Grandview Heights, Hamilton, New Zealand
Total Depth : 1 m	Date : 02/10/2025	Loc Comment :

PID (ppm)	Sample	Moisture	Water Level	Depth (m)	Graphic Log	LITHOLOGICAL DESCRIPTION	COMMENTS / CONTAMINANT INDICATORS	Well Diagram	Elevation (m)
		M				TOPSOIL Clayey SILT, Dark brown, low plasticity, Rootlets, moist, firm			
		M				SILT, Orangish brown, low plasticity, moist, firm			
		M		0.5		Clayey SILT, Orangish brown, medium plasticity, moist, firm			
		M				Silty CLAY, Light brown mottled orange, high plasticity, moist, stiff			
						SS11 Terminate at 1 m (Target depth was reached at 1 m.)			

UTM : 60H	Driller Rig : Hand Auger	Job Number : 810.031825.00001
Latitude : -37.78316	Driller Supplier :	Client : CMW Geosciences
Longitude : 175.22059	Logged By : SH	Project : Brymer Development DSI
Elevation : Not Surveyed	Reviewed By :	Location : Brymer Road, Grandview Heights, Hamilton, New Zealand
Total Depth : 1 m	Date : 02/10/2025	Loc Comment :

PID (ppm)	Sample	Moisture	Water Level	Depth (m)	Graphic Log	LITHOLOGICAL DESCRIPTION	COMMENTS / CONTAMINANT INDICATORS	Well Diagram	Elevation (m)
		M				TOPSOIL Clayey SILT, Dark brown, low plasticity, Rootlets, moist, firm			
		M		0.5		SILT, Orangish brown, low plasticity, moist, firm			
		M				Clayey SILT, Orangish brown, high plasticity, moist, very stiff			
		M				Silty CLAY, Light brown mottled orange, high plasticity, moist, stiff			
						SS12 Terminate at 1 m (Target depth was reached at 1 m.)			

UTM : 60H	Driller Rig : Hand Auger	Job Number : 810.031825.00001
Latitude : -37.78319	Driller Supplier :	Client : CMW Geosciences
Longitude : 175.22064	Logged By : SH	Project : Brymer Development DSI
Elevation : Not Surveyed	Reviewed By :	Location : Brymer Road, Grandview Heights, Hamilton, New Zealand
Total Depth : 1 m	Date : 02/10/2025	Loc Comment :

PID (ppm)	Sample	Moisture	Water Level	Depth (m)	Graphic Log	LITHOLOGICAL DESCRIPTION	COMMENTS / CONTAMINANT INDICATORS	Well Diagram	Elevation (m)
		M		0.5		TOPSOIL Clayey SILT, Dark brown, low plasticity, Gravel (m), moist, firm			
		M				Clayey SILT, Orangish brown, medium plasticity, moist, very stiff			
		M				Silty CLAY, Light brown mottled orange, high plasticity, moist, very stiff			
						SS13 Terminate at 1 m (Target depth was reached at 1 m.)			

UTM : 60H	Driller Rig : Hand Auger	Job Number : 810.031825.00001
Latitude : -37.78308	Driller Supplier :	Client : CMW Geosciences
Longitude : 175.22055	Logged By : SH	Project : Brymer Development DSI
Elevation : Not Surveyed	Reviewed By :	Location : Brymer Road, Grandview Heights, Hamilton, New Zealand
Total Depth : 1 m	Date : 02/10/2025	Loc Comment :

PID (ppm)	Sample	Moisture	Water Level	Depth (m)	Graphic Log	LITHOLOGICAL DESCRIPTION	COMMENTS / CONTAMINANT INDICATORS	Well Diagram	Elevation (m)
		M				TOPSOIL Clayey SILT, Dark brown, low plasticity, Rootlets, moist, firm			
		M		0.5		Clayey SILT, Orangish brown, low plasticity, moist, stiff			
		M				Silty CLAY, Light brown mottled orange, high plasticity, moist, stiff			
						SS14 Terminate at 1 m (Target depth was reached at 1 m.)			

UTM : 60H	Driller Rig : Hand Auger	Job Number : 810.031825.00001
Latitude : -37.78303	Driller Supplier :	Client : CMW Geosciences
Longitude : 175.22056	Logged By : SH	Project : Brymer Development DSI
Elevation : Not Surveyed	Reviewed By :	Location : Brymer Road, Grandview Heights, Hamilton, New Zealand
Total Depth : 1 m	Date : 02/10/2025	Loc Comment :

PID (ppm)	Sample	Moisture	Water Level	Depth (m)	Graphic Log	LITHOLOGICAL DESCRIPTION	COMMENTS / CONTAMINANT INDICATORS	Well Diagram	Elevation (m)
		M				TOPSOIL Clayey SILT, Dark brown, low plasticity, Rootlets, moist, firm			
		M		0.5		Clayey SILT, Orangish brown, low plasticity, moist, firm			
		M				Silty CLAY, Orangish brown, high plasticity, moist, stiff			
						SS15 Terminate at 1 m (Target depth was reached at 1 m.)			

UTM : 60H	Driller Rig : Hand Auger	Job Number : 810.031825.00001
Latitude : -37.78303	Driller Supplier :	Client : CMW Geosciences
Longitude : 175.22063	Logged By : SH	Project : Brymer Development DSI
Elevation : Not Surveyed	Reviewed By :	Location : Brymer Road, Grandview Heights, Hamilton, New Zealand
Total Depth : 1 m	Date : 02/10/2025	Loc Comment :

PID (ppm)	Sample	Moisture	Water Level	Depth (m)	Graphic Log	LITHOLOGICAL DESCRIPTION	COMMENTS / CONTAMINANT INDICATORS	Well Diagram	Elevation (m)
		M				FILL Gravelly SILT, Dark brown, low plasticity, Rootlets, moist, firm			
		M		0.5		Clayey SILT, Orangish brown, medium plasticity, moist, stiff			
		M				Silty CLAY, Orangish brown and orange, high plasticity, moist, firm			
						SS16 Terminate at 1 m (Target depth was reached at 1 m.)			

UTM : 60H	Driller Rig : Hand Auger	Job Number : 810.031825.00001
Latitude : 0.00000	Driller Supplier :	Client : CMW Geosciences
Longitude : 0.00000	Logged By : SH	Project : Brymer Development DSI
Elevation : Not Surveyed	Reviewed By :	Location : Brymer Road, Grandview Heights, Hamilton, New Zealand
Total Depth : 1 m	Date : 02/10/2025	Loc Comment :

PID (ppm)	Sample	Moisture	Water Level	Depth (m)	Graphic Log	LITHOLOGICAL DESCRIPTION	COMMENTS / CONTAMINANT INDICATORS	Well Diagram	Elevation (m)
		M				TOPSOIL Clayey SILT, Dark brown, low plasticity, Rootlets, moist, firm			
		M				SILT, Orangish brown, low plasticity, moist, firm			
		M		0.5		Clayey SILT, Orangish brown, medium plasticity, moist, firm			
		M				Silty CLAY, Orangish brown and orange with red pockets, high plasticity, moist, stiff			
						SS17 Terminate at 1 m (Target depth was reached at 1 m.)			

UTM : 60H	Driller Rig : Hand Auger	Job Number : 810.031825.00001
Latitude : 0.00000	Driller Supplier :	Client : CMW Geosciences
Longitude : 0.00000	Logged By : SH	Project : Brymer Development DSI
Elevation : Not Surveyed	Reviewed By :	Location : Brymer Road, Grandview Heights, Hamilton, New Zealand
Total Depth : 1 m	Date : 02/10/2025	Loc Comment :

PID (ppm)	Sample	Moisture	Water Level	Depth (m)	Graphic Log	LITHOLOGICAL DESCRIPTION	COMMENTS / CONTAMINANT INDICATORS	Well Diagram	Elevation (m)
		SLM				Clayey SILT, Brown, low plasticity, slightly moist			
		M		0.5		Silty CLAY, Orangish brown, high plasticity, moist, firm			
		M				SILT, Orange, medium plasticity, moist, stiff			
						SS18 Terminate at 1 m (Target depth was reached at 1 m.)			

UTM : 60H	Driller Rig : Hand Auger	Job Number : 810.031825.00001
Latitude : -37.78326	Driller Supplier :	Client : CMW Geosciences
Longitude : 175.22062	Logged By : SH	Project : Brymer Development DSI
Elevation : Not Surveyed	Reviewed By :	Location : Brymer Road, Grandview Heights, Hamilton, New Zealand
Total Depth : 1 m	Date : 02/10/2025	Loc Comment :

PID (ppm)	Sample	Moisture	Water Level	Depth (m)	Graphic Log	LITHOLOGICAL DESCRIPTION	COMMENTS / CONTAMINANT INDICATORS	Well Diagram	Elevation (m)
		M				TOPSOIL Clayey SILT, Dark brown, low plasticity, Rootlets, Gravel (c), moist, stiff			
		M				SILT, Orangish brown, low plasticity, moist, stiff			
		M		0.5		Clayey SILT, Orangish brown with black specs, medium plasticity, moist, stiff			
		M				Silty CLAY, Light brown mottled orange, high plasticity, moist, stiff			
						SS19 Terminate at 1 m (was reached at 1 m.)			

UTM : 60H	Driller Rig : Hand Auger	Job Number : 810.031825.00001
Latitude : -37.78314	Driller Supplier :	Client : CMW Geosciences
Longitude : 175.22063	Logged By : SH	Project : Brymer Development DSI
Elevation : Not Surveyed	Reviewed By :	Location : Brymer Road, Grandview Heights, Hamilton, New Zealand
Total Depth : 1 m	Date : 02/10/2025	Loc Comment :

PID (ppm)	Sample	Moisture	Water Level	Depth (m)	Graphic Log	LITHOLOGICAL DESCRIPTION	COMMENTS / CONTAMINANT INDICATORS	Well Diagram	Elevation (m)
		M				FILL Gravelly SILT, Dark brown, low plasticity, Rootlets, moist, firm			
		M		0.5		Clayey SILT, Orangish brown, medium plasticity, moist, stiff			
		M				Silty CLAY, Orangish brown and orange, high plasticity, moist, firm			
						SS20 Terminate at 1 m (was reached at 1 m.)			

UTM : 60H	Driller Rig : Hand Auger	Job Number : 810.031825.00001
Latitude : -37.78333	Driller Supplier :	Client : CMW Geosciences
Longitude : 175.22060	Logged By : SH	Project : Brymer Development DSI
Elevation : Not Surveyed	Reviewed By :	Location : Brymer Road, Grandview Heights, Hamilton, New Zealand
Total Depth : 1 m	Date : 02/10/2025	Loc Comment :

PID (ppm)	Sample	Moisture	Water Level	Depth (m)	Graphic Log	LITHOLOGICAL DESCRIPTION	COMMENTS / CONTAMINANT INDICATORS	Well Diagram	Elevation (m)
		M				TOPSOIL Clayey SILT, Dark brown, low plasticity, Rootlets, moist, firm			
		M				SILT, Orangish brown, low plasticity, moist, firm			
		M		0.5		Clayey SILT, Orangish brown and orange, medium plasticity, moist, stiff			
		M				Silty CLAY, Light brown mottled orange, high plasticity, moist, stiff			
						SS21 Terminate at 1 m (Target depth was reached at 1 m.)			

UTM : 60H	Driller Rig : Hand Auger	Job Number : 810.031825.00001
Latitude : -37.78330	Driller Supplier :	Client : CMW Geosciences
Longitude : 175.22070	Logged By : SH	Project : Brymer Development DSI
Elevation : Not Surveyed	Reviewed By :	Location : Brymer Road, Grandview Heights, Hamilton, New Zealand
Total Depth : 1 m	Date : 02/10/2025	Loc Comment :

PID (ppm)	Sample	Moisture	Water Level	Depth (m)	Graphic Log	LITHOLOGICAL DESCRIPTION	COMMENTS / CONTAMINANT INDICATORS	Well Diagram	Elevation (m)
		M				Clayey SILT, Orangish brown, medium plasticity, moist, stiff			
		M		0.5		Silty CLAY, Oranginsh brown mottled orange, high plasticity, moist, stiff			
		M				Clayey SILT, Orange, medium plasticity, moist, stiff			
						SS22 Terminate at 1 m (Target depth was reached at 1 m.)			

UTM : 60H	Driller Rig : Hand Auger	Job Number : 810.031825.00001
Latitude : -37.78321	Driller Supplier :	Client : CMW Geosciences
Longitude : 175.22073	Logged By : SH	Project : Brymer Development DSI
Elevation : Not Surveyed	Reviewed By :	Location : Brymer Road, Grandview Heights, Hamilton, New Zealand
Total Depth : 1 m	Date : 02/10/2025	Loc Comment :

PID (ppm)	Sample	Moisture	Water Level	Depth (m)	Graphic Log	LITHOLOGICAL DESCRIPTION	COMMENTS / CONTAMINANT INDICATORS	Well Diagram	Elevation (m)
		M				Clayey SILT, Dark brown and black, medium plasticity, Gravel, moist, stiff			
		M		0.5		Silty CLAY, Oranginsh brown mottled orange, high plasticity, Roots, moist, stiff			
		M				Clayey SILT, Orange, medium plasticity, moist, stiff			
						SS23 Terminate at 1 m (Target depth was reached at 1 m.)			

