ENVIRONMENTAL CONSULTING SERVICES

PRELIMINARY SITE INVESTIGATION

40 The Retreat
Bradfield NSW 2556

ENVIRONMENTAL CONSULTING SERVICES PTY LTD
E: simon@ecsgroup.com.au | P 0415 225 474 | ABN 75 073 668 425

Disclaimer

Register of Amendments		
Revision	Date	Description
1	13.02.2024	Issued for use
2	12.07.2024	

Document Approval		
Prepared by	Date	Signed
Tom Caples	06.02.2024	
Approved by	Date	Signed
Simon Caples Principal Consultant	13.02.2024	

Acknowledgement of Country

ECS acknowledges the Traditional Custodians of the land on which this investigation was conducted, and we and pay our respects to their Elders past and present.

Executive Summary

Environmental Consulting Services Pty Ltd (ECS) was engaged to undertake an environmental assessment of the properties at 40 The Retreat in Bringelly (the Site). The objective of the environmental investigation was to evaluate the potential for contamination resulting from past Site activities and draw conclusion about the suitability of the Site for residential use.

The scope of work undertaken to meet this objective included the review of selected background information including historical aerial photographs and certificates of title, the identification of potential contamination types and the development of a conceptual Site model, a Site inspection and targeted soil sampling.

The Site currently contains a single storey brick house as well as a few sheds within the rear yard. Scattered across the northern end of the property are old vehicles, trailers and small piles of building materials. There is also a small pit at the north-west of the property that appeared to be a dumping waste olives and other similar organic material.

Except for the vehicles and objects covering the northern Site surface, the property is otherwise mostly covered with grass. Surface soils are considered to be disturbed natural clays with traces of rocks, which has been graded to follow the regional topography. At the time of this investigation, an internal inspection of the house was not undertaken.

During the Site inspection there was no significant evidence of imported fill material observed across the Site surface or found within the test pits excavated for sampling.

The history review showed the Site has been owned by only a few individuals, and it is considered likely that the land has been used solely for residential purposes since the construction of the house sometime between 1994 and 2005. These photographs also show evidence of early agricultural activity (grazing) on the Site and on adjoining land. Considering that the Site has been used for residential purposes and grazing, there is limited potential for impacts. However, numerous cars have been stored on the northern end of the Site.

To characterise the surface material, twelve shallow test pits were excavated into clayey sandy soils with traces of organic material and minor gravel. Additionally, three water samples were taken from groundwater monitoring wells installed during a geotechnical investigation.

The results of the soil analysis indicated concentrations of all contaminants below the human health Site Assessment Criteria for sensitive land use. However, a concentration of nickel was measured above the ecological investigation criteria. This single exceedance of an EIL is not considered significant with this material likely to be removed during development work.

The results of groundwater analysis indicated some concentrations of metals above assessment criteria for the protection of freshwater ecosystems. The concentrations encountered are expected to represent background levels at this location.

Based on the findings of this Site Investigation, ECS considers the Site is suitable for redevelopment and sensitive land use following the implementation of the following recommendations:

- The removal of all stored cars and materials, and the removal of olive waste from the identified pit;
- The preparation of a waste classifications for any material to be excavated and disposed of off-site. The waste classifications must be prepared in accordance with EPA guidelines and must be managed and disposed of in accordance with current guidelines and regulations.

This investigation has not identified significant potential for contamination at the Site or encountered significant soil or groundwater contamination that would preclude the proposed development. ECS does not consider further environmental investigations including a detailed Site Investigation is required, or preparation of a remediation action plan or long-term management plan based on the investigation completed and the proposed development.

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1.0 INTRODUCTION

Environmental Consulting Services Pty Ltd (ECS) was engaged to undertake a Preliminary Site Investigation (PSI) of the property known as 40 The Retreat in Bradfield (the Site). The purpose of this assessment was to evaluate the potential for contamination resulting from past Site activities and to draw conclusions regarding the suitability of the Site for sensitive land use.

ECS understands that it is proposed to demolish the existing house and redevelop the Site for the residential purposes. The proposed development will consist of multi storey residential building(s) over a basement car park.

The investigation has been undertaken in deference to:

- Guidelines for Consultants Reporting on Contaminated Sites (NSW EPA, 2020);
- State Environmental Planning Policy (Resilience and Hazards) 2021;
- Sampling design part 1 - application (NSW Environment Protection Authority August 2022); and
- National Environment Protection Measure (NEPM) for the Assessment of the Site Contamination (NEPM 2013).

1.1 Scope of Work

The objective of the environmental investigation was to evaluate the potential for contamination resulting from past Site activities and draw conclusion about the suitability of the Site for sensitive use. The scope of work undertaken to meet this objective included the following:

- The review of selected background information including historical aerial photographs and certificates of title;
- The identification of potential contamination types and the development of a conceptual Site model (CSM);
- A Site inspection and targeted soil and water sampling; and
- The preparation of a site assessment report for submission to council.

2.0 SITE INFORMATION

2.1 Site Identification

The location of the Site is presented in *Figure 2.1 – Site Location Plan* with the Site identification details summarised in *Table 2.1 – Site Identification*.

Table 2.1 – Site Identification

Attribute	Detail
Site Address	40 The Retreat, Bradfield NSW 2556
Lot & Deposited Plan	Lot 272, DP 803167
Current Land Use	Residential & Mixed
Proposed Land Use	Residential
Local Government Authority	Liverpool City Council
Current Zoning	MU – Mixed Use
Site Area (approximate)	2.09ha
Geographical Location (approximate centre)	Latitude: -33.920444 Longitude: 150.74233

Figure 2.1 – Site Location Plan

2.2 Site Location and Regional Setting

The Site is in Bradfield in Greater Western Sydney and is a suburb comprised of a 100-hectare portion of north-eastern Bringelly, adjacent to Western Sydney Airport. Bradfield is located approximately 45km west of Sydney CBD and 27km south-west of Parramatta CBD and is bound by The Northern Road and Bringelly Road to its south/south-west, and by Badgerys Creek to the north and South Creek to the east.

The Site is positioned at the northern end of The Retreat cul-de-sac and consists of a single irregular-shaped lot (Lot 272, DP 803167) with a street frontage of approximately 43m. It lies within a 'mixed-use' zone, however, occurring developments within the greater surrounding area is mostly residential.

Surrounding the Site are mixed land-uses that include residential development and large areas of cleared and undeveloped land that is currently used for farming purposes. Land to the west has been fenced off and by the NSW State Government showing development signage and more recent development stemming from the construction of roadways such as The Retreat has also enabled further residential development onto neighbouring land.

There is also a small creek to the south-east of Site which supplies a small dam and has several tributaries from the surrounding land.

The Site is outlined in red and surrounding properties are shown on *Figure 2.2 – Site Layout*.

Figure 2.2 – Site Layout

2.3 Topography

The rear, northern portion, of the Site is relatively level. The southern half of the Site slopes downwards towards the south follow the gradient of the surrounding topography. The surface of property is mostly covered in grass except for the footprint of the existing house and concrete driveway.

There is minimal evidence of surface modifications and there does not appear to have been any significant filling based on the topography.

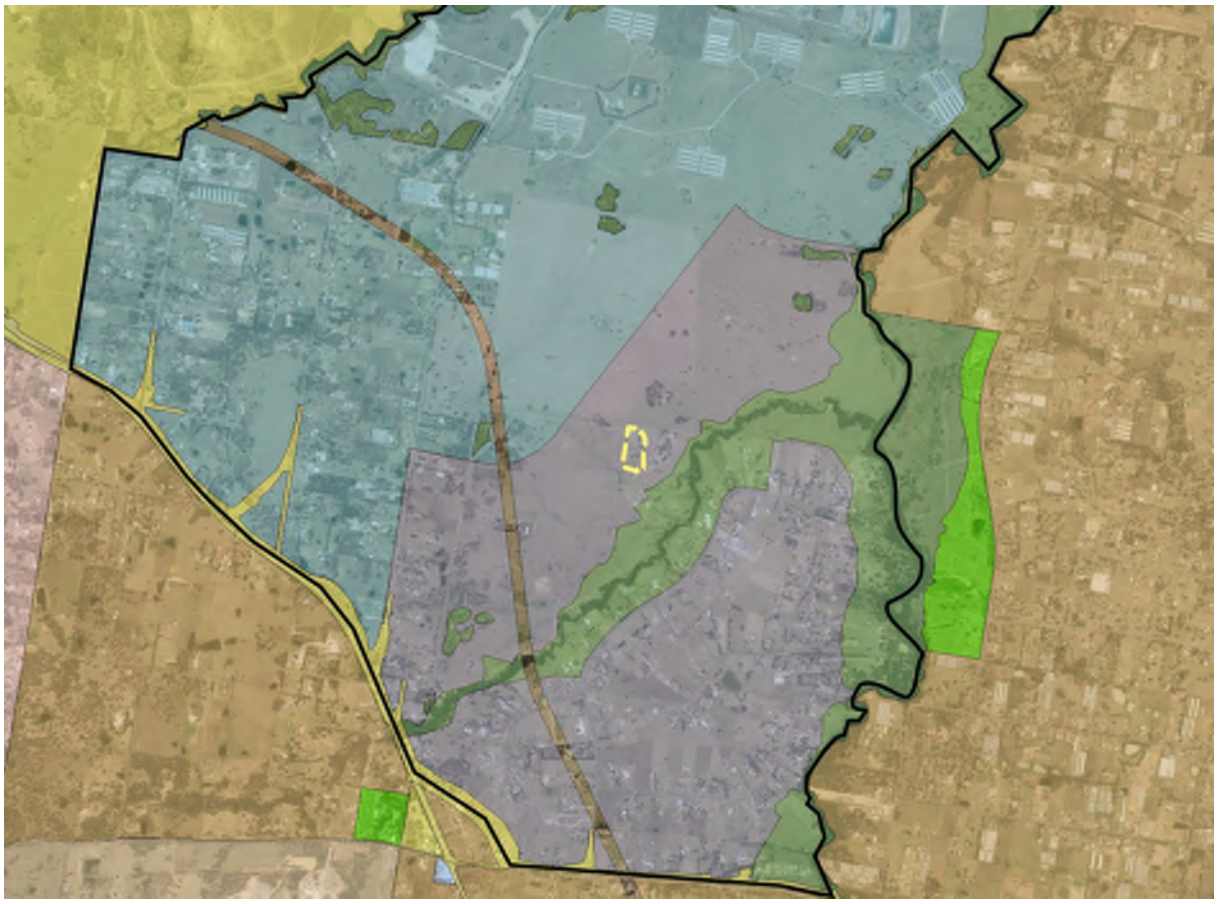
2.4 Zoning

Zoning in Bradfield is split into two sections, with an enterprise zone at its north-western half and a mixed-use zone at its south. Development across the whole suburb is currently a mix of farms, residential, industrial, and commercial uses, however, Bradfield is also listed as being the proposed location of a new business district.

The Site and adjacent properties are zoned for mixed-use and is mostly undeveloped but cleared land.

Zoning for the Site and surrounding landscape is shown on *Figure 2.3 – Zoning Map*, with the Site outlined in yellow, and the extents of Bradfield outlined in black.

Figure 2.3 – Zoning Map



3.0 GEOLOGY AND HYDROGEOLOGY

3.1 Regional Geology

Regional geology of the area is shown on the Penrith Geological Map scaled at 1:100,000 (Geological Series Sheet 9030, Edition 1, 1991). The Site is underlain by Bringelly Shale, which is described as shale, carbonaceous claystone, claystone, laminite, fine to medium-grained lithic sandstone, rare coal, and tuff.

3.2 Acid Sulfate Soil (ASS) Risk Planning

The Liverpool Local Environment Plan (LEP) 2008 prepared by Liverpool City Council does not include Acid Sulfate Soil (ASS) risk maps with coverage inclusive of the Site area, which indicates a low potential for ASS to be encountered.

ECS considers that there is a low likelihood of encountering acid sulfate soils on the Site.

3.3 Hydrogeology

The nearest surface water body to the Site is Thompsons Creek, which is approximately 245m to the east of Site at its nearest location. Thompsons Creek flows in a generally north-easterly direction where it discharges into South Creek/Wianamatta approximately 1.2km to the east of Site.

Additionally, there are several unnamed tributaries of Thompsons Creek scattered throughout the local landscape as well as a number of dams on nearby properties.

The MinView database provided by the NSW Government (2021) shows that there are five registered groundwater bores nearby the Site. The locations of the wells are shown in *Figure 3.1 – Registered Groundwater Bores*, with the Site outlined in red and the locations of the wells shown in blue. The details of the wells are summarised in *Table 3.1 – Registered Groundwater Bores*.

Figure 3.1 – Registered Groundwater Bores

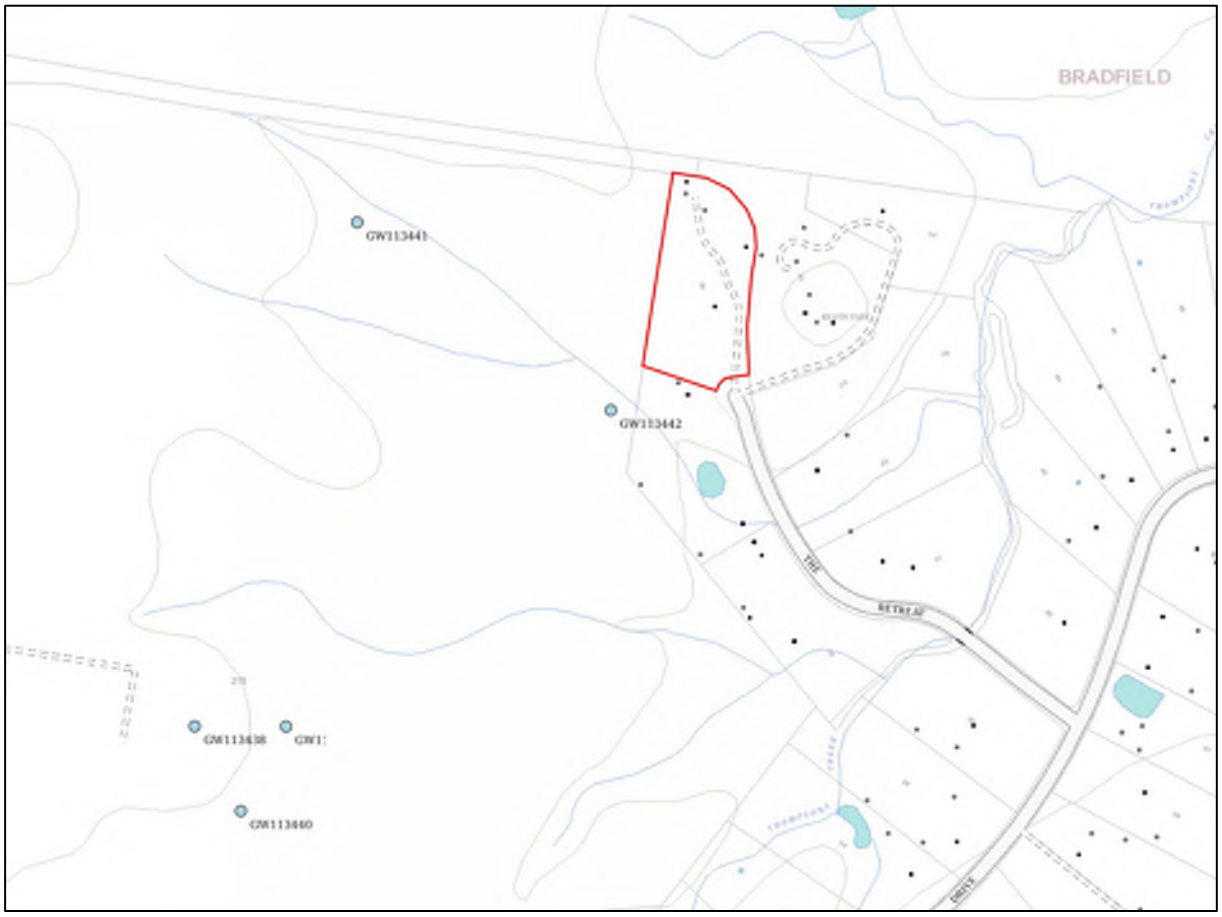


Table 3.1 – Registered Groundwater Bores

Groundwater Bore	Bore Type	Year Constructed	Drilled Depth
GW113438	Exploration (Functional)	2010	12.2m
GW113439	Exploration (Functional)	2010	12.2m
GW113440	Exploration (Functional)	2010	12.1m
GW113441	Exploration (Functional)	2010	12.2m
GW113442	Exploration (Functional)	2010	12.2m

