PRELIMINARY SITE INVESTIGATION
Block 12 Section 2
Nicholls, ACT

Prepared for:	Capital Crown Leasing Pty Ltd
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AGON DOCUMENT CONTROL

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EXECUTIVE SUMMARY

Agon Environmental was engaged by Capital Crown Leasing to undertake a Preliminary Site Investigation (PSI) for the property identified as 11 O'Hanlon Place, Nicholls ACT, Block 12 Section 2 Nicholls (the site, see Figure 1). The site is the premises of the Ginninderra Village and Schoolhouse.

Agon understand the proponent is seeking to vary the current Crown Lease to add 'childcare centre' and that a PSI is required to support the variation of the Crown Lease. Based on comments received by the OEPA on the 9th of March 2021 an assessment of shallow soils in areas proposed for the placement of a childcare centre and targeted sample locations in proximity to existing historical buildings.

The PSI data summarised in this report indicates that the site was developed between 1883-1884 as the Ginninderra Public School. The site was used as a school until 1913 and used as a Post Office till 1963. Since then, the site was used for storage and as a museum and more recently it was used for a range of retail purposes as part of the wider Gold Creek Village tourist facility.

Agon understand the proponent is seeking to vary the Crown Lease to add a "childcare centre" to the southern and/or western portion of the site (the exact placement location subject to later design and sitting). To support this PSI Agon undertook an assessment of the proposed childcare area and targeted locations adjacent to the historical buildings present at the site.

Assessment the proposed childcare area did not identify the presence of pesticides or other indicators of contamination (i.e. staining, odours or anthropogenic inclusions). On this basis, Agon conclude that the proposed childcare area suitable for the Crown Lease variation to add 'childcare centre' and all land uses permitted under a Merit Track Assessment for CZ6. This conclusion only applies to the area shown in **Figure 5**, with boundary coordinates of:

- **Boundary Coordinate A1**:
  - X – 689857.055
  - Y – 6103676.16
- **Boundary Coordinate A2**:
  - X – 689844.61
  - Y – 6103639.92
- **Boundary Coordinate A3**:
  - X – 689816.19
  - Y – 6103644.74
- **Boundary Coordinate A4**:
  - X – 689801.64
  - Y – 6103598.84
- **Boundary Coordinate A5**:
  - X – 689866.46
  - Y – 6103554.92
- **Boundary Coordinate A6**:
  - X – 689889.748
  - Y – 6103667.90

Other areas of the site are suitable for ongoing commercial/industrial land uses. The elevated lead concentrations at sample location BH03, whilst less than the adopted HIL D commercial/industrial land use criteria, is inconsistent with the other sample locations at the site. Agon recommend:

- A hazardous materials survey be undertaken specifically for the presence of lead paint (and other hazardous building materials) associated with the Green Herring Building which was imported to the site in the 1970s.

1.0 INTRODUCTION

1.1 Background

Agon Environmental Pty Ltd (Agon) was engaged by Capital Crown Leasing Pty Ltd to undertake a Preliminary Site Investigation (PSI) for the property identified as 11 O'Hanlon Place, Nicholls ACT, Block 12 Section 2 Nicholls (the site, see Figure 1). The site is the premises of the Ginninderra Village and Schoolhouse.

Agon understand the proponent is seeking to vary the current Crown Lease to add 'childcare centre' and that a PSI is required to support the variation of the Crown Lease. Based on comments received by the OEPA on the 9th of March 2021 an assessment of shallow soils in areas proposed for the placement of a childcare centre and targeted sample locations in proximity to existing historical buildings.

This PSI has been prepared to comply with ACT EPA (2017) Contaminated Sites Environment Protection Policy (CSEPP) that states "A site assessment would normally be required where there is a change to the lease purpose or land use where the past use of the land may have caused contamination".

1.2 Objective

The objective of this PSI is to:

- Identify potentially contaminating activities (PCAs) which may have occurred or are occurring at the site.
- Provide an initial assessment of potential risks to human health and the environment.
- Provide a conclusion as to the suitability of the site for the land use planned under the current Territory Plan terminology and the proposed lease variation.

1.3 Scope of Work

The scope of work for this investigation comprised:

- A review of property details and a description of the features of this site.
- A review of current zoning and land use on and surrounding the site.
- A review of regional geology and hydrogeology.
- A review of historical aerial photographs of the site and surrounding area.
- A review of historical land titles ownership.
- A review of publicly available information.
- A search of the Contaminated Sites Database and Geographic Information System maintained by the ACT EPA.
- A search of the Dangerous Substances Register, Dangerous Goods Database and the Manifest Quantity Notifications maintained by Worksafe ACT.
- An inspection of the site.

- Advancement of four boreholes (BH01 to BH04) and surface (SS01 to SS08) sample locations targeting the area proposed for the placement of a childcare centre and locations in proximity to existing historical buildings.
- Submission of 14 samples to a NATA accredited laboratory to evaluate concentrations of contaminants of potential concern.
- Compilation of this information and data presented in this PSI report.

1.4 Legislative Framework

The PSI has been prepared in general accordance with the guidelines endorsed by the ACT EPA CSEPP, including but not limited to:

- National Environment Management (Assessment of Site Contamination) Measure 1999 (amended 2013) (the NEPM).
- ACT EPA Information Sheet 7 - Guidance for undertaking preliminary contamination investigations for development/lease variation purposes.
- ACT EPA Information Sheet 11 – Environment Protection Authority Report Submission Requirements.

Figure 1: Site Location
Source: ACTMapi (2021)

2.0 SITE DETAILS

2.1 Site Identification

Table 1: Site Identification

Site Address	11 O'Hanlon Place, Nicholls ACT
Allotment Description	Block 12 Section 2 Nicholls ACT
Deposited Plan	DP9718
Land Zoning	CZ6: LEISURE AND ACCOMMODATION
Current Land Use	Ginninderra Village and Schoolhouse, mixture of retail and tourism
Proposed Land Use	Inclusion of a childcare centre
Total Area	11, 984 square metres or thereabouts.

2.2 Physical Setting and Current Land Use

The site is situated within the suburb of Nicholls and is located approximately 10 km north east of the Canberra Central Business District. The site is the premise of the Ginninderra Village and Schoolhouse and is bound to the south west by Barton Highway and O'Hanlon Place to the north.

Ginninderra Village covers 11,984 m^2 and comprises six single-storey buildings with a history of specialty arts and crafts, hospitality and other retail offerings including the schoolhouse and the former St Francis Catholic Church (Block 11 Section 2). The remainder of the site comprises low lying grass and vegetation.

Figure 2: Site Layout
Source: ACTMapi (2021)

2.3 Site Zoning

The site is currently zoned within the "Territory Plan Zone CZ6: Leisure and Accommodation". The primary objectives of the Leisure and Accommodation Zone, as described in the Territory Plan are:

a) *Provide for the development of entertainment, accommodation and leisure facilities for residents of and visitors to the ACT and surrounding region*

b) *Protect leisure and accommodation uses from competition from higher order commercial uses, and encourage activities that enhance the region's economic diversity and employment prospects*

c) *Ensure leisure and accommodation facilities have convenient access to public transport*

d) *Protect the amenity of nearby residential areas, with regard to noise, traffic, parking and privacy*

e) *Ensure the location of facilities, and their design and landscaping is compatible with environmental values*

f) *Ensure that the bulk, scale, size, design and landscaping of development is compatible with the surrounding landscape*

g) *Encourage activity at street frontage level and provide an appropriate level of surveillance of the public realm*

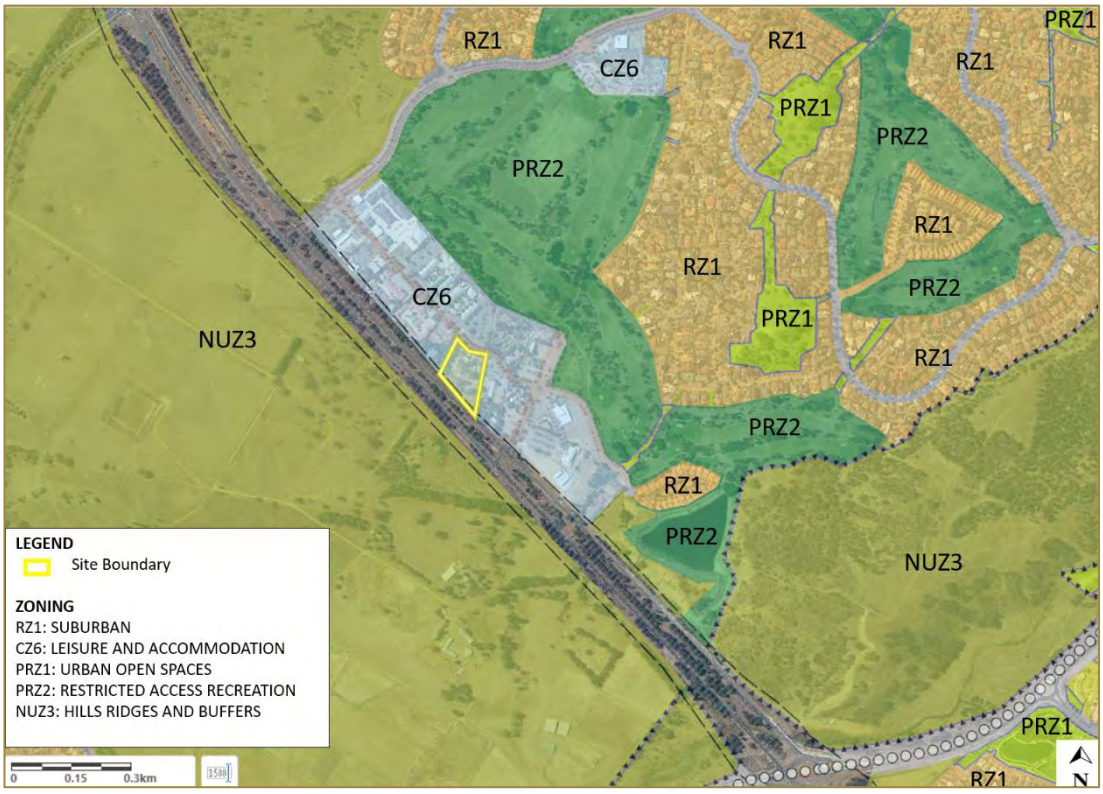

Figure 3: Site Zoning
Source: ACTMapi (2021)

2.4 Surrounding Land Use

As shown in Figure 3, the site is located within an expanse of land zoned for Leisure and Accommodation along the Barton Highway frontage. The expanse of Leisure and Accommodation zoned land is bordered by Restricted Access Recreation Zoned (PRZ2) land to the north and east, with Suburban (RZ1) Zone further north. A large expanse of Hills Ridges and Buffers zoned land is situated to the south west of Barton Highway.

The immediate surrounding land uses to the site are summarised below in Table 2.

Table 2: Surrounding Land Use

Direction	Land Use
North	O'Hanlon Place, Gold Creek Village (including gallery, gift ware, retail) Cockington Green Gardens (leisure and recreation), Gold Creek Country Club golf course (leisure and recreation), residential beyond
East	Gold Creek Village (including café, retail, accommodation), Gold Creek Road, Museum, Gold Creek Country Club golf course, The Promontory housing development (residential)
South	Barton Highway, CSIRO – Ginninderra Site (science and technology)
West	Gold Creek Village (including Chapel, Tourist Resort)

2.5 Site Geology

Soil in Central Canberra is expected to comprise up to 6 m of alluvium (clays) underlain by weathered bedrock, which is described on the 1:100,000 Geological Map (Abell 1992) as Silurian sedimentary and metamorphic bedrock inclusive of siltstones, mudstones, shales and sandstones. The 1:100,000 Geological Map indicates that natural soil in the vicinity of the site is likely to comprise of Silurian Volcanics including the Mount Painter Volcanic sediments (green-grey dacite porphyry, unfoliated) associated with Hawkins Volcanic Suite.

The dominant soil type expected to be found within the site area are characterised by the Williamsdale Landscape. The Williamsdale Landscape is transferral and is characterised by undulating rises, fans, valley flats and depressions on Silurian Volcanics of the Canberra Lowlands. Soils in the Williamsdale Landscape are moderately deep (0.5 m to 1.5 m), moderately well drained red and brown Chromosols and Kandosols overlying well drained brown and yellow Chromosols and brown Kandosols.

2.6 Site Hydrology and Hydrogeology

The site is located within the Gungahlin Hydrogeological Landscape (HGL). The area is dominated by constructed wetlands, waterways and lakes and is characterised by the sub-catchments of Ginninderra and Gungahlin Creeks. Review of the 1:100,000 Hydrology of the Australian Capital Territory and Environs (Evans 1984) indicates that the groundwater beneath the site is present in fractured rock aquifers, and that wells in the area typically yield between 0.5 – 1.0 L/s. The quality of groundwater abstracted from these wells ranges from around 500 – 1,000mg/L Total Dissolved Solids (TDS) indicating good to fair water quality.

A search of the ACT Government register for privately managed abstraction and monitoring bores within the ACT was undertaken and is summarised below in Table 3.