UTM : 60H	Driller Rig : Hand Auger	Job Number : 810.031825.00001
Latitude : -37.78315	Driller Supplier :	Client : CMW Geosciences
Longitude : 175.22069	Logged By : SH	Project : Brymer Development DSI
Elevation : Not Surveyed	Reviewed By :	Location : Brymer Road, Grandview Heights, Hamilton, New Zealand
Total Depth : 1 m	Date : 02/10/2025	Loc Comment :

PID (ppm)	Sample	Moisture	Water Level	Depth (m)	Graphic Log	LITHOLOGICAL DESCRIPTION	COMMENTS / CONTAMINANT INDICATORS	Well Diagram	Elevation (m)
		M				FILL Clayey SILT, Dark brown, low plasticity, Rootlets, moist, firm			
		M		0.5		Clayey SILT, Orangish brown, medium plasticity, moist, stiff			
		M				Silty CLAY, Orangish brown and orange, high plasticity, moist, firm			
						SS24 Terminate at 1 m (Target depth was reached at 1 m.)			

UTM : 60H	Driller Rig : Hand Auger	Job Number : 810.031825.00001
Latitude : -37.78308	Driller Supplier :	Client : CMW Geosciences
Longitude : 175.22066	Logged By : SH	Project : Brymer Development DSI
Elevation : Not Surveyed	Reviewed By :	Location : Brymer Road, Grandview Heights, Hamilton, New Zealand
Total Depth : 1 m	Date : 02/10/2025	Loc Comment :

PID (ppm)	Sample	Moisture	Water Level	Depth (m)	Graphic Log	LITHOLOGICAL DESCRIPTION	COMMENTS / CONTAMINANT INDICATORS	Well Diagram	Elevation (m)
		M				FILL Gravelly SILT, Dark brown, low plasticity, Rootlets, moist, firm			
		M		0.5		Clayey SILT, Orangish brown, medium plasticity, moist, stiff			
		M				Silty CLAY, Orangish brown and orange, high plasticity, moist, firm			
						SS25 Terminate at 1 m (Target depth was reached at 1 m.)			

UTM : 60H	Driller Rig : Hand Auger	Job Number : 810.031825.00001
Latitude : -37.79170	Driller Supplier :	Client : CMW Geosciences
Longitude : 175.21793	Logged By : SH	Project : Brymer Development DSI
Elevation : Not Surveyed	Reviewed By :	Location : Brymer Road, Grandview Heights, Hamilton, New Zealand
Total Depth : 1 m	Date : 01/10/2025	Loc Comment :

PID (ppm)	Sample	Moisture	Water Level	Depth (m)	Graphic Log	LITHOLOGICAL DESCRIPTION	COMMENTS / CONTAMINANT INDICATORS	Well Diagram	Elevation (m)
		M				TOPSOIL Clayey SILT, Dark brown, medium plasticity, Rootlets, moist, firm			
		M		0.5		Silty CLAY, Light brown mottled orange, high plasticity, moist, firm			
		M				Clayey SILT, Light brown mottled orange, high plasticity, moist, soft			
		M				CLAY, Orange, high plasticity, moist, very stiff			
						SS26 Terminate at 1 m (Target depth was reached at 1 m.)			

UTM : 60H	Driller Rig : Hand Auger	Job Number : 810.031825.00001
Latitude : -37.79175	Driller Supplier :	Client : CMW Geosciences
Longitude : 175.21806	Logged By : SH	Project : Brymer Development DSI
Elevation : Not Surveyed	Reviewed By :	Location : Brymer Road, Grandview Heights, Hamilton, New Zealand
Total Depth : 1 m	Date : 01/10/2025	Loc Comment :

PID (ppm)	Sample	Moisture	Water Level	Depth (m)	Graphic Log	LITHOLOGICAL DESCRIPTION	COMMENTS / CONTAMINANT INDICATORS	Well Diagram	Elevation (m)
		M				TOPSOIL Clayey SILT, Dark brown, medium plasticity, Rootlets, moist, soft Silty CLAY, Light brown mottled orange, high plasticity, moist, firm Silty CLAY, Orange, high plasticity, moist, very stiff			
		M		0.5					
		M							
						SS27 Terminate at 1 m (Target depth was reached at 1 m.)			

UTM : 60H	Driller Rig : Hand Auger	Job Number : 810.031825.00001
Latitude : -37.79163	Driller Supplier :	Client : CMW Geosciences
Longitude : 175.21797	Logged By : SH	Project : Brymer Development DSI
Elevation : Not Surveyed	Reviewed By :	Location : Brymer Road, Grandview Heights, Hamilton, New Zealand
Total Depth : 1 m	Date : 01/10/2025	Loc Comment :

PID (ppm)	Sample	Moisture	Water Level	Depth (m)	Graphic Log	LITHOLOGICAL DESCRIPTION	COMMENTS / CONTAMINANT INDICATORS	Well Diagram	Elevation (m)
		M				TOPSOIL Clayey SILT, Dark brown, medium plasticity, Rootlets, moist, firm			
		M		0.5		Silty CLAY, Orange and light brown, high plasticity, moist, stiff			
		M				CLAY, Orange mottled dark brown, high plasticity, moist, very stiff			
						SS28 Terminate at 1 m (Target depth was reached at 1 m.)			

UTM : 60H	Driller Rig : Hand Auger	Job Number : 810.031825.00001
Latitude : -37.79173	Driller Supplier :	Client : CMW Geosciences
Longitude : 175.21791	Logged By : SH	Project : Brymer Development DSI
Elevation : Not Surveyed	Reviewed By :	Location : Brymer Road, Grandview Heights, Hamilton, New Zealand
Total Depth : 1 m	Date : 01/10/2025	Loc Comment :

PID (ppm)	Sample	Moisture	Water Level	Depth (m)	Graphic Log	LITHOLOGICAL DESCRIPTION	COMMENTS / CONTAMINANT INDICATORS	Well Diagram	Elevation (m)
		M				TOPSOIL Clayey SILT, Dark brown, low plasticity, Rootlets, moist, soft			
		M		0.5		Clayey SILT, Light brown, low plasticity, moist, firm			
		M				Silty CLAY, Orange and light brown, high plasticity, moist, firm			
						SS29 Terminate at 1 m (Target depth was reached at 1 m.)			

UTM : 60H	Driller Rig : Hand Auger	Job Number : 810.031825.00001
Latitude : -37.79178	Driller Supplier :	Client : CMW Geosciences
Longitude : 175.21819	Logged By : SH	Project : Brymer Development DSI
Elevation : Not Surveyed	Reviewed By :	Location : Brymer Road, Grandview Heights, Hamilton, New Zealand
Total Depth : 1 m	Date : 01/10/2025	Loc Comment :

PID (ppm)	Sample	Moisture	Water Level	Depth (m)	Graphic Log	LITHOLOGICAL DESCRIPTION	COMMENTS / CONTAMINANT INDICATORS	Well Diagram	Elevation (m)
		M				TOPSOIL Clayey SILT, Dark brown, medium plasticity, Rootlets, moist, soft Clayey SILT, Light brown mottled orange mottled grey, high plasticity, moist, stiff Silty CLAY, Orange, high plasticity, moist, very stiff			
		M				SS30 Terminate at 1 m (Target depth was reached at 1 m.)			

UTM : 60H	Driller Rig : Hand Auger	Job Number : 810.031825.00001
Latitude : -37.79184	Driller Supplier :	Client : CMW Geosciences
Longitude : 175.21813	Logged By : SH	Project : Brymer Development DSI
Elevation : Not Surveyed	Reviewed By :	Location : Brymer Road, Grandview Heights, Hamilton, New Zealand
Total Depth : 1 m	Date : 01/10/2025	Loc Comment :

PID (ppm)	Sample	Moisture	Water Level	Depth (m)	Graphic Log	LITHOLOGICAL DESCRIPTION	COMMENTS / CONTAMINANT INDICATORS	Well Diagram	Elevation (m)
		M				TOPSOIL Clayey SILT, Dark brown, medium plasticity, Rootlets, moist, firm			
		M		0.5		Clayey SILT, Light brown, medium plasticity, moist, firm			
		M				Silty CLAY, Orangish brown with black pockets, high plasticity, moist, stiff			
						SS31 Terminate at 1 m (Target depth was reached at 1 m.)			

UTM : 60H	Driller Rig : Hand Auger	Job Number : 810.031825.00001
Latitude : -37.79189	Driller Supplier :	Client : CMW Geosciences
Longitude : 175.21821	Logged By : SH	Project : Brymer Development DSI
Elevation : Not Surveyed	Reviewed By :	Location : Brymer Road, Grandview Heights, Hamilton, New Zealand
Total Depth : 1 m	Date : 02/10/2025	Loc Comment :

PID (ppm)	Sample	Moisture	Water Level	Depth (m)	Graphic Log	LITHOLOGICAL DESCRIPTION	COMMENTS / CONTAMINANT INDICATORS	Well Diagram	Elevation (m)
		M				FILL Gravelly SAND, Light grey, Rootlets, Silt, moist, mildly dense			
		M				FILL Gravelly SAND, Brown, poorly graded, Clay, moist, dense			
		M				FILL Gravelly SAND, Dark grey, well graded, subangular, Clay, moist, mildly dense			
		M				FILL Gravelly SILT, Light brown and dark brown, low plasticity, moist, stiff			
		M		0.5		Clayey SILT, Light brown mottled orange, high plasticity, moist, firm			
		M				Silty CLAY, Orangish brown mottled orange, high plasticity, moist, very stiff			
						SS32 Terminate at 1 m (Target depth was reached at 1 m.)			

UTM : 60H	Driller Rig : Hand Auger	Job Number : 810.031825.00001
Latitude : -37.79187	Driller Supplier :	Client : CMW Geosciences
Longitude : 175.21827	Logged By : SH	Project : Brymer Development DSI
Elevation : Not Surveyed	Reviewed By :	Location : Brymer Road, Grandview Heights, Hamilton, New Zealand
Total Depth : 1 m	Date : 01/10/2025	Loc Comment :

PID (ppm)	Sample	Moisture	Water Level	Depth (m)	Graphic Log	LITHOLOGICAL DESCRIPTION	COMMENTS / CONTAMINANT INDICATORS	Well Diagram	Elevation (m)
		M		0.5		FILL Sandy SILT, Dark brown, low plasticity, Gravels (f-c), moist, firm			
		M				Silty CLAY, Orange, high plasticity, moist, stiff			
						SS33 Terminate at 1 m (Target depth was reached at 1 m.)			

UTM : 60H	Driller Rig : Hand Auger	Job Number : 810.031825.00001
Latitude : -37.79170	Driller Supplier :	Client : CMW Geosciences
Longitude : 175.21807	Logged By : SH	Project : Brymer Development DSI
Elevation : Not Surveyed	Reviewed By :	Location : Brymer Road, Grandview Heights, Hamilton, New Zealand
Total Depth : 1 m	Date : 01/10/2025	Loc Comment :

PID (ppm)	Sample	Moisture	Water Level	Depth (m)	Graphic Log	LITHOLOGICAL DESCRIPTION	COMMENTS / CONTAMINANT INDICATORS	Well Diagram	Elevation (m)
		M				TOPSOIL Clayey SILT, Dark brown, low plasticity, Rootlets, moist, firm			
		M		0.5		Clayey SILT, Light brown mottled light grey with orange stripes, medium plasticity, moist, firm			
		M				Silty CLAY, Orange and light brown with black pockets, high plasticity, moist, very stiff			
						SS34 Terminate at 1 m (Target depth was reached at 1 m.)			

UTM : 60H	Driller Rig : Hand Auger	Job Number : 810.031825.00001
Latitude : -37.79164	Driller Supplier :	Client : CMW Geosciences
Longitude : 175.21780	Logged By : SH	Project : Brymer Development DSI
Elevation : Not Surveyed	Reviewed By :	Location : Brymer Road, Grandview Heights, Hamilton, New Zealand
Total Depth : 1 m	Date : 01/10/2025	Loc Comment :

PID (ppm)	Sample	Moisture	Water Level	Depth (m)	Graphic Log	LITHOLOGICAL DESCRIPTION	COMMENTS / CONTAMINANT INDICATORS	Well Diagram	Elevation (m)
		M				Silty CLAY, Orange, high plasticity, moist, very stiff			
		M		0.5		Silty CLAY, Light brown mottled orange, high plasticity, moist, firm			
						SS35 Terminate at 1 m (Target depth was reached at 1 m.)			



Borehole No: SS36

UTM : 60H Driller Rig : Hand Auger Job Number : 810.031825.00001
Latitude : -37.79192 Driller Supplier : Client : CMW Geosciences
Longitude : 175.21789 Logged By : SH Project : Brymer Development DSI
Elevation : Not Surveyed Reviewed By : Location : Brymer Road, Grandview Heights, Hamilton, New Zealand
Total Depth : 0.4 m Date : 01/10/2025 Loc Comment :

PID (ppm)	Sample	Moisture	Water Level	Depth (m)	Graphic Log	LITHOLOGICAL DESCRIPTION	COMMENTS / CONTAMINANT INDICATORS	Well Diagram	Elevation (m)
		M				TOPSOIL Clayey SILT, Dark brown, high plasticity, Rootlets, moist, soft			
		M				Clayey SILT, Orangish brown, medium plasticity, moist			
						SS36 Terminate at 0.4 m (Target depth was reached at 0.4 m.)			

UTM : 60H	Driller Rig : Hand Auger	Job Number : 810.031825.00001
Latitude : -37.79199	Driller Supplier :	Client : CMW Geosciences
Longitude : 175.21777	Logged By : SH	Project : Brymer Development DSI
Elevation : Not Surveyed	Reviewed By :	Location : Brymer Road, Grandview Heights, Hamilton, New Zealand
Total Depth : 0.4 m	Date : 01/10/2025	Loc Comment :

PID (ppm)	Sample	Moisture	Water Level	Depth (m)	Graphic Log	LITHOLOGICAL DESCRIPTION	COMMENTS / CONTAMINANT INDICATORS	Well Diagram	Elevation (m)
		M				TOPSOIL Clayey SILT, Dark brown, medium plasticity, Rootlets, moist, firm			
		M				Silty CLAY, Orangish brown, high plasticity, moist, firm			
						SS37 Terminate at 0.4 m (Target depth was reached at 0.4 m.)			