4.0 DATA QUALITY OBJECTIVES

The Data Quality Objective (DQO) process is a systematic, seven-step process that defines the criteria an investigation should satisfy including the type, quantity and quality of data required to support decisions relating to the investigation. DQOs for this investigation have been developed based on the seven-step approach in accordance with the NSW DEC Guidelines for the NSW Site Auditor Scheme (3rd Edition), 2017. The DQOs incorporate field

quality control and laboratory analysis, methods and information on laboratory quality control data and validate the field and analytical data for this investigation. The DQOs are presented in detail in the following sections.

Step 1 - State the Problem

The Site is proposed to be used for residential purposes and could be contaminated from past site activities. The objective of the investigation is to assess the potential for contamination resulting from past Site activities and to draw conclusions regarding the suitability of the Site for sensitive land use.

This investigation should be undertaken in general accordance with the NSW EPA Guidelines for Consultants Reporting on Contaminated Sites 2020. This requires a review of historical Site usage to evaluate the potential for the former uses to result in contamination. Where there is the potential for impact, an intrusive investigation should be undertaken, and appropriate management strategies implemented.

Step 2 - Identify the Decisions

The assessment for contamination is based on the known historic uses of the land. The decisions associated with this assessment include:

- Would historic land uses result in contamination that may preclude sensitive land use;
- Is the Site suitable for proposed sensitive land use?

Step 3 - Identify Inputs to the Decision

The inputs required to make the identified decisions include:

- Data regarding the regional and local conditions;
- Historical records and air photographs;
- Site walkover; and
- Targeted soil sampling.

Step 4 - Define the Study Boundary

The boundaries for this assessment have been identified as follows:

- Lateral boundaries – the Site area; and
- Vertical boundaries – surface soils to a depth of about 0.5m.

Step 5 - Develop an Analytical Approach

The decision rules for this investigation are:

- If the Site history and/or preliminary sampling indicates the potential for Site contamination to exist, then an assessment for actual impacts from that activity must be undertaken.
- If the presence of potential sources of contamination are encountered such as areas of filling of damaged asbestos materials on the ground surface, then remediation or management must be undertaken.
- Results of assessment activities undertaken to investigate for actual impacts need to consider the proposed Site use. If the results of sampling encounter concentrations of contaminants greater than nominated Site Assessment Criteria indicating a potential

human health of environmental risk, then remediation or management must be undertaken.

Step 6 - Specify Performance or Acceptance Criteria

The null hypothesis is that the soil and fill material is contaminated and exceeds the adopted Site Assessment Criteria. The alternative hypothesis is that the soil and fill material is not contaminated above the adopted Site Assessment Criteria.

The incorrect consideration of background information has the potential to conclude that the Site is contaminated when it is not or alternatively, conclude the Site is not contaminated when it actually is. To provide more certainty to the conclusion regarding the contamination status of the Site, both the background information and the Site conditions will be jointly assessed.

The continuity and understanding of past Site activities provides the basis for the consideration of the necessity for Site sampling. Where there is uncertainty or indications of the potential for contamination, sampling needs to be undertaken.

The preliminary sampling at the Site needs to address the findings of the background data review and needs to include sufficient sampling locations and depths, utilise appropriate field sampling methodologies, review suitable data quality indicators (DQIs) and quality assessment procedures and incorporate appropriate data evaluation procedures such as the use of 95 percent upper confidence limit (95% UCL) calculations.

Step 7 - Optimise the Design for Obtaining Data

The data sources for this assessment are historic records that have been maintained and that are readily available, soil samples that are from targeted locations established as the preliminary sampling plan.

The sampling plan prepared for this investigation considered the Site history and the Site setting. A sampling plan was established to assess near surface soil conditions with locations targeting areas of environmental concern if present.

The density of sampling considered the Schedule B2 of the NEPM Guideline on Site Characterisation (2011) and the sampling depth intervals set to assess surface soil. The sampling density also considered the NSW EPA Guidelines. The sampling density is below the recommended sampling density in the EPA Guidelines however, this is considered suitable for the preliminary Site investigation.

Near surface soils are considered the primary indicator for significant impact based on the Site history.

5.0 HISTORY REVIEW

To evaluate the development history of the Site, historical aerial photographs and certificates of title acquired from Lotsearch were reviewed.

5.1 Regional History

Land grants were extended to the Bringelly area in 1812 and the surrounding landscape was cleared for farming applications. Eventually, Luddenham Post Office was opened in 1857 and was renamed to Bringelly in 1863. The adjacent property to the east of Site was also known

as The Retreat which is a Georgian farmhouse built in 1920 and is listed in the NSW State Heritage Register.

In March 2021, a northern portion of Bringelly was also announced to become the location of Sydney's third commercial centre behind Parramatta, due to its proximity to Western Sydney Airport and has been named Bradfield in memory of the engineer of Sydney Harbour Bridge, Dr John Bradfield.

5.2 Aerial Photographs

Aerial photographs dating back to 1949 were reviewed to evaluate developmental history at the Site. *Table 5.1 – Aerial Photographs* summarises the features observed in the historical aerial photographs. Copies of the aerial photographs are included in *Appendix 1*.

Table 5.1 – Aerial Photographs

Year	Site Features	Surrounding Area
1949	The Site is cleared and vacant land but appears to be part of a larger property.	There is a residence to the east of Site and possibly some animal enclosures. Surrounding land is otherwise mostly cleared and is mostly vacant. There are two small dams to the south and south-west and a connecting creek.
1955, 1956	The Site appears unchanged from the 1949 aerial photograph.	The surrounding land is relatively unchanged from the 1949 aerial photograph.
1961	The Site is relatively unchanged from the 1956 aerial photograph, but there are vehicle tracks.	The surrounding land is relatively unchanged from the 1956 aerial photograph.
1965	The Site appears unchanged from the 1961 aerial photograph.	The surrounding land is relatively unchanged from the 1961 aerial photograph.
1970	The Site appears unchanged from the 1965 aerial photograph.	The surrounding land is relatively unchanged from the 1965 aerial photograph.
1978	The Site appears relatively unchanged from the 1970 aerial photograph.	There are a few additional sheds on land to the east as well as some surface changes and vehicle tracks. The surrounding landscape is otherwise relatively unchanged.
1982	A fence has been built around a portion of the Site, but the area otherwise appears relatively unchanged from the 1978 aerial photograph.	A tennis court has been constructed on land to the east. The surrounding landscape is otherwise relatively unchanged.
1986	The Site appears unchanged from the 1982 aerial photograph.	The surrounding land is relatively unchanged from the 1982 aerial photograph.
1991	The Site appears unchanged from the 1986 aerial photograph, except the fence has been removed.	There are some unclear surface changes on land to the west and the roadway of The Retreat has been constructed to the south. The neighbouring land is relatively unchanged.
1994	The Site appears relatively unchanged from the 1991 aerial photograph.	The surrounding land is relatively unchanged from the 1991 aerial photograph, although the ground surface is considerably drier.
2005	A house has been built which resembles the existing building on-site. There are also a few sheds at the northern end of the property which resemble the layout of existing outbuildings.	A few houses have been built to the south. The surrounding land otherwise remains undeveloped.
2007	There are some unclear objects being stored at the northern end of the Site.	The surrounding land is relatively unchanged from the 2005 aerial photograph. There are some minor surface changes within nearby properties.
2011	A fence has been installed to separate the north and south halves of the Site. There are some cars and other objects being stored at the northern end.	There are some surface changes and additional outbuilding on neighbouring properties, but the surrounding land-uses otherwise appear relatively unchanged from the 2007 aerial photograph.
2016	There are additional cars and objects at the northern end of the Site as well as small trees lining the rear boundaries. The Site otherwise appears relatively unchanged and now fully resembles its existing conditions.	An additional house has been built on land to the east. There are also some small changes visible within other nearby residential properties.

Year	Site Features	Surrounding Area
2020	There are several additional cars at the northern end of the Site.	The surrounding land is relatively unchanged from the 2016 aerial photograph.
2023	The Site appears relatively unchanged from the 2020 aerial photograph.	The surrounding land is relatively unchanged from the 2020 aerial photograph.

5.3 Certificate of Title

Historical land title records indicating ownership of the land were reviewed during this assessment. The title records associated with the Site are presented in *Table 5.2 – Title History*. A copy of the title search for the Site is included in *Appendix 2*.

Table 5.2 – Title History

Years owned	Proprietor(s)
As regards to the part numbered 1 on attached Cadastral Records Enquiry Report:	
1918 to 1924	Hugh Peter MacDonald (Grazier)
1924 to 1949	Lorna Jessie MacDonald (Spinster)
1949 to 1959	Commonwealth of Australia (Acquired for Purposes of the Overseas Telecommunications Commission)
1959 to 1972	Lorna Jessie MacDonald (Spinster)
1972 to 1985	Peter Medich Properties Pty Ltd Lubo Medich Properties Pty Ltd
As regards to the part numbered 2 on attached Cadastral Records Enquiry Report:	
1918 to 1924	Hugh Peter MacDonald (Grazier)
1924 to 1972	Lorna Jessie MacDonald (Spinster)
1972 to 1985	Peter Medich Properties Pty Ltd Lubo Medich Properties Pty Ltd
Continued as to the whole of Lot 272 D.P. 803167:	
1985 to 1998	Peter Medich Properties Pty Ltd
1998 to date	Zivko Milinkovic Jasmina Milinkovic

An excerpt from the Cadastral Records Enquiry Report is provided in *Figure 5.1 – Cadastral Records Excerpt*.

Figure 5.1 – Cadastral Records Excerpt

5.4 Gaps in the Site History

Sixteen aerial photos were reviewed covering a time span of 74 years (1949 to 2023). The aerial photos confirm that the house on the Site was built sometime between 1994 and 2005 and has been the primary development prior to and since its construction. There are also several small gaps throughout the photographic record, although as there was no other significant development observed, these gaps are considered not significant. There was, however, evidence both on-site and on surrounding land of historical farming and grazing activities that have occurred, which indicate the potential for historic use of pesticides.

Based on the above, no significant observations have been identified from gaps in the Site history. The land use is considered to have been limited to residential activities or potential prior farming and there is minimal potential for significant or widespread contamination to be present associated with historical Site use and ownership.

5.5 History Summary

Based on the review of historic aerial photographs, the Site at 40 The Retreat appears to possible have been used for grazing purposes until the construction of the house sometime between 1994 and 2005. The historical ownerships of title also indicate that the property has held ownership by only a few individuals though mostly held a consistent ownership by a family between 1918 to 1972. More recent aerial photographs also show that the collection of vehicles and objects at the northern end of the Site has occurred during its current ownership since 1998.

ECS considers that there is minimal potential for significant or widespread contamination to be present associated with historical Site use and ownership.

5.6 NSW EPA Records

A review of the NSW Environment Protection Authority (EPA) databases was conducted including the following:

- Records maintained in relation to contaminated land under Section 58 of the CLM Act 1997;
- Records of sites notified to the EPA in accordance with the Guidelines on the Duty to Report Contamination under Section 60 of the CLM Act 1997 (2015);
- Licensed activities under the Protection of the Environment Operations Act (1997).

This review indicated that there are no properties within Bradfield or Bringelly that have been notified to the EPA.

6.0 CONCEPTUAL SITE MODEL SUMMARY

The potential for Site contamination is reflective of past use of the land. The conceptual site model (CSM) is based on the findings of the desktop study including regional and local conditions and historical records. The history review indicated the Site has been primarily used for residential purposes that are unlikely to result in significant contamination.

During this investigation, the following potential areas of environmental concern were identified. Each potential area of concern was analysed and determined if further investigation and management were required.

The CSM is the framework for identifying activities with the potential to contaminate the site and how potential receptors may be exposed to contamination (if present) either in the present or the future. I.e. it enables an assessment of the potential source – pathway – receptor linkages (complete pathways).

Potential Sources

Based on the results of the background data review the Areas of Environmental Concern (AEC) include the following potential sources of contamination and associated Contaminants of Potential Concern (CoPC) have been identified. Hazardous building materials such as asbestos are unlikely to be present as buildings on the site are less than 20 years old however, fill, if encountered could contain asbestos.

S1 – Storage of cars and building materials may result in hydrocarbon and metal contamination.

Potential Receptors

Human health receptors
R1 – Construction and maintenance workers;
R2 – End users (residential); and
R3 – Adjacent users (residential and sensitive).

Environmental receptors
R4 – Water bodies (Thomsons Creek);
R5 – Ecology (vegetation and biota); and
R6 – Groundwater (freshwater).

Potential Pathways

P1 – Ingestion and dermal contact;
P2 – Inhalation of dust;
P3 – Surface water run-off;
P4 – Leaching of contaminants and vertical migration into groundwater;
P5 – Lateral migration of groundwater providing base flow to water bodies; and
P6 – Direct contact with ecological receptors (including accidental and/or via irrigation).

A ‘source–pathway–receptor’ approach has been used to assess the potential risks of harm being caused to human, water, or environmental receptors from potential contamination sources on or in the vicinity of the Site, via exposure pathways (complete pathways). The possible pathways between the above potential source (S1) and receptors (R1 to R6) are provided in *Table 6.1 – Source Pathway Analysis*.