Table 3: Groundwater Bore Search (1km)

Bore ID	Purpose	Details	Comment
61	Abstraction 170m Northwest	Coordinates: X - 689952 Y - 6103657 No details recorded.	Gungahlin Registered Rural Block 309. Businesses operated on this Block known as 'Cockington Green Gardens' include miniaturised buildings, landscaped areas and a café.
14	Abstraction 420m East	Coordinates: X - 690550 Y - 6103395 No details recorded.	Block 11, Section 88 Nicholls. Gold Creek Country Club and Golfcourse.
13	Abstraction 580m North	Coordinates: X - 690172 Y - 6104060 No details recorded.	Block 14, Section 86 Nicholls. Gold Creek Country Club and Golfcourse.
186	Abstraction 540m Southwest	Coordinates: X - 689652 Y - 6102922 No details recorded.	Belconnen Registered Rural Block 1545. Exact use of property unknown, appears to be a private rural property.

2.7 Topography and Drainage

Local topography indicates a slight southerly slope towards the Barton Highway.

Surface water in the vicinity of the site is expected to infiltrate the local soils, be retained in surface water retention ponds and/or drain to local stormwater infrastructure prior to being discharged to the nearest surface water body, Ginninderra Creek, located approximately 1 km to the south-east, and the Gungahlin Pond, located approximately 1.5 km to the east of the site.

The Ginninderra Creek, a partly perennial stream of the Murrumbidgee catchment within the Murray-Darling basin, flows generally south-west across the Ginninderra Plain, through the Gungahlin and Belconnen districts.

3.0 SITE INSPECTION

An inspection of the site was undertaken by Agon on 29th January 2020. A photolog is presented in **Appendix A** and shows the main site features observed during the site inspection. Key observations were as follows:

- The site contains 5 buildings including two heritage buildings (schoolhouse and residence) that are dated 1883 (refer Photograph 1 and 2, **Appendix A**). The site buildings were used for a range of retail purposes as part of the wider Gold Creek Village tourist facility (refer Photographs 3-4, **Appendix A**).
- Retail facilities included:
    - Psychic reading.
    - Gift store.
    - Books & Music store.
    - Restaurant.
    - Fabric store.
- Other areas of the site comprised garden areas, pedestrian walkways, carparking and open areas (refer Photographs 5-7, **Appendix A**)
- No evidence of fuel storage (i.e., heating oil) was observed, with the buildings historically utilising wood fireplaces and more recently reverse cycle air conditioning.

4.0 HISTORICAL INFORMATION

4.1 Historical Aerial Imagery

Aerial Photographs were reviewed from 1951 to present to investigate the former land uses at the site. Selected extracts are provided in **Appendix B**, with approximate site locations outlined in yellow.

Table 4: Historical Aerial Imagery

Year	Description
1961	**Site**: A structure is situated in the northern portion of the site with a smaller shed situated further to the north. A row of mature trees is seen running north to south in the centre of the site with scattered trees across the site. Access tracks are visible from this residence to the southern boundary of the site from the main road and a track intersects the north east boundary of the site. **Surrounds**: The surrounding area is predominately vacant grazing farmland. Multiple structures and an orchard are seen adjacent the eastern boundary of the site. Deasland Homestead is seen in the wider local area to the east of the site.
1973	**Site**: The site remains relatively unchanged. **Surrounds**: No significant changes are observed from the previous photograph.
1981	**Site**: Structural changes have been undertaken to the main building at the site. **Surrounds**: The land immediate to the north, east and west has undergone development. The construction of the roadway infrastructure in the surrounding area has begun with the development of O'Hanlon Place to the north of the site and Barton Highway to the south of the site.
1998	**Site**: A building has been constructed along the northern boundary of the site. **Surrounds**: Significant increase in development within the expanse of land zoned for Leisure and Accommodation along the Barton Highway frontage. Surrounding road infrastructure has been further developed with the initial stages of Edie Payne Close. The dam adjacent the southern boundary of the site appears to have been filled. The Golf course to the north of the site has begun development.
2004	**Site**: Further buildings have been constructed in the central/western portion of the site. A gravel access hardstand is seen via O'Hanlon Place to the new buildings. **Surrounds**: Significant suburban development has undergone to the north and east of the site.
2012 Present	**Site**: No significant changes. Minor structural changes and the clearing of some of the mature trees across the site. **Surrounds**: No significant changes.

4.2 Historical Ownership

A search of historical titles was undertaken using the Australian Capital Territory Land Information System (ACTLIS). Historical Titles are available from 2009 to 2014 and indicate various leases and subleases to individual entities occurred during that time. Details of these transactions are recorded in the Historical Titles search provided in **Appendix C.**

4.3 ACT Heritage Register

A review of the ACT Heritage Register indicates the site contains a heritage objects or place within The Ginninderra Village Complex (Heritage ID 174; Location ID 96) comprising:

a) the school teacher's residence and schoolroom; and

b) the adjoining weatherboard building which originally housed a kitchen.

These buildings date between 1983-1984. In accordance with s54(1) of the *Land (Planning and Environment) Act 1991* the following requirements are identified as essential to the conservation of the heritage significance of the place. These requirements are prepared to implement the following conservation policy for the place:

The original built elements of the place and their setting in the Ginninderra Village Precinct are to be conserved and appropriately maintained.

i. Building including alterations and additions

a) New buildings in the precinct may be permitted where their design and siting will not adversely affect the heritage values of the place.

b) Minor internal and external alterations and changes may be made to the buildings shown on Figure 51, where the proposed works will not adversely affect the heritage values of the place.

ii. Demolition

a) Subject to (ii)(b), demolition of original buildings and structures identified on Figure 51 shall not be permitted, other than in exceptional circumstances, including circumstances in which the buildings and structures are structurally unsound and beyond economic repair or where there are significant public health and safety reasons to warrant demolition. Demolition shall not be permitted unless it can be demonstrated that there is no prudent and feasible alternative.

b) The demolition of original building fabric may be permitted in the context of sympathetic alterations and additions to original buildings and structures.

iii. Landscape

a) New landscape elements may be permitted where they will enhance the heritage values of the place.

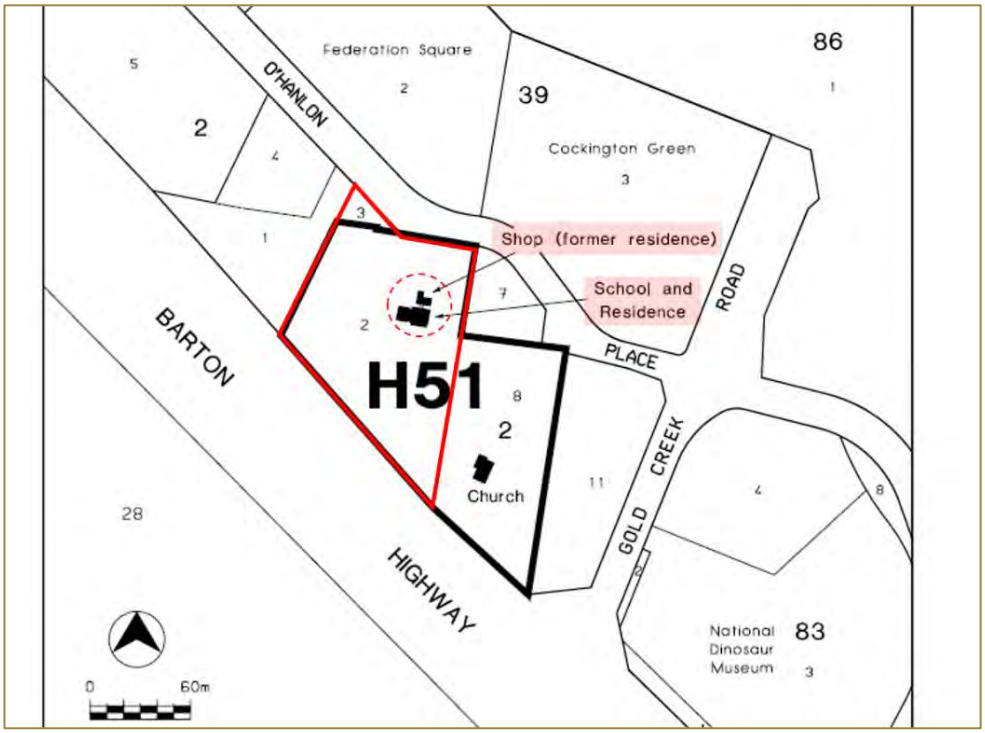

Figure 4: **Heritage Listed Buildings**
Source: ACT Heritage Council (2021)

A number of articles relating to the history of the site were reviewed by Agon, these summarised the site history as follows:

- 1883-1913 Ginninderra Public School.
- 1913-1963 used as the Ginninderra Post Office.
- Site buildings were used for storage and later as a museum, before becoming part of the Gold Creek Village (1982) tourist facility when it was used for a range of retail commercial premises.

4.4 Office of Environment Protection Authority

4.4.1 Public Register of Contaminated Sites

A search of the ACT EPA Register of Contaminated Sites (October 2018) was undertaken to identify any site contamination notifications or reports held by the EPA in the public register, under the *Environment Protection Act 1993* for the site and the Division of Nicholls. The active Caltex Service Station, Block 10 Section 2 Nicholls, was listed as a notified contaminated site under Section 76(2) and is located approximately 700m north west to the site.

4.4.2 ACT EPA Contaminated Land Search

A search of the Register of Contaminated Sites maintained by the ACT EPA (under the Environment Protection Act 1997) was undertaken to identify any site contamination notifications or reports. In summary, the site and nearby properties are not recorded on the Register of Contaminated Sites.

The block is not recorded on the EPA's contaminated sites management database or geographic information system.

The EPA noted that the block is occupied by a commercial complex, which may have utilised boiler heating or similar systems prior to introduction of natural gas to the ACT in the 1980s. These systems generally utilised diesel or heating oil fuels which was mainly stored in underground fuel storage tanks.

The EPA has not issued any orders of assessment or remediation under sections 91C (1) or 91D (1) respectively, environment protection orders under sections 125 (2) or (3), requested an audit under section 76 (2) or received an audit notification under section 76A (1) of the Environment Protection Act 1997 (the Act) over the site and as a result the site is not recorded on the Register of contaminated sites under section 21A of the Act.

A copy of the EPA's response to this request, dated 20/01/2021 is included as **Appendix D**.

4.5 Office of Regulatory Services – Dangerous Goods Search

A search of the Dangerous Substances Register, Dangerous Goods Database and the Manifest Quantity Notifications maintained by Worksafe ACT was requested for the site.

A search response was received (dated 02 February 2021), which indicated no records of dangerous goods storage was reported for the site. A copy of this search result is provided in **Appendix D**.

4.6 Leaseholder Interview, Building Plans and Heating Methods

An inspection of the site was undertaken with the leaseholder Mr Stan Waldren on the 21st April 2021, key items discussed:

- The building occupied by the Green Herring Restaurant was constructed of raw timber, it is understood this building was imported as a complete structure to the site in the 1970s. The original schoolhouse and post office are the original buildings on the block.
- Buildings in the northern portion of the site were of more recent construction to host the retail tenancies.
- The area proposed for the childcare centre was inspected and the exact location/arrangement are subject to design and sitting.
- Stand was not aware of any contaminating activities that may have occurred at the site.
- The historical buildings utilised wood fired heating with no evidence of heating oil tanks for operating a boiler. Similarly the more recent building structures used air conditioning.

4.7 Potentially Contaminating Activities

Historically, the site was developed as a schoolhouse and later used as post office. More recent site uses have been centred around tourism, retail and food outlets as part of the Gold Creek Village tourist facility. Due to the age of some buildings within the site, historically application of pesticides may have offered in close proximity to these buildings. The historical application of pesticides is considered a Potentially Contaminating Activities (PCA) and has been assessed, with regard to the area proposed for placement of a childcare centre, in **Section 5.0**.

5.0 TARGETTED SITE ASSESSMENT

5.1 Scope of Work

The following scope of work was implemented:

- Proposed Childcare Area – The area proposed for the placement of the childcare centre was targeted by sample locations BH02, BH04, SS01, SS02, SS03, SS04 and SS05 to assess surface soils for the presence of pesticides. BH04 was also assessed for a broad range of contaminants (refer **Table 3**).
- Adjacent Historical Buildings – The areas adjacent to the historical buildings were assessed by sample locations BH01, BH03, SS06, SS07 and SS08 for the presence of pesticides. BH01 was also assessed for a broad range of contaminants (refer **Table 3**).
- Submission of 14 samples to a NATA accredited laboratory to evaluate concentrations of contaminants of potential concern.
- Comparison of soil analysis data against the adopted assessment criteria and a summary of results.