UTM : 60H	Driller Rig : Hand Auger	Job Number : 810.031825.00001
Latitude : -37.79206	Driller Supplier :	Client : CMW Geosciences
Longitude : 175.21781	Logged By : SH	Project : Brymer Development DSI
Elevation : Not Surveyed	Reviewed By :	Location : Brymer Road, Grandview Heights, Hamilton, New Zealand
Total Depth : 0.5 m	Date : 01/10/2025	Loc Comment :

PID (ppm)	Sample	Moisture	Water Level	Depth (m)	Graphic Log	LITHOLOGICAL DESCRIPTION	COMMENTS / CONTAMINANT INDICATORS	Well Diagram	Elevation (m)
		M				TOPSOIL Clayey SILT, Dark brown, medium plasticity, Rootlets, moist, very soft			
		M				Clayey SILT, Orangish brown, low plasticity, moist, firm			
						SS38 Terminate at 0.5 m (Target depth was reached at 0.5 m.)			

UTM : 60H	Driller Rig : Hand Auger	Job Number : 810.031825.00001
Latitude : -37.79205	Driller Supplier :	Client : CMW Geosciences
Longitude : 175.21789	Logged By : SH	Project : Brymer Development DSI
Elevation : Not Surveyed	Reviewed By :	Location : Brymer Road, Grandview Heights, Hamilton, New Zealand
Total Depth : 0.4 m	Date : 01/10/2025	Loc Comment :

PID (ppm)	Sample	Moisture	Water Level	Depth (m)	Graphic Log	LITHOLOGICAL DESCRIPTION	COMMENTS / CONTAMINANT INDICATORS	Well Diagram	Elevation (m)
		D				TOPSOIL SILT, Brown, low plasticity, Organics (leaves, rootlets), dry, very soft			
		M				Clayey SILT, Light brown and dark brown, medium plasticity, moist, firm			
						SS39 Terminate at 0.4 m (Target depth was reached at 0.4 m.)			

UTM : 60H	Driller Rig : Hand Auger	Job Number : 810.031825.00001
Latitude : -37.79087	Driller Supplier :	Client : CMW Geosciences
Longitude : 175.21622	Logged By : SH	Project : Brymer Development DSI
Elevation : Not Surveyed	Reviewed By :	Location : Brymer Road, Grandview Heights, Hamilton, New Zealand
Total Depth : 0.4 m	Date : 01/10/2025	Loc Comment :

PID (ppm)	Sample	Moisture	Water Level	Depth (m)	Graphic Log	LITHOLOGICAL DESCRIPTION	COMMENTS / CONTAMINANT INDICATORS	Well Diagram	Elevation (m)
		D				FILL GRAVEL, Grey, well graded, subangular, dry, loose			
		M				FILL Silty CLAY, Dark brown and orangish brown with occasional yellow pockets, high plasticity, Sand (m-c), moist, firm			
						SS40 Terminate at 0.4 m (Target depth was reached at 0.4 m.)			

UTM : 60H	Driller Rig : Hand Auger	Job Number : 810.031825.00001
Latitude : -37.79069	Driller Supplier :	Client : CMW Geosciences
Longitude : 175.21613	Logged By : SH	Project : Brymer Development DSI
Elevation : Not Surveyed	Reviewed By :	Location : Brymer Road, Grandview Heights, Hamilton, New Zealand
Total Depth : 0.4 m	Date : 01/10/2025	Loc Comment :

PID (ppm)	Sample	Moisture	Water Level	Depth (m)	Graphic Log	LITHOLOGICAL DESCRIPTION	COMMENTS / CONTAMINANT INDICATORS	Well Diagram	Elevation (m)
		M				TOPSOIL Clayey SILT, Dark brown, high plasticity, Rootlets, moist, soft			
		M				Silty CLAY, Orangish brown and dark brown with black specs, high plasticity, moist, firm			
						SS41 Terminate at 0.4 m (Target depth was reached at 0.4 m.)			



UTM	: 60H	Driller Rig	: Hand Auger	Job Number	: 810.031825.00001
Latitude	: -37.79074	Driller Supplier	:	Client	: CMW Geosciences
Longitude	: 175.21597	Logged By	: SH	Project	: Brymer Development DSI
Elevation	: Not Surveyed	Reviewed By	:	Location	: Brymer Road, Grandview Heights, Hamilton, New Zealand
Total Depth	: 0.4 m	Date	: 01/10/2025	Loc Comment	:

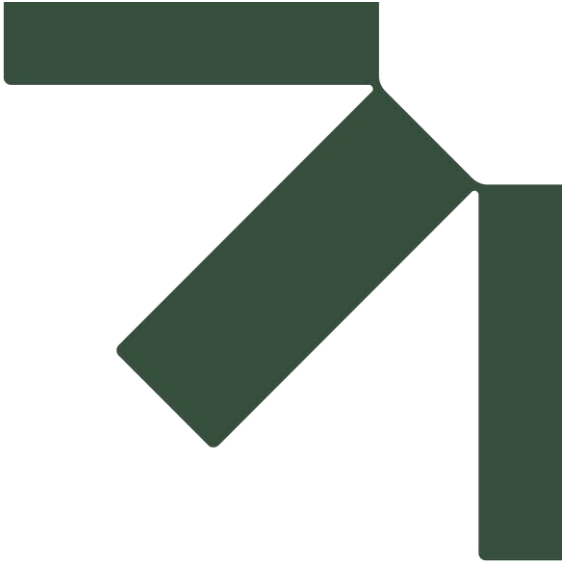
PID (ppm)	Sample	Moisture	Water Level	Depth (m)	Graphic Log	LITHOLOGICAL DESCRIPTION	COMMENTS / CONTAMINANT INDICATORS	Well Diagram	Elevation (m)
		M				TOPSOIL Clayey SILT, Dark brown, high plasticity, Rootlets, moist, soft			
		M				Silty CLAY, Orangish brown and dark brown, high plasticity, moist, firm			
						SS42 Terminate at 0.4 m (Target depth was reached at 0.4 m.)			

UTM : 60H	Driller Rig : Hand Auger	Job Number : 810.031825.00001
Latitude : -37.79084	Driller Supplier :	Client : CMW Geosciences
Longitude : 175.21606	Logged By : SH	Project : Brymer Development DSI
Elevation : Not Surveyed	Reviewed By :	Location : Brymer Road, Grandview Heights, Hamilton, New Zealand
Total Depth : 0.4 m	Date : 01/10/2025	Loc Comment :

PID (ppm)	Sample	Moisture	Water Level	Depth (m)	Graphic Log	LITHOLOGICAL DESCRIPTION	COMMENTS / CONTAMINANT INDICATORS	Well Diagram	Elevation (m)
		M				Clayey SILT, Dark brown, high plasticity, Organics (rootlets, vegetation), moist, soft Silty CLAY, Light brown and dark brown, high plasticity, moist, firm			
		M				SS43 Terminate at 0.4 m (Target depth was reached at 0.4 m.)			

UTM : 60H	Driller Rig : Hand Auger	Job Number : 810.031825.00001
Latitude : -37.79178	Driller Supplier :	Client : CMW Geosciences
Longitude : 175.21804	Logged By : SH	Project : Brymer Development DSI
Elevation : Not Surveyed	Reviewed By :	Location : Brymer Road, Grandview Heights, Hamilton, New Zealand
Total Depth : 1 m	Date : 02/10/2025	Loc Comment :

PID (ppm)	Sample	Moisture	Water Level	Depth (m)	Graphic Log	LITHOLOGICAL DESCRIPTION	COMMENTS / CONTAMINANT INDICATORS	Well Diagram	Elevation (m)
		M				TOPSOIL Clayey SILT, Dark brown, medium plasticity, Rootlets, moist, firm			
		M				SILT, Light brown, medium plasticity, moist, stiff			
		M		0.5		Clayey SILT, Light brown mottled orange, high plasticity, moist, stiff			
		M				Silty CLAY, Orange with black specs, high plasticity, moist, stiff			
						SS44 Terminate at 1 m (Target depth was reached at 1 m.)			



Appendix C Laboratory Analytical Reports

Detailed Site Investigation

Brymer Development

CMW Geosciences Ltd

SLR Project No.: 810.031825.00001

12 August 2026

Certificate of Analysis

Page 1 of 6

Client:	SLR Consulting New Zealand Limited	Lab No:	3998742	SPV2
Contact:	Lindsay Lutes	Date Received:	01-Oct-2025	
	C/- SLR Consulting New Zealand Limited	Date Reported:	14-Oct-2025	(Amended)
	PO Box 911310	Quote No:	97403	
	Victoria Street West	Order No:		
	Auckland 1142	Client Reference:	810.031825.00001	
		Submitted By:	Sandra Hamler	

Sample Type: Soil

Sample Name:	SS40/0.0 01-Oct-2025	SS41/0.0 01-Oct-2025	SS42/0.0 01-Oct-2025	SS43/0.0 01-Oct-2025	SS39/0.0 01-Oct-2025
Lab Number:	3998742.1	3998742.3	3998742.5	3998742.7	3998742.9

Individual Tests

Total Recoverable Lead	mg/kg dry wt	29	39	47	44	720
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Sample Name:	SS39/0.4 01-Oct-2025	SS38/0.0 01-Oct-2025	SS38/0.4 01-Oct-2025	SS37/0.0 01-Oct-2025	SS37/0.4 01-Oct-2025
Lab Number:	3998742.10	3998742.11	3998742.12	3998742.13	3998742.14

Individual Tests

Total Recoverable Lead	mg/kg dry wt	174	870	56	1,360	49
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Sample Name:	SS36/0.0 01-Oct-2025	SS36/0.4 01-Oct-2025	SS01/0.0 01-Oct-2025	SS02/0.0 01-Oct-2025	SS03/0.0 01-Oct-2025
Lab Number:	3998742.15	3998742.16	3998742.17	3998742.19	3998742.21

Individual Tests

Total Recoverable Lead	mg/kg dry wt	360	41	-	-	-
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Heavy Metals, Screen Level

Total Recoverable Arsenic	mg/kg dry wt	-	-	9	7	7
Total Recoverable Cadmium	mg/kg dry wt	-	-	0.68	0.41	0.22
Total Recoverable Chromium	mg/kg dry wt	-	-	14	12	12
Total Recoverable Copper	mg/kg dry wt	-	-	21	22	25
Total Recoverable Lead	mg/kg dry wt	-	-	117	24	26
Total Recoverable Nickel	mg/kg dry wt	-	-	4	5	5
Total Recoverable Zinc	mg/kg dry wt	-	-	178	73	56

Sample Name:	SS04/0.0 01-Oct-2025	SS30/0.0 01-Oct-2025	SS27/0.0 01-Oct-2025	SS34/0.0 01-Oct-2025	SS29/0.0 01-Oct-2025
Lab Number:	3998742.23	3998742.31	3998742.34	3998742.37	3998742.40

Individual Tests

Dry Matter	g/100g as rcvd	-	64	70	60	63
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Heavy Metals, Screen Level

Total Recoverable Arsenic	mg/kg dry wt	15	-	-	12	12
Total Recoverable Cadmium	mg/kg dry wt	0.50	-	-	0.37	0.24
Total Recoverable Chromium	mg/kg dry wt	18	-	-	14	15
Total Recoverable Copper	mg/kg dry wt	25	-	-	34	34
Total Recoverable Lead	mg/kg dry wt	47	-	-	32	42
Total Recoverable Nickel	mg/kg dry wt	5	-	-	5	6
Total Recoverable Zinc	mg/kg dry wt	146	-	-	142	108



This Laboratory is accredited by International Accreditation New Zealand (IANZ), which represents New Zealand in the International Laboratory Accreditation Cooperation (ILAC). Through the ILAC Mutual Recognition Arrangement (ILAC-MRA) this accreditation is internationally recognised. The tests reported herein have been performed in accordance with the terms of accreditation, with the exception of tests marked * or any comments and interpretations, which are not accredited.