Table 6.1 – Source Pathway Analysis

Source	Pathway	Receptor	Risk Evaluation
S1	P1 – Ingestion and dermal contact	R1 – Workers	Possible during development works
		R2 – Occupants	Possible following development works
		R3 – Neighbours	Unlikely potential source is limited
	P2 – Inhalation of dust and/or vapours	R1 – Workers	Possible during development works
		R2 – Occupants	Possible following development works
		R3 – Neighbours	Unlikely potential source is limited
	P3 – Surface water run-off	R4 – Water bodies	Possible during development works
		R6 – Groundwater	Unlikely potential source is limited
	P4 – Leaching of contaminants	R4 – Water bodies	Unlikely the Site is relatively isolated
		R6 – Groundwater	Unlikely potential source is limited
	P5 – Migration of groundwater	R4 – Water bodies	Unlikely the Site is relatively isolated
		R6 – Groundwater	Unlikely potential source is limited
	P6 – Contact with ecological receptors	R5 – Ecology	Possible depending on development

Notes: Risk ranking assessed as low and acceptable are shaded in green
Risk ranking assessed to be more than low shaded in yellow.

The potential area of environmental concern (AEC) identified are associated with historical Site usage. The AEC including damaged building materials (from construction, demolition, and degradation). Near surface soils are considered the primary indicator for impact based on the Site history.

7.0 SITE ASSESSMENT

To evaluate for the presence of contamination, in particular the presence and quality of fill material, at the Site the following scope of work was undertaken:

- A walkover Site inspection with observations for potential Asbestos Containing Material (ACM);
- The excavation of twelve shallow test pits around the Site;
- The collection of surface soil samples from the test pits;
- The collection of water samples from three existing groundwater monitoring wells installed during a geotechnical investigation; and
- The analysis of the soil and groundwater samples for common contaminants including the contaminants of potential concern (CoPC).

The rationale for environmental sampling locations was based on the probability that surface soils would unlikely be impacted from prior activities on the Site.

Targeted sampling was used to evaluate for impact around the former house. Methodical sampling with a density based on the Schedule B2 of the NEPM Guideline on Site Characterisation (2011) or the NSW EPA site assessment guidelines was not considered necessary for this preliminary Site investigation.

7.1 Site Inspection

An inspection of the Site was conducted on 27th November 2023. The Site currently contains a single storey brick house built upon brick foundations as well as a few sheds within the rear yard. Scattered across the northern end of the property are multiple (more than 20) old vehicles, trailers and small piles of building materials. There was also a small pit at the north-west of the property that appeared to be a dumping area for olives or for other similar organic material. Except for the vehicles and objects covering the northern Site surface, the property

is otherwise mostly covered with grass. There is also a long bitumen driveway connecting The Retreat to the house and northern end of the Site.

There appeared to be no significant surface modifications present and there was also no evidence of significant volumes of imported fill material observed across the Site surface or found within the test pits. Additionally, potential Asbestos Containing Material (ACM) was not observed across the Site surface or detected within the test pits excavated for sampling.

At the time of this investigation, an internal inspection of the house was not undertaken. Based on the age of the house the potential for asbestos building materials is expected to be low.

Existing conditions of the Site are shown in the following figures:

Figure 7.1 – House Front
Figure 7.2 – House Rear
Figure 7.3 – House Construction
Figure 7.4 – Entry to Rear
Figure 7.5 – Rear Driveway
Figure 7.6 – Farm Area
Figure 7.7 – Rear Yard
Figure 7.8 – North-East Yard
Figure 7.9 – Rear Storage
Figure 7.10 – Rear Shed
Figure 7.11 – Workshop
Figure 7.12 – Workshop Interior
Figure 7.13 – Olive Barrels
Figure 7.14 – Olive Pit
Figure 7.15 – North-West Boundary
Figure 7.16 – North Boundary

Figure 7.1 – House Front

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Figure 7.3 – House Construction

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Figure 7.8 – North-East Yard

Figure 7.9 – Rear Storage

Figure 7.10 – Rear Sheds

Figure 7.11 – Workshop

Figure 7.12 – Workshop Interior

Figure 7.13 – Olive Barrels

Figure 7.14 – Olive Pit

Figure 7.15 – North-West Boundary

Figure 7.16 – North Boundary

7.2 Assessment Method

The sampling plan prepared for this investigation considered the Site history and the Site setting with eight shallow test pits excavated to evaluate surface soils. Test pit locations were established based on a targeted sampling regime and considering accessible areas around the Site. Soil samples were collected from each test pit targeting the surface material. Each sample location was recorded in the field on a test pit log and on a chain of custody.

Test pits were labelled RB1-RB12, RBD and RBP with each sample labelled with its test pit number. The locations of the test pits are presented on *Figure 7.17 – Sample Location Plan*. The subsurface conditions encountered at each location are summarised in *Table 7.1 – Sample Schedule*.

Figure 7.17 – Sample Location Plan

Table 7.1 – Sample Schedule

Sample Number	Sample Depth (m)	Location	Description
RB1	0.0 – 0.1	North	Brown clayey soil, organic material and some gravel
RB2	0.0 – 0.1	North	Brown clayey soil, organic material and some gravel
RB3	0.0 – 0.1	North	Brown clayey soil, organic material and some gravel
RB4	0.0 – 0.1	North-East	Brown clayey soil, organic material and some gravel
RB5	0.0 – 0.1	Mid-West	Brown clayey soil, organic material
RB6	0.0 – 0.1	North-East	Brown clayey soil, organic material
RB7	0.0 – 0.1	Mid-West	Brown clayey soil, organic material
RB8	0.0 – 0.1	Mid-East	Brown clayey soil, organic material
RB9	0.0 – 0.1	South-East	Brown clayey soil, organic material
RB10	0.0 – 0.1	Mid-East	Brown clayey soil, organic material
RB11	0.0 – 0.1	South-East	Brown clayey soil, organic material
RB12	0.0 – 0.1	South	Brown clayey soil, organic material
RBD	0.0 – 0.1	Duplicate/RB4	Brown clayey soil, organic material and some gravel
RBP	0.0 – 0.1	Olive Pit	Brown sludge with olive stones

Soil samples were collected directly from test pits at the nominated sample depth by hand directly into laboratory prepared sample jars wearing a new pair of disposable gloves to collect each sample.

7.3 Quality Plan

The field quality assurance / quality control (QA/QC) procedures adopted during this assessment included: field decontamination protocols, sample labelling storage and handling methodologies.

Field decontamination involved rinsing of sampling equipment with potable water. All samples were labelled in the field with the sample location recorded.

The analytical laboratory also conducted a QA/QC program. This program included the analysis of one blank sample and one spiked sample with every batch of samples tested; then repeat analysis of approximately 10% of the samples. The results of this laboratory QA/QC program are included within the laboratory reports.

8.0 ASSESSMENT GUIDELINES

8.1 Soil Assessment Criteria

The NSW Environment Protection Authority (EPA) has issued a number of guidelines relevant to the concentration of contaminants in soil. These are used in conjunction with the National Environment Protection Council (NEPC) – National Environment Protection (Assessment of Site Contamination) Measure 2013.

The Site Assessment Criteria (SAC) that have been used to evaluate surface soils are based on the National Environment Protection Measure (NEPM) for the Assessment of Site Contamination (NEPM 2013). These criteria are not derived as acceptance criteria for contamination at a site, but as levels above which specific consideration of risk, based on the site use and potential exposure, is required. If a risk is determined present, then remediation and/or management must be undertaken.

The National Environmental Protection Measure (NEPM) provides Health Investigation Levels (HILs) that are concentration levels, which have been tiered (provided in sets based on risk)

for various exposure settings pertaining to land uses. The site criteria within the NEPM are based on potential impact to human health and are intentionally conservative.

The HILs have been derived for four (4) generic land use settings. The HILs for the land use type considered in NEPM include:

- HIL A – residential with garden/accessible soil (home grown produce <10% fruit and vegetable intake, (no poultry), also includes children's day care centres, preschools, and primary schools.
- HIL B – residential with minimal opportunities for soil access includes dwellings with fully and permanently paved yard space such as high-rise buildings and flats.
- HIL C – public open space such as parks, playgrounds, playing fields (e.g. ovals), secondary schools and footpaths. It does not include undeveloped public open space (such as urban bushland and reserves) which should be subject to a site-specific assessment where appropriate.
- HIL D – commercial/industrial such as shops, offices, factories, and industrial sites.

Health Screening Levels (HSLs) for various petroleum hydrocarbon compounds have also been developed. The HSLs also relate to the land use (consistent with the HILs) and are dependent on soil type and depth.

The Site is being redeveloped to be used as a residence. The conservative guidelines used for this proposed land use are the residential criteria (HIL A levels). Consistent with the HILs, HSLs for residential land use (HSL A) with sandy soils have been adopted for the relevant SAC. These criteria are summarised on *Table 8.1 – Soil Assessment Criteria*.

Ecological Investigation Levels (EILs) and Ecological Screening Levels (ESLs) were used for an 'urban residential and public open space' exposure scenario as outlined in NEPM (2013) and adjusted for the soil type.

EILs for selected metals were calculated based on the conservative added contaminant limit (ACL) values for soils with a pH of 5.5 or more (neutral to slightly acidic soils) presented in Schedule B(1) of NEPM (2013) and published ambient background concentration (ABC) values (50th percentile for background levels in old suburbs with high traffic).

It is noted that development of the Site will include a basement that encompasses most of the Site area which will result in limited potential for environmental exposures on the Site.

Table 8.1 – Soil Assessment Criteria

Contaminant	Site Assessment Criteria (mg/kg)	
	HIL/HSL	EIL/ESL
Heavy Metals		
Arsenic	100[1]	100
Cadmium	20[1]	
Chromium (VI)	100[1]	203
Copper	6000[1]	158
Lead	300[1]	1263
Mercury	40[1]	
Nickel	400[1]	36
Zinc	7400[1]	363
Total Recoverable Hydrocarbons (TRH)		
Naphthalene	3[2]	170
TRH C6-C10 (F1)	45[2]	180
TRH C10-C16 (F2)	110[2]	120
Monocyclic Aromatic Hydrocarbons		
Benzene	0.5[2]	50
Toluene	160[2]	85
Ethylbenzene	55[2]	70
Xylene (Total)	40[2]	105
Polycyclic Aromatic Hydrocarbons (PAH)		
Benzo(a)pyrene	3[3]	0.7
Total PAH	300[3]	
Organochlorine Pesticides (OCP)		
DDT+DDE+DDD	240[1]	180
Aldrin and Dieldrin	6[1]	
Chlordane	50[1]	
Endosulfan	270[1]	
Endrin	10[1]	
Heptachlor	6[1]	
HCB	10[1]	
Methoxychlor	300[1]	
Toxaphene	20[1]	
Asbestos		
Bonded Asbestos	0.01%	

Notes: 1. HIL A levels sensitive land use.
2. Health screening levels for sandy soils over the depth interval 0-1m.
3. Carcinogenic PAHs based on the 8 carcinogenic PAHs.

8.2 Groundwater Assessment Criteria

The NSW EPA Guidelines for the Assessment and Management of Groundwater Contamination (NSW DEC, 2007) describes the process to identify environmental values which must be considered in groundwater investigations at contaminated sites. Based on these guidelines, assessment of relevant environmental values requires that the consultant assess whether it is a major drinking water aquifer; assess the uses of the aquifer and identify if it is a suitable drinking water source.

ECS has identified that:

- The site lies within a riparian land zone.
- The closest potential discharge point is considered as the Pacific Ocean, approximately 2km east.

The Pacific Ocean is a marine environment, so environmental values for groundwater quality are for protection of marine aquatic species and potentially recreational use. In addition, protection of human health from hydrocarbon vapours is applicable to assessment of groundwater.

The Australian and New Zealand Guidelines for the Protection of Aquatic Organisms have trigger values for 95% Protection of Species in freshwater ecosystem and these are considered applicable to assess groundwater at the Site. In addition, the ASC NEPM (2013) has HSL for vapour intrusion of petroleum hydrocarbon contaminants in groundwater.

There are also establish drinking water guidelines that can be used to assess water quality (Australian Drinking Water Guidelines NHMRC 2011). Groundwater is not currently being extracted for domestic consumption, however, the criterial are considered relevant as a potential measure of water quality. These criteria are summarised on *Table 8.2 – Groundwater Criteria*.

Table 8.2 – Groundwater Assessment Criteria

Contaminant	Site Assessment Criteria (µg/l)		
	ANZG[1]	ASC NEPM[2]	Drinking[3]
Monocyclic Aromatic Hydrocarbons			
Benzene	950	5000	1
Toluene	--	NL	800
Ethylbenzene	--	NL	600
Xylene	200[4]/350[5]	NL	300
Polycyclic Aromatic Hydrocarbons (PAH)			
Naphthalene	16	NL	--
TRH F1	--	6000	--
TRH F2	--	NL	--
Heavy Metals			
Arsenic	13	--	10
Cadmium	0.2	--	2
Chromium (VI)	1	--	50
Copper	1.4	--	2000
Lead	3.4	--	10
Mercury	0.6	--	1
Nickel	11	--	2
Zinc	8	--	--
Polycyclic Aromatic Hydrocarbons			
Benzo(a)pyrene	--	--	0.01
Total PAH	--	--	--

9.0 INVESTIGATION RESULTS

9.1 Site Conditions

At the locations where sampling was undertaken, surface soils appeared to consist of clayey soils with some organic material and minor gravel at some locations. These sediments are expected to be disturbed natural soils with minor gravel waste at this location. No significant thicknesses of fill material were observed at the Site. Additionally, potential Asbestos Containing Material (ACM) was not observed across the Site surface or found within test pits.

9.2 Analytical Results

The results of analysis soil and water samples are summarised in *Table 9.1 – Soil Analytical Results* and *Table 9.2 – Groundwater Analytical Results*. The laboratory reports are included in *Appendix 3*.

The results of the soil analysis indicated concentrations of all contaminants below the human health criteria for sensitive land use. In addition all concentrations were below the ecological assessment criteria but with the following exception of the concentration of nickel in sample RB10 is 190mg/kg which is above the EIL of 36.

It is further noted that the level of copper in the olive waste is close to (but below) the EIL.

The results of groundwater analysis indicated levels of some metal above the ANZC criteria. The concentrations measured are potentially indicative of regional conditions and not considered to be the result of activities undertaken on the Site.