5.2 Field Methodology

The following field methodology was implemented to assess fill materials present at the site:

Table 5: Field Methodology

Item	Description
Sample Collection	Samples were collected by an experienced Agon Environmental Scientist and were recovered by hand. Fresh nitrile gloves were used at each sample location to prevent cross contamination. Bulk undisturbed soil (recovered via the auger and/or spade) were selected for sampling. Sample collection was in general accordance with the ASC (2013) NEPM. Samples were sent under chain of custody documentation in chilled condition to the receiving NATA Accredited laboratory (Eurofins).
QA/QC	Two field duplicates QC101A (SS07) and QC101B (BH04-0.4) was collected as part of the assessment. Comparison of Relative Percent Differences (RPDs) between the duplicates and the primary sample were within the acceptable range; similarly the laboratory QA/QC were within the acceptable range. The QA/QC results are considered adequate for the purpose of the PSI and data are therefore considered acceptable.
Contaminants of Concern (CoC)	The primary contaminants of concern based on the site history were: • Metals, noting Arsenic was historically used as a pesticide. • OCP/OPP. Two additional samples were assessed for a broader range of contaminants to confirm their absence: • TRH • BTEX. • PAHs.
Observations	Shallow soils were logged to comprise: • Garden Soil (0-300mm) – Silty sandy topsoil, rootlets and gravels traces (to 20mm) and bark chips. Logged at BH01, BH03, SS08. • Grass underlain by clayey silt (inferred natural) logged at SS01, SS02, SS03, BH02, SS04, SS05 and BH04. • Gravels underlain by clayey silt (inferred natural) logged at SS06 and SS07. No indicators of contamination (i.e. staining, odours) or anthropogenic inclusions observed.

Item	Description
Adopted Assessment Criteria	A portion of the site is proposed to be used for childcare (refer **Figure 4**) this area has been compared to the relevant **ASC (2013) NEPM HIL/HSL A** values appropriate for sensitive land uses. The reminder of the site is being used for a range of commercial purposes (shops, food outlets) and has accordingly been compared to the relevant **ASC (2013) NEPM HIL/HSL D** values appropriate for ongoing commercial/industrial land uses.

Figure 4 shows the sample locations advanced as part of this PSI.

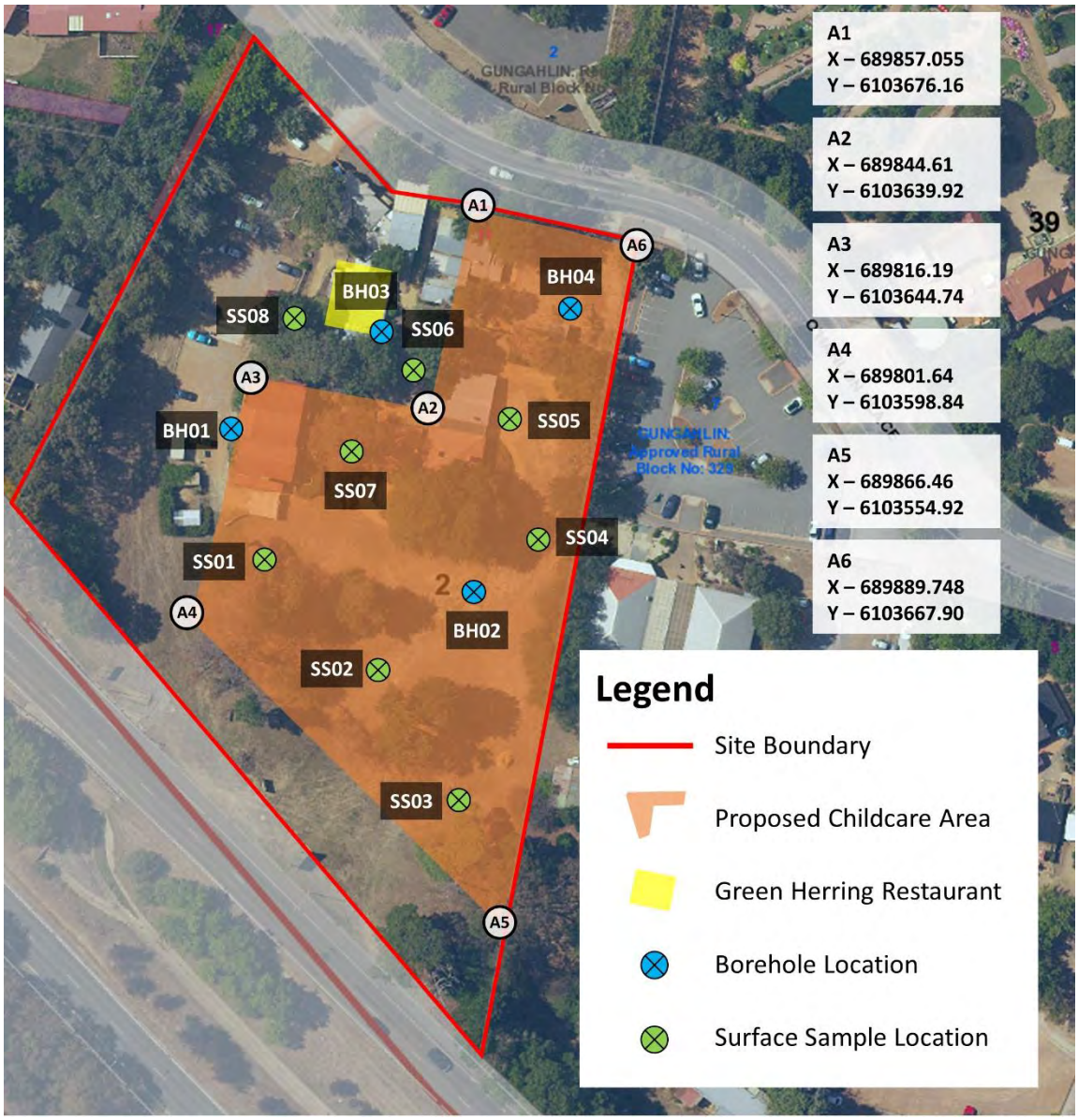

Figure 5: **Sample Location Plan**
Source: ACTMapi (2021)

5.3 Results

All soil analysis results were less than the adopted assessment criteria applicable to the relevant area.

5.4 Discussion

The soil assessment data did not identify the presence of pesticides or other contaminants at all sample locations. BH03-0.3 reported lead at 1,400 mg/kg which is less than the HIL D criterion of 1,500 mg/kg but is elevated compared to the HIL A criterion of 300 mg/kg. This result was inconsistent with all other sample locations which reported lead to be between 9.4 and 100 mg/kg. On this basis it is probable that the Green Herring Restaurant building (which was imported to the site in the 1970s - **Section 4.6**) contains lead-based paint which can flake/deteriorate to surrounding adjacent soils.

6.0 CONCLUSIONS

The PSI data summarised in this report indicates that the site was developed between 1883-1884 as the Ginninderra Public School. The site was used as a school until 1913 and used as a Post Office till 1963. Since then, the site was used for storage and as a museum and more recently it was used for a range of retail purposes as part of the wider Gold Creek Village tourist facility.

Agon understand the proponent is seeking to vary the Crown Lease to add a "childcare centre" to the southern and/or western portion of the site (the exact placement location subject to later design and sitting). To support this PSI Agon undertook an assessment of the proposed childcare area and targeted locations adjacent to the historical buildings present at the site.

Assessment the proposed childcare area did not identify the presence of pesticides or other indicators of contamination (i.e. staining, odours or anthropogenic inclusions). On this basis, Agon conclude that the proposed childcare area suitable for the Crown Lease variation to add 'childcare centre' and all land uses permitted under a Merit Track Assessment for CZ6. This conclusion only applies to the area shown in **Figure 5**, with boundary coordinates of:

- **Boundary Coordinate A1**:
  - X – 689857.055
  - Y – 6103676.16
- **Boundary Coordinate A2**:
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  - X – 689889.748
  - Y – 6103667.90

Other areas of the site are suitable for ongoing commercial/industrial land uses. The elevated lead concentrations at sample location BH03, whilst less than the adopted HIL D commercial/industrial land use criteria, is inconsistent with the other sample locations at the site. Agon recommend:

- A hazardous materials survey be undertaken specifically for the presence of lead paint (and other hazardous building materials) associated with the Green Herring Building which was imported to the site in the 1970s.

7.0 LIMITATIONS OF THIS REPORT

This report has been prepared in accordance with industry recognised standards and procedures current at the time of the work. The report presents the results of the assessment based on the quoted scope of works (unless otherwise agreed in writing) for the specific purposes of the engagement by the Client. No warranties expressed or implied are offered to any third parties and no liability will be accepted for use of this report by third parties.

The assessment of environmental and human health risk included in this report relate to the whole site as described in the report. If the site is subject to demolition works or redevelopment, the risk profile of the site will change and the conclusions of this report will no longer be valid. If the site is subject to subdivision, the risk profile of each division of the site will change and the conclusion of this report will no longer be valid.

Consideration of the aesthetic and geotechnical suitability of site soils has been excluded from this report. Aesthetic and geotechnical suitability may need to be addressed in subsequent assessments.

Although no onsite sources of groundwater contamination were identified during this investigation, given the regional history of land use around the site, groundwater contamination may have occurred in the vicinity of the site. Groundwater investigation was excluded from the scope of this investigation and comments in relation to potential groundwater at the site have been excluded from this report.

All information provided by third parties has been assumed to be correct and complete. Agon does not assume any liability for misrepresentation of information by third parties or for matters not visible, accessible or present on the subject site.

Opinions and judgements expressed herein are based on Agon's understanding of current regulatory standards and should not be construed as legal opinions.

No responsibility is accepted for use of any part of this report in any other context or for any other purpose or by third parties other than those listed above.

This report should be read in full.

8.0 REFERENCES

ACT Department of Environment and Sustainable Development Information sheet 7 – *Guidance for undertaking preliminary contamination investigations for development/lease variation purposes.* Australian Capital Territory.

ACT Department of Environment and Sustainable Development Information sheet 11 – *EPA Report Submission Requirements.* Australian Capital Territory.

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ACT Government (2020) ACT Legislation Register, *Territory Plan Version R234, 28 February 2020*. Located at: https://www.legislation.act.gov.au/ni/2008-27/Current

Abell (1992) *Canberra New South Wales and Australian Capital Territory 1:100 000 Map Sheet 8727.* Bureau of Mineral Resources, Canberra.

ANZECC (1999) *Guidelines for the Assessment of On-Site Containment of Contaminated Soil*. Australian and New Zealand Environment Council, Canberra.

Evans, WR (1984*) Hydrogeology of the Australian Capital Territory and Environs*. Bureau of Mineral Resources, Geology and Geophysics, Canberra.

Evans, WR, Croke, BFW, Ticehurst, JL, Jakeman, AJ (2004) *Sustainable Groundwater Yield Assessment: Weston Sub-Catchment, ACT.* Integrated Catchment, assessment and Management Centre (iCAM) Australian National University, Canberra.

National Environment Protection Council (1999) *Amended National Environmental Protection Measures Schedule B series.* Department of Sustainability, Environment, Water, Population and Communities, Canberra.

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APPENDIX A: SITE INSPECTION

Photograph 1: The Ginninderra School House (1983)

Photograph 2: Origianl residence

Photograph 3: Building used for retail

Photograph 4: Building used for retail

Photograph 5: Gardens throughout the site.

Photograph 6: Garden areas between buildings

Photograph 7: Open area at the south of the site adjoining the Barton Highway

APPENDIX B: HISTORICAL AERIAL IMAGERY

Historical Aerial Photograph 1: 1961

Historical Aerial Photograph 2: 1973

Historical Aerial Photograph 3: 1981

Historical Aerial Photograph 4: 1998

Historical Aerial Photograph 5: 2004

Historical Aerial Photograph 6: 2014

APPENDIX C: HISTORICAL TITLE SEARCH

ORIGINAL

Entered in Register Book Vol. 1612 Folio 68

19 OCT 2001

CANCELLED ON ISSUE OF NEW CERTIFICATE OF TITLE 19/10/01

AUSTRALIAN CAPITAL TERRITORY

LAND (PLANNING AND ENVIRONMENT) ACT 1991

Andrew Taylor
Registrar-General

THE AUSTRALIAN CAPITAL TERRITORY REGISTRAR-GENERAL'S OFFICE

Australian Capital Territory (Planning and Land Management) Act 1988 (C'th) ss 29, 30 & 31

LEASE GRANTED pursuant to the Land (Planning and Environment) Act 1991 and the Regulations thereunder on the ELEVENTH day of SEPTEMBER Two thousand and one WHEREBY THE AUSTRALIAN CAPITAL TERRITORY EXECUTIVE ON BEHALF OF THE COMMONWEALTH OF AUSTRALIA

LESSEE (hereinafter called "the Commonwealth") grants to **GINNINDERRA SCHOOL HOUSE PTY LIMITED** A.C.N. 008 507 962 a company having its registered office at Unit 21 Molonglo Mall Fyshwick in the Australian Capital Territory

LAND (hereinafter called "the Lessee") ALL THAT piece or parcel of land situate in the Australian Capital Territory containing **an area of 1.198 Hectares** or thereabouts and being **Block 12 Section 2 Division of Nicholls** as delineated on **Deposited Plan Number** 9718 in the Registrar-General's Office at Canberra in the said Territory (hereinafter referred to as "the land") RESERVING unto the Territory all minerals TO HOLD unto the Lessee for the term commencing on the ELEVENTH day of SEPTEMBER **Two thousand and one** (hereinafter referred to as "the date of the commencement of the lease") and terminating on the **first** day of **January Two thousand and eighty two** to be used by the Lessee for the purpose set forth in sub-clause (a) of Clause 3 of this lease only YIELDING AND PAYING THEREFOR rent in the amount and in the manner and at the times hereinafter provided and UPON AND SUBJECT TO the covenants conditions and agreements hereinafter contained.