Sample Type: Soil						
Sample Name:		SS04/0.0 01-Oct-2025	SS30/0.0 01-Oct-2025	SS27/0.0 01-Oct-2025	SS34/0.0 01-Oct-2025	SS29/0.0 01-Oct-2025
Lab Number:		3998742.23	3998742.31	3998742.34	3998742.37	3998742.40
Organochlorine Pesticides Screening in Soil						
Aldrin	mg/kg dry wt	-	< 0.016	< 0.015	< 0.017	< 0.016
alpha-BHC	mg/kg dry wt	-	< 0.016	< 0.015	< 0.017	< 0.016
beta-BHC	mg/kg dry wt	-	< 0.016	< 0.015	< 0.017	< 0.016
delta-BHC	mg/kg dry wt	-	< 0.016	< 0.015	< 0.017	< 0.016
gamma-BHC (Lindane)	mg/kg dry wt	-	< 0.016	< 0.015	< 0.017	< 0.016
cis-Chlordane	mg/kg dry wt	-	< 0.016	< 0.015	< 0.017	< 0.016
trans-Chlordane	mg/kg dry wt	-	< 0.016	< 0.015	< 0.017	< 0.016
2,4'-DDD	mg/kg dry wt	-	< 0.016	< 0.015	< 0.017	< 0.016
4,4'-DDD	mg/kg dry wt	-	< 0.016	< 0.015	< 0.017	< 0.016
2,4'-DDE	mg/kg dry wt	-	< 0.016	< 0.015	< 0.017	< 0.016
4,4'-DDE	mg/kg dry wt	-	< 0.016	< 0.015	< 0.017	< 0.016
2,4'-DDT	mg/kg dry wt	-	< 0.016	< 0.015	< 0.017	< 0.016
4,4'-DDT	mg/kg dry wt	-	< 0.016	< 0.015	< 0.017	< 0.016
Total DDT Isomers	mg/kg dry wt	-	< 0.10	< 0.09	< 0.10	< 0.10
Dieldrin	mg/kg dry wt	-	< 0.016	< 0.015	< 0.017	< 0.016
Endosulfan I	mg/kg dry wt	-	< 0.016	< 0.015	< 0.017	< 0.016
Endosulfan II	mg/kg dry wt	-	< 0.016	< 0.015	< 0.017	< 0.016
Endosulfan sulphate	mg/kg dry wt	-	< 0.016	< 0.015	< 0.017	< 0.016
Endrin	mg/kg dry wt	-	< 0.016	< 0.015	< 0.017	< 0.016
Endrin aldehyde	mg/kg dry wt	-	< 0.016	< 0.015	< 0.017	< 0.016
Endrin ketone	mg/kg dry wt	-	< 0.016	< 0.015	< 0.017	< 0.016
Heptachlor	mg/kg dry wt	-	< 0.016	< 0.015	< 0.017	< 0.016
Heptachlor epoxide	mg/kg dry wt	-	< 0.016	< 0.015	< 0.017	< 0.016
Hexachlorobenzene	mg/kg dry wt	-	< 0.016	< 0.015	< 0.017	< 0.016
Methoxychlor	mg/kg dry wt	-	< 0.016	< 0.015	< 0.017	< 0.016
Sample Name:		SS26/0.0 01-Oct-2025	SS28/0.0 01-Oct-2025	SS35/0.0 01-Oct-2025	SS32/0.0 01-Oct-2025	SS09/0.0 02-Oct-2025
Lab Number:		3998742.43	3998742.46	3998742.49	3998742.52	3998742.62
Individual Tests						
Dry Matter	g/100g as rcvd	69	57	72	-	67
Heavy Metals, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	-	8	-	3	-
Total Recoverable Cadmium	mg/kg dry wt	-	0.46	-	< 0.10	-
Total Recoverable Chromium	mg/kg dry wt	-	11	-	6	-
Total Recoverable Copper	mg/kg dry wt	-	35	-	5	-
Total Recoverable Lead	mg/kg dry wt	-	29	-	4.3	-
Total Recoverable Nickel	mg/kg dry wt	-	6	-	3	-
Total Recoverable Zinc	mg/kg dry wt	-	157	-	41	-
Organochlorine Pesticides Screening in Soil						
Aldrin	mg/kg dry wt	< 0.015	< 0.018	< 0.014	-	< 0.015
alpha-BHC	mg/kg dry wt	< 0.015	< 0.018	< 0.014	-	< 0.015
beta-BHC	mg/kg dry wt	< 0.015	< 0.018	< 0.014	-	< 0.015
delta-BHC	mg/kg dry wt	< 0.015	< 0.018	< 0.014	-	< 0.015
gamma-BHC (Lindane)	mg/kg dry wt	< 0.015	< 0.018	< 0.014	-	< 0.015
cis-Chlordane	mg/kg dry wt	< 0.015	< 0.018	< 0.014	-	< 0.015
trans-Chlordane	mg/kg dry wt	< 0.015	< 0.018	< 0.014	-	< 0.015
2,4'-DDD	mg/kg dry wt	< 0.015	< 0.018	< 0.014	-	< 0.015
4,4'-DDD	mg/kg dry wt	< 0.015	< 0.018	< 0.014	-	< 0.015
2,4'-DDE	mg/kg dry wt	< 0.015	< 0.018	< 0.014	-	< 0.015
4,4'-DDE	mg/kg dry wt	< 0.015	< 0.018	< 0.014	-	< 0.015
2,4'-DDT	mg/kg dry wt	< 0.015	< 0.018	< 0.014	-	< 0.015
4,4'-DDT	mg/kg dry wt	< 0.015	< 0.018	< 0.014	-	< 0.015
Total DDT Isomers	mg/kg dry wt	< 0.09	< 0.11	< 0.08	-	< 0.09
Dieldrin	mg/kg dry wt	< 0.015	< 0.018	< 0.014	-	< 0.015
Endosulfan I	mg/kg dry wt	< 0.015	< 0.018	< 0.014	-	< 0.015

Sample Type: Soil						
Sample Name:		SS26/0.0 01-Oct-2025	SS28/0.0 01-Oct-2025	SS35/0.0 01-Oct-2025	SS32/0.0 01-Oct-2025	SS09/0.0 02-Oct-2025
Lab Number:		3998742.43	3998742.46	3998742.49	3998742.52	3998742.62
Organochlorine Pesticides Screening in Soil						
Endosulfan II	mg/kg dry wt	< 0.015	< 0.018	< 0.014	-	< 0.015
Endosulfan sulphate	mg/kg dry wt	< 0.015	< 0.018	< 0.014	-	< 0.015
Endrin	mg/kg dry wt	< 0.015	< 0.018	< 0.014	-	< 0.015
Endrin aldehyde	mg/kg dry wt	< 0.015	< 0.018	< 0.014	-	< 0.015
Endrin ketone	mg/kg dry wt	< 0.015	< 0.018	< 0.014	-	< 0.015
Heptachlor	mg/kg dry wt	< 0.015	< 0.018	< 0.014	-	< 0.015
Heptachlor epoxide	mg/kg dry wt	< 0.015	< 0.018	< 0.014	-	< 0.015
Hexachlorobenzene	mg/kg dry wt	< 0.015	< 0.018	< 0.014	-	< 0.015
Methoxychlor	mg/kg dry wt	< 0.015	< 0.018	< 0.014	-	< 0.015
Sample Name:		SS10/0.0 02-Oct-2025	SS11/0.0 02-Oct-2025	SS11/0.5 02-Oct-2025	SS12/0.0 02-Oct-2025	SS13/0.0 02-Oct-2025
Lab Number:		3998742.65	3998742.68	3998742.69	3998742.71	3998742.74
Individual Tests						
Dry Matter	g/100g as rcvd	62	64	55	59	66
Organochlorine Pesticides Screening in Soil						
Aldrin	mg/kg dry wt	< 0.017	< 0.016	< 0.018	< 0.017	< 0.016
alpha-BHC	mg/kg dry wt	< 0.017	< 0.016	< 0.018	< 0.017	< 0.016
beta-BHC	mg/kg dry wt	< 0.017	< 0.016	< 0.018	< 0.017	< 0.016
delta-BHC	mg/kg dry wt	< 0.017	< 0.016	< 0.018	< 0.017	< 0.016
gamma-BHC (Lindane)	mg/kg dry wt	< 0.017	< 0.016	< 0.018	< 0.017	< 0.016
cis-Chlordane	mg/kg dry wt	< 0.017	< 0.016	< 0.018	< 0.017	< 0.016
trans-Chlordane	mg/kg dry wt	< 0.017	< 0.016	< 0.018	< 0.017	< 0.016
2,4'-DDD	mg/kg dry wt	< 0.017	< 0.016	< 0.018	< 0.017	< 0.016
4,4'-DDD	mg/kg dry wt	< 0.017	< 0.016	< 0.018	< 0.017	< 0.016
2,4'-DDE	mg/kg dry wt	< 0.017	< 0.016	< 0.018	< 0.017	< 0.016
4,4'-DDE	mg/kg dry wt	< 0.017	< 0.016	< 0.018	< 0.017	< 0.016
2,4'-DDT	mg/kg dry wt	< 0.017	< 0.016	< 0.018	< 0.017	< 0.016
4,4'-DDT	mg/kg dry wt	< 0.017	< 0.016	< 0.018	< 0.017	< 0.016
Total DDT Isomers	mg/kg dry wt	< 0.10	< 0.10	< 0.11	< 0.11	< 0.10
Dieldrin	mg/kg dry wt	< 0.017	< 0.016	< 0.018	< 0.017	< 0.016
Endosulfan I	mg/kg dry wt	< 0.017	< 0.016	< 0.018	< 0.017	< 0.016
Endosulfan II	mg/kg dry wt	< 0.017	< 0.016	< 0.018	< 0.017	< 0.016
Endosulfan sulphate	mg/kg dry wt	< 0.017	< 0.016	< 0.018	< 0.017	< 0.016
Endrin	mg/kg dry wt	< 0.017	< 0.016	< 0.018	< 0.017	< 0.016
Endrin aldehyde	mg/kg dry wt	< 0.017	< 0.016	< 0.018	< 0.017	< 0.016
Endrin ketone	mg/kg dry wt	< 0.017	< 0.016	< 0.018	< 0.017	< 0.016
Heptachlor	mg/kg dry wt	< 0.017	< 0.016	< 0.018	< 0.017	< 0.016
Heptachlor epoxide	mg/kg dry wt	< 0.017	< 0.016	< 0.018	< 0.017	< 0.016
Hexachlorobenzene	mg/kg dry wt	< 0.017	< 0.016	< 0.018	< 0.017	< 0.016
Methoxychlor	mg/kg dry wt	< 0.017	< 0.016	< 0.018	< 0.017	< 0.016
Sample Name:		SS14/0.0 02-Oct-2025	SS15/0.0 02-Oct-2025	SS16/0.0 02-Oct-2025	SS17/0.0 02-Oct-2025	SS18/0.0 02-Oct-2025
Lab Number:		3998742.77	3998742.80	3998742.83	3998742.86	3998742.89
Individual Tests						
Dry Matter	g/100g as rcvd	60	63	59	-	-
Heavy Metals, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	-	-	-	14	8
Total Recoverable Cadmium	mg/kg dry wt	-	-	-	0.37	0.12
Total Recoverable Chromium	mg/kg dry wt	-	-	-	12	15
Total Recoverable Copper	mg/kg dry wt	-	-	-	20	17
Total Recoverable Lead	mg/kg dry wt	-	-	-	27	20
Total Recoverable Nickel	mg/kg dry wt	-	-	-	5	5
Total Recoverable Zinc	mg/kg dry wt	-	-	-	79	35

Sample Type: Soil						
Sample Name:		SS14/0.0 02-Oct-2025	SS15/0.0 02-Oct-2025	SS16/0.0 02-Oct-2025	SS17/0.0 02-Oct-2025	SS18/0.0 02-Oct-2025
Lab Number:		3998742.77	3998742.80	3998742.83	3998742.86	3998742.89
Organochlorine Pesticides Screening in Soil						
Aldrin	mg/kg dry wt	< 0.016	< 0.016	< 0.017	-	-
alpha-BHC	mg/kg dry wt	< 0.016	< 0.016	< 0.017	-	-
beta-BHC	mg/kg dry wt	< 0.016	< 0.016	< 0.017	-	-
delta-BHC	mg/kg dry wt	< 0.016	< 0.016	< 0.017	-	-
gamma-BHC (Lindane)	mg/kg dry wt	< 0.016	< 0.016	< 0.017	-	-
cis-Chlordane	mg/kg dry wt	< 0.016	< 0.016	< 0.017	-	-
trans-Chlordane	mg/kg dry wt	< 0.016	< 0.016	< 0.017	-	-
2,4'-DDD	mg/kg dry wt	< 0.016	< 0.016	< 0.017	-	-
4,4'-DDD	mg/kg dry wt	< 0.016	< 0.016	< 0.017	-	-
2,4'-DDE	mg/kg dry wt	< 0.016	< 0.016	< 0.017	-	-
4,4'-DDE	mg/kg dry wt	< 0.016	< 0.016	< 0.017	-	-
2,4'-DDT	mg/kg dry wt	< 0.016	< 0.016	< 0.017	-	-
4,4'-DDT	mg/kg dry wt	< 0.016	< 0.016	< 0.017	-	-
Total DDT Isomers	mg/kg dry wt	< 0.10	< 0.10	< 0.10	-	-
Dieldrin	mg/kg dry wt	< 0.016	< 0.016	< 0.017	-	-
Endosulfan I	mg/kg dry wt	< 0.016	< 0.016	< 0.017	-	-
Endosulfan II	mg/kg dry wt	< 0.016	< 0.016	< 0.017	-	-
Endosulfan sulphate	mg/kg dry wt	< 0.016	< 0.016	< 0.017	-	-
Endrin	mg/kg dry wt	< 0.016	< 0.016	< 0.017	-	-
Endrin aldehyde	mg/kg dry wt	< 0.016	< 0.016	< 0.017	-	-
Endrin ketone	mg/kg dry wt	< 0.016	< 0.016	< 0.017	-	-
Heptachlor	mg/kg dry wt	< 0.016	< 0.016	< 0.017	-	-
Heptachlor epoxide	mg/kg dry wt	< 0.016	< 0.016	< 0.017	-	-
Hexachlorobenzene	mg/kg dry wt	< 0.016	< 0.016	< 0.017	-	-
Methoxychlor	mg/kg dry wt	< 0.016	< 0.016	< 0.017	-	-
Sample Name:		SS19/0.0 02-Oct-2025	SS20/0.0 02-Oct-2025	SS21/0.0 02-Oct-2025	SS22/0.0 02-Oct-2025	SS23/0.0 02-Oct-2025
Lab Number:		3998742.92	3998742.95	3998742.98	3998742.101	3998742.104
Individual Tests						
Dry Matter	g/100g as rcvd	61	74	-	-	-
Heavy Metals, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	-	-	14	8	7
Total Recoverable Cadmium	mg/kg dry wt	-	-	0.28	0.16	0.33
Total Recoverable Chromium	mg/kg dry wt	-	-	13	12	10
Total Recoverable Copper	mg/kg dry wt	-	-	18	14	12
Total Recoverable Lead	mg/kg dry wt	-	-	27	19.1	15.4
Total Recoverable Nickel	mg/kg dry wt	-	-	5	5	4
Total Recoverable Zinc	mg/kg dry wt	-	-	93	56	49
Organochlorine Pesticides Screening in Soil						
Aldrin	mg/kg dry wt	< 0.017	< 0.013	-	-	-
alpha-BHC	mg/kg dry wt	< 0.017	< 0.013	-	-	-
beta-BHC	mg/kg dry wt	< 0.017	< 0.013	-	-	-
delta-BHC	mg/kg dry wt	< 0.017	< 0.013	-	-	-
gamma-BHC (Lindane)	mg/kg dry wt	< 0.017	< 0.013	-	-	-
cis-Chlordane	mg/kg dry wt	< 0.017	< 0.013	-	-	-
trans-Chlordane	mg/kg dry wt	< 0.017	< 0.013	-	-	-
2,4'-DDD	mg/kg dry wt	< 0.017	< 0.013	-	-	-
4,4'-DDD	mg/kg dry wt	< 0.017	< 0.013	-	-	-
2,4'-DDE	mg/kg dry wt	< 0.017	< 0.013	-	-	-
4,4'-DDE	mg/kg dry wt	< 0.017	< 0.013	-	-	-
2,4'-DDT	mg/kg dry wt	< 0.017	< 0.013	-	-	-
4,4'-DDT	mg/kg dry wt	< 0.017	< 0.013	-	-	-
Total DDT Isomers	mg/kg dry wt	< 0.10	< 0.08	-	-	-
Dieldrin	mg/kg dry wt	< 0.017	0.030	-	-	-
Endosulfan I	mg/kg dry wt	< 0.017	< 0.013	-	-	-