ENVIRONMENTAL CONSULTING SERVICES

Table 9.1 – Soil Analytical Results

Sample Number	RB1	RB2	RB3	RB4	RB5	RB6	RB7	RB8	RB9	RB10	RB11	RB12	RBD	RBP	SAC HIL/HSL
Heavy Metals															
Arsenic	9.2	12	11	13	10	14	10	12	7.4	4.7	6.3	6.3	10	< 2	100
Cadmium	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	0.5	< 0.4	< 0.4	< 0.4	< 0.4	20
Chromium	18	26	24	20	21	21	15	17	12	280	10	17	17	< 5	100
Copper	25	30	30	20	32	29	15	17	16	43	14	18	19	150	6000
Lead	29	31	30	47	24	45	25	26	17	34	17	16	42	< 5	300
Mercury	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	9.6	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	40
Nickel	11	11	11	8.4	18	9.9	5.4	5.7	6.5	190	5.6	8.4	6.8	< 5	400
Zinc	140	63	64	52	82	96	51	51	35	240	36	42	60	9.2	7400
Total Recoverable Hydrocarbons (TRH)															
Naphthalene	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	3
TRH F1	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	45
TRH F2	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	110
Monocyclic Aromatic Hydrocarbons															
Benzene	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.5
Ethylbenzene	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	160
Toluene	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	55
Xylene (Total)	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	40
Polycyclic Aromatic Hydrocarbons (PAH)															
Benzo(a)pyrene	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	3
Total PAH	1.3	< 0.5	1.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	300
Organochlorine Pesticides															
DDT+DDE+DDD	< 0.05	< 0.5	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	< 0.05	< 0.5	< 0.05	< 0.5	240
Aldrin & Dieldrin	< 0.05	< 0.5	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	< 0.05	< 0.5	< 0.05	< 0.5	6
Chlordane	< 0.1	< 1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 1	< 0.1	< 1	< 0.1	< 1	50
Endosulfan	< 0.05	< 0.5	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	< 0.05	< 0.5	< 0.05	< 0.5	270
Endrin	< 0.05	< 0.5	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.05	0.07	< 0.5	< 0.05	< 0.5	< 0.05	< 0.5	10
Heptachlor	< 0.05	< 0.5	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	< 0.05	< 0.5	< 0.05	< 0.5	6
HCB	< 0.05	< 0.5	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	< 0.05	< 0.5	< 0.05	< 0.5	10
Methoxychlor	< 0.05	< 0.5	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	< 0.05	< 0.5	< 0.05	< 0.5	300
Toxaphene	< 0.5	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 10	< 0.5	< 10	< 0.5	< 10	20
Organophosphorus Pesticides															
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asbestos															
Asbestos	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.01

Notes: All measurements in mg/kg except asbestos

Table 9.2 – Groundwater Analytical Results

Sample Number	A	B	C	Site Assessment Criteria (µg/L)		
Well location	**RB4**	**RB3**	**RB11**	ANZC	NEPM	Drinking
Monocyclic Aromatic Hydrocarbons						
Benzene	< 1	< 1	< 1	950	5000	1
Toluene	< 1	< 1	< 1	--	NL	800
Ethylbenzene	< 1	< 1	< 1	--	NL	600
Xylene	< 3	< 3	< 3	200/350	NL	300
Organochlorine Pesticides						
DDT+DDE+DDD	< 0.2	< 0.2	< 0.2			
Aldrin & Dieldrin	< 0.2	< 0.2	< 0.2			
Chlordane	< 2	< 2	< 2			
Endosulfan	< 0.2	< 0.2	< 0.2			
Endrin	< 0.2	< 0.2	< 0.2			
Heptachlor	< 0.2	< 0.2	< 0.2			
HCB	< 0.2	< 0.2	< 0.2			
Methoxychlor	< 0.2	< 0.2	< 0.2			
Toxaphene	< 5	< 5	< 5			
Total Recoverable Hydrocarbons (TRH)						
Naphthalene	10	10	10	16	NL	--
TRH F1	20	20	20	--	6000	--
TRH F2	50	50	50	--	NL	--
Heavy Metals						
Arsenic	6	16	< 1	13	--	10
Cadmium	0.2	0.3	< 0.2	0.2	--	2
Chromium (VI)	< 1	4	< 1	1	--	50
Copper	1	15	< 1	1.4	--	2000
Lead	2	17	< 1	3.4	--	10
Mercury	< 0.1	< 0.1	< 0.1	0.6	--	1
Nickel	52	48	44	11	--	2
Zinc	100	140	42	8	--	--
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene	< 1	< 1	< 1	--	--	0.01
Total PAH	< 1	< 1	< 1	--	--	--

Notes: NL = non-limiting.

9.3 Data Quality Review

Data Quality Objectives

The purpose of establishing data quality objectives was to ensure the field investigations and analyses are undertaken in a way that enabled the collection and reporting of reliable data on which to base the site assessment.

The data quality objectives (DQOs) for sampling techniques and laboratory analysis of collected samples defines the acceptable level of error required for this investigation. The data quality objectives will be assessed by reference to data quality indicators (DQI) as follows:

Data Representativeness

Data representativeness expresses the degree which sample data accurately and precisely represents a characteristic of a population or an environmental condition. Representativeness was achieved by collecting samples at pre-determined locations across the Site and by taking

an adequate number of samples to achieve the intended objectives. Consistent and repeatable sampling techniques and methods were utilised throughout the sampling, as described.

Completeness

Completeness is defined as the percentage of measurements made which are judged to be valid measurements. The completeness goal is set at there being sufficient valid data generated during the study. If there is insufficient valid data, as determined by the other data quality indicators, then additional data would be required to be collected.

Completeness also needs to consider the integrity of the samples collected delivered to the laboratory for analysis. The laboratory sample receipt notice summarises the sample integrity on receipt.

Data Comparability

Data comparability is a qualitative parameter expressing the confidence with which one data set can be compared with another. This is achieved through maintaining a level of consistency for analytical techniques and reporting methods. Reporting of results was done in consistent units and nomenclatures, and comparability was achieved by ensuring that precision and accuracy objectives were met.

Precision

Precision measures the reproducibility of measurements under a given set of conditions. The precision of the laboratory data and sampling techniques is assessed by calculating the Relative Percent Difference (RPD) of duplicate samples. The criteria used for the assessment of RPDs is based on guidelines given in AS4482.1 (1997) and laboratory criteria but has been set by ECS for this assessment. If duplicate results are not within the acceptable RPDs, investigation into the cause is initiated. If a cause cannot be determined the validity of the data is questioned.

The proposed acceptable range for Relative Percent Difference (RPD) for duplicate samples have been set as follows:

%RPD Range result >10 times PQL then maximum RPD 50%
result >5 times PQL then maximum RPD 75%
result >2 times PQL then maximum RPD 100%
result <2 times PQL then no limit.

RPD is calculated as the absolute value of the difference between the initial and repeat result divided by the average value expressed as a percentage. The overall success is based on assessment of the data set as a whole and not on individual acceptance or exceedance within the data set.

A summary of the duplicate soil samples with the calculated RPDs is presented in the Table 9.3 These calculations are limited to metals only as all other contaminant results were below the laboratory Level of Reporting (LOR).

Table 9.3 – Relative Percent Differences Soil

Sample Number	LOR	RB4	RBD	RPD (%)	Comment
Heavy Metals					
Arsenic	2	13	10	26	Accept
Cadmium	0.4	< 0.4	< 0.4	-	Accept
Chromium	5	20	17	1	Accept
Copper	5	20	19	5	Accept
Lead	5	47	42	11	Accept
Mercury	0.1	< 0.1	< 0.1	-	Accept
Nickel	5	8.4	6.8	21	Marginal
Zinc	5	52	60	14	Accept

The results of duplicate analysis showed good comparability with each RPD below the designated acceptance criteria.

The analytical laboratory QA/QC program included the analysis of one blank sample and one spiked sample with every batch of samples tested, and the repeat analysis of approximately 10% of the samples. Laboratory Quality Assurance and Quality Control procedures are provided in the Final Certificate of Analysis.

- A copy of chain of custody (COC) forms are provided with the laboratory results. These forms detail the sample logs such as sample identification, matrix, depths, dates of sampling, container type, and analysis requests;
- A sample receipt notice (SRN) is issued upon delivery of samples, and Sample Integrity and Validated Time of Sample Receipt (VTSR) Holding Times are verified;
- Analytical methods are detailed in the Final Certificate of Analysis; and
- NATA accreditation is held for each method and sample matrix type reported, unless otherwise specified, NATA accredited in-house laboratory methods are referenced from NEPC, ASTM, and modified USEPA / APHA documents.

Performance of intra-laboratory spikes and duplicates are specific to each report, details of which are provided in the Final Certificate of Analysis (FCA). Details referring to instrument detection limits, method detection limits (MDL), and estimated quantitative limits (EQL) are also provided in the FCA.

10.0 CONCLUSIONS

The Site currently contains a single storey brick house built upon brick foundations as well as a few sheds within the rear yard. Scattered across the northern end of the property are several old vehicles, trailers and small piles of building materials. There is also a small pit at the north-west of the property that appeared to be a dumping waste olives and other similar organic material.

Except for the vehicles and objects covering the northern Site surface, the property is otherwise mostly covered with grass. Surface soils are considered to be disturbed natural clays with traces of rocks, which has been graded to follow the regional topography. At the time of this investigation, an internal inspection of the house was not undertaken.

During the Site inspection there was no significant evidence of imported fill material observed across the Site surface or found within the test pits excavated for sampling.

The history review showed the Site has been owned by only a few individuals, and it is considered likely that the land has been used solely for residential purposes since the

construction of the house. Historical aerial photographs confirm that the Site has been occupied by a house which was built sometime between 1994 and 2005 and been the only significant development. These photographs also show evidence of early agricultural activity (grazing) on the Site and on adjoining land. Considering that the Site has been used for residential purposes and grazing, there is limited potential for impacts. However, numerous cars have been stored on the northern end of the Site.

To characterise the surface material, twelve shallow test pits were excavated into clayey sandy soils with traces of organic material and minor gravel. Additionally, three water samples were taken from groundwater monitoring wells installed during a geotechnical investigation.

The results of the soil analysis indicated concentrations of all contaminants below the human health Site Assessment Criteria for sensitive land use. However, a concentration of nickel was measured above the ecological investigation criteria. This single exceedance of an EIL is not considered significant with this material likely to be removed during development work.

The results of groundwater analysis indicated some concentrations of metals above assessment criteria for the protection of freshwater ecosystems. The concentrations encountered are expected to represent background levels at this location.

Based on the findings of this Site Investigation, ECS considers the Site is suitable for redevelopment and sensitive land use following the implementation of the following recommendations:

- The removal of all stored cars and materials, and the removal of olive waste from the identified pit;
- The preparation of a waste classifications for any material to be excavated and disposed of off-site. The waste classifications must be prepared in accordance with EPA guidelines; and
- All waste must be managed and disposed of in accordance with current guidelines and regulations.

This investigation has not identified significant potential for contamination at the Site or encountered significant soil or groundwater contamination that would preclude the proposed development. ECS does not consider further environmental investigations including a detailed Site Investigation is required, or preparation of a remediation action plan or long-term management plan based on the investigation completed and the proposed development.

11.0 LIMITATIONS

This report has been prepared by ECS for Intrax Consulting based on the objectives and scope of work list in Sections 1.1. No warranty, expressed or implied, is made as to the information and professional advice included in this report. Anyone using this document does so at their own risk and should satisfy themselves concerning its applicability and, where necessary, should seek expert advice in relation to their particular situation.

The opinions, conclusions and recommendations in this report are based on conditions encountered during site visits and information reviewed at the date of preparation of the report. ECS has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

In preparing this report ECS has relied on information contained in reports prepared by others and on information from third parties. ECS disclaims liability arising from errors and omissions contained within reports and information prepared by others. ECS has also relied on information contained in searches of government websites and has not independently verified or checked the data contained on these websites.

In preparing this report, current guidelines for assessment and management of contaminated land were considered. The conclusions reached in this report are dependent on the limitations inherent in all subsurface investigations where horizontal and vertical variation in contaminant concentrations can occur. No subsurface assessment can accurately predict the contaminant concentration at all points.

APPENDIX 1

Date:16 Nov 2023

Reference: LS0xxxxx EA

Address: 40 The Retreat, Bradfield, NSW 2556

40 The Retreat, Bradfield, NSW 2556

Legend

Site Boundary

Buffer 150m

Scale: 0 25 50 75 100 Meters	Data Source Aerial Imagery: © Aerometrex Pty Ltd	Coordinate System: GDA 1994 MGA Zone 56	Date: 16 November 2023

40 The Retreat, Bradfield, NSW 2556

Legend

Site Boundary

Buffer 150m

Scale: 0 25 50 75 100 Meters	Data Source Aerial Imagery: © Aerometrex Pty Ltd	Coordinate System: GDA 1994 MGA Zone 56	Date: 16 November 2023

40 The Retreat, Bradfield, NSW 2556

Legend

Site Boundary

Buffer 150m

Scale: 0 25 50 75 100 Meters	Data Source Aerial Imagery: © Aerometrex Pty Ltd	Coordinate System: GDA 1994 MGA Zone 56	Date: 16 November 2023

40 The Retreat, Bradfield, NSW 2556

Legend

Site Boundary

Buffer 150m

Scale: 0 25 50 75 100 Meters	Data Source Aerial Imagery: © Aerometrex Pty Ltd	Coordinate System: GDA 1994 MGA Zone 56	Date: 16 November 2023

40 The Retreat, Bradfield, NSW 2556

Legend

Site Boundary

Buffer 150m

Scale: 0 25 50 75 100 Meters	Data Source Aerial Imagery: © Aerometrex Pty Ltd	Coordinate System: GDA 1994 MGA Zone 56	Date: 16 November 2023

40 The Retreat, Bradfield, NSW 2556

Legend

Site Boundary

Buffer 150m

Scale: 0 25 50 75 100 Meters	Data Source Aerial Imagery: © Aerometrex Pty Ltd	Coordinate System: GDA 1994 MGA Zone 56	Date: 16 November 2023

Legend

Site Boundary

Buffer 150m

Scale: 0 25 50 75 100 Meters	Data Sources: Aerial Imagery: © NSW Department of Customer Service	Coordinate System: GDA 1994 MGA Zone 56	Date: 16 November 2023

Legend

Site Boundary

Buffer 150m

Scale: 0 25 50 75 100 Meters	Data Sources: Aerial Imagery: © NSW Department of Customer Service	Coordinate System: GDA 1994 MGA Zone 56	Date: 16 November 2023

Legend

Site Boundary

Buffer 150m

Scale: 0 25 50 75 100 Meters	Data Sources: Aerial Imagery: © NSW Department of Customer Service	Coordinate System: GDA 1994 MGA Zone 56	Date: 16 November 2023

Legend

Site Boundary

Buffer 150m

Scale: 0 25 50 75 100 Meters	Data Sources: Aerial Imagery: © NSW Department of Customer Service	Coordinate System: GDA 1994 MGA Zone 56	Date: 16 November 2023

Legend

Site Boundary

Buffer 150m

Scale: 0 25 50 75 100 Meters	Data Sources: Aerial Imagery: © NSW Department of Customer Service	Coordinate System: GDA 1994 MGA Zone 56	Date: 16 November 2023

Legend

Site Boundary

Buffer 150m

Scale: 0 25 50 75 100 Meters	Data Sources: Aerial Imagery: © NSW Department of Customer Service	Coordinate System: GDA 1994 MGA Zone 56	Date: 16 November 2023

Legend

Site Boundary

Buffer 150m

Scale: 0 25 50 75 100 Meters	Data Sources: Aerial Imagery: © NSW Department of Customer Service	Coordinate System: GDA 1994 MGA Zone 56	Date: 16 November 2023

Legend

Site Boundary

Buffer 150m

Scale: 0 25 50 75 100 Meters	Data Sources: Aerial Imagery: © NSW Department of Customer Service	Coordinate System: GDA 1994 MGA Zone 56	Date: 16 November 2023

40 The Retreat, Bradfield, NSW 2556

Legend

Site Boundary

Buffer 150m

Scale: 0 25 50 75 100 Meters	Data Sources: Aerial Imagery: © NSW Department of Customer Service	Coordinate System: GDA 1994 MGA Zone 56	Date: 16 November 2023

Legend

Site Boundary

Buffer 150m

Scale: 0 25 50 75 100 Meters	Data Source Aerial Imagery: ©2023 Geoscience Australia	Coordinate System: GDA 1994 MGA Zone 56	Date: 16 November 2023

USE OF REPORT - APPLICABLE TERMS

The following terms apply to any person (End User) who is given the Report by the person who purchased the Report from Lotsearch Pty Ltd (ABN: 89 600 168 018) (Lotsearch) or who otherwise has access to the Report (Terms). The contract terms that apply between Lotsearch and the purchaser of the Report are specified in the order form pursuant to which the Report was ordered and the terms set out below are of no effect as between Lotsearch and the purchaser of the Report.