TERM

INTERPRETATION

1. IN THIS LEASE unless the contrary intention appears:

(a) "Australian Capital Territory Executive" means the Executive established by section 36 of the Australian Capital Territory (Self-Government) Act 1988 (C'th);

(b) "building" means any building or structure, as those terms are defined in s222 of the Land (Planning and Environment) Act 1991, which requires approval under Part 6 of that Act;

(c) "gross floor area" means the sum of the gross areas of the floor or floors of the building measured from the external faces of the exterior walls or from the centre lines of walls separating the building from any other building;

(d) "Lessee" shall -

(i) where the Lessee consists of one person be deemed to include the Lessee and the executors administrators and assigns of the Lessee;

(ii) where the Lessee consists of two or more persons be deemed to include in the case of a tenancy in common the persons and each of them and their and each of their executors administrators and assigns and in the case of a joint tenancy be deemed to include the said persons and each of them and their and each of their assigns and the executors administrators and assigns of the survivor of them; and

(iii) where the Lessee is a corporation be deemed to include such corporation its successors and assigns;

(e) "premises" means the land and any building or other improvements on the land;

(f) "Territory" means -

(i) when used in a geographical sense the Australian Capital Territory; and

(ii) when used in any other sense the body politic established by section 7 of the Australian Capital Territory (Self Government) Act 1988 (C'th);

(g) Words in the singular include the plural and vice versa; words importing one gender include the other genders.

2. THE LESSEE COVENANTS WITH THE COMMONWEALTH as follows:

RENT

(a) That the Lessee shall pay to the Territory rent at the rate of five cents per annum if and when demanded payable within one month of the date of any demand made by the Territory relating thereto and served on the Lessee;

MANNER OF PAYMENT OF RENT

(b) That any rent or other moneys payable by the Lessee under this lease shall be paid to such person as may be authorised by the Territory for that purpose at Canberra in the said Territory without any deduction whatsoever.

3. THE LESSEE FURTHER COVENANTS WITH THE COMMONWEALTH as follows:

PURPOSE

(a) To use the premises only for the purposes of an arts and craft display museum and the sale of antiques scrubbed furniture pottery weaving handcrafts old wares bric-a-brac light refreshments and restaurant;

GROSS FLOOR AREA

(b) That the gross floor area of any building or buildings erected on the land shall not exceed a total of 1200 square metres PROVIDED ALWAYS THAT the existing "Ginninderra Schoolhouse" shall not exceed 180 square metres;

CARPARKING

(c) Where the gross floor area of the building or buildings on the said land exceeds 530 square metres the Lessee shall provide and maintain an approved carparking area on the land to a standard acceptable to the Territory in accordance with plans and specifications previously submitted to and approved in writing by the Territory;

LANDSCAPING

(d) That the Lessee shall provide and maintain landscaping on the land to a standard acceptable to the Territory in accordance with plans and specifications prepared by the lessee and previously submitted to and approved in writing by the Territory;

DISABLED PERSONS ACCESS

(e) That the Lessee shall provide and maintain facilities for the disabled to a standard acceptable to the Territory to ensure that disabled persons are given full opportunity for access;

SERVICE AREAS	(f)	That the Lessee shall screen and keep screened all service areas to the satisfaction of the Territory and shall ensure that all plant and machinery contained within the premises is suitably screened from public view;
ADDITIONAL FITTINGS	(g)	That the Lessee shall not without the previous consent in writing by the Territory install any additional fittings fixtures or other equipment in the premises;
BUILDING SUBJECT TO APPROVAL	(h)	That the Lessee shall not without the previous approval in writing of the Territory erect any building or make any structural alterations to any building, on the land;
CONSERVATION AND MANAGEMENT PLAN	(i)	That the Lessee shall not do anything on the premises that is contrary to the Conservation and Management Plan which specifies measures for the protection of the "Ginninderra Schoolhouse";
MANAGEMENT	(j)	That the Lessee shall manage the premises and business to the satisfaction of the Territory and in accordance with the laws in force in the said Territory relating thereto;
REPAIR	(k)	That the Lessee shall at all times during the said term maintain repair and keep in repair the premises to the satisfaction of the Territory;
FAILURE TO REPAIR	(l)	If and whenever the Lessee is in breach of the Lessee's obligations to maintain repair and keep in repair the premises the Territory may by notice in writing to the Lessee specifying the repairs and maintenance needed require the Lessee to effect the necessary work in accordance with the notice. If the Territory is of the opinion that a building or some other improvement on the land is beyond reasonable repair the Territory may by notice in writing to the Lessee require the Lessee to remove the building or improvement and may require the Lessee to construct a new building or improvement in place of that removed within the time specified in the notice. If the Lessee does not carry out the required work within the time specified by the Territory any person or persons duly authorised by the Territory with such equipment as is necessary may enter the premises and carry out the necessary work and all costs and expenses incurred by the Territory in carrying out the work shall be paid by the Lessee to the Territory on demand and from the date of such demand until paid shall for all purposes of this lease be a debt due and payable to the Territory by the Lessee;

RIGHT OF INSPECTION

(m) Subject to the provisions of the Land (Planning and Environment) Act 1991 to permit any person or persons authorised by the Territory to enter and inspect the premises at all reasonable times and in any reasonable manner;

RATES AND CHARGES

(n) To pay all rates charges and other statutory outgoings assessed levied or payable in respect of the premises as and when the same fall due.

4. THE COMMONWEALTH COVENANTS WITH THE LESSEE as follows:

QUIET ENJOYMENT

That the Lessee paying the rent and observing and performing the covenants and stipulations on the part of the Lessee to be observed and performed shall quietly enjoy the premises without interruption by the Territory or any person lawfully claiming from or under or in trust for the Territory.

5. IT IS MUTUALLY COVENANTED AND AGREED as follows:

TERMINATION

(a) That if -

(i) any rent or other moneys payable under this lease shall remain unpaid for three months next after the date appointed for payment thereof (whether such rent or other moneys shall have been formally demanded or not); or

(ii) after completion of an approved development as aforesaid the land is at any time not used for a period of one year for the purpose for which this lease is granted; or

(iii) the Lessee shall fail to observe or perform any other of the covenants herein contained on the part of the Lessee to be observed or performed and shall have failed to remedy such breach within a period of six months from the date of service on the Lessee of a notice in writing from the Territory specifying the nature of such breach

the Territory may terminate this lease but without prejudice to any claim which the Territory and or the Commonwealth may have against the Lessee in respect of any breach of the covenants on the part of the Lessee to be observed or performed;

ACCEPTANCE OF RENT

(b) That acceptance of rent or other moneys by the Territory during or after any period referred to in paragraph (i) or (ii) or (iii) of sub-clause (a) of this clause shall not prevent or impede the exercise by the Territory of the powers conferred upon it by sub-clause (a) of this clause;

FURTHER LEASE

(c) That subject to the provisions of the Land (Planning and Environment) Act 1991 the Lessee shall be entitled to a further lease of the land for such further term and at such rent and subject to such conditions as may then be provided or permitted by Statute Ordinance or Regulation;

NOTICES

(d) That any notice requirement demand consent or other communication to be given to or served upon the Lessee under this lease shall be deemed to have been duly given or served if signed by or on behalf of the Territory and delivered to or sent in a prepaid letter addressed to the Lessee at the registered office of the Lessee in the said Territory BUT if for any reason the Lessee does not have a registered office in the said Territory then at the usual or last-known address of the Lessee or affixed in a conspicuous position on the premises;

EXERCISE OF POWERS

(e) Any and every right power and or remedy conferred on the Commonwealth the Territory or the respective Ministers hereunder or implied by law may be exercised on behalf of the Commonwealth the Territory or the respective Ministers as the case may be by:

(i) the Australian Capital Territory Executive;

(ii) the Minister for the time being administering the Land (Planning and Environment) Act 1991 or any Statute Ordinance or Regulation substituted therefor;

(iii) an authority or person for the time being authorised by the Australian Capital Territory Executive or the Minister referred to in (i) or (ii) above or by law to exercise those powers or functions of the Territory the Commonwealth or the relevant Minister; or

(iv) the person to whom the Minister referred to in (ii) above has delegated all his powers or functions under the said Land (Planning and Environment) Act 1991 or any Statute Ordinance or Regulation substituted therefor.

IN WITNESS whereof the Australian Capital Territory Executive on behalf of the Commonwealth and the Lessee have executed this Lease.

SIGNED SEALED AND DELIVERED)
by **MARIA VIRGINIA SERRANO**)
a person duly authorised by the)
Australian Capital Territory Executive)
for and on behalf of the Commonwealth)
in the presence of:)

Signed by **GINNINDERRA SCHOOL HOUSE PTY LIMITED** A.C.N.008 507 962 by:)

Ginninderra School House Pty Limited ACN 008 507 962
Common Seal

Signature	Signature
RAY L. DAVIS	GRAEME CAMACE
Name in full	Name in full
DIRECTOR.	SECRETARY
Director/Secretary	Director/Secretary

Signed Sealed and Delivered for and on behalf of National Australia Bank Limited
by Fiona Mary FERGUSON
its duly constituted Attorney under Power of Attorney Registered No. 5484 M 066801
in the presence of Kylie GRIFFITH
Bank Officer
255 George Street, Sydney NSW

NATIONAL AUSTRALIA BANK LIMITED
by its Attorney
Manager

ACT REVENUE OFFICE
ORIGINAL DULY STAMPED
Assessed

Duty Paid $20.00

for Surrender Regrant - Non Residen
tial
00619222 00001 21/09/01

Block Section 2 Nicholls

AUSTRALIAN CAPITAL TERRITORY

TITLE SEARCH

Nicholls Section 2 Block 12 on Deposited Plan 9718
Lease commenced on 11/09/2001, granted on 11/09/2001, term TERMINATING 01-JAN-2082
Area is 1 hectares 1980 square metres or thereabouts

Sole Proprietor:
Ginninderra Village Pty Limited
of C/- Maxim Services Pty Limited, Level 2, 59 Wentworth Avenue Kingston ACT 2604

Registered Date	Dealing Number	Description
		Original title is **Volume** 1612 **Folio** 68 Purpose Clause: Refer Crown Lease
10/12/2009	1662309	Application to vary Crown Lease - refer instrument
01/05/2013	1843462	Sublease to DALE BEAUMONT BREYNARD and YVETTE HELENA BREYNARD tenants in common in equal shares of Area 7 on SL Plan 6665 Exp 30/08/2017
20/11/2013	1890720	Sublease to DALE BEAUMONT BREYNARD and YVETTE HELENA BREYNARD of Unit 6 on SL Plan 6665 Exp 30/06/2018
27/05/2014	1919685	Mortgage to National Australia Bank Limited
		End of interests

This data (excluding administrative interests) is certified correct by the Registrar-General at 10:22:09 on 17/11/2017
Unregistered dealings have not been formally recorded in the register.

APPENDIX D: ACT GOVERNMENT SEARCH

From:	Zhang, Jianmin on behalf of Contaminated Sites
To:	John OBrien
Subject:	Contaminated Land Search Result - Block 12 Section 2 Nicholls Gungahlin
Date:	Wednesday, 20 January 2021 2:45:48 PM
Attachments:	image001.png

OFFICIAL

Dear Mr O'Brien

RE: CONTAMINATED LAND SEARCH

Thank you for your search form request of 18/01/2021 enquiring about:

Block 12 Section 2 Nicholls Gungahlin

Records held by the Environment Protection Authority (EPA) for the above block(s) indicate the following:

The block is not recorded on the EPA's contaminated sites management database or geographic information system.

The site is currently occupied by a commercial complex. Commercial/industrial complexes, prior to the introduction of natural gas to the ACT in the 1980's, utilised boiler heating or similar systems. These systems were generally fuelled by diesel or heating oil which was mainly stored in underground fuel storage tanks.

The ACT EPA Contaminated Sites Environment Protection Policy 2017 lists fuel storage as an activity associated with land contamination which may pose a risk to human health and the environment.

Other potentially contaminating activities may have also been undertaken at the site associated with past and current uses

The EPA has not issued any orders of assessment or remediation under sections 91C (1) or 91D (1) respectively, environment protection orders under sections 125 (2) or (3), requested an audit under section 76 (2) or received an audit notification under section 76A (1) of the Environment Protection Act 1997 (the Act) over the site and as a result the site is not recorded on the Register of contaminated sites under section 21A of the Act.

The information detailed above only relates to records held by the EPA and may not represent the actual condition of the site.

At present the EPA has no information on contamination of the above block(s) other than as detailed above. However, this does not absolutely rule out the possibility of contamination and should not be interpreted as a warranty that there is no contamination.

I appreciate that this does not absolutely rule out the existence of contamination of the soils. If you or your clients wish to be completely sure you, or they, should arrange to conduct independent tests.