Sample Type: Soil						
Sample Name:		SS19/0.0 02-Oct-2025	SS20/0.0 02-Oct-2025	SS21/0.0 02-Oct-2025	SS22/0.0 02-Oct-2025	SS23/0.0 02-Oct-2025
Lab Number:		3998742.92	3998742.95	3998742.98	3998742.101	3998742.104
Organochlorine Pesticides Screening in Soil						
Endosulfan II	mg/kg dry wt	< 0.017	< 0.013	-	-	-
Endosulfan sulphate	mg/kg dry wt	< 0.017	< 0.013	-	-	-
Endrin	mg/kg dry wt	< 0.017	< 0.013	-	-	-
Endrin aldehyde	mg/kg dry wt	< 0.017	< 0.013	-	-	-
Endrin ketone	mg/kg dry wt	< 0.017	< 0.013	-	-	-
Heptachlor	mg/kg dry wt	< 0.017	< 0.013	-	-	-
Heptachlor epoxide	mg/kg dry wt	< 0.017	< 0.013	-	-	-
Hexachlorobenzene	mg/kg dry wt	< 0.017	< 0.013	-	-	-
Methoxychlor	mg/kg dry wt	< 0.017	< 0.013	-	-	-
Sample Name:		SS24/0.0 02-Oct-2025	SS25/0.0 02-Oct-2025	SS44/0.0 02-Oct-2025	QAQC1 02-Oct-2025	QAQC2 02-Oct-2025
Lab Number:		3998742.107	3998742.110	3998742.114	3998742.117	3998742.118
Individual Tests						
Dry Matter	g/100g as rcvd	-	67	69	-	65
Heavy Metals, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	9	-	13	8	-
Total Recoverable Cadmium	mg/kg dry wt	0.65	-	0.25	0.13	-
Total Recoverable Chromium	mg/kg dry wt	12	-	14	16	-
Total Recoverable Copper	mg/kg dry wt	18	-	31	18	-
Total Recoverable Lead	mg/kg dry wt	22	-	44	21	-
Total Recoverable Nickel	mg/kg dry wt	5	-	6	5	-
Total Recoverable Zinc	mg/kg dry wt	66	-	112	34	-
Organochlorine Pesticides Screening in Soil						
Aldrin	mg/kg dry wt	-	< 0.015	< 0.014	-	< 0.016
alpha-BHC	mg/kg dry wt	-	< 0.015	< 0.014	-	< 0.016
beta-BHC	mg/kg dry wt	-	< 0.015	< 0.014	-	< 0.016
delta-BHC	mg/kg dry wt	-	< 0.015	< 0.014	-	< 0.016
gamma-BHC (Lindane)	mg/kg dry wt	-	< 0.015	< 0.014	-	< 0.016
cis-Chlordane	mg/kg dry wt	-	< 0.015	< 0.014	-	< 0.016
trans-Chlordane	mg/kg dry wt	-	< 0.015	< 0.014	-	< 0.016
2,4'-DDD	mg/kg dry wt	-	< 0.015	< 0.014	-	< 0.016
4,4'-DDD	mg/kg dry wt	-	< 0.015	< 0.014	-	< 0.016
2,4'-DDE	mg/kg dry wt	-	< 0.015	< 0.014	-	< 0.016
4,4'-DDE	mg/kg dry wt	-	< 0.015	< 0.014	-	< 0.016
2,4'-DDT	mg/kg dry wt	-	< 0.015	< 0.014	-	< 0.016
4,4'-DDT	mg/kg dry wt	-	< 0.015	< 0.014	-	< 0.016
Total DDT Isomers	mg/kg dry wt	-	< 0.09	< 0.09	-	< 0.10
Dieldrin	mg/kg dry wt	-	< 0.015	< 0.014	-	< 0.016
Endosulfan I	mg/kg dry wt	-	< 0.015	< 0.014	-	< 0.016
Endosulfan II	mg/kg dry wt	-	< 0.015	< 0.014	-	< 0.016
Endosulfan sulphate	mg/kg dry wt	-	< 0.015	< 0.014	-	< 0.016
Endrin	mg/kg dry wt	-	< 0.015	< 0.014	-	< 0.016
Endrin aldehyde	mg/kg dry wt	-	< 0.015	< 0.014	-	< 0.016
Endrin ketone	mg/kg dry wt	-	< 0.015	< 0.014	-	< 0.016
Heptachlor	mg/kg dry wt	-	< 0.015	< 0.014	-	< 0.016
Heptachlor epoxide	mg/kg dry wt	-	< 0.015	< 0.014	-	< 0.016
Hexachlorobenzene	mg/kg dry wt	-	< 0.015	< 0.014	-	< 0.016
Methoxychlor	mg/kg dry wt	-	< 0.015	< 0.014	-	< 0.016
Analyst's Comments						
Amended Report: This certificate of analysis replaces report '3998742-SPv1' issued on 08-Oct-2025 at 5:09 pm. Reason for amendment: Additional testing added, at the request of the client.						

Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request. Unless otherwise indicated, analyses were performed at Hill Labs, 28 Duke Street, Frankton, Hamilton 3204.

Sample Type: Soil			
Test	Method Description	Default Detection Limit	Sample No
Environmental Solids Sample Drying*	Air dried at 35°C Used for sample preparation. May contain a residual moisture content of 2-5%. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed).	-	1, 3, 5, 7, 9-17, 19, 21, 23, 37, 40, 46, 52, 86, 89, 98, 101, 104, 107, 114, 117
Environmental Solids Sample Preparation	Air dried at 35°C and sieved, <2mm fraction. Used for sample preparation May contain a residual moisture content of 2-5%. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed).	-	1, 3, 5, 7, 9-16
Heavy Metals, Screen Level	Dried sample, < 2mm fraction. Nitric/Hydrochloric acid digestion. Complies with NES Regulations. ICP-MS screen level, interference removal by Kinetic Energy Discrimination if required. US EPA 200.2 (modified), APHA 3125 B: Online Edition.	0.10 - 4 mg/kg dry wt	17, 19, 21, 23, 37, 40, 46, 52, 86, 89, 98, 101, 104, 107, 114, 117
Organochlorine Pesticides Screening in Soil	Sonication extraction, GC-ECD analysis. Tested on as received sample. In-house based on US EPA 8081.	0.010 - 0.06 mg/kg dry wt	31, 34, 37, 40, 43, 46, 49, 62, 65, 68-69, 71, 74, 77, 80, 83, 92, 95, 110, 114, 118
Dry Matter	Dried at 103°C for 4-22hr (removes 3-5% more water than air dry) , gravimetry. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed). US EPA 3550.	0.10 g/100g as rcvd	31, 34, 37, 40, 43, 46, 49, 62, 65, 68-69, 71, 74, 77, 80, 83, 92, 95, 110, 114, 118
Total Recoverable digestion	Nitric / hydrochloric acid digestion. US EPA 200.2 (modified), APHA 3125 B: Online Edition.	-	1, 3, 5, 7, 9-16
Total Recoverable Lead	Dried sample, sieved as specified (if required). Nitric/Hydrochloric acid digestion, ICP-MS, screen level. US EPA 200.2 (modified), APHA 3125 B: Online Edition.	0.4 mg/kg dry wt	1, 3, 5, 7, 9-16

These samples were collected by yourselves (or your agent) and analysed as received at the laboratory.

Testing was completed between 06-Oct-2025 and 14-Oct-2025. For completion dates of individual analyses please contact the laboratory.

Samples are held at the laboratory after reporting for a length of time based on the stability of the samples and analytes being tested (considering any preservation used), and the storage space available. Once the storage period is completed, the samples are discarded unless otherwise agreed with the customer. Extended storage times may incur additional charges.

This certificate of analysis must not be reproduced, except in full, without the written consent of the signatory.



Graham Corban MSc Tech (Hons)
Client Services Manager - Environmental

Certificate of Analysis

Page 1 of 3

Client:	SLR Consulting New Zealand Limited	Lab No:	3999169	A2Pv3
Contact:	Lindsay Lutes	Date Received:	02-Oct-2025	
	C/- SLR Consulting New Zealand Limited	Date Reported:	17-Oct-2025	(Amended)
	PO Box 911310	Quote No:	97403	
	Victoria Street West	Order No:		
	Auckland 1142	Client Reference:	810.031825.00001	
		Submitted By:	Sandra Hamler	

Sample Type: Soil

Sample Name:	SS40/0.0 01-Oct-2025	SS41/0.0 01-Oct-2025	SS42/0.0 01-Oct-2025	SS42/0.4 01-Oct-2025	SS43/0.0 01-Oct-2025
Lab Number:	3999169.1	3999169.3	3999169.5	3999169.6	3999169.7
Asbestos Presence / Absence	Asbestos NOT detected.	Asbestos NOT detected.	Asbestos NOT detected.	Asbestos NOT detected.	Asbestos NOT detected.
Description of Asbestos Form	-	-	-	-	-
Asbestos in ACM as % of Total Sample*	% w/w < 0.001	% w/w < 0.001	% w/w < 0.001	% w/w < 0.001	% w/w < 0.001
Combined Fibrous Asbestos + Asbestos Fines as % of Total Sample*	% w/w < 0.001	% w/w < 0.001	% w/w < 0.001	% w/w < 0.001	% w/w < 0.001
Asbestos as Fibrous Asbestos as % of Total Sample*	% w/w < 0.001	% w/w < 0.001	% w/w < 0.001	% w/w < 0.001	% w/w < 0.001
Asbestos as Asbestos Fines as % of Total Sample*	% w/w < 0.001	% w/w < 0.001	% w/w < 0.001	% w/w < 0.001	% w/w < 0.001
As Received Weight	g 814.1	g 706.3	g 751.4	g 772.7	g 703.8
Dry Weight	g 637.0	g 499.0	g 557.1	g 587.3	g 508.2
Moisture*	% 22	% 29	% 26	% 24	% 28
Sample Fraction >10mm	g dry wt 73.1	g dry wt < 0.1	g dry wt 1.8	g dry wt < 0.1	g dry wt 11.1
Sample Fraction <10mm to >2mm	g dry wt 166.5	g dry wt 27.2	g dry wt 21.7	g dry wt 64.5	g dry wt 93.2
Sample Fraction <2mm	g dry wt 397.3	g dry wt 470.6	g dry wt 532.3	g dry wt 521.3	g dry wt 402.4
<2mm Subsample Weight	g dry wt 51.7	g dry wt 52.6	g dry wt 52.6	g dry wt 54.3	g dry wt 52.0
Weight of Asbestos in ACM (Non-Friable)	g dry wt < 0.00001	g dry wt < 0.00001	g dry wt < 0.00001	g dry wt < 0.00001	g dry wt < 0.00001
Weight of Asbestos as Fibrous Asbestos (Friable)	g dry wt < 0.00001	g dry wt < 0.00001	g dry wt < 0.00001	g dry wt < 0.00001	g dry wt < 0.00001
Weight of Asbestos as Asbestos Fines (Friable)*	g dry wt < 0.00001	g dry wt < 0.00001	g dry wt < 0.00001	g dry wt < 0.00001	g dry wt < 0.00001

Sample Name:	SS39/0.0 01-Oct-2025	SS38/0.0 01-Oct-2025	SS37/0.0 01-Oct-2025	SS37/0.4 01-Oct-2025	SS36/0.0 01-Oct-2025
Lab Number:	3999169.9	3999169.11	3999169.13	3999169.14	3999169.15
Asbestos Presence / Absence	Asbestos NOT detected.	Asbestos NOT detected.	Chrysotile (White Asbestos) detected.	Asbestos NOT detected.	Asbestos NOT detected.
Description of Asbestos Form	-	-	ACM debris	-	-
Asbestos in ACM as % of Total Sample*	% w/w < 0.001	% w/w < 0.001	% w/w < 0.001	% w/w < 0.001	% w/w < 0.001
Combined Fibrous Asbestos + Asbestos Fines as % of Total Sample*	% w/w < 0.001	% w/w < 0.001	0.003	% w/w < 0.001	% w/w < 0.001
Asbestos as Fibrous Asbestos as % of Total Sample*	% w/w < 0.001	% w/w < 0.001	% w/w < 0.001	% w/w < 0.001	% w/w < 0.001
Asbestos as Asbestos Fines as % of Total Sample*	% w/w < 0.001	% w/w < 0.001	0.003	% w/w < 0.001	% w/w < 0.001
As Received Weight	g 524.8	g 515.9	g 542.8	g 785.4	g 620.8
Dry Weight	g 368.2	g 316.1	g 338.3	g 576.2	g 406.8
Moisture*	% 30	% 39	% 38	% 27	% 34



This Laboratory is accredited by International Accreditation New Zealand (IANZ), which represents New Zealand in the International Laboratory Accreditation Cooperation (ILAC). Through the ILAC Mutual Recognition Arrangement (ILAC-MRA) this accreditation is internationally recognised. The tests reported herein have been performed in accordance with the terms of accreditation, with the exception of tests marked * or any comments and interpretations, which are not accredited.