1. End User acknowledges and agrees that:
   (a) the Report is compiled from or using content (**Third Party Content**) which is comprised of:
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      (ii) content which is derived from content described in paragraph (i);
   (b) Neither Lotsearch nor Third Party Content Suppliers takes any responsibility for or give any warranty in relation to the accuracy or completeness of any Third Party Content included in the Report including any contaminated land assessment or other assessment included as part of a Report;
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   (f) Lotsearch has not undertaken any physical inspection of the property;
   (g) neither Lotsearch nor Third Party Content Suppliers warrants that all land uses or features whether past or current are identified in the Report;
   (h) the Report does not include any information relating to the actual state or condition of the Property;
   (i) the Report should not be used or taken to indicate or exclude actual fitness or unfitness of Land or Property for any particular purpose
   (j) the Report should not be relied upon for determining saleability or value or making any other decisions in relation to the Property and in particular should not be taken to be a rating or assessment of the desirability or market value of the property or its features; and
   (k) the End User should undertake its own inspections of the Land or Property to satisfy itself that there are no defects or failures
2. The End User may not make the Report or any copies or extracts of the report or any part of it available to any other person. If End User wishes to provide the Report to any other person or make extracts or copies of the Report, it must contact the purchaser of the Report before doing so to ensure the proposed use is consistent with the contract terms between Lotsearch and the purchaser.
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4. The End User hereby to the maximum extent permitted by law:
   (a) acknowledges that the Lotsearch (nor any of its officers, employees or agents), nor any of its Third Party Content Supplier have any liability to it under or in connection with the

Report or these Terms;

(b) waives any right it may have to claim against Third Party Content Supplier in connection with the Report, or the negotiation of, entry into, performance of, or termination of these Terms; and

(c) releases each Third Party Content Supplier from any claim it may have otherwise had in connection with the Report, or the negotiation of, entry into, performance of, or termination of these Terms.

5. The End User acknowledges that any Third Party Supplier shall be entitled to plead the benefits conferred on it under clause 4, despite not being a party to these terms.
6. End User must not remove any copyright notices, trade marks, digital rights management information, other embedded information, disclaimers or limitations from the Report or authorise any person to do so.
7. End User acknowledges and agrees that Lotsearch and Third Party Content Suppliers retain ownership of all copyright, patent, design right (registered or unregistered), trade marks (registered or unregistered), database right or other data right, moral right or know how or any other intellectual property right in any Report or any other item, information or data included in or provided as part of a Report.
8. To the extent permitted by law and subject to paragraph 9, all implied terms, representations and warranties whether statutory or otherwise relating to the subject matter of these Terms other than as expressly set out in these Terms are excluded.
9. Subject to paragraph 6, Lotsearch excludes liability to End User for loss or damage of any kind, however caused, due to Lotsearch's negligence, breach of contract, breach of any law, in equity, under indemnities or otherwise, arising out of all acts, omissions and events whenever occurring.
10. Lotsearch acknowledges that if, under applicable State, Territory or Commonwealth law, End User is a consumer certain rights may be conferred on End User which cannot be excluded, restricted or modified. If so, and if that law applies to Lotsearch, then, Lotsearch's liability is limited to the greater of an amount equal to the cost of resupplying the Report and the maximum extent permitted under applicable laws.
11. Subject to paragraph 9, neither Lotsearch nor the End User is liable to the other for:
    (a) any indirect, incidental, consequential, special or exemplary damages arising out of or in relation to the Report or these Terms; or
    (b) any loss of profit, loss of revenue, loss of interest, loss of data, loss of goodwill or loss of business opportunities, business interruption arising directly or indirectly out of or in relation to the Report or these Terms,

    irrespective of how that liability arises including in contract or tort, liability under indemnity or for any other common law, equitable or statutory cause of action or otherwise.
12. These Terms are subject to New South Wales law.

APPENDIX 2

ABN: 36 092 724 251
Ph: 02 9099 7400
(Ph: 0412 199 304)

Level 14, 135 King Street, Sydney
Sydney 2000
GPO Box 4103 Sydney NSW 2001
DX 967 Sydney

Summary of Owners Report

Address: 40 The Retreat, Bradfield, NSW

Description: Lot 272 D.P. 803167

As regards to the part numbered 1 on attached Cadastral Records Enquiry Report: -

Date of Acquisition and term held	Registered Proprietor(s) & Occupations where available	Reference to Title at Acquisition and sale
01.05.1918? (1918 to 1924)	Hugh Peter MacDonald (Grazier)	Unregistered Conveyance? (Volume 2846 Folio 119)
07.06.1924 (1924 to 1949)	Lorna Jessie MacDonald (Spinster)	Unregistered Conveyance? (Volume 2846 Folio 119)
20.10.1949 (1949 to 1959)	Commonwealth of Australia (Acquired for Purposes of the Overseas Telecommunications Commission)	Commonwealth Gazette published 20.10.1949 Folio 3013
24.04.1959 (1959 to 1972)	Lorna Jessie MacDonald (Spinster)	Primary Application No. 40287 Now Volume 7682 Folio 76 (Crown Grant)
17.07.1972 (1972 to 1985)	Peter Medich Properties Pty Ltd Lubo Medich Properties Pty Ltd	Volume 7682 Folio 76 Now 27/712840

As regards to the part numbered 2 on attached Cadastral Records Enquiry Report: -

Date of Acquisition and term held	Registered Proprietor(s) & Occupations where available	Reference to Title at Acquisition and sale
01.05.1918 (1918 to 1924)	Hugh Peter MacDonald (Grazier)	Volume 2846 Folio 119
07.06.1924 (1924 to 1972)	Lorna Jessie MacDonald (Spinster)	Volume 2846 Folio 119
28.01.1972 (1972 to 1985)	Peter Medich Properties Pty Ltd Lubo Medich Properties Pty Ltd	Volume 2846 Folio 119 Then Volume 11889 Folio 89 Now 27/712840

ABN: 36 092 724 251
Ph: 02 9099 7400
(Ph: 0412 199 304)

Level 14, 135 King Street, Sydney
Sydney 2000
GPO Box 4103 Sydney NSW 2001
DX 967 Sydney

Continued as to the whole of Lot 272 D.P. 803167: -

Date of Acquisition and term held	Registered Proprietor(s) & Occupations where available	Reference to Title at Acquisition and sale
14.06.1985 (1985 to 1998)	Peter Medich Properties Pty Ltd	27/712840 Now 272/803167
27.11.1998 (1998 to Date)	# Zivko Milinkovic # Jasmina Milinkovic	272/803167

 # Denotes current registered proprietors

Leases: - NIL

Easements: - NIL

Yours Sincerely,
Molly Elson
(Checked by Mark Groll)
21st November 2023

PLAN FORM 2

Plan Drawing only to appear in this space

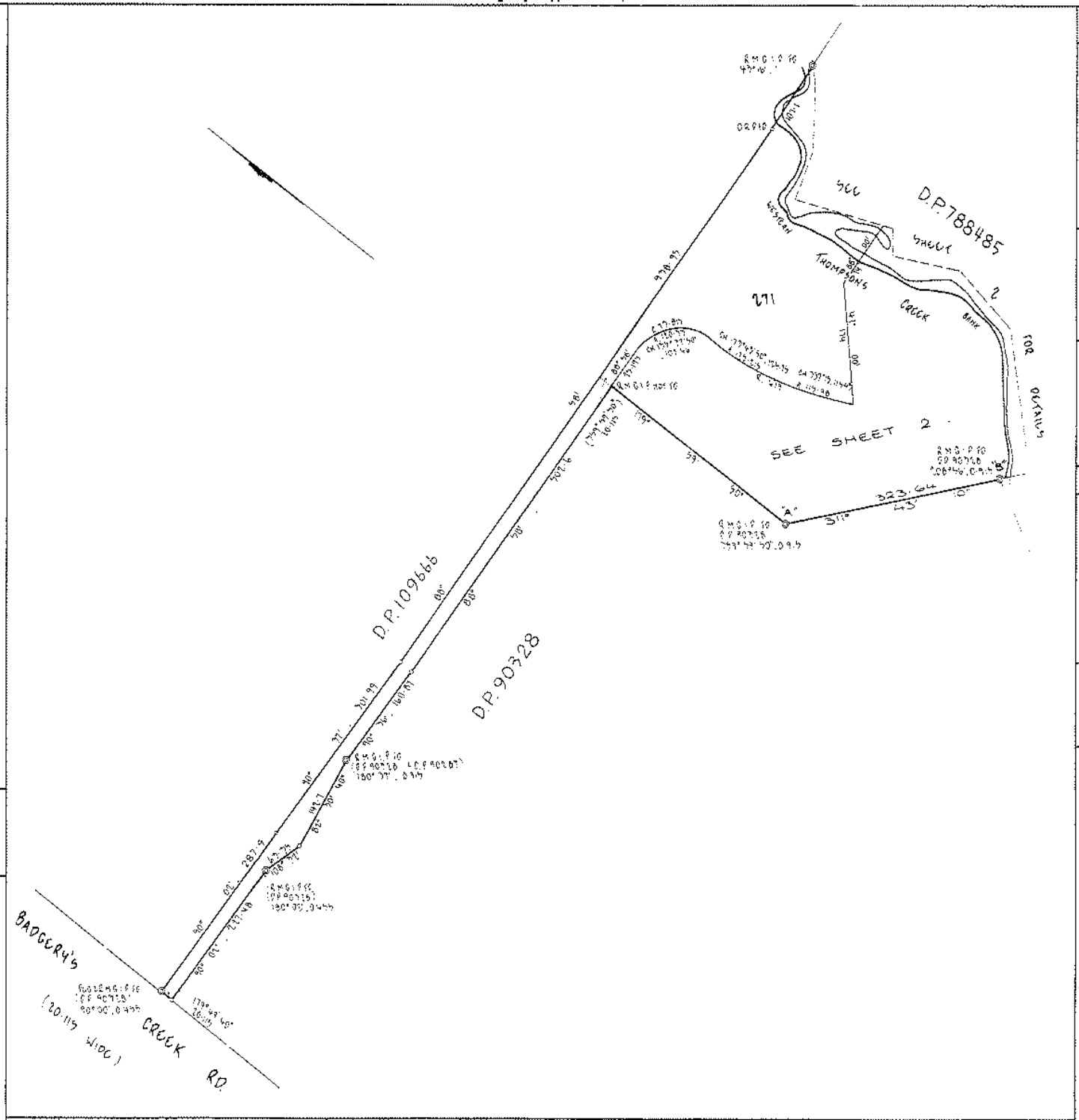
*OFFICE USE ONLY

DP 803167

Y1006A2A

SIGNATURE AND SEALS ONLY

PETER KILLEEN PROPERTIES PTY LTD Common Seal



Registered: DT 21-6-1990

C.A.: No 1990/21 OF 4-5-90

Title System: TORRENS

Purpose: SUBDIVISION

Ref. Map.: U7337-2*, U7345-7*, 8*.

Last Plan: DP 712840

PLAN OF SUBDIVISION OF LOT 27 IN D.P. 712840.

Lengths are in metres. Reduction Ratio 1:4000

Mun./Shire / City: LIVERPOOL

Locality: BRINGELLY

Parish: BRINGELLY

County: CUMBERLAND

This is sheet 1 of my plan in 5 sheets
(Delete if inapplicable)

I, JOHN ROBERT LOVE of PO Box 57 of REGIONAL SURVEYS PTY LTD of PO Box 57 LIVERPOOL

a surveyor registered under the Surveyors Act 1929, as amended, hereby certify that the survey represented in this plan is accurate and has been made in accordance with the Survey Practice Regulations, 1933 and any special requirements of the Department of Lands, and was completed on

19.1.90

Signature: [signature]
Surveyor registered under Surveyors Act 1929, as amended
Datum Line of Azimuth
Bearing: "A" - "B"
Date of survey:

Plans used in preparation of survey/compilation.
D.P. 712840

Crown Lands Office Approval

PLAN APPROVED .....
Authorised Officer
Land District .....
Paper No. .....
Field Book ..... pages .....

Council Clerk's Certificate

I hereby certify that —

(a) the requirements of the Local Government Act, 1919 other than the requirements for the registration of plans), and

(b) the requirements of section 346 of the Metropolitan Water, Sewerage and Drainage Act, 1924, as amended / Hunter District Water, Sewerage and Drainage Act, 1938 as amended

have been complied with by the applicant in relation to the proposed SUBDIVISION (insert "new road" "subdivision" "consolidation" as set out herein)

Subdivision No. 1990/21

Date 4-5-1990

*Signature: [signature]
Counter-signature

Council File No. SX/062 Sg 2

*This part of certificate to be deleted where the application is only for a consolidation of or the opening of a new road or where the land is to be subdivided is wholly outside the areas of operation of the Metropolitan Water, Sewerage and Drainage Board and the Hunter District Water Board.

* Delete if inapplicable

PANEL FOR USE ONLY for statements of intention to dedicate public roads or to create public reserves, drainage reserves, easements or restrictions as to user

PURSUANT TO SEC 88B OF THE CONVEYANCING ACT 1919-64 AS AMENDED IT IS INTENDED TO CREATE :-

1) EASEMENT TO DRAIN WATER 10 WIDE.

2) EASEMENT FOR ELECTRICITY SUBSTATION 25 WIDE.