Regards
Jianmin

Jianmin Zhang | Environment Protection Officer, Environmental Quality
Office of the Environment Protection Authority
Access Canberra | Chief Minister Treasury and Economic Development Directorate | ACT
Phone: 02 6207 2157|Email: jianmin.zhang@act.gov.au
480 Northbourne Avenue, Dickson **|** GPO Box 158 Canberra ACT 2601 |
www.act.gov.au/accessCBR

This email, and any attachments, may be confidential and also privileged. If you are not the intended recipient, please notify the sender and delete all copies of this transmission along with any attachments immediately. You should not copy or use it for any purpose, nor disclose its contents to any other person.

WORKSAFE ACT
SAFE + HEALTHY WORKPLACES

MAIL
PO Box 158
Canberra ACT 2601

PHONE
02 6207 3000

EMAIL
worksafe@act.gov.au

FAX
02 6206 0336

Mr John O'Brien
Agon Environmental Pty Ltd
14 Tulong Ave
COOMA NSW 2630

2/02/2021

Dear Mr O'Brien

Thank you for submitting an application for a records search on Section 2 Block 12 the Gold Creek Gallery at 11 O'Hanlon Place, Nicholls ACT.

I have conducted a search of our records and hold no information on above mentioned address.

(Note: Under the *Dangerous Goods Act 1975* (1975 to April 2004), tanks of 50,000 litres which contained diesel were not required to be licenced with regulator, only if the capacity was 50,001 litres and above).

If you have any questions in relation to this matter please do not hesitate in contacting me on 62076353 or email dangeroussubstances@act.gov.au

Kind regards

Lisa Bopping
Administration Officer
Corporate Services and
Regulatory Support

APPENDIX E: SOIL ASSESSMENT

AGON ENVIRONMENTAL

Table 1
Soil Analytical Results

JC0690
PSI

	Volatile																OCP/OPP													PAHs	
	TRH C6-C10 (F1)	TRH >C10-C16 (F2)	Benzene	Toluene	Ethylbenzene	Xylenes - Total	Napthalene	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Zinc	Aldrin and Dieldrin (Total)*	Chlordanes - Total	DDT + DDE + DDD (Total)*	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Heptachlor	Hexachlorobenzene	Methoxychlor	Toxaphene	2.4.5-Trichlorophenol	2.4-Dichlorophenol	Benzo(a)pyrene	Total PAH*
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
	<20	<20	<0.1	<0.1	<0.1	<0.3	<0.5	3.5	< 0.4	10	6.4	30	< 0.1	5.4	35	< 0.05	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 1	< 1	< 0.5	< 0.5	< 0.5
ASC NEPM (2013) HIL A + HSL A (0-1m) - Low Density Residential	45	110	0.5	160	55	40	3	100	20	100	6000	300	40	400	7400	6	50	240	270	270	270	10	6	10	300	20	600	900	3	300
ASC NEPM (2013) HIL D + HSL D (0-1m) - Commercial/Industrial	260	NL	3	160	NL	NL	NL	3000	900	3600	240,000	1500	730	6000	400,000	45	530	3600	2000	2000	2000	100	50	80	2500	160	500	9000	40	4000
Sample ID	**Area**	**Date**	**Depth**	**Material**																											
SS01	Childcare Area	12/04/2021	0.0-0.1	Surface Sample	-	-	-	-	-	-	-	2.3	< 0.4	19	8	45	-	7.3	76	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	-	-
SS02	Childcare Area	12/04/2021	0.0-0.1	Surface Sample	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SS03	Childcare Area	12/04/2021	0.0-0.1	Surface Sample	-	-	-	-	-	-	-	< 2	< 0.4	17	14	100	-	6.2	120	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	-	-
SS04	Childcare Area	12/04/2021	0.0-0.1	Surface Sample	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SS05	Childcare Area	12/04/2021	0.0-0.1	Surface Sample	-	-	-	-	-	-	-	2.1	< 0.4	13	5.5	17	-	< 5	160	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	-	-
BH02-0.2	Childcare Area	12/04/2021	0.2	Fill	-	-	-	-	-	-	-	3.7	< 0.4	11	8.3	54	-	5.4	53	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	-	-	-	-	-	-	-
BH04-0.1	Childcare Area	12/04/2021	0.1	Fill	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	-	-
BH04-0.4	Childcare Area	12/04/2021	0.4	Fill	<20	<20	< 0.1	< 0.1	< 0.1	< 0.1	< 0.3	2.1	< 0.4	14	7.1	38	< 0.1	5.6	120	-	-	-	-	-	-	-	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	-	-
QC101A	QA/QC	12/04/2021	-	QA/QC	-	-	-	-	-	-	-	3.9	< 0.4	13	19	27	-	5.6	1200	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-
QC101B	QA/QC	12/04/2021	-	QA/QC	-	-	-	-	-	-	-	< 2	< 0.4	12	5.2	16	-	< 5	150	-	-	-	-	-	-	-	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	-	-
SS06	Site Area	12/04/2021	0.0-0.1	Surface Sample	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	-	-
SS07	Site Area	12/04/2021	0.0-0.1	Surface Sample	-	-	-	-	-	-	-	4.6	< 0.4	15	26	30	-	5.8	1300	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	-	-
SS08	Site Area	12/04/2021	0.0-0.1	Surface Sample	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	-	-
BH01-0.1	Site Area	12/04/2021	0.1	Fill	< 20	< 20	-	< 0.1	< 0.1	< 0.1	< 0.3	2.9	< 0.4	16	7.5	11	< 0.1	5.2	36	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-
BH01-0.4	Site Area	12/04/2021	0.4	Fill	-	-	-	-	-	-	-	2.1	< 0.4	15	7	9.5	-	6.1	33	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	-	-	-	-	-	-
BH03-0.3	Site Area	12/04/2021	0.3	Fill	-	-	-	-	-	-	-	5.6	< 0.4	21	25	1400	-	7.6	160	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	-	-	-	-	-	-

Non-Detect (N.D)
Laboratory Limit of Reporting (LOR)
RPD

QC101A/SS07								16%		14%	31%	11%		4%	8%																
QC101B/BH04-0.4								5%		8%	6%	6%		0%	6%																

CHAIN OF CUSTODY RECORD

ABN 50 005 085 521

☑ Sydney Laboratory
Unit F3 Bld F, 16 Mars Rd, Lane Cove West, NSW 2066
02 9900 8400 EnviroSampleNSW@eurofins.com

☐ Brisbane Laboratory
Unit 1, 21 Smallwood Pl, Murarrie, QLD 4172
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Company	Agon	Project №	-
Address	4/10 Kennedy St Kingston	Project Name	JC0690
Contact Name	John O'Brien	Project Manager	JO
Phone №	0431582323	EDD Format (ESdat, EQuIS, Custom)	ESDAT
Special Directions		Sampler(s)	OP/JO
Purchase Order		Handed over by	J.O
Quote ID №	Quotation # 190129AEGA	Email for Invoice	john.o'brien@agonenviro.com.au; finance@agonenviro.com.au;
		Email for Results	john.o'brien@agonenviro.com.au

№	Client Sample ID	Sampled Date/Time (dd/mm/yy hh:mm)	Matrix (Solid (S) Water (W))	Analyses (Note: Where metals are requested, please specify "Total" or "Filtered"	SUITE does need to cover to below SOIL pricing)	M7 - Metals (As, Cd, Cr, Cu, Ni, Pb, Zn)	B14 - OCP/OPP	B10 - TRH, BTEXN, PAH, OCP, OPP, Metals (As, Cd, Cr, Cu, Ni, Pb, Zn, Hg)	Containers: Jar (Glass)	Jar (HDPE)	Bag 500mL ACM	Bag Acid Sulphate Soil	Small plastic bottle	Vial (headspace)	Plastic bottle (inorganics)	Amber bottle	Turnaround Time (TAT) Requirements (Default will be 5 days if not ticked)	Sample Comments / Dangerous Goods Hazard Warning
1	SS01	12.4.21	S			X											☐ Overnight (9am)*	
2	SS02	12.4.21	S				X										☐ 1 Day* ☐ 2 Day*	
3	SS03	12.4.21	S			X											☑ 3 Day* ☐ 5 Day	
4	SS04	12.4.21	S				X										* Surcharges apply	
5	SS05	12.4.21	S			X											☐ Other ( )	
6	SS06	12.4.21	S				X											
7	SS07	12.4.21	S			X												
8	SS08	12.4.21	S				X											
9	BH01-0.1	12.4.21	S					X										
10	BH01-0.4	12.4.21	S			X												
11	BH02-0.2	12.4.21	S			X	X											
12	BH03-0.3	12.4.21	S			X	X											
13	BH04-0.1	12.4.21	S				X											
14	BH04-0.4	12.4.21	S					X										
15	QC101a	12.4.21	S			X												
16	QC101b	12.4.21	S			X												
			Total Counts			9	7	2										

Method of Shipment: ☐ Courier (#) ☐ Hand Delivered ☐ Postal Name Date __/__/__ Time __:__

Eurofins | mgt Laboratory Use Only: Received By (SYD | BNE | MEL | PER | ADL | NTL | DRW) Date __/__/__ Time Temperature

Received By (SYD | BNE | MEL | PER | ADL | NTL | DRW) Date __/__/__ Time Report №

Submission of samples to the laboratory will be deemed as acceptance of Eurofins | mgt Standard Terms and Conditions unless agreed otherwise. A copy of Eurofins | mgt Standard Terms and Conditions is available on request.

Eurofins Environment Testing Australia Pty Ltd trading as Eurofins | mgt

L. Burgess E.F
13/4/21 12:02PM
786203

Agon Environmental Pty Ltd
3/224 Glen Osmond Road
Fullarton
SA 5063

NATA Accredited
Accreditation Number 1261
Site Number 1254

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

Attention: **John O'Brien**

Report **786703-S**
Project name
Project ID JC0690
Received Date Apr 13, 2021

Client Sample ID			**SS01**	**SS02**	**SS03**	**SS04**
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M21-Ap18194**	**M21-Ap18195**	**M21-Ap18196**	**M21-Ap18197**
Date Sampled			**Apr 12, 2021**	**Apr 12, 2021**	**Apr 12, 2021**	**Apr 12, 2021**
Test/Reference	LOR	Unit				
Heavy Metals						
Arsenic	2	mg/kg	2.3	-	< 2	-
Cadmium	0.4	mg/kg	< 0.4	-	< 0.4	-
Chromium	5	mg/kg	19	-	17	-
Copper	5	mg/kg	8.0	-	14	-
Lead	5	mg/kg	45	-	100	-
Nickel	5	mg/kg	7.3	-	6.2	-
Zinc	5	mg/kg	76	-	120	-
% Moisture	1	%	15	15	13	2.0
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	-	< 0.1	-	< 0.1
4.4'-DDD	0.05	mg/kg	-	< 0.05	-	< 0.05
4.4'-DDE	0.05	mg/kg	-	< 0.05	-	< 0.05
4.4'-DDT	0.05	mg/kg	-	< 0.05	-	< 0.05
a-BHC	0.05	mg/kg	-	< 0.05	-	< 0.05
Aldrin	0.05	mg/kg	-	< 0.05	-	< 0.05
b-BHC	0.05	mg/kg	-	< 0.05	-	< 0.05
d-BHC	0.05	mg/kg	-	< 0.05	-	< 0.05
Dieldrin	0.05	mg/kg	-	< 0.05	-	< 0.05
Endosulfan I	0.05	mg/kg	-	< 0.05	-	< 0.05
Endosulfan II	0.05	mg/kg	-	< 0.05	-	< 0.05
Endosulfan sulphate	0.05	mg/kg	-	< 0.05	-	< 0.05
Endrin	0.05	mg/kg	-	< 0.05	-	< 0.05
Endrin aldehyde	0.05	mg/kg	-	< 0.05	-	< 0.05
Endrin ketone	0.05	mg/kg	-	< 0.05	-	< 0.05
g-BHC (Lindane)	0.05	mg/kg	-	< 0.05	-	< 0.05
Heptachlor	0.05	mg/kg	-	< 0.05	-	< 0.05
Heptachlor epoxide	0.05	mg/kg	-	< 0.05	-	< 0.05
Hexachlorobenzene	0.05	mg/kg	-	< 0.05	-	< 0.05
Methoxychlor	0.05	mg/kg	-	< 0.05	-	< 0.05
Toxaphene	0.1	mg/kg	-	< 0.1	-	< 0.1
Aldrin and Dieldrin (Total)*	0.05	mg/kg	-	< 0.05	-	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	-	< 0.05	-	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	-	< 0.1	-	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	-	< 0.1	-	< 0.1