Sample Type: Soil						
Sample Name:		SS39/0.0 01-Oct-2025	SS38/0.0 01-Oct-2025	SS37/0.0 01-Oct-2025	SS37/0.4 01-Oct-2025	SS36/0.0 01-Oct-2025
Lab Number:		3999169.9	3999169.11	3999169.13	3999169.14	3999169.15
Sample Fraction >10mm	g dry wt	1.6	5.3	2.0	95.8	12.2
Sample Fraction <10mm to >2mm	g dry wt	18.8	10.3	10.0	118.4	57.4
Sample Fraction <2mm	g dry wt	346.4	299.4	324.4	360.2	336.2
<2mm Subsample Weight	g dry wt	57.7	55.0	59.1	50.3	53.6
Weight of Asbestos in ACM (Non-Friable)	g dry wt	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001
Weight of Asbestos as Fibrous Asbestos (Friable)	g dry wt	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001
Weight of Asbestos as Asbestos Fines (Friable)*	g dry wt	< 0.00001	< 0.00001	0.00920	< 0.00001	< 0.00001

Glossary of Terms

- Loose fibres (Minor) - One or two fibres/fibre bundles identified during analysis by stereo microscope/PLM.
 - Loose fibres (Major) - Three or more fibres/fibre bundles identified during analysis by stereo microscope/PLM.
 - ACM Debris (Minor) - One or two small (<2mm) pieces of material attached to fibres identified during analysis by stereo microscope/PLM.
 - ACM Debris (Major) - Large (>2mm) piece, or more than three small (<2mm) pieces of material attached to fibres identified during analysis by stereo microscope/PLM.
 - Unknown Mineral Fibres - Mineral fibres of unknown type detected by polarised light microscopy including dispersion staining. The fibres detected may or may not be asbestos fibres. To confirm the identities, another independent analytical technique may be required.
 - Trace - Trace levels of asbestos, as defined by AS4964-2004.
- For further details, please contact the Asbestos Team.

Please refer to the **BRANZ New Zealand Guidelines for Assessing and Managing Asbestos in Soil**.

<https://www.branz.co.nz/asbestos>

The following assumptions have been made:

1. Asbestos Fines in the <2mm fraction, after homogenisation, is evenly distributed throughout the fraction
2. The weight of asbestos in the sample is unaffected by the ashing process.

Results are representative of the sample provided to Hill Laboratories only.

Analyst's Comments
Amended Report: This certificate of analysis replaces report '3999169-A2Pv2' issued on 14-Oct-2025 at 5:25 pm. Reason for amendment: Additional testing added, at the request of the client.

Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request. Unless otherwise indicated, analyses were performed at Hill Labs, 28 Duke Street, Frankton, Hamilton 3204.

Sample Type: Soil			
Test	Method Description	Default Detection Limit	Sample No
New Zealand Guidelines Semi Quantitative Asbestos in Soil			
As Received Weight	Measurement on analytical balance. Analysed at Hill Laboratories - Asbestos; Unit 1, 17 Print Place, Middleton, Christchurch.	0.1 g	1, 3, 5-7, 9, 11, 13-15
Dry Weight	Sample dried at 100 to 105°C, measurement on balance. Analysed at Hill Laboratories - Asbestos; Unit 1, 17 Print Place, Middleton, Christchurch.	0.1 g	1, 3, 5-7, 9, 11, 13-15
Moisture*	Sample dried at 100 to 105°C. Calculation = (As received weight - Dry weight) / as received weight x 100.	1 %	1, 3, 5-7, 9, 11, 13-15
Sample Fraction >10mm	Sample dried at 100 to 105°C, 10mm sieve, measurement on analytical balance. Analysed at Hill Laboratories - Asbestos; Unit 1, 17 Print Place, Middleton, Christchurch.	0.1 g dry wt	1, 3, 5-7, 9, 11, 13-15
Sample Fraction <10mm to >2mm	Sample dried at 100 to 105°C, 10mm and 2mm sieve, measurement on analytical balance. Analysed at Hill Laboratories - Asbestos; Unit 1, 17 Print Place, Middleton, Christchurch.	0.1 g dry wt	1, 3, 5-7, 9, 11, 13-15
Sample Fraction <2mm	Sample dried at 100 to 105°C, 2mm sieve, measurement on analytical balance. Analysed at Hill Laboratories - Asbestos; Unit 1, 17 Print Place, Middleton, Christchurch.	0.1 g dry wt	1, 3, 5-7, 9, 11, 13-15

Sample Type: Soil			
Test	Method Description	Default Detection Limit	Sample No
Asbestos Presence / Absence	Examination using Low Powered Stereomicroscopy followed by 'Polarised Light Microscopy' including 'Dispersion Staining Techniques'. Analysed at Hill Laboratories - Asbestos; Unit 1, 17 Print Place, Middleton, Christchurch. AS 4964 (2004) - Method for the Qualitative Identification of Asbestos in Bulk Samples.	0.01%	1, 3, 5-7, 9, 11, 13-15
Description of Asbestos Form	Description of asbestos form and/or shape if present.	-	1, 3, 5-7, 9, 11, 13-15
Weight of Asbestos in ACM (Non-Friable)	Measurement on analytical balance, from the >10mm Fraction. Weight of asbestos based on assessment of ACM form. Analysed at Hill Laboratories - Asbestos; Unit 1, 17 Print Place, Middleton, Christchurch. New Zealand Guidelines for Assessing and Managing Asbestos in Soil, November 2017.	0.00001 g dry wt	1, 3, 5-7, 9, 11, 13-15
Asbestos in ACM as % of Total Sample*	Calculated from weight of asbestos in ACM and sample dry weight. New Zealand Guidelines for Assessing and Managing Asbestos in Soil, November 2017.	0.001 % w/w	1, 3, 5-7, 9, 11, 13-15
Weight of Asbestos as Fibrous Asbestos (Friable)	Measurement on analytical balance, from the >10mm Fraction. Analysed at Hill Laboratories - Asbestos; Unit 1, 17 Print Place, Middleton, Christchurch. New Zealand Guidelines for Assessing and Managing Asbestos in Soil, November 2017.	0.00001 g dry wt	1, 3, 5-7, 9, 11, 13-15
Asbestos as Fibrous Asbestos as % of Total Sample*	Calculated from weight of fibrous asbestos and sample dry weight. New Zealand Guidelines for Assessing and Managing Asbestos in Soil, November 2017.	0.001 % w/w	1, 3, 5-7, 9, 11, 13-15
Weight of Asbestos as Asbestos Fines (Friable)*	Measurement on analytical balance, from the <10mm Fractions. Analysed at Hill Laboratories - Asbestos; Unit 1, 17 Print Place, Middleton, Christchurch. New Zealand Guidelines for Assessing and Managing Asbestos in Soil, November 2017.	0.00001 g dry wt	1, 3, 5-7, 9, 11, 13-15
Asbestos as Asbestos Fines as % of Total Sample*	Calculated from weight of asbestos fines and sample dry weight. New Zealand Guidelines for Assessing and Managing Asbestos in Soil, November 2017.	0.001 % w/w	1, 3, 5-7, 9, 11, 13-15
Combined Fibrous Asbestos + Asbestos Fines as % of Total Sample*	Calculated from weight of fibrous asbestos plus asbestos fines and sample dry weight. New Zealand Guidelines for Assessing and Managing Asbestos in Soil, November 2017.	0.001 % w/w	1, 3, 5-7, 9, 11, 13-15

These samples were collected by yourselves (or your agent) and analysed as received at the laboratory.

Testing was completed between 09-Oct-2025 and 17-Oct-2025. For completion dates of individual analyses please contact the laboratory.

Samples are held at the laboratory after reporting for a length of time based on the stability of the samples and analytes being tested (considering any preservation used), and the storage space available. Once the storage period is completed, the samples are discarded unless otherwise agreed with the customer. Extended storage times may incur additional charges.

This certificate of analysis must not be reproduced, except in full, without the written consent of the signatory.



Jessica Griffin BSc, BOHS W504
Team Leader - Asbestos

Appendix D Laboratory Chain of Custody

Detailed Site Investigation

Brymer Development

CMW Geosciences Ltd

SLR Project No.: 810.031825.00001

12 August 2026





Quote No

Primary Contact

Submitted By

Client Name

Address

Postcode

Phone

Mobile

Email

Charge To

Client Reference

Order No

ApiNZ Membership No.

PRIORITY

☐ Normal

☐ Urgent (ASAP, extra charge applies, please contact lab first)

ADDITIONAL INFORMATION

Wrong Coc Form. All samples are for soil testing.

SOIL TESTING (ES)

#	Sample Name	Enter Y	Infused Honey?	See Test notes below	Manuka 5 Attributes	Manuka Chem only	Manuka DNA only	Honey 3in1 + NPA	Leptosperin	Honey Forecast Model	Tutin - Individual	Tutin - Composite	C4 Sugar (AOAC)	C4 Sugar (Screen)	Glyphosate	American Foulbrood (AFB)	Aerobic Plate Count (APC)	Yeast & Mould	Osmophilic Yeast	Diastase (Phadebas)	Physical Properties (CCBM)	Moisture only	Colour only	Heavy Metals	Pollen Count (subcontracted)
1	SS40/0.0	1/10/25																							
2	SS40/0.4																								
3	SS41/0.0																								
4	SS41/0.4																								
5	SS42/0.0																								
6	SS42/0.4																								
7	SS43/0.0																								
8	SS43/0.4																								
9	SS39/0.0																								
10	SS39/0.4																								

Other Tests
(Please specify)

Hold
cold

ANALYSIS REQUEST FORM	
R J Hill Laboratories Limited 221A Ellis Street, Frankton Hamilton 3204 Private Bag 3205 Hamilton 3240, New Zealand	Job No: 399 8742 Date Recv: 01-Oct-25 17:33 Received by: Maia King
0508 HILL LAB (44 555 22) +64 7 858 2000 mail@hill-labs.co.nz www.hill-labs.co.nz	 3139987422

CHAIN OF CUSTODY	
Sent to Hill Labs	Date & Time: 1/10/25 17:30
☒ Tick if you require COC to be emailed back	Name: Sandra Hamler Signature: Sandra H.
Received at Hill Labs	Date & Time: Name: Signature:
Results To	Reports will be emailed to Primary Contact by default. Additional Reports will be sent as specified below

☒ Email Primary Contact	☐ Email Submitter	☐ Email Client
☐ Email Other		

Job Information Summary

Page 1 of 4

Client:	SLR Consulting New Zealand Limited	Lab No:	3998742
Contact:	Lindsay Lutes	Date Registered:	02-Oct-2025 9:02 am
	C/- SLR Consulting New Zealand Limited	Priority:	High
	PO Box 911310	Quote No:	97403
	Victoria Street West	Order No:	
	Auckland 1142	Client Reference:	810.031825.00001
		Add. Client Ref:	
		Submitted By:	Sandra Hamler
		Charge To:	SLR Consulting New Zealand Limited
		Target Date:	14-Oct-2025 4:30 pm

Samples				
No	Sample Name	Sample Type	Containers	Tests Requested
1	SS40/0.0 01-Oct-2025	Soil	GSoil300	Total Recoverable Lead
2	SS40/0.4 01-Oct-2025	Soil	GSoil300	Hold Cold
3	SS41/0.0 01-Oct-2025	Soil	GSoil300	Total Recoverable Lead
4	SS41/0.4 01-Oct-2025	Soil	GSoil300	Hold Cold
5	SS42/0.0 01-Oct-2025	Soil	GSoil300	Total Recoverable Lead
6	SS42/0.4 01-Oct-2025	Soil	GSoil300	Hold Cold
7	SS43/0.0 01-Oct-2025	Soil	GSoil300	Total Recoverable Lead
8	SS43/0.4 01-Oct-2025	Soil	GSoil300	Hold Cold
9	SS39/0.0 01-Oct-2025	Soil	GSoil300	Total Recoverable Lead
10	SS39/0.4 01-Oct-2025	Soil	GSoil300	Total Recoverable Lead
11	SS38/0.0 01-Oct-2025	Soil	GSoil300	Total Recoverable Lead
12	SS38/0.4 01-Oct-2025	Soil	GSoil300	Total Recoverable Lead
13	SS37/0.0 01-Oct-2025	Soil	GSoil300	Total Recoverable Lead
14	SS37/0.4 01-Oct-2025	Soil	GSoil300	Total Recoverable Lead
15	SS36/0.0 01-Oct-2025	Soil	GSoil300	Total Recoverable Lead
16	SS36/0.4 01-Oct-2025	Soil	GSoil300	Total Recoverable Lead
17	SS01/0.0 01-Oct-2025	Soil	GSoil300	Heavy Metals, Screen Level
18	SS01/0.4 01-Oct-2025	Soil	GSoil300	Hold Cold
19	SS02/0.0 01-Oct-2025	Soil	GSoil300	Heavy Metals, Screen Level
20	SS02/0.4 01-Oct-2025	Soil	GSoil300	Hold Cold
21	SS03/0.0 01-Oct-2025	Soil	GSoil300	Heavy Metals, Screen Level
22	SS03/0.4 01-Oct-2025	Soil	GSoil300	Hold Cold
23	SS04/0.0 01-Oct-2025	Soil	GSoil300	Heavy Metals, Screen Level
24	SS04/0.4 01-Oct-2025	Soil	GSoil300	Hold Cold
25	SS33/0.0 01-Oct-2025	Soil	GSoil300	Hold Cold
26	SS33/0.5 01-Oct-2025	Soil	GSoil300	Hold Cold
27	SS33/1.0 01-Oct-2025	Soil	GSoil300	Hold Cold
28	SS31/0.0 01-Oct-2025	Soil	GSoil300	Hold Cold
29	SS31/0.5 01-Oct-2025	Soil	GSoil300	Hold Cold
30	SS31/1.0 01-Oct-2025	Soil	GSoil300	Hold Cold
31	SS30/0.0 01-Oct-2025	Soil	GSoil300	Organochlorine Pesticides Screening in Soil
32	SS30/0.5 01-Oct-2025	Soil	GSoil300	Hold Cold
33	SS30/1.0 01-Oct-2025	Soil	GSoil300	Hold Cold
34	SS27/0.0 01-Oct-2025	Soil	GSoil300	Organochlorine Pesticides Screening in Soil
35	SS27/0.5 01-Oct-2025	Soil	GSoil300	Hold Cold
36	SS27/1.0 01-Oct-2025	Soil	GSoil300	Hold Cold
37	SS34/0.0 01-Oct-2025	Soil	GSoil300	Heavy Metals, Screen Level, Organochlorine Pesticides Screening in Soil