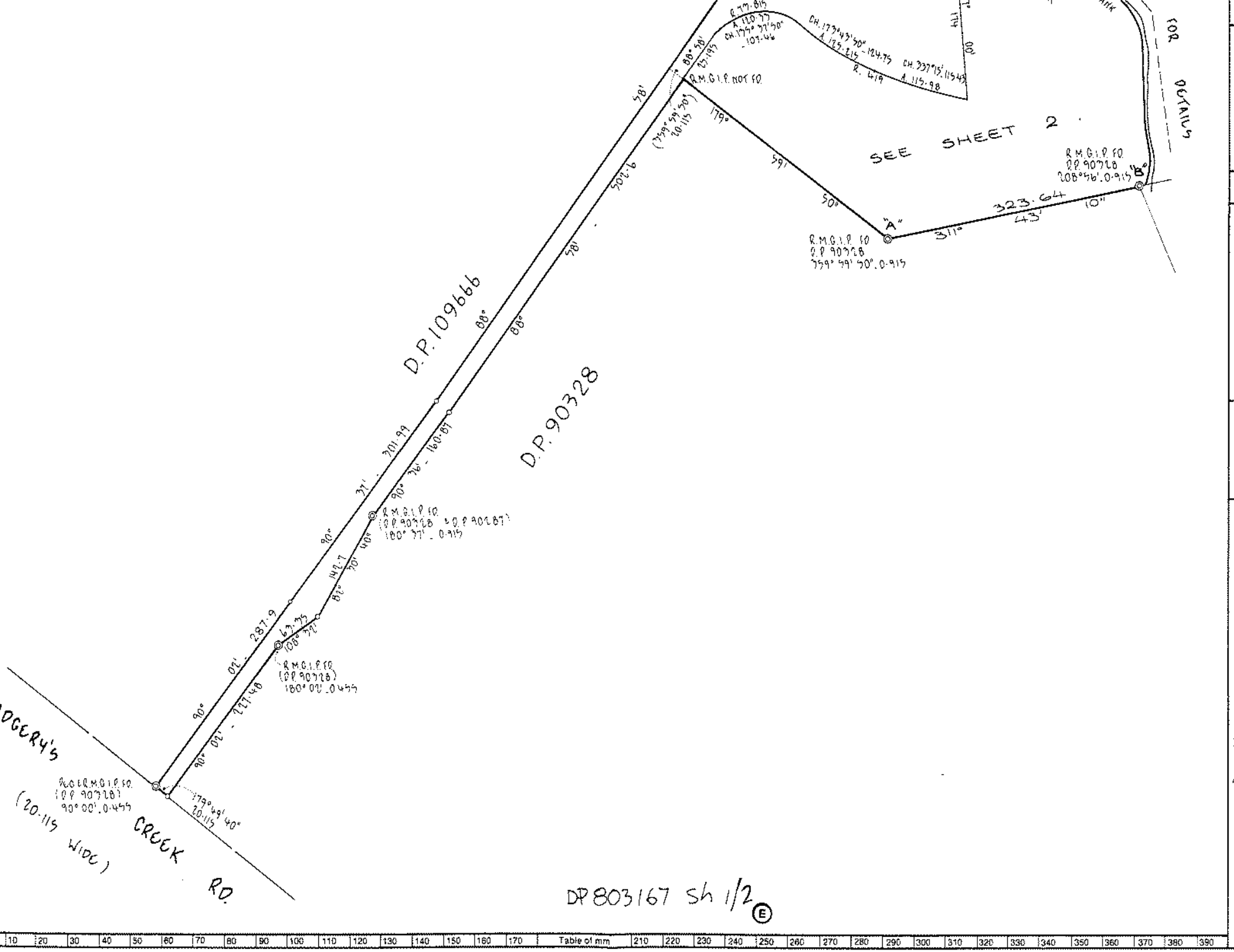
3) RESTRICTION AS TO USER.

4) RESTRICTION AS TO USER.

IT IS INTENDED TO DEDICATE THE ROAD SHOWN AS THE RETREAT TO THE PUBLIC AS ROAD.

SURVEYOR'S REFERENCE 10896 MPD

WARNING: CREASING OR FOLDING WILL LEAD TO REJECTION



DP 803167 Sh 1/2 (E)

Lengths are i

Mun./Shire City

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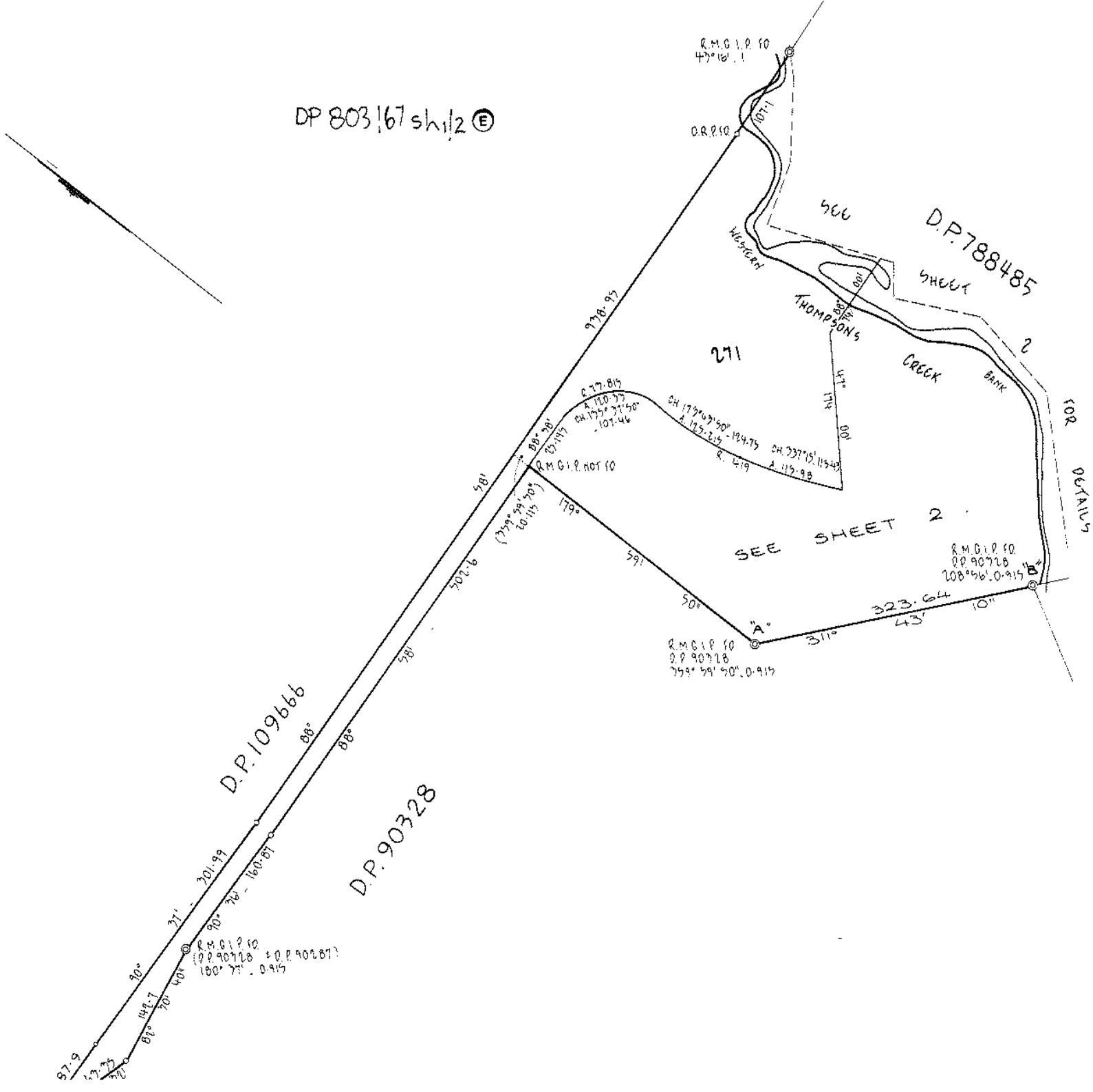

Registered:

C.A.:

Title System:

Purpose:

Ref. Map:

Last Plan:

PLAN OF
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Lengths are i

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City

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Parish:

County:

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PLAN FORM 3 | To be used in conjunction with Plan Form 2 | WARNING: CREASING OR FOLDING WILL LEAD TO REJECTION | *OFFICE USE ONLY

DP 803167 (E)

Registered: DT 21-6-1990

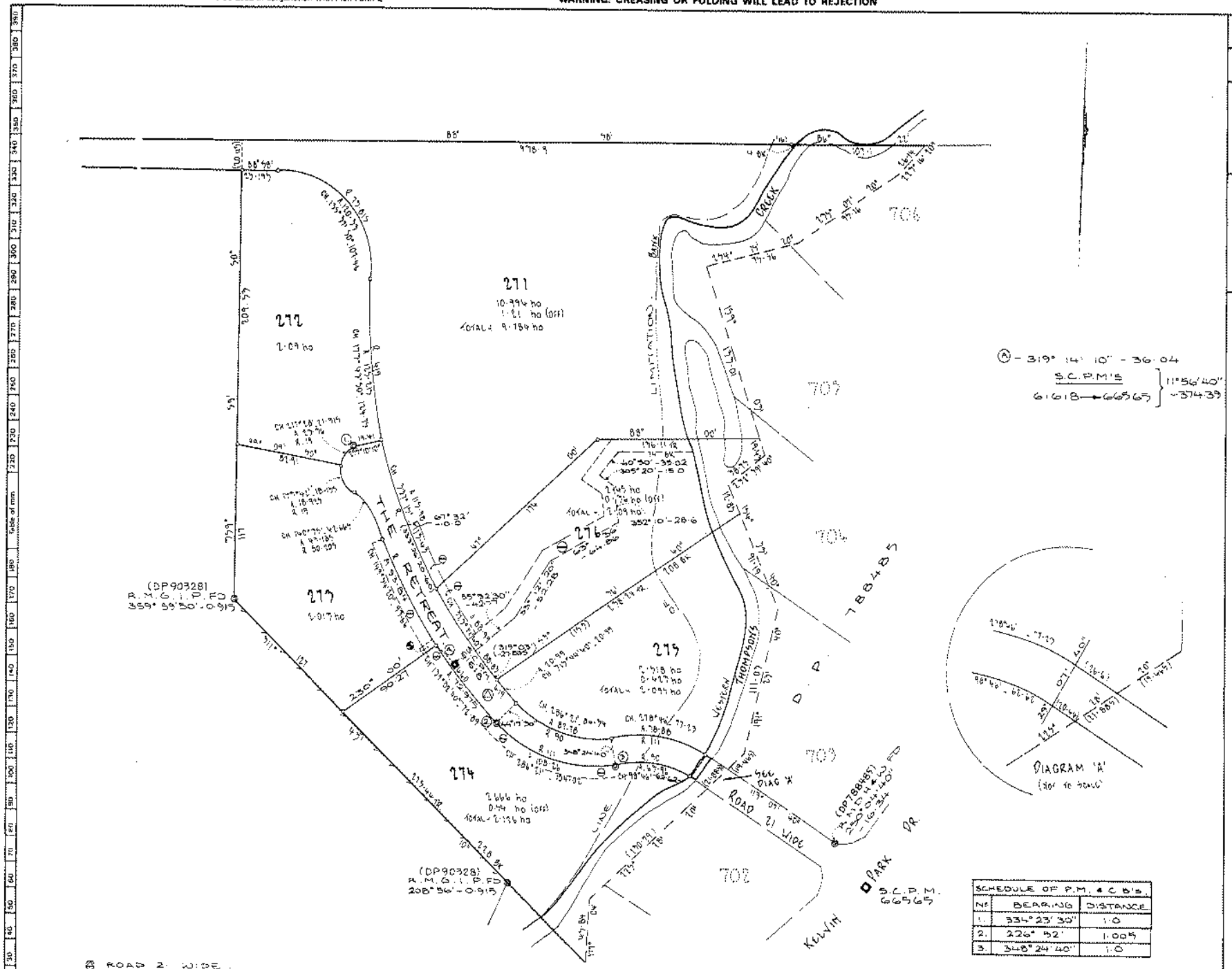
This is sheet 2 of my plan in 2 sheets dated 19-1-90

Surveyor registered under Surveyors Act 1929

This is sheet 2 of the plan of 2 sheets approved by my Certificate No. 1990/21 at 4-5-1990

Council Clerk

For use where space is insufficient in any panel on Plan Form 2.



SCHEDULE OF P.M. & C.B.'s.		
No.	BEARING	DISTANCE
1.	334° 23' 30"	1·0
2.	226° 52'	1·005
3.	348° 24' 40"	1·0

ROAD 21 WIDE.

EASEMENT TO DRAIN WATER 10 WIDE

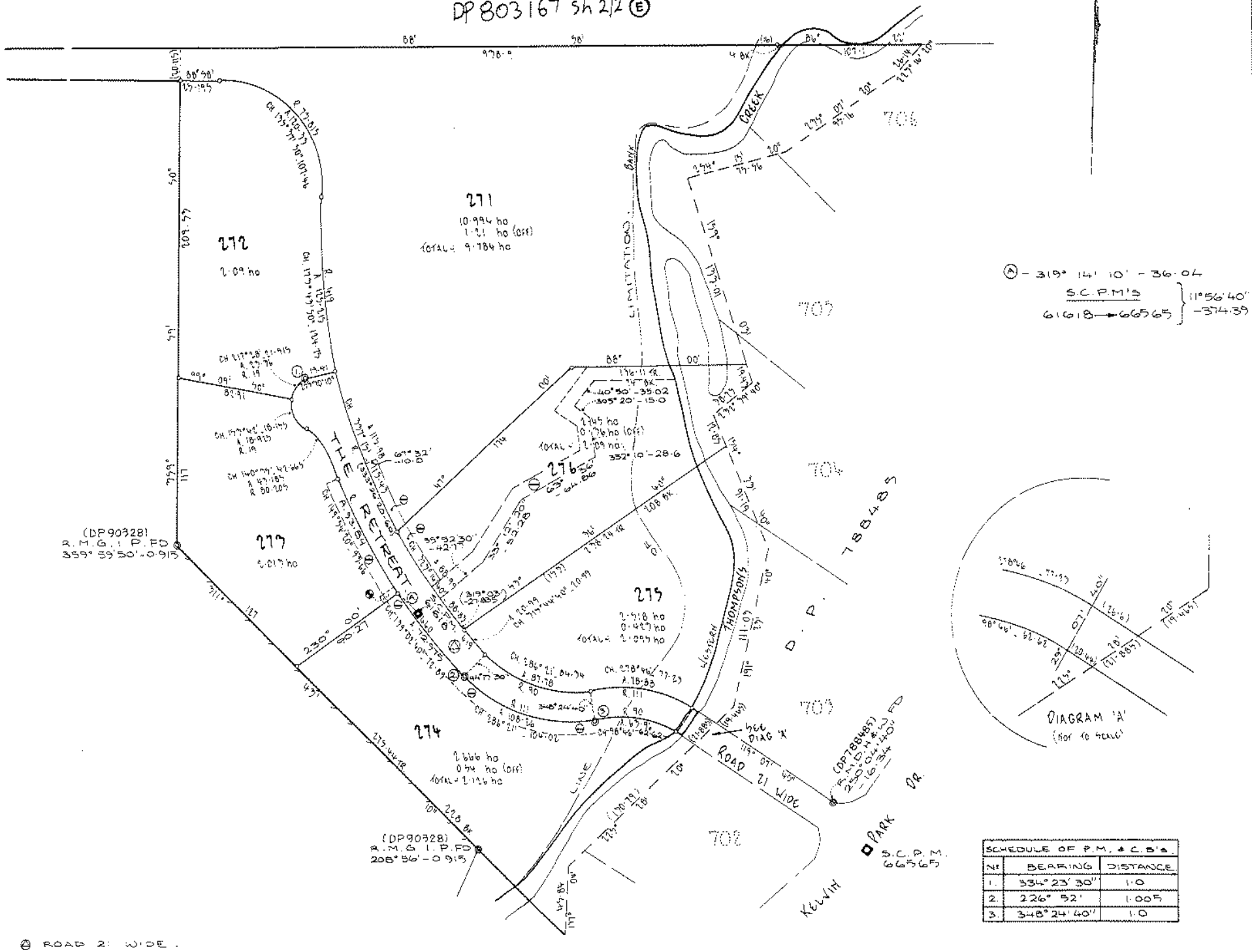
EASEMENT FOR ELECTRICITY SUBSTATION 2·5 WIDE.