Client Sample ID			SS01	SS02	SS03	SS04
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M21-Ap18194	M21-Ap18195	M21-Ap18196	M21-Ap18197
Date Sampled			Apr 12, 2021	Apr 12, 2021	Apr 12, 2021	Apr 12, 2021
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Dibutylchlorendate (surr.)	1	%	-	98	-	69
Tetrachloro-m-xylene (surr.)	1	%	-	120	-	86
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	-	< 0.2	-	< 0.2
Bolstar	0.2	mg/kg	-	< 0.2	-	< 0.2
Chlorfenvinphos	0.2	mg/kg	-	< 0.2	-	< 0.2
Chlorpyrifos	0.2	mg/kg	-	< 0.2	-	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	-	< 0.2	-	< 0.2
Coumaphos	2	mg/kg	-	< 2	-	< 2
Demeton-S	0.2	mg/kg	-	< 0.2	-	< 0.2
Demeton-O	0.2	mg/kg	-	< 0.2	-	< 0.2
Diazinon	0.2	mg/kg	-	< 0.2	-	< 0.2
Dichlorvos	0.2	mg/kg	-	< 0.2	-	< 0.2
Dimethoate	0.2	mg/kg	-	< 0.2	-	< 0.2
Disulfoton	0.2	mg/kg	-	< 0.2	-	< 0.2
EPN	0.2	mg/kg	-	< 0.2	-	< 0.2
Ethion	0.2	mg/kg	-	< 0.2	-	< 0.2
Ethoprop	0.2	mg/kg	-	< 0.2	-	< 0.2
Ethyl parathion	0.2	mg/kg	-	< 0.2	-	< 0.2
Fenitrothion	0.2	mg/kg	-	< 0.2	-	< 0.2
Fensulfothion	0.2	mg/kg	-	< 0.2	-	< 0.2
Fenthion	0.2	mg/kg	-	< 0.2	-	< 0.2
Malathion	0.2	mg/kg	-	< 0.2	-	< 0.2
Merphos	0.2	mg/kg	-	< 0.2	-	< 0.2
Methyl parathion	0.2	mg/kg	-	< 0.2	-	< 0.2
Mevinphos	0.2	mg/kg	-	< 0.2	-	< 0.2
Monocrotophos	2	mg/kg	-	< 2	-	< 2
Naled	0.2	mg/kg	-	< 0.2	-	< 0.2
Omethoate	2	mg/kg	-	< 2	-	< 2
Phorate	0.2	mg/kg	-	< 0.2	-	< 0.2
Pirimiphos-methyl	0.2	mg/kg	-	< 0.2	-	< 0.2
Pyrazophos	0.2	mg/kg	-	< 0.2	-	< 0.2
Ronnel	0.2	mg/kg	-	< 0.2	-	< 0.2
Terbufos	0.2	mg/kg	-	< 0.2	-	< 0.2
Tetrachlorvinphos	0.2	mg/kg	-	< 0.2	-	< 0.2
Tokuthion	0.2	mg/kg	-	< 0.2	-	< 0.2
Trichloronate	0.2	mg/kg	-	< 0.2	-	< 0.2
Triphenylphosphate (surr.)	1	%	-	107	-	67

Client Sample ID			SS05	SS06	SS07	SS08
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M21-Ap18198	M21-Ap18199	M21-Ap18200	M21-Ap18201
Date Sampled			Apr 12, 2021	Apr 12, 2021	Apr 12, 2021	Apr 12, 2021
Test/Reference	LOR	Unit				
Heavy Metals						
Arsenic	2	mg/kg	2.1	-	4.6	-
Cadmium	0.4	mg/kg	< 0.4	-	< 0.4	-
Chromium	5	mg/kg	13	-	15	-
Copper	5	mg/kg	5.5	-	26	-
Lead	5	mg/kg	17	-	30	-
Nickel	5	mg/kg	< 5	-	5.8	-
Zinc	5	mg/kg	160	-	1300	-
% Moisture	1	%	4.3	6.5	23	5.9
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	-	< 0.1	-	< 0.1
4.4'-DDD	0.05	mg/kg	-	< 0.05	-	< 0.05
4.4'-DDE	0.05	mg/kg	-	< 0.05	-	< 0.05
4.4'-DDT	0.05	mg/kg	-	< 0.05	-	< 0.05
a-BHC	0.05	mg/kg	-	< 0.05	-	< 0.05
Aldrin	0.05	mg/kg	-	< 0.05	-	< 0.05
b-BHC	0.05	mg/kg	-	< 0.05	-	< 0.05
d-BHC	0.05	mg/kg	-	< 0.05	-	< 0.05
Dieldrin	0.05	mg/kg	-	< 0.05	-	< 0.05
Endosulfan I	0.05	mg/kg	-	< 0.05	-	< 0.05
Endosulfan II	0.05	mg/kg	-	< 0.05	-	< 0.05
Endosulfan sulphate	0.05	mg/kg	-	< 0.05	-	< 0.05
Endrin	0.05	mg/kg	-	< 0.05	-	< 0.05
Endrin aldehyde	0.05	mg/kg	-	< 0.05	-	< 0.05
Endrin ketone	0.05	mg/kg	-	< 0.05	-	< 0.05
g-BHC (Lindane)	0.05	mg/kg	-	< 0.05	-	< 0.05
Heptachlor	0.05	mg/kg	-	< 0.05	-	< 0.05
Heptachlor epoxide	0.05	mg/kg	-	< 0.05	-	< 0.05
Hexachlorobenzene	0.05	mg/kg	-	< 0.05	-	< 0.05
Methoxychlor	0.05	mg/kg	-	< 0.05	-	< 0.05
Toxaphene	0.1	mg/kg	-	< 0.1	-	< 0.1
Aldrin and Dieldrin (Total)*	0.05	mg/kg	-	< 0.05	-	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	-	< 0.05	-	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	-	< 0.1	-	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	-	< 0.1	-	< 0.1
Dibutylchlorendate (surr.)	1	%	-	106	-	81
Tetrachloro-m-xylene (surr.)	1	%	-	105	-	98
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	-	< 0.2	-	< 0.2
Bolstar	0.2	mg/kg	-	< 0.2	-	< 0.2
Chlorfenvinphos	0.2	mg/kg	-	< 0.2	-	< 0.2
Chlorpyrifos	0.2	mg/kg	-	< 0.2	-	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	-	< 0.2	-	< 0.2
Coumaphos	2	mg/kg	-	< 2	-	< 2
Demeton-S	0.2	mg/kg	-	< 0.2	-	< 0.2
Demeton-O	0.2	mg/kg	-	< 0.2	-	< 0.2
Diazinon	0.2	mg/kg	-	< 0.2	-	< 0.2
Dichlorvos	0.2	mg/kg	-	< 0.2	-	< 0.2
Dimethoate	0.2	mg/kg	-	< 0.2	-	< 0.2

Client Sample ID			SS05	SS06	SS07	SS08
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M21-Ap18198	M21-Ap18199	M21-Ap18200	M21-Ap18201
Date Sampled			Apr 12, 2021	Apr 12, 2021	Apr 12, 2021	Apr 12, 2021
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Disulfoton	0.2	mg/kg	-	< 0.2	-	< 0.2
EPN	0.2	mg/kg	-	< 0.2	-	< 0.2
Ethion	0.2	mg/kg	-	< 0.2	-	< 0.2
Ethoprop	0.2	mg/kg	-	< 0.2	-	< 0.2
Ethyl parathion	0.2	mg/kg	-	< 0.2	-	< 0.2
Fenitrothion	0.2	mg/kg	-	< 0.2	-	< 0.2
Fensulfothion	0.2	mg/kg	-	< 0.2	-	< 0.2
Fenthion	0.2	mg/kg	-	< 0.2	-	< 0.2
Malathion	0.2	mg/kg	-	< 0.2	-	< 0.2
Merphos	0.2	mg/kg	-	< 0.2	-	< 0.2
Methyl parathion	0.2	mg/kg	-	< 0.2	-	< 0.2
Mevinphos	0.2	mg/kg	-	< 0.2	-	< 0.2
Monocrotophos	2	mg/kg	-	< 2	-	< 2
Naled	0.2	mg/kg	-	< 0.2	-	< 0.2
Omethoate	2	mg/kg	-	< 2	-	< 2
Phorate	0.2	mg/kg	-	< 0.2	-	< 0.2
Pirimiphos-methyl	0.2	mg/kg	-	< 0.2	-	< 0.2
Pyrazophos	0.2	mg/kg	-	< 0.2	-	< 0.2
Ronnel	0.2	mg/kg	-	< 0.2	-	< 0.2
Terbufos	0.2	mg/kg	-	< 0.2	-	< 0.2
Tetrachlorvinphos	0.2	mg/kg	-	< 0.2	-	< 0.2
Tokuthion	0.2	mg/kg	-	< 0.2	-	< 0.2
Trichloronate	0.2	mg/kg	-	< 0.2	-	< 0.2
Triphenylphosphate (surr.)	1	%	-	104	-	82

Client Sample ID			BH01-0.1	BH01-0.4	BH02-0.2	BH03-0.3
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M21-Ap18202	M21-Ap18203	M21-Ap18204	M21-Ap18205
Date Sampled			Apr 12, 2021	Apr 12, 2021	Apr 12, 2021	Apr 12, 2021
Test/Reference	LOR	Unit				
Heavy Metals						
Arsenic	2	mg/kg	2.9	2.1	3.7	5.6
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	16	15	11	21
Copper	5	mg/kg	7.5	7.0	8.3	25
Lead	5	mg/kg	11	9.5	54	1400
Mercury	0.1	mg/kg	< 0.1	-	-	-
Nickel	5	mg/kg	5.2	6.1	5.4	7.6
Zinc	5	mg/kg	36	33	53	160
% Moisture	1	%	18	17	12	16
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	-	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
a-BHC	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05

Client Sample ID			BH01-0.1	BH01-0.4	BH02-0.2	BH03-0.3
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M21-Ap18202	M21-Ap18203	M21-Ap18204	M21-Ap18205
Date Sampled			Apr 12, 2021	Apr 12, 2021	Apr 12, 2021	Apr 12, 2021
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
b-BHC	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
d-BHC	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Toxaphene	0.1	mg/kg	< 0.1	-	< 0.1	< 0.1
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	-	< 0.1	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	-	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	69	-	86	61
Tetrachloro-m-xylene (surr.)	1	%	77	-	102	81
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Bolstar	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Coumaphos	2	mg/kg	< 2	-	< 2	< 2
Demeton-S	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Demeton-O	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Diazinon	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Dimethoate	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Disulfoton	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
EPN	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Ethion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Ethoprop	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Fenthion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Malathion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Merphos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Mevinphos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Monocrotophos	2	mg/kg	< 2	-	< 2	< 2
Naled	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Omethoate	2	mg/kg	< 2	-	< 2	< 2
Phorate	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2

Client Sample ID			BH01-0.1	BH01-0.4	BH02-0.2	BH03-0.3
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M21-Ap18202	M21-Ap18203	M21-Ap18204	M21-Ap18205
Date Sampled			Apr 12, 2021	Apr 12, 2021	Apr 12, 2021	Apr 12, 2021
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Pirimiphos-methyl	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Ronnel	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Terbufos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Tokuthion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Trichloronate	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Triphenylphosphate (surr.)	1	%	65	-	82	62
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	< 20	-	-	-
TRH C10-C14	20	mg/kg	< 20	-	-	-
TRH C15-C28	50	mg/kg	97	-	-	-
TRH C29-C36	50	mg/kg	130	-	-	-
TRH C10-C36 (Total)	50	mg/kg	227	-	-	-
BTEX						
Benzene	0.1	mg/kg	< 0.1	-	-	-
Toluene	0.1	mg/kg	< 0.1	-	-	-
Ethylbenzene	0.1	mg/kg	< 0.1	-	-	-
m&p-Xylenes	0.2	mg/kg	< 0.2	-	-	-
o-Xylene	0.1	mg/kg	< 0.1	-	-	-
Xylenes - Total*	0.3	mg/kg	< 0.3	-	-	-
4-Bromofluorobenzene (surr.)	1	%	65	-	-	-
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.5	mg/kg	< 0.5	-	-	-
TRH C6-C10	20	mg/kg	< 20	-	-	-
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	-	-	-
TRH >C10-C16	50	mg/kg	< 50	-	-	-
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	-	-	-
TRH >C16-C34	100	mg/kg	180	-	-	-
TRH >C34-C40	100	mg/kg	< 100	-	-	-
TRH >C10-C40 (total)*	100	mg/kg	180	-	-	-
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	-	-	-
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	-	-	-
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	-	-	-
Acenaphthene	0.5	mg/kg	< 0.5	-	-	-
Acenaphthylene	0.5	mg/kg	< 0.5	-	-	-
Anthracene	0.5	mg/kg	< 0.5	-	-	-
Benz(a)anthracene	0.5	mg/kg	< 0.5	-	-	-
Benzo(a)pyrene	0.5	mg/kg	< 0.5	-	-	-
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	-	-	-
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	-	-	-
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	-	-	-
Chrysene	0.5	mg/kg	< 0.5	-	-	-
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	-	-	-
Fluoranthene	0.5	mg/kg	< 0.5	-	-	-
Fluorene	0.5	mg/kg	< 0.5	-	-	-
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	-	-	-
Naphthalene	0.5	mg/kg	< 0.5	-	-	-

Client Sample ID			BH01-0.1	BH01-0.4	BH02-0.2	BH03-0.3
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M21-Ap18202	M21-Ap18203	M21-Ap18204	M21-Ap18205
Date Sampled			Apr 12, 2021	Apr 12, 2021	Apr 12, 2021	Apr 12, 2021
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Phenanthrene	0.5	mg/kg	< 0.5	-	-	-
Pyrene	0.5	mg/kg	< 0.5	-	-	-
Total PAH*	0.5	mg/kg	< 0.5	-	-	-
2-Fluorobiphenyl (surr.)	1	%	61	-	-	-
p-Terphenyl-d14 (surr.)	1	%	67	-	-	-