Samples				
No	Sample Name	Sample Type	Containers	Tests Requested
38	SS34/0.5 01-Oct-2025	Soil	GSoil300	Hold Cold
39	SS34/1.0 01-Oct-2025	Soil	GSoil300	Hold Cold
40	SS29/0.0 01-Oct-2025	Soil	GSoil300	Heavy Metals, Screen Level, Organochlorine Pesticides Screening in Soil
41	SS29/0.5 01-Oct-2025	Soil	GSoil300	Hold Cold
42	SS29/1.0 01-Oct-2025	Soil	GSoil300	Hold Cold
43	SS26/0.0 01-Oct-2025	Soil	GSoil300	Organochlorine Pesticides Screening in Soil
44	SS26/0.5 01-Oct-2025	Soil	GSoil300	Hold Cold
45	SS26/1.0 01-Oct-2025	Soil	GSoil300	Hold Cold
46	SS28/0.0 01-Oct-2025	Soil	GSoil300	Heavy Metals, Screen Level, Organochlorine Pesticides Screening in Soil
47	SS28/0.5 01-Oct-2025	Soil	GSoil300	Hold Cold
48	SS28/1.0 01-Oct-2025	Soil	GSoil300	Hold Cold
49	SS35/0.0 01-Oct-2025	Soil	GSoil300	Organochlorine Pesticides Screening in Soil
50	SS35/0.5 01-Oct-2025	Soil	GSoil300	Hold Cold
51	SS35/1.0 01-Oct-2025	Soil	GSoil300	Hold Cold
52	SS32/0.0 01-Oct-2025	Soil	GSoil300	Heavy Metals, Screen Level
53	[Unlabeled Soil Sample] 01-Oct-2025	Soil	GSoil300	Hold Cold
62	SS09/0.0 02-Oct-2025	Soil	GSoil300	Organochlorine Pesticides Screening in Soil
63	SS09/0.5 02-Oct-2025	Soil	GSoil300	Hold Cold
64	SS09/1.0 02-Oct-2025	Soil	GSoil300	Hold Cold
65	SS10/0.0 02-Oct-2025	Soil	GSoil300	Organochlorine Pesticides Screening in Soil
66	SS10/0.5 02-Oct-2025	Soil	GSoil300	Hold Cold
67	SS10/1.0 02-Oct-2025	Soil	GSoil300	Hold Cold
68	SS11/0.0 02-Oct-2025	Soil	GSoil300	Organochlorine Pesticides Screening in Soil
69	SS11/0.5 02-Oct-2025	Soil	GSoil300	Organochlorine Pesticides Screening in Soil
70	SS11/1.0 02-Oct-2025	Soil	GSoil300	Hold Cold
71	SS12/0.0 02-Oct-2025	Soil	GSoil300	Organochlorine Pesticides Screening in Soil
72	SS12/0.5 02-Oct-2025	Soil	GSoil300	Hold Cold
73	SS12/1.0 02-Oct-2025	Soil	GSoil300	Hold Cold
74	SS13/0.0 02-Oct-2025	Soil	GSoil300	Organochlorine Pesticides Screening in Soil
75	SS13/0.5 02-Oct-2025	Soil	GSoil300	Hold Cold
76	SS31/1.0 02-Oct-2025	Soil	GSoil300	Hold Cold
77	SS14/0.0 02-Oct-2025	Soil	GSoil300	Organochlorine Pesticides Screening in Soil
78	SS14/0.5 02-Oct-2025	Soil	GSoil300	Hold Cold
79	SS14/1.0 02-Oct-2025	Soil	GSoil300	Hold Cold
80	SS15/0.0 02-Oct-2025	Soil	GSoil300	Organochlorine Pesticides Screening in Soil
81	SS15/0.5 02-Oct-2025	Soil	GSoil300	Hold Cold
82	SS15/1.0 02-Oct-2025	Soil	GSoil300	Hold Cold
83	SS16/0.0 02-Oct-2025	Soil	GSoil300	Organochlorine Pesticides Screening in Soil
84	SS16/0.5 02-Oct-2025	Soil	GSoil300	Hold Cold
85	SS16/1.0 02-Oct-2025	Soil	GSoil300	Hold Cold
86	SS17/0.0 02-Oct-2025	Soil	GSoil300	Heavy Metals, Screen Level
87	SS17/0.5 02-Oct-2025	Soil	GSoil300	Hold Cold
88	SS17/1.0 02-Oct-2025	Soil	GSoil300	Hold Cold
89	SS18/0.0 02-Oct-2025	Soil	GSoil300	Heavy Metals, Screen Level
90	SS18/0.5 02-Oct-2025	Soil	GSoil300	Hold Cold
91	SS18/1.0 02-Oct-2025	Soil	GSoil300	Hold Cold
92	SS19/0.0 02-Oct-2025	Soil	GSoil300	Organochlorine Pesticides Screening in Soil
93	SS19/0.5 02-Oct-2025	Soil	GSoil300	Hold Cold
94	SS19/1.0 02-Oct-2025	Soil	GSoil300	Hold Cold
95	SS20/0.0 02-Oct-2025	Soil	GSoil300	Organochlorine Pesticides Screening in Soil
96	SS20/0.5 02-Oct-2025	Soil	GSoil300	Hold Cold
97	SS20/1.0 02-Oct-2025	Soil	GSoil300	Hold Cold

Samples				
No	Sample Name	Sample Type	Containers	Tests Requested
98	SS21/0.0 02-Oct-2025	Soil	GSoil300	Heavy Metals, Screen Level
99	SS21/0.5 02-Oct-2025	Soil	GSoil300	Hold Cold
100	SS21/1.0 02-Oct-2025	Soil	GSoil300	Hold Cold
101	SS22/0.0 02-Oct-2025	Soil	GSoil300	Heavy Metals, Screen Level
102	SS22/0.5 02-Oct-2025	Soil	GSoil300	Hold Cold
103	SS22/1.0 02-Oct-2025	Soil	GSoil300	Hold Cold
104	SS23/0.0 02-Oct-2025	Soil	GSoil300	Heavy Metals, Screen Level
105	SS23/0.5 02-Oct-2025	Soil	GSoil300	Hold Cold
106	SS23/1.0 02-Oct-2025	Soil	GSoil300	Hold Cold
107	SS24/0.0 02-Oct-2025	Soil	GSoil300	Heavy Metals, Screen Level
108	SS24/0.5 02-Oct-2025	Soil	GSoil300	Hold Cold
109	SS24/1.0 02-Oct-2025	Soil	GSoil300	Hold Cold
110	SS25/0.0 02-Oct-2025	Soil	GSoil300	Organochlorine Pesticides Screening in Soil
111	SS25/0.5 02-Oct-2025	Soil	GSoil300	Hold Cold
112	SS25/1.0 02-Oct-2025	Soil	GSoil300	Hold Cold
113	Cesspit/0.4 02-Oct-2025	Soil	GSoil300	Hold Cold
114	SS44/0.0 02-Oct-2025	Soil	GSoil300	Heavy Metals, Screen Level, Organochlorine Pesticides Screening in Soil
115	SS44/0.5 02-Oct-2025	Soil	GSoil300	Hold Cold
116	SS44/1.0 02-Oct-2025	Soil	GSoil300	Hold Cold
117	QAQC1 02-Oct-2025	Soil	GSoil300	Heavy Metals, Screen Level
118	QAQC2 02-Oct-2025	Soil	GSoil300	Organochlorine Pesticides Screening in Soil
119	SS32/0.5 02-Oct-2025	Soil	GSoil300	Hold Cold
120	SS32/1.0 02-Oct-2025	Soil	GSoil300	Hold Cold
121		Soil		

Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request. Unless otherwise indicated, analyses were performed at Hill Labs, 28 Duke Street, Frankton, Hamilton 3204.

Sample Type: Soil			
Test	Method Description	Default Detection Limit	Sample No
Environmental Solids Sample Drying	Air dried at 35°C Used for sample preparation. May contain a residual moisture content of 2-5%. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed).	-	1, 3, 5, 7, 9-17, 19, 21, 23, 37, 40, 46, 52, 86, 89, 98, 101, 104, 107, 114, 117
Environmental Solids Sample Preparation	Air dried at 35°C and sieved, <2mm fraction. Used for sample preparation May contain a residual moisture content of 2-5%. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed).	-	1, 3, 5, 7, 9-16
Heavy Metals, Screen Level	Dried sample, < 2mm fraction. Nitric/Hydrochloric acid digestion. Complies with NES Regulations. ICP-MS screen level, interference removal by Kinetic Energy Discrimination if required. US EPA 200.2 (modified), APHA 3125 B: Online Edition.	0.10 - 4 mg/kg dry wt	17, 19, 21, 23, 37, 40, 46, 52, 86, 89, 98, 101, 104, 107, 114, 117
Organochlorine Pesticides Screening in Soil	Sonication extraction, GC-ECD analysis. Tested on as received sample. In-house based on US EPA 8081.	0.010 - 0.06 mg/kg dry wt	31, 34, 37, 40, 43, 46, 49, 62, 65, 68-69, 71, 74, 77, 80, 83, 92, 95, 110, 114, 118

Sample Type: Soil			
Test	Method Description	Default Detection Limit	Sample No
Dry Matter	Dried at 103°C for 4-22hr (removes 3-5% more water than air dry) , gravimetry. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed). US EPA 3550.	0.10 g/100g as rcvd	31, 34, 37, 40, 43, 46, 49, 62, 65, 68-69, 71, 74, 77, 80, 83, 92, 95, 110, 114, 118
Total Recoverable digestion	Nitric / hydrochloric acid digestion. US EPA 200.2 (modified), APHA 3125 B: Online Edition.	-	1, 3, 5, 7, 9-16
Total Recoverable Lead	Dried sample, sieved as specified (if required). Nitric/Hydrochloric acid digestion, ICP-MS, screen level. US EPA 200.2 (modified), APHA 3125 B: Online Edition.	0.4 mg/kg dry wt	1, 3, 5, 7, 9-16



Quote No

Primary Contact

Lindsay Lutes

Submitted By

Sandra Hamler

Client Name

SLR

Address

Postcode

Phone

Mobile

Email

lindsay.lutes@slrconsulting.com

Charge To

SLR

Client Reference

810.031825.00001

Order No

ApiNZ Membership No.

PRIORITY☐ Normal☐ Urgent (ASAP, extra charge applies, please contact lab first)**ANALYSIS REQUEST FORM**

R J Hill Laboratories Limited
221A Ellis Street, Frankton
Hamilton 3204
Private Bag 3205
Hamilton 3240, New Zealand

Job No: Date Recv: 02-Oct-25 09:08

399 9169

Received by: Nathaniel Sue

☎ 0508 HILL LAB (44 555 22)
☎ +64 7 858 2000
✉ mail@hill-labs.co.nz
🌐 www.hill-labs.co.nz



3139991697

18

CHAIN OF CUSTODY

Sent to Hill Labs

Date & Time: 1/10/25 17:30

☒ Tick if you require
COC to be emailed back

Name: Sandra Hamler

Signature: Sandra H.

Received at Hill
Labs

Date & Time:

Name:

Signature:

Results To

Reports will be emailed to Primary Contact by default.
Additional Reports will be sent as specified below

☒ Email Primary Contact☐ Email Submitter☐ Email Client☐ Email Other**ADDITIONAL INFORMATION**

Wrong Coc Form. All samples are for soil testing.