Reduction Ratio 1: 1000

Plan Drawing only to appear in this space

SURVEYOR'S REFERENCE: 70896

DP 803167 sh 2/2 (E)



Ⓐ - 319° 14' 10" - 36·04

S.C.P.M.'S	
61618 → 66565	11° 56' 40" / -374·39

SCHEDULE OF P.M. & C.B's.		
No	BEARING	DISTANCE
1.	334° 23' 30"	1·0
2.	226° 52'	1·005
3.	348° 24' 40"	1·0

Ⓓ ROAD 21 WIDE.

Ⓔ CARRIAGE TO DRAIN WATER 10 WIDE

EASEMENT FOR ELECTRICITY SUBSTATION 2·5 WIDE.

Sh 1 of 2

Plan Form No 6 (for transfers, leases, etc.) 251/57

DP 90287
SHT 1/2

Municipality of
Shire of Nepean

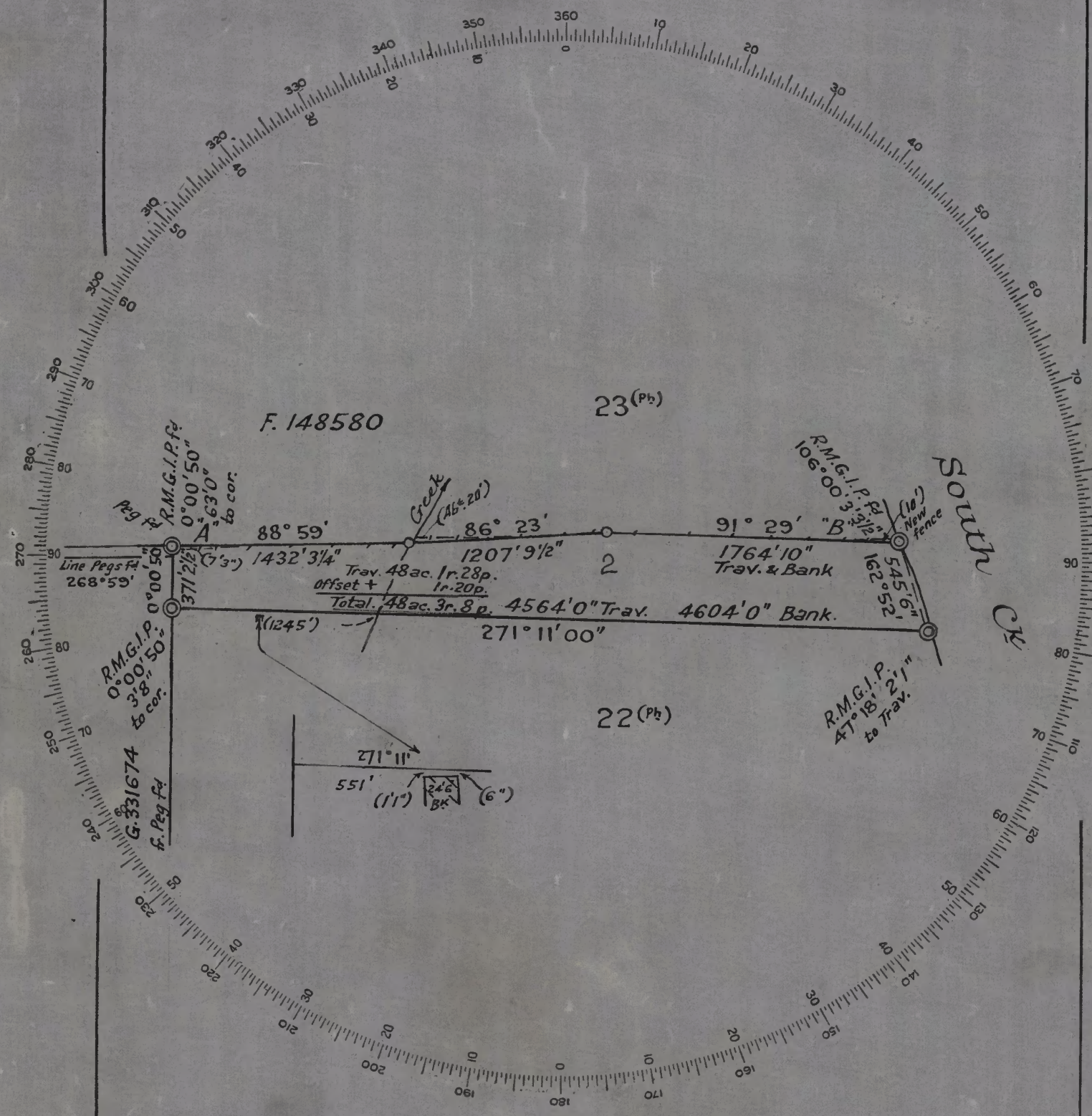
P.A.40287
(No 1 of 2 Plans)

PLAN
of part of Appn 2358 (Abandoned)
Parish of Bringelly County of Cumberland

Scale :- 800 Feet to an Inch.

Signatures of parties to be made in this margin.

This margin to be left free from notation



Approved by Council and covered by Council Clerks Certificate

No.....of.....

.....
Council Clerk

I, George Henry Martin,
of Sydney,
a surveyor registered under the Surveyors Act, 1929-1946, hereby certify that the survey represented in this plan is accurate and has been made * ~~(1) by me~~ (2) under my immediate supervision in accordance with the Survey Practice Regulations, 1933, and was completed on † 15th August, 1957.

(Signature) Geo H Martin
Surveyor registered under the Surveyors Act, 1929-46.

Datum line "A" "B"

*Strike out either (1) or (2). †Insert date of Survey.

This is the plan marked " " referred to in
Dated

P.A. 40287

Sh 2 of 2

Plan Form No 6 (for transfers, leases, etc.)

251/57

DP 90287
SHT 2/2

Municipality of
Shire of Nepean
P.A. 40287
(No 2 of 2 Plans)

PLAN

of part of P.A. 2358 (abandoned)

Parish of Bringelly County of Cumberland

Scale : 400 feet to an Inch.

This margin to be left free from notation

Signatures of parties to be made in this margin.

Plan in F148580

peg fd.

50° 26' 45" 132' 0"

90° 38' 990' 9¼"

peg fd.

(359° 48' 30" 66' 0"18")

88° 59' 1649' 3½" (7'3")

peg fd.

(1'8") (1'2")

peg fd.

468' 2" 262° 31' 40"

270° 38' 527' 9½"

268° 59' 1649' 0½"

peg fd.

Peg & R.M. fd. 180° 38' 3'0"

Peg & R.M. fd. 179° 48' 30" 3'0"

4a. 1r. 16p.

"A"

"B"

180° 00' 50" 66' 0"18"

R.M.G.I.P. fd. 180° 00' 50" 3'0"

R.M.G.I.P. fd. 0° 00' 50" 3'0"

305° 2'½"

180° 00' 50" 3'0"

Peg fd. 90

Peg & R.M. fd. 270° 0' 1" 2'0"

R. P. A. 42358

R. D. P. 41021

Approved by the Council and Certified in accordance with the Provisions of Section 327 of the Local Government Act, 1919.

Subdivision No. .....

Council Clerk .....

Datum Line of Azimuth. "A" — "B"

I, George Henry Martin

of Sydney

a surveyor registered under the Surveyors Act, 1929-1946, hereby certify that the survey represented in this plan is accurate and has been made *~~(1) by me (2)~~ under my immediate supervision in accordance with the Survey Practice Regulations, 1933, and was completed on † 1ST September 1958

(Signature) Geo H Martin

Surveyor registered under the Surveyors Act, 1929-46.

*Strike out either (1) or (2). †Insert date of Survey.

This is the plan marked " " referred to in .....

Dated .....

Forwarded

2358
No 2358

New South Wales.

REGISTRAR-GENERAL NEW SOUTH WALES

(A.)

APPLICATION TO BRING LANDS UNDER THE PROVISIONS OF THE REAL PROPERTY ACT (26 VICTORIA, No. 9.)

CAUTION.—Applicants are reminded that by Section 132, the penalties of perjury are attached to a false declaration concerning any matter or procedure under the Act, and that the utmost care is therefore necessary in framing (or reading over, if the form be filled up by an attorney) every particular statement herein.
It is further provided by Section 117, that any applicant procuring a Certificate through any fraud, error, omission, misrepresentation, or misdescription will, notwithstanding the issue of such Certificate, remain liable for damages to any person thereby prejudiced. And any person who fraudulently procures, assists in fraudulently procuring, or is privy to the fraudulent procurement of any Certificate of Title, is declared guilty of a misdemeanor, and liable to a penalty not exceeding £500, or imprisonment not exceeding three years; and any Certificate thereby procured is rendered void as between all parties or privies to the fraud.

FEE SIMPLE.*

Absorbed

I, Charles Parbury of Sydney in the Colony of New South Wales Merchant

do solemnly and sincerely declare, that b I am

seised for an Estate in fee simple of c All that piece or parcel of Land containing by admeasurement Seventy four acres one rood and Twenty perches be the same more or less situate in the parish and district of Bringelly County of Cumberland and Colony of New South Wales at the Northern boundary of the Land comprised in Certificate of Title Vol: 16 Folio 170 and particularized in the plan annexed hereto

which land (including all improvements) is of the value of d Three hundred and fifty pounds and no more, and is e ~~or~~ is occupied as ~~of~~ f part of a certain piece of land ~~at~~ containing ~~six~~ two hundred acres

originally granted to g ~~Thomas~~ Eve Lucas ~~Laycock~~ by Crown grant, under the Hand of h Lachlan Macquarie Esquire formerly " " " " " " Governor of the Colony, dated the ~~Twenty Sixth~~ day of ~~November~~ ~~1818~~ (this date is correct)

And I further declare, that I verily believe there does not exist any lease or agreement for lease of the said land for any term exceeding a tenancy for one year, or from year to year ~~[except as follows—]~~ i

W. Bishop — You will have a certificate from Registrar ... date of grant — C.P. — W.B.

Also, that there does not exist any mortgage, lien, writ of execution, charge or encumbrance, will or settlement, or any deed or writing, contract, or dealing ~~(other than such lease or tenancy as aforesaid)~~ giving any right, claim, or interest in or to the said land, or any part thereof, to any other person than myself ~~[except as follows—]~~ j

Margin notes:

* Another form can be obtained for leaseholds.

a Here state Christian and Surname in full, with residence and occupation.

b "I am," or "C.D. of is" (as the case may be.)

c Here give description of the property in full. If the land consists of a Crown Grant, a diagram from the Survey Office must be procured—and on payment of a special fee of 2s. 6d. accompanying the application, this will be obtained through the Land Titles Department. If the land comprise a portion only of a Grant, an accurate plan must accompany the application. It is always desirable, and in many cases absolutely necessary, ... prepared and certified by one of the Surveyors licensed under the Act. If there be any rights of way, or other rights or easements affecting the premises, the particulars should be stated. If the space for description be insufficient, it may be completed by annexure, which must, however, be identified as part of the declaration, by memorandum signed by the declarant and attesting Officer.

d If this valuation be inadequate or doubtful, the applicant will be subjected to the expense of an official valuation, under Section 27.

e State whether "the whole" or "part."

f Insert Allotment with reference to number and section on plan, if any, or if not, number of acres granted.

g Name of Grantee.

h Name of Governor.

i If there be any Lease here state particulars; if none, strike out the words within brackets.

j If any exception, here state particulars; if none, strike out the words of reference within brackets.

And I further declare, that there is no person in possession or occupation of the said lands adversely to my Estate or interest therein, and that the said land is now [k] *in the occupation of William John Pearce*

[k] Insert "unoccupied," or "in the occupation of" adding names and addresses of tenants in full.
State also nature of tenancy, if not under some lease before mentioned.

and that the owners and occupiers of adjacent lands are as follows:—On the north *Philip King Esquire Owner Settlebridge Occupier* ~~owner~~, ~~and occupier~~; on the [m] *West J Mc Mate Esquire Owner, unoccupied on the South by property of the said William John Pearce Owner and occupier And on the East by South Creek.*

[l] Here insert names and residences of adjacent owners and occupiers on each side.

[m] Insert the like particulars as to the other sides of the property.

And I further declare, that [n] *I am unmarried*

[n] Here insert "I am unmarried" or "I was married to my present wife on the day of 18 " as the fact may be.

And I further declare, that the annexed Schedule, to which my signature is affixed, and which is to be taken as part of this Declaration, contains a full and correct list of all settlements, deeds, documents, or instruments, maps, plans, and papers relating to the land comprised in this application, so far as I have any means of ascertaining the same, distinguishing such as being in my possession or under my control, are herewith lodged, and indicating where or with whom, so far as known to me, any others thereof are deposited: Also, that there does not exist any fact or circumstance whatever material to the title, which is not hereby fully and fairly disclosed to the utmost extent of my knowledge, information, and belief; and that there is not, to my knowledge and belief, any action or suit pending affecting the said land, nor any person who has or claims any estate, right, title, or interest therein, or in any part thereof, otherwise than by virtue and to the extent of some lease or tenancy hereby fully disclosed [~~except as follows~~]

[o] If any exception, state particulars; if none, strike out the words within brackets.

And I make this solemn Declaration, conscientiously believing the same to be true.

DATED at *Sydney* this *21* day of *June* 1869.