Client Sample ID			BH04-0.1	BH04-0.4	QC101A	QC101B
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M21-Ap18206	M21-Ap18207	M21-Ap18208	M21-Ap18209
Date Sampled			Apr 12, 2021	Apr 12, 2021	Apr 12, 2021	Apr 12, 2021
Test/Reference	LOR	Unit				
Heavy Metals						
Arsenic	2	mg/kg	-	2.1	3.9	< 2
Cadmium	0.4	mg/kg	-	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	-	14	13	12
Copper	5	mg/kg	-	7.1	19	5.2
Lead	5	mg/kg	-	38	27	16
Mercury	0.1	mg/kg	-	< 0.1	-	-
Nickel	5	mg/kg	-	5.6	5.6	< 5
Zinc	5	mg/kg	-	120	1200	150
% Moisture	1	%	10	11	24	4.3
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	-	-
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	-	-
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	-	-
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05	-	-
a-BHC	0.05	mg/kg	< 0.05	< 0.05	-	-
Aldrin	0.05	mg/kg	< 0.05	< 0.05	-	-
b-BHC	0.05	mg/kg	< 0.05	< 0.05	-	-
d-BHC	0.05	mg/kg	< 0.05	< 0.05	-	-
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	-	-
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	-	-
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	-	-
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	-	-
Endrin	0.05	mg/kg	< 0.05	< 0.05	-	-
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	-	-
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	-	-
g-BHC (Lindane)	0.05	mg/kg	< 0.05	< 0.05	-	-
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	-	-
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	-	-
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	-	-
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05	-	-
Toxaphene	0.1	mg/kg	< 0.1	< 0.1	-	-
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	-	-
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	-	-
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	-	-
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	-	-

Client Sample ID			BH04-0.1	BH04-0.4	QC101A	QC101B
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M21-Ap18206	M21-Ap18207	M21-Ap18208	M21-Ap18209
Date Sampled			Apr 12, 2021	Apr 12, 2021	Apr 12, 2021	Apr 12, 2021
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Dibutylchlorendate (surr.)	1	%	74	73	-	-
Tetrachloro-m-xylene (surr.)	1	%	81	83	-	-
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	< 0.2	< 0.2	-	-
Bolstar	0.2	mg/kg	< 0.2	< 0.2	-	-
Chlorfenvinphos	0.2	mg/kg	< 0.2	< 0.2	-	-
Chlorpyrifos	0.2	mg/kg	< 0.2	< 0.2	-	-
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	< 0.2	-	-
Coumaphos	2	mg/kg	< 2	< 2	-	-
Demeton-S	0.2	mg/kg	< 0.2	< 0.2	-	-
Demeton-O	0.2	mg/kg	< 0.2	< 0.2	-	-
Diazinon	0.2	mg/kg	< 0.2	< 0.2	-	-
Dichlorvos	0.2	mg/kg	< 0.2	< 0.2	-	-
Dimethoate	0.2	mg/kg	< 0.2	< 0.2	-	-
Disulfoton	0.2	mg/kg	< 0.2	< 0.2	-	-
EPN	0.2	mg/kg	< 0.2	< 0.2	-	-
Ethion	0.2	mg/kg	< 0.2	< 0.2	-	-
Ethoprop	0.2	mg/kg	< 0.2	< 0.2	-	-
Ethyl parathion	0.2	mg/kg	< 0.2	< 0.2	-	-
Fenitrothion	0.2	mg/kg	< 0.2	< 0.2	-	-
Fensulfothion	0.2	mg/kg	< 0.2	< 0.2	-	-
Fenthion	0.2	mg/kg	< 0.2	< 0.2	-	-
Malathion	0.2	mg/kg	< 0.2	< 0.2	-	-
Merphos	0.2	mg/kg	< 0.2	< 0.2	-	-
Methyl parathion	0.2	mg/kg	< 0.2	< 0.2	-	-
Mevinphos	0.2	mg/kg	< 0.2	< 0.2	-	-
Monocrotophos	2	mg/kg	< 2	< 2	-	-
Naled	0.2	mg/kg	< 0.2	< 0.2	-	-
Omethoate	2	mg/kg	< 2	< 2	-	-
Phorate	0.2	mg/kg	< 0.2	< 0.2	-	-
Pirimiphos-methyl	0.2	mg/kg	< 0.2	< 0.2	-	-
Pyrazophos	0.2	mg/kg	< 0.2	< 0.2	-	-
Ronnel	0.2	mg/kg	< 0.2	< 0.2	-	-
Terbufos	0.2	mg/kg	< 0.2	< 0.2	-	-
Tetrachlorvinphos	0.2	mg/kg	< 0.2	< 0.2	-	-
Tokuthion	0.2	mg/kg	< 0.2	< 0.2	-	-
Trichloronate	0.2	mg/kg	< 0.2	< 0.2	-	-
Triphenylphosphate (surr.)	1	%	66	71	-	-
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	-	< 20	-	-
TRH C10-C14	20	mg/kg	-	< 20	-	-
TRH C15-C28	50	mg/kg	-	89	-	-
TRH C29-C36	50	mg/kg	-	88	-	-
TRH C10-C36 (Total)	50	mg/kg	-	177	-	-
BTEX						
Benzene	0.1	mg/kg	-	< 0.1	-	-
Toluene	0.1	mg/kg	-	< 0.1	-	-
Ethylbenzene	0.1	mg/kg	-	< 0.1	-	-
m&p-Xylenes	0.2	mg/kg	-	< 0.2	-	-

Client Sample ID			BH04-0.1	BH04-0.4	QC101A	QC101B
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M21-Ap18206	M21-Ap18207	M21-Ap18208	M21-Ap18209
Date Sampled			Apr 12, 2021	Apr 12, 2021	Apr 12, 2021	Apr 12, 2021
Test/Reference	LOR	Unit				
BTEX						
o-Xylene	0.1	mg/kg	-	< 0.1	-	-
Xylenes - Total*	0.3	mg/kg	-	< 0.3	-	-
4-Bromofluorobenzene (surr.)	1	%	-	65	-	-
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.5	mg/kg	-	< 0.5	-	-
TRH C6-C10	20	mg/kg	-	< 20	-	-
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	-	< 20	-	-
TRH >C10-C16	50	mg/kg	-	< 50	-	-
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	-	< 50	-	-
TRH >C16-C34	100	mg/kg	-	150	-	-
TRH >C34-C40	100	mg/kg	-	< 100	-	-
TRH >C10-C40 (total)*	100	mg/kg	-	150	-	-
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	-	< 0.5	-	-
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	-	0.6	-	-
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	-	1.2	-	-
Acenaphthene	0.5	mg/kg	-	< 0.5	-	-
Acenaphthylene	0.5	mg/kg	-	< 0.5	-	-
Anthracene	0.5	mg/kg	-	< 0.5	-	-
Benz(a)anthracene	0.5	mg/kg	-	< 0.5	-	-
Benzo(a)pyrene	0.5	mg/kg	-	< 0.5	-	-
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	-	< 0.5	-	-
Benzo(g.h.i)perylene	0.5	mg/kg	-	< 0.5	-	-
Benzo(k)fluoranthene	0.5	mg/kg	-	< 0.5	-	-
Chrysene	0.5	mg/kg	-	< 0.5	-	-
Dibenz(a.h)anthracene	0.5	mg/kg	-	< 0.5	-	-
Fluoranthene	0.5	mg/kg	-	< 0.5	-	-
Fluorene	0.5	mg/kg	-	< 0.5	-	-
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	-	< 0.5	-	-
Naphthalene	0.5	mg/kg	-	< 0.5	-	-
Phenanthrene	0.5	mg/kg	-	< 0.5	-	-
Pyrene	0.5	mg/kg	-	< 0.5	-	-
Total PAH*	0.5	mg/kg	-	< 0.5	-	-
2-Fluorobiphenyl (surr.)	1	%	-	63	-	-
p-Terphenyl-d14 (surr.)	1	%	-	59	-	-

Sample History

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

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

Description	Testing Site	Extracted	Holding Time
Metals M7	Melbourne	Apr 13, 2021	180 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Eurofins Suite B10			
Metals M8	Melbourne	Apr 14, 2021	180 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Organochlorine Pesticides	Melbourne	Apr 14, 2021	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8270)			
Organophosphorus Pesticides	Melbourne	Apr 14, 2021	14 Days
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS (USEPA 8081)			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Melbourne	Apr 14, 2021	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Melbourne	Apr 14, 2021	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Apr 14, 2021	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Apr 14, 2021	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Melbourne	Apr 14, 2021	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
% Moisture	Melbourne	Apr 13, 2021	14 Days
- Method: LTM-GEN-7080 Moisture			

eurofins | Environment Testing

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Company Name: Agon Environmental Pty Ltd - SA
Address: 3/224 Glen Osmond Road
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Project Name:
Project ID: JC0690

Order No.:
Report #: 786703
Phone: 08 8338 1009
Fax:

Received: Apr 13, 2021 12:02 PM
Due: Apr 16, 2021
Priority: 3 Day
Contact Name: John O'Brien

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						Metals M7	Suite B14: OCP/OPP	Moisture Set	Eurofins Suite B10
Melbourne Laboratory - NATA Site # 1254 & 14271						X	X	X	X
Sydney Laboratory - NATA Site # 18217									
Brisbane Laboratory - NATA Site # 20794									
Perth Laboratory - NATA Site # 23736									
Mayfield Laboratory									
External Laboratory									
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**				
1	SS01	Apr 12, 2021		Soil	M21-Ap18194	X		X	
2	SS02	Apr 12, 2021		Soil	M21-Ap18195		X	X	
3	SS03	Apr 12, 2021		Soil	M21-Ap18196	X		X	
4	SS04	Apr 12, 2021		Soil	M21-Ap18197		X	X	
5	SS05	Apr 12, 2021		Soil	M21-Ap18198	X		X	
6	SS06	Apr 12, 2021		Soil	M21-Ap18199		X	X	
7	SS07	Apr 12, 2021		Soil	M21-Ap18200	X		X	
8	SS08	Apr 12, 2021		Soil	M21-Ap18201		X	X	
9	BH01-0.1	Apr 12, 2021		Soil	M21-Ap18202			X	X

eurofins | Environment Testing

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Sample Detail						Metals M7	Suite B14: OCP/OPP	Moisture Set	Eurofins Suite B10
Melbourne Laboratory - NATA Site # 1254 & 14271						X	X	X	X
Sydney Laboratory - NATA Site # 18217									
Brisbane Laboratory - NATA Site # 20794									
Perth Laboratory - NATA Site # 23736									
Mayfield Laboratory									
External Laboratory									
10	BH01-0.4	Apr 12, 2021		Soil	M21-Ap18203	X		X	
11	BH02-0.2	Apr 12, 2021		Soil	M21-Ap18204	X	X	X	
12	BH03-0.3	Apr 12, 2021		Soil	M21-Ap18205	X	X	X	
13	BH04-0.1	Apr 12, 2021		Soil	M21-Ap18206		X	X	
14	BH04-0.4	Apr 12, 2021		Soil	M21-Ap18207			X	X
15	QC101A	Apr 12, 2021		Soil	M21-Ap18208	X		X	
16	QC101B	Apr 12, 2021		Soil	M21-Ap18209	X		X	
Test Counts						9	7	16	2

Internal Quality Control Review and Glossary

General

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

Holding Times

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

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

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

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

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

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram

mg/L: milligrams per litre

ug/L: micrograms per litre

ppm: Parts per million

ppb: Parts per billion

%: Percentage

org/100mL: Organisms per 100 millilitres

NTU: Nephelometric Turbidity Units

MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version 5.3
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