SOIL TESTING (ES)**HONEY TESTING**

#	Sample Name	Infused Honey? See Test notes below Enter Y	Manuka 5 Attributes	Manuka Chem only	Manuka DNA only	Honey 3in1 + NPA	Leptosperin	Honey Forecast Model	Tutin - Individual	Tutin - Composite	C4 Sugar (AOAC)	C4 Sugar (Screen)	Glyphosate	American Foulbrood (AFB)	Aerobic Plate Count (APC)	Yeast & Mould	Osmophilic Yeast	Diastase (Phadebas)	Physical Properties (CCBM)	Moisture only	Colony only	Heavy Metals	Pollen Count (subcontracted)	Other Tests (Please specify)
1	SS40/0.0	1/10/25	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	Hold cold
2	SS40/0.4		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
3	SS41/0.0		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
4	SS41/0.4		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
5	SS42/0.0		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
6	SS42/0.4		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
7	SS43/0.0		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
8	SS43/0.4		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
9	SS39/0.0		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
10	SS39/0.4		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	

SS38/0.0 1/10/25 ES

SS38/0.4

SS37/0.0

SS37/0.4

SS36/0.0

SS36/0.4

SS01/0.0

SS01/0.4

SS02/0.0

SS02/0.4

SS03/0.0

SS03/0.4

SS04/0.0

SS04/0.4

SS05/0.0

SS05/0.4

SS06/0.0

SS06/0.4

SS07/0.0

SS07/0.4

SS08/0.0

SS08/0.4

SS33/0.0

SS33/0.5

SS33/1.0

SS31/0.0

SS31/0.5

SS31/1.0

SS30/0.0

SS30/0.5

SS30/1.0

SS27/0.0

SS27/0.5

SS27/1.0

SS34/0.0 1/10/25 ES

SS34/0.5

SS34/1.0

SS29/0.0

SS29/0.5

SS29/1.0

SS26/0.0

SS26/0.5

SS26/1.0

SS28/0.0

SS28/0.5

SS28/1.0

SS35/0.0

SS35/0.5

SS35/1.0

SS32/0.0

cesspit

H/O
6

col
6

Hold cold

Job Information Summary

Page 1 of 2

Client:	SLR Consulting New Zealand Limited	Lab No:	3999169
Contact:	Lindsay Lutes	Date Registered:	02-Oct-2025 9:11 am
	C/- SLR Consulting New Zealand Limited	Priority:	High
	PO Box 911310	Quote No:	97403
	Victoria Street West	Order No:	
	Auckland 1142	Client Reference:	810.031825.00001
		Add. Client Ref:	
		Submitted By:	Sandra Hamler
		Charge To:	SLR Consulting New Zealand Limited
		Target Date:	14-Oct-2025 4:30 pm

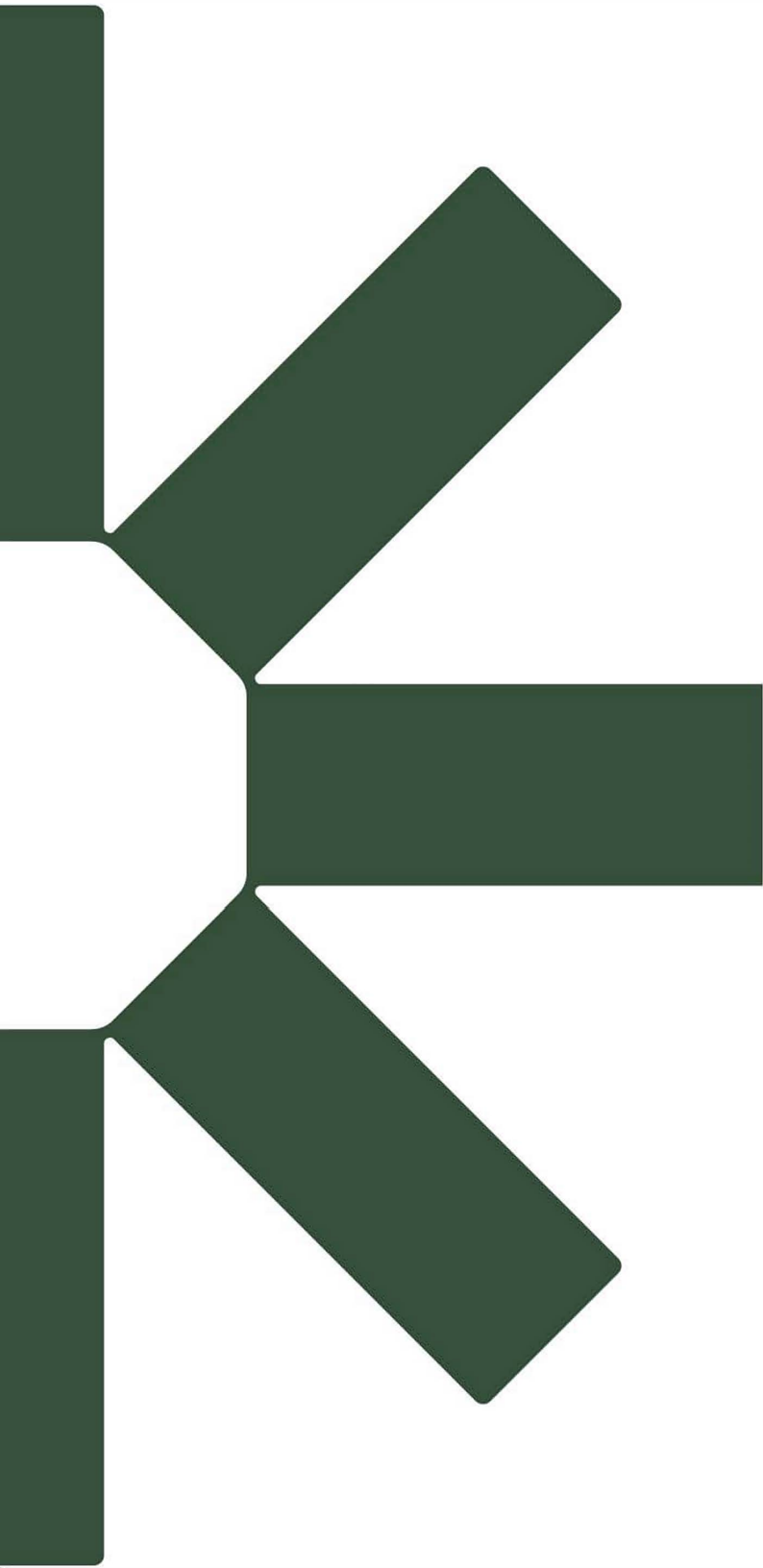
Samples

No	Sample Name	Sample Type	Containers	Tests Requested
1	SS40/0.0 01-Oct-2025	Soil	PSoil500Asb	New Zealand Guidelines Semi Quantitative Asbestos in Soil
2	SS40/0.4 01-Oct-2025	Soil	PSoil500Asb	Hold Cold
3	SS41/0.0 01-Oct-2025	Soil	PSoil500Asb	New Zealand Guidelines Semi Quantitative Asbestos in Soil
4	SS41/0.4 01-Oct-2025	Soil	PSoil500Asb	Hold Cold
5	SS42/0.0 01-Oct-2025	Soil	PSoil500Asb	New Zealand Guidelines Semi Quantitative Asbestos in Soil
6	SS42/0.4 01-Oct-2025	Soil	PSoil500Asb	New Zealand Guidelines Semi Quantitative Asbestos in Soil
7	SS43/0.0 01-Oct-2025	Soil	PSoil500Asb	New Zealand Guidelines Semi Quantitative Asbestos in Soil
8	SS43/0.4 01-Oct-2025	Soil	PSoil500Asb	Hold Cold
9	SS39/0.0 01-Oct-2025	Soil	PSoil500Asb	New Zealand Guidelines Semi Quantitative Asbestos in Soil
10	SS39/0.4 01-Oct-2025	Soil	PSoil500Asb	Hold Cold
11	SS38/0.0 01-Oct-2025	Soil	PSoil500Asb	New Zealand Guidelines Semi Quantitative Asbestos in Soil
12	SS38/0.4 01-Oct-2025	Soil	PSoil500Asb	Hold Cold
13	SS37/0.0 01-Oct-2025	Soil	PSoil500Asb	New Zealand Guidelines Semi Quantitative Asbestos in Soil
14	SS37/0.4 01-Oct-2025	Soil	PSoil500Asb	Hold Cold
15	SS36/0.0 01-Oct-2025	Soil	PSoil500Asb	New Zealand Guidelines Semi Quantitative Asbestos in Soil
16	SS36/0.4 01-Oct-2025	Soil	PSoil500Asb	Hold Cold
17	SS05/0.0 01-Oct-2025	Soil	PSoil500Asb	Hold Cold
18	SS05/0.4 01-Oct-2025	Soil	PSoil500Asb	Hold Cold
19	SS06/0.0 01-Oct-2025	Soil	PSoil500Asb	Hold Cold
20	SS06/0.4 01-Oct-2025	Soil	PSoil500Asb	Hold Cold
21	SS07/0.0 01-Oct-2025	Soil	PSoil500Asb	Hold Cold
22	SS07/0.4 01-Oct-2025	Soil	PSoil500Asb	Hold Cold
23	SS08/0.0 01-Oct-2025	Soil	PSoil500Asb	Hold Cold
24	SS08/0.4 01-Oct-2025	Soil	PSoil500Asb	Hold Cold
25	SS32/0.0 01-Oct-2025	Soil	PSoil500Asb	Hold Cold

Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request. Unless otherwise indicated, analyses were performed at Hill Labs, 28 Duke Street, Frankton, Hamilton 3204.

Sample Type: Soil			
Test	Method Description	Default Detection Limit	Sample No
New Zealand Guidelines Semi Quantitative Asbestos in Soil			
As Received Weight	Measurement on analytical balance. Analysed at Hill Laboratories - Asbestos; Unit 1, 17 Print Place, Middleton, Christchurch.	0.1 g	1, 3, 5-7, 9, 11, 13, 15
Dry Weight	Sample dried at 100 to 105°C, measurement on balance. Analysed at Hill Laboratories - Asbestos; Unit 1, 17 Print Place, Middleton, Christchurch.	0.1 g	1, 3, 5-7, 9, 11, 13, 15
Moisture	Sample dried at 100 to 105°C. Calculation = (As received weight - Dry weight) / as received weight x 100.	1 %	1, 3, 5-7, 9, 11, 13, 15
Sample Fraction >10mm	Sample dried at 100 to 105°C, 10mm sieve, measurement on analytical balance. Analysed at Hill Laboratories - Asbestos; Unit 1, 17 Print Place, Middleton, Christchurch.	0.1 g dry wt	1, 3, 5-7, 9, 11, 13, 15
Sample Fraction <10mm to >2mm	Sample dried at 100 to 105°C, 10mm and 2mm sieve, measurement on analytical balance. Analysed at Hill Laboratories - Asbestos; Unit 1, 17 Print Place, Middleton, Christchurch.	0.1 g dry wt	1, 3, 5-7, 9, 11, 13, 15
Sample Fraction <2mm	Sample dried at 100 to 105°C, 2mm sieve, measurement on analytical balance. Analysed at Hill Laboratories - Asbestos; Unit 1, 17 Print Place, Middleton, Christchurch.	0.1 g dry wt	1, 3, 5-7, 9, 11, 13, 15
Asbestos Presence / Absence	Examination using Low Powered Stereomicroscopy followed by 'Polarised Light Microscopy' including 'Dispersion Staining Techniques'. Analysed at Hill Laboratories - Asbestos; Unit 1, 17 Print Place, Middleton, Christchurch. AS 4964 (2004) - Method for the Qualitative Identification of Asbestos in Bulk Samples.	0.01%	1, 3, 5-7, 9, 11, 13, 15
Description of Asbestos Form	Description of asbestos form and/or shape if present.	-	1, 3, 5-7, 9, 11, 13, 15
Weight of Asbestos in ACM (Non-Friable)	Measurement on analytical balance, from the >10mm Fraction. Weight of asbestos based on assessment of ACM form. Analysed at Hill Laboratories - Asbestos; Unit 1, 17 Print Place, Middleton, Christchurch. New Zealand Guidelines for Assessing and Managing Asbestos in Soil, November 2017.	0.00001 g dry wt	1, 3, 5-7, 9, 11, 13, 15
Asbestos in ACM as % of Total Sample	Calculated from weight of asbestos in ACM and sample dry weight. New Zealand Guidelines for Assessing and Managing Asbestos in Soil, November 2017.	0.001 % w/w	1, 3, 5-7, 9, 11, 13, 15
Weight of Asbestos as Fibrous Asbestos (Friable)	Measurement on analytical balance, from the >10mm Fraction. Analysed at Hill Laboratories - Asbestos; Unit 1, 17 Print Place, Middleton, Christchurch. New Zealand Guidelines for Assessing and Managing Asbestos in Soil, November 2017.	0.00001 g dry wt	1, 3, 5-7, 9, 11, 13, 15
Asbestos as Fibrous Asbestos as % of Total Sample	Calculated from weight of fibrous asbestos and sample dry weight. New Zealand Guidelines for Assessing and Managing Asbestos in Soil, November 2017.	0.001 % w/w	1, 3, 5-7, 9, 11, 13, 15
Weight of Asbestos as Asbestos Fines (Friable)	Measurement on analytical balance, from the <10mm Fractions. Analysed at Hill Laboratories - Asbestos; Unit 1, 17 Print Place, Middleton, Christchurch. New Zealand Guidelines for Assessing and Managing Asbestos in Soil, November 2017.	0.00001 g dry wt	1, 3, 5-7, 9, 11, 13, 15
Asbestos as Asbestos Fines as % of Total Sample	Calculated from weight of asbestos fines and sample dry weight. New Zealand Guidelines for Assessing and Managing Asbestos in Soil, November 2017.	0.001 % w/w	1, 3, 5-7, 9, 11, 13, 15
Combined Fibrous Asbestos + Asbestos Fines as % of Total Sample	Calculated from weight of fibrous asbestos plus asbestos fines and sample dry weight. New Zealand Guidelines for Assessing and Managing Asbestos in Soil, November 2017.	0.001 % w/w	1, 3, 5-7, 9, 11, 13, 15



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