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

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-BHC	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-BHC	mg/kg	< 0.05			0.05	Pass	
d-BHC	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	
Endrin aldehyde	mg/kg	< 0.05			0.05	Pass	
Endrin ketone	mg/kg	< 0.05			0.05	Pass	
g-BHC (Lindane)	mg/kg	< 0.05			0.05	Pass	
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.05			0.05	Pass	
Toxaphene	mg/kg	< 0.1			0.1	Pass	
Method Blank							
Organophosphorus Pesticides							
Azinphos-methyl	mg/kg	< 0.2			0.2	Pass	
Bolstar	mg/kg	< 0.2			0.2	Pass	
Chlorfenvinphos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos-methyl	mg/kg	< 0.2			0.2	Pass	
Coumaphos	mg/kg	< 2			2	Pass	
Demeton-S	mg/kg	< 0.2			0.2	Pass	
Demeton-O	mg/kg	< 0.2			0.2	Pass	
Diazinon	mg/kg	< 0.2			0.2	Pass	
Dichlorvos	mg/kg	< 0.2			0.2	Pass	
Dimethoate	mg/kg	< 0.2			0.2	Pass	
Disulfoton	mg/kg	< 0.2			0.2	Pass	
EPN	mg/kg	< 0.2			0.2	Pass	
Ethion	mg/kg	< 0.2			0.2	Pass	
Ethoprop	mg/kg	< 0.2			0.2	Pass	
Ethyl parathion	mg/kg	< 0.2			0.2	Pass	
Fenitrothion	mg/kg	< 0.2			0.2	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Fensulfothion	mg/kg	< 0.2			0.2	Pass	
Fenthion	mg/kg	< 0.2			0.2	Pass	
Malathion	mg/kg	< 0.2			0.2	Pass	
Merphos	mg/kg	< 0.2			0.2	Pass	
Methyl parathion	mg/kg	< 0.2			0.2	Pass	
Mevinphos	mg/kg	< 0.2			0.2	Pass	
Monocrotophos	mg/kg	< 2			2	Pass	
Naled	mg/kg	< 0.2			0.2	Pass	
Omethoate	mg/kg	< 2			2	Pass	
Phorate	mg/kg	< 0.2			0.2	Pass	
Pirimiphos-methyl	mg/kg	< 0.2			0.2	Pass	
Pyrazophos	mg/kg	< 0.2			0.2	Pass	
Ronnel	mg/kg	< 0.2			0.2	Pass	
Terbufos	mg/kg	< 0.2			0.2	Pass	
Tetrachlorvinphos	mg/kg	< 0.2			0.2	Pass	
Tokuthion	mg/kg	< 0.2			0.2	Pass	
Trichloronate	mg/kg	< 0.2			0.2	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Method Blank							
BTEX							
Benzene	mg/kg	< 0.1			0.1	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Xylenes - Total*	mg/kg	< 0.3			0.3	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	102			80-120	Pass	
Cadmium	%	103			80-120	Pass	
Chromium	%	113			80-120	Pass	
Copper	%	107			80-120	Pass	
Lead	%	112			80-120	Pass	
Mercury	%	113			80-120	Pass	
Nickel	%	104			80-120	Pass	
Zinc	%	101			80-120	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	79			70-130	Pass	
4.4'-DDD	%	111			70-130	Pass	
4.4'-DDE	%	82			70-130	Pass	
4.4'-DDT	%	74			70-130	Pass	
a-BHC	%	79			70-130	Pass	
Aldrin	%	83			70-130	Pass	
b-BHC	%	77			70-130	Pass	
d-BHC	%	76			70-130	Pass	
Dieldrin	%	84			70-130	Pass	
Endosulfan I	%	87			70-130	Pass	
Endosulfan II	%	86			70-130	Pass	
Endosulfan sulphate	%	77			70-130	Pass	
Endrin	%	76			70-130	Pass	
Endrin aldehyde	%	77			70-130	Pass	
Endrin ketone	%	78			70-130	Pass	
g-BHC (Lindane)	%	95			70-130	Pass	
Heptachlor	%	78			70-130	Pass	
Heptachlor epoxide	%	81			70-130	Pass	
Hexachlorobenzene	%	84			70-130	Pass	
Methoxychlor	%	78			70-130	Pass	
LCS - % Recovery							
Organophosphorus Pesticides							
Diazinon	%	103			70-130	Pass	
Dimethoate	%	115			70-130	Pass	
Ethion	%	98			70-130	Pass	
Fenitrothion	%	114			70-130	Pass	
Methyl parathion	%	119			70-130	Pass	
Mevinphos	%	90			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	%	108			70-130	Pass	
TRH C10-C14	%	109			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	92			70-130	Pass	
Toluene	%	100			70-130	Pass	
Ethylbenzene	%	102			70-130	Pass	
m&p-Xylenes	%	107			70-130	Pass	
Xylenes - Total*	%	106			70-130	Pass	
LCS - % Recovery							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	116			70-130	Pass	
TRH C6-C10	%	93			70-130	Pass	
TRH >C10-C16	%	108			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	94			70-130	Pass	
Acenaphthylene	%	98			70-130	Pass	
Anthracene	%	102			70-130	Pass	
Benz(a)anthracene	%	86			70-130	Pass	
Benzo(a)pyrene	%	91			70-130	Pass	
Benzo(b&j)fluoranthene	%	78			70-130	Pass	
Benzo(g.h.i)perylene	%	76			70-130	Pass	
Benzo(k)fluoranthene	%	108			70-130	Pass	
Chrysene	%	98			70-130	Pass	
Dibenz(a.h)anthracene	%	80			70-130	Pass	
Fluoranthene	%	95			70-130	Pass	
Fluorene	%	94			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	75			70-130	Pass	
Naphthalene	%	92			70-130	Pass	
Phenanthrene	%	89			70-130	Pass	
Pyrene	%	99			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	M21-Ap16544	NCP	%	92			75-125	Pass	
Cadmium	M21-Ap16544	NCP	%	114			75-125	Pass	
Chromium	M21-Ap16544	NCP	%	106			75-125	Pass	
Copper	M21-Ap16544	NCP	%	101			75-125	Pass	
Lead	M21-Ap16544	NCP	%	104			75-125	Pass	
Nickel	M21-Ap16544	NCP	%	101			75-125	Pass	
Zinc	M21-Ap16544	NCP	%	98			75-125	Pass	
Spike - % Recovery									
Organophosphorus Pesticides				Result 1					
Diazinon	M21-Ap18906	NCP	%	97			70-130	Pass	
Dimethoate	M21-Ap18906	NCP	%	72			70-130	Pass	
Ethion	M21-Ap18906	NCP	%	73			70-130	Pass	
Fenitrothion	M21-Ap18906	NCP	%	99			70-130	Pass	
Methyl parathion	M21-Ap18906	NCP	%	90			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Chlordanes - Total	M21-Ap19425	NCP	%	110			70-130	Pass	
4.4'-DDD	M21-Ap19425	NCP	%	113			70-130	Pass	
4.4'-DDE	M21-Ap19425	NCP	%	105			70-130	Pass	
4.4'-DDT	M21-Ap19425	NCP	%	83			70-130	Pass	
a-BHC	M21-Ap19425	NCP	%	94			70-130	Pass	
Aldrin	M21-Ap19425	NCP	%	114			70-130	Pass	
b-BHC	M21-Ap19425	NCP	%	90			70-130	Pass	
d-BHC	M21-Ap19425	NCP	%	95			70-130	Pass	
Dieldrin	M21-Ap19425	NCP	%	117			70-130	Pass	
Endosulfan I	M21-Ap19425	NCP	%	116			70-130	Pass	
Endosulfan II	M21-Ap19425	NCP	%	110			70-130	Pass	
Endosulfan sulphate	M21-Ap19425	NCP	%	109			70-130	Pass	
Endrin	M21-Ap19425	NCP	%	90			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Endrin aldehyde	M21-Ap19425	NCP	%	104			70-130	Pass	
Endrin ketone	M21-Ap19425	NCP	%	125			70-130	Pass	
g-BHC (Lindane)	M21-Ap19425	NCP	%	89			70-130	Pass	
Heptachlor	M21-Ap19425	NCP	%	97			70-130	Pass	
Heptachlor epoxide	M21-Ap19425	NCP	%	107			70-130	Pass	
Hexachlorobenzene	M21-Ap19425	NCP	%	107			70-130	Pass	
Methoxychlor	M21-Ap19425	NCP	%	93			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Mercury	M21-Ap16544	NCP	%	104			75-125	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C6-C9	M21-Ap18907	NCP	%	98			70-130	Pass	
TRH C10-C14	M21-Ap16726	NCP	%	92			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	M21-Ap18907	NCP	%	83			70-130	Pass	
Toluene	M21-Ap18907	NCP	%	93			70-130	Pass	
Ethylbenzene	M21-Ap18907	NCP	%	93			70-130	Pass	
m&p-Xylenes	M21-Ap18907	NCP	%	99			70-130	Pass	
o-Xylene	M21-Ap18907	NCP	%	98			70-130	Pass	
Xylenes - Total*	M21-Ap18907	NCP	%	98			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
Naphthalene	M21-Ap18907	NCP	%	103			70-130	Pass	
TRH C6-C10	M21-Ap18907	NCP	%	85			70-130	Pass	
TRH >C10-C16	M21-Ap16726	NCP	%	88			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	P21-Ap15591	NCP	%	94			70-130	Pass	
Acenaphthylene	P21-Ap15591	NCP	%	103			70-130	Pass	
Anthracene	P21-Ap15591	NCP	%	111			70-130	Pass	
Benz(a)anthracene	P21-Ap15591	NCP	%	90			70-130	Pass	
Benzo(a)pyrene	P21-Ap15591	NCP	%	92			70-130	Pass	
Benzo(b&j)fluoranthene	P21-Ap15591	NCP	%	91			70-130	Pass	
Benzo(g.h.i)perylene	P21-Ap15591	NCP	%	76			70-130	Pass	
Benzo(k)fluoranthene	P21-Ap15591	NCP	%	103			70-130	Pass	
Chrysene	P21-Ap15591	NCP	%	101			70-130	Pass	
Dibenz(a.h)anthracene	P21-Ap15591	NCP	%	80			70-130	Pass	
Fluoranthene	P21-Ap15591	NCP	%	96			70-130	Pass	
Fluorene	P21-Ap15591	NCP	%	99			70-130	Pass	
Indeno(1.2.3-cd)pyrene	P21-Ap15591	NCP	%	76			70-130	Pass	
Naphthalene	P21-Ap15591	NCP	%	96			70-130	Pass	
Phenanthrene	P21-Ap15591	NCP	%	83			70-130	Pass	
Pyrene	P21-Ap15591	NCP	%	101			70-130	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	M21-Ap16544	NCP	mg/kg	2.3	2.3	1.0	30%	Pass	
Cadmium	M21-Ap16544	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	M21-Ap16544	NCP	mg/kg	14	14	2.0	30%	Pass	
Copper	M21-Ap16544	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Lead	M21-Ap16544	NCP	mg/kg	12	12	<1	30%	Pass	
Nickel	M21-Ap16544	NCP	mg/kg	6.0	6.0	<1	30%	Pass	
Zinc	M21-Ap16544	NCP	mg/kg	11	12	<1	30%	Pass	

Duplicate									
				Result 1	Result 2	RPD			
% Moisture	M21-Ap18196	CP	%	13	13	2.0	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	M21-Ap19424	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	M21-Ap19424	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	M21-Ap19424	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	M21-Ap19424	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-BHC	M21-Ap19424	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	M21-Ap19424	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-BHC	M21-Ap19424	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-BHC	M21-Ap19424	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	M21-Ap19424	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	M21-Ap19424	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	M21-Ap19424	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	M21-Ap19424	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	M21-Ap19424	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	M21-Ap19424	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	M21-Ap19424	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-BHC (Lindane)	M21-Ap19424	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	M21-Ap19424	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	M21-Ap19424	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	M21-Ap19424	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	M21-Ap19424	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Toxaphene	M21-Ap19424	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Azinphos-methyl	M21-Ap19424	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Bolstar	M21-Ap19424	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorfenvinphos	M21-Ap19424	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos	M21-Ap19424	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos-methyl	M21-Ap19424	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Coumaphos	M21-Ap19424	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Demeton-S	M21-Ap19424	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Demeton-O	M21-Ap19424	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Diazinon	M21-Ap19424	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dichlorvos	M21-Ap19424	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dimethoate	M21-Ap19424	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Disulfoton	M21-Ap19424	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
EPN	M21-Ap19424	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethion	M21-Ap19424	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethoprop	M21-Ap19424	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethyl parathion	M21-Ap19424	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenitrothion	M21-Ap19424	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fensulfothion	M21-Ap19424	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenthion	M21-Ap19424	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Malathion	M21-Ap19424	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Merphos	M21-Ap19424	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methyl parathion	M21-Ap19424	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Mevinphos	M21-Ap19424	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Monocrotophos	M21-Ap19424	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Naled	M21-Ap19424	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Omethoate	M21-Ap19424	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Phorate	M21-Ap19424	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pirimiphos-methyl	M21-Ap19424	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	

Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Pyrazophos	M21-Ap19424	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ronnel	M21-Ap19424	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Terbufos	M21-Ap19424	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tetrachlorvinphos	M21-Ap19424	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tokuthion	M21-Ap19424	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Trichloronate	M21-Ap19424	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Mercury	M21-Ap16544	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C6-C9	M21-Ap18896	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	M21-Ap19168	NCP	mg/kg	40	35	12	30%	Pass	
TRH C15-C28	M21-Ap19168	NCP	mg/kg	2900	2500	17	30%	Pass	
TRH C29-C36	M21-Ap19168	NCP	mg/kg	1900	1500	18	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	M21-Ap18896	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	M21-Ap18896	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	M21-Ap18896	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	M21-Ap18896	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	M21-Ap18896	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total*	M21-Ap18896	NCP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	M21-Ap18896	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	M21-Ap18896	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	M21-Ap19168	NCP	mg/kg	76	70	8.0	30%	Pass	
TRH >C16-C34	M21-Ap19168	NCP	mg/kg	4300	3600	18	30%	Pass	
TRH >C34-C40	M21-Ap19168	NCP	mg/kg	640	520	21	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	M21-Ap18206	CP	%	10	10	1.0	30%	Pass	

Comments

Sample Integrity

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

Qualifier Codes/Comments

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

Authorised by:

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Emily Rosenberg	Senior Analyst-Metal (VIC)
Joseph Edouard	Senior Analyst-Organic (VIC)
Vivian Wang	Senior Analyst-Volatile (VIC)

Glenn Jackson
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

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

Measurement uncertainty of test data is available on request or please click here.

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