Made and subscribed by the abovenamed *Charles Parbury* this *21st* day of *June* 1869, in the presence of [p]

(Signature of Applicant.) *Charles Parbury*

G Read
Notary Public

[p] The declaration must be attested by the Registrar General or Deputy, or by a Notary Public, or by a Justice of the Peace.
If the signature be by mark, the attestation must state that it was read over to the declarant, that he appeared fully to understand the contents. This applies also to the subjoined direction, particularly if a different person be nominated to receive certificate.

To the Registrar General—

I, *Charles Parbury* the above declarant, do hereby apply to have the land described in the above declaration brought under the provisions of the Real Property Act, and request you to issue the Certificate of Title in the name of [q] *myself*.

[q] If to Applicant, say "myself;" if to other person, write name at full length, with address and occupation.
If to two or more, state whether as joint tenants or tenants in common.
If to an infant, the age should be stated, and verified by Certificate of Baptism, or by Statutory Declaration.
If to a married woman, the name of the husband, together with his residence and occupation should be stated.

DATED at *Sydney* this *21st* day of *June* 1869.

Witness to Signature—
G Read

(Signature of Applicant) *Charles Parbury*

N.B.—The annexed Schedule, and the Certificate indorsed should both be also signed.

SCHEDULE REFERRED TO.*

(TO BE SIGNED BY APPLICANT.)

* For the particulars which this Schedule must comprise, see concluding part of Declaration, to which particular attention is directed, as any omission or mis-statement will render applicant liable to the penalties of false Declaration.

(1) 15 April 1869. Indenture between Frederick Boston of the one part and Charles Varbury of the other part Conveyance

Charles [illegible]

Such of the Deeds and Documents as are in applicant's possession or control, must be deposited with the application. Counterpart leases must be included, but these will be returned, if required.

(2) Plan of the land applied for in this Application.

If any deposited Deeds relate also to property not brought under the Act, they may be returned after partial cancellation; but of all these, abstracts or copies for retention should be furnished, and the desire for the return of the originals noted.

If the only object be to comply with covenant to produce, parties are reminded that by specially depositing them under the 25th Section of the Act, 22 Vic., No. 1, such covenant will be finally satisfied.

Undertake to effect personal service of the notices herein
21 June 1869
[illegible]

Borrowed the plan for purpose of Determination
[illegible]
4 Oct 1869

SEE INDORSEMENT OVERLEAF.

N.B.—Section 104 requires that the following Certificate be signed by applicant or his Solicitor, and renders liable any person falsely or negligently certifying, to a penalty of £50; also, to damages recoverable by parties injured.

I certify that the within application is correct for the purposes of the Real Property Act.* and that I am the Solicitor for the within named Applicant

[signature]

* If by Solicitor insert:—"And that I am the Solicitor of the within-named applicant;" and add his own address to his signature.

FEES.

PAYMENT OF THESE MUST ACCOMPANY THE APPLICATION.

1st.—Where the Applicant is the Original Grantee from the Crown.

Commissioners' Fee	£0 5 0
New Certificate	1 0 0
Sketch (unless furnished)	0 2 6
Add Assurance, ½d. in the pound on declared value	.....

2nd.—Where the Applicant is not the Grantee from the Crown, or being the Grantee, the Property has been dealt with by any Registered Instrument.

	Commissioners' Fee.	Advertisements.	New Certificates.	Total.
If property £200 and under—	£0 10 0	£1 10 0	£1 0 0	£3 0 0
" 300 "	1 0 0	1 10 0	1 0 0	3 10 0
" 400 "	1 10 0	1 10 0	1 0 0	4 0 0
" 500 "	2 0 0	1 10 0	1 0 0	4 10 0
Ditto above 500	2 10 0	1 10 0	1 0 0	5 0 0

In addition to the Assurance Fee of ½d. in the £ on the value; and 2s. 6d. for Sketch, if the whole of a Crown Grant.

☞ State to whom all correspondence relating to this Application should be sent, with address as under, viz.:—

Name _____

Occupation _____

Post Town _____

COMMONWEALTH OF AUSTRALIA.

The *Lands Acquisition Act* 1906-1936.

NOTIFICATION OF THE ACQUISITION OF LAND BY THE COMMONWEALTH.

IT is hereby notified and declared by His Excellency the Governor-General acting with the advice of the Federal Executive Council, that the land hereunder described together with all tanks and buildings, if any, thereon has been acquired by the Commonwealth under the *Lands Acquisition Act* 1906-1936, for the following public purpose, namely: Purposes of the Overseas Telecommunications Commission at Bringelly, New South Wales.—(A.336.)—(Ex. Min. No. 1259.)

Dated this sixth day of October, One thousand nine hundred and forty-nine.

W. J. McKELL
Governor-General.

By His Excellency's Command,
VICTOR JOHNSON
Minister of State for the Interior.

DESCRIPTION OF LAND REFERRED TO.

All that piece of land containing an area of 544 acres 32 perches more or less being Lots 13 and 14 of Section 4 of Deposited Plan 2650 and part of Portion 23 Parish of Bringelly County of Cumberland State of New South Wales: Commencing on the left bank of South Creek at a point which bears 90 degrees 35 minutes 20 seconds 992 feet 7¾ inches 88 degrees 59 minutes 3081 feet 6¼ inches 86 degrees 23 minutes 1207 feet 9½ inches and 91 degrees 29 minutes 1704 feet 10 inches from the northeastern corner of Lot 12 of Section 4 of Deposited Plan 2650 and bounded thence by lines bearing 271 degrees 29 minutes 1704 feet 10 inches 266 degrees 23 minutes 1207 feet 9½ inches 268 degrees 59 minutes 3081 feet 6¼ inches and 270 degrees 35 minutes 20 seconds 992 feet 7¾ inches thence by the northern boundary of Lot 12 of Section 4 of Deposited Plan 2650 aforesaid bearing 270 degrees 942 feet 6¼ inches thence by part of an eastern side of a road 66 feet wide bearing 360 degrees 660 feet thence by the southern boundary of Lot 15 of Section 4 of Deposited Plan 2650 bearing 90 degrees 949 feet 4 inches thence by eastern boundaries of Lots 15 to 23 inclusive of Section 4 of Deposited Plan 2650 bearing in all 35 minutes 20 seconds 2967 feet 2¾ inches thence by lines bearing 91 degrees 33 minutes 40 seconds 3278 feet 10½ inches and 100 degrees 8 minutes 3148 feet 6¼ inches to a point on the left bank of South Creek thence generally southeasterly by the left bank of that creek upstream to the point of commencement.

GRANT OF AN EASEMENT FOR ACCESS OVER COMMONWEALTH LAND AT BRINGELLY, NEW SOUTH WALES.

HIS Excellency the Governor-General in Council has authorized pursuant to section 63 of the *Lands Acquisition Act* 1906-1936 the grant of an easement for access over the land described in the schedule hereunder.—(A.336.)—(Ex. Min. No. 1252.)

VICTOR JOHNSON
Minister of State for the Interior.

SCHEDULE.

All that piece of land containing an area of 3 acres more or less being Commonwealth Property and being part of Lots 13 and 14 of Section 4 of Deposited Plan 2650 Parish of Bringelly County of Cumberland State of New South Wales: Commencing at the southeastern corner of Lot 15 of Section 4 of Deposited Plan 2650 and bounded thence by the eastern boundaries of Lots 13 and 14 of Section 4 of Deposited Plan 2650 bearing in all 180 degrees 35 minutes 20 seconds 660 feet thence by part of the northern boundary of Lot 12 of Section 4 of Deposited Plan 2650 bearing 270 degrees 198 feet thence by a line bearing 35 minutes 20 seconds 660 feet thence by part of the southern boundary of Lot 15 of Section 4 of Deposited Plan 2650 aforesaid bearing 90 degrees 198 feet to the point of commencement.

ACQUISITION BY AGREEMENT OF LAND FOR POSTAL PURPOSES AT YARRAWONGA, VICTORIA.

HIS Excellency the Governor-General in Council has authorized pursuant to section 14 of the *Lands Acquisition Act* 1906-1936 the acquisition by agreement with the owners of the land described in the schedule hereunder.—(B.510.)—(Ex. Min. No. 1266.)

VICTOR JOHNSON
Minister of State for the Interior.

SCHEDULE.

All that piece of land containing an area of 2 roods 0.1 perches more or less being Crown Allotment 5 of Section 2 Township of Yarrawonga Parish of Yarrawonga County of Moira State of Victoria: Commencing on an eastern side of Belmore Street at the northwestern corner of Commonwealth Transferred Property No. 183 and bounded thence by part of the aforesaid eastern side of Belmore street bearing 360 degrees 66 feet thence by the southern boundary of Crown Allotment 4 of Section 2 Township of Yarrawonga bearing 90 degrees 330 feet 1½ inches thence by part of the western side of Hume Street bearing 180 degrees 30 seconds 65 feet 11½ inches thence by northern boundaries of Commonwealth Transferred Property No. 183 aforesaid bearing respectively 269 degrees 59 minutes 290 feet 1½ inches and 270 degrees 13 minutes 39 feet 11½ inches to the point of commencement.

COMMONWEALTH OF AUSTRALIA.

The *Lands Acquisition Act* 1906-1936.

NOTIFICATION OF THE ACQUISITION OF LAND BY THE COMMONWEALTH.

IT is hereby notified and declared by His Excellency the Governor-General acting with the advice of the Federal Executive Council, that the land hereunder described together with all tanks and buildings, if any, thereon has been acquired by the Commonwealth under the *Lands Acquisition Act* 1906-1936, for the following public purpose, namely: Postal purposes at Deniliquin, New South Wales.—(C.L.13843.)—(Ex. Min. No. 1253.)

Dated this sixth day of October, One thousand nine hundred and forty-nine.

W. J. McKELL
Governor-General.

By His Excellency's Command,
VICTOR JOHNSON
Minister of State for the Interior.

DESCRIPTION OF LAND REFERRED TO.

All that piece of land containing an area of 3 roods more or less being Allotment 12 and part of Allotment 10 of Section 51 Town of South Deniliquin Parish of South Deniliquin County of Townsend State of New South Wales: Commencing at the northernmost corner of Allotment 13 of Section 51 and bounded thence by part of a southeastern side of Macauley Street bearing 44 degrees 58 minutes 165 feet thence by the southwestern boundaries of Lots A and B of Plan in Transfer No. B.501144 and a line bearing in all 135 degrees 198 feet thence by part of the northwestern boundary of Allotment 9 of Section 51 bearing 224 degrees 58 minutes 165 feet thence by the northeastern boundaries of Allotments 15 and 13 of Section 51 bearing in all 315 degrees 198 feet to the point of commencement.

DISPOSAL BY SALE OF COMMONWEALTH LAND AT ZEEHAN, TASMANIA.

WHEREAS the land described in the schedule hereunder is no longer required for any public purpose of the Commonwealth His Excellency the Governor-General in Council has authorized pursuant to section 63 of the *Lands Acquisition Act* 1906-1936 the disposal of such land by sale to the State of Tasmania.—(C.L.17204.)—(Ex. Min. No. 1251.)

VICTOR JOHNSON
Minister of State for the Interior.

SCHEDULE.

All that piece of land containing an area of 1 rood 18½ perches more or less being Commonwealth Transferred Property No. 63 and Commonwealth Property acquired *vide Commonwealth of Australia Gazette* No. 57 dated 11th November 1905 and being Allotments 5 and 6 of Section H7 Town of Zeehan State of Tasmania: Commencing at the intersection of an eastern side of Hurst Street with a northern side of Tarleton Street and bounded thence by part of the aforesaid eastern side of Hurst Street bearing 358 degrees 59 minutes 250 links thence by part of the southern side of a Right of Way bearing 88 degrees 59 minutes 262.75 links thence by a northwestern side of a drainage reserve bearing 221 degrees 57 minutes 340 links thence by part of the aforesaid northern side of Tarleton Street bearing 266 degrees 58 minutes 30.75 links to the point of commencement.

R.P.2.

No. 40287

New South Wales. DEC 1957

APPLICATION TO BRING LANDS UNDER THE PROVISIONS OF THE REAL-PROPERTY ACT, 1900.

ONE POUND TEN SHILLINGS STAMP DUTY

FEE SIMPLE.[a]

Fees :—	£	s.	d.
Lodgment			
Certificate			
Advertising			
Office Copy Plan			
Total	£4-10-0		

CAUTION.—Applicants are reminded that by virtue of the provisions of the Crimes Act, 1900, the penalties of perjury are attached to a false declaration concerning any matter or procedure under the Act, and that the utmost care is therefore necessary in framing (or reading over, if the form be filled up by an Attorney) every particular statement herein.

It is further provided by Section 126 of the Real Property Act, 1900, that any applicant [illegible] through any fraud, error, omission, misrepresentation, or misdescription will, notwithstanding the [illegible] remain liable for damages to any person thereby prejudiced. And any person who fraudulently procures, assists in fraudulently procuring, or is privy to the fraudulent procurement of any Certificate of Title, is declared guilty of a misdemeanour, and liable to a penalty not exceeding £500, or imprisonment not exceeding three years; and any Certificate thereby procured is rendered void as between all parties or privies to the fraud.

R 19 11 57

a This form may be modified to suit the case of a leasehold title.

b Here state Christian and surname (or names) in full with residence and occupation.

c "I am" or if the declaration is made by an attorney "C.D. of is" (as the case may be).

d Here give description of the property in full. If the land is shown on a plan lodged with the application or is fully described in a deed, it will be sufficient to insert a reference to the area, town, parish, and county and words indicating that the land is shown on the plan or described in the deed in question. The application may include an appurtenant easement expressly created by an instrument not registered under the Real Property Act, 1900 (see section 14A). Unless the Registrar-General has previously dispensed with a plan of survey, an accurate plan, prepared and certified by a surveyor specially licensed under the Act, must accompany the application. If there be any rights of way or other rights or easements affecting the premises the particulars should be stated. If the space for description be insufficient, it may be completed by annexure which must however be identified as part of the declaration, by memorandum signed by the declarant and attesting officer.

I[b] LORNA JESSIE MACDONALD of "Kelvin" Bringelly in the State of New South ~~We~~ Wales, Spinster

do solemnly and sincerely declare, that[c] I am seized for an Estate in fee simple ~~etc~~[d] by possession of land situate in the Parish of Bringelly and County of Cumberland ~~having an area of 64 acres 32 perches~~ as is shown on the plans lodged herewith ~~and on the plan lodged with Transfer G.775266.~~

483a. 3r. 8p. in plan
153 1r. 24p. - acquired by Comm Gov 1/8/57
64 - 0 - 32p. - [illegible] Appl. 40287

e The full improved value should be stated.

f State whether "the whole" or "part."

g Insert allotment with reference to number and section on plan, if any, or if not, number of acres granted.

h Name of Grantee.

which land (including all improvements) is of the value of[e] Two thousand pounds and no more, and is[f] part of[g] ~~600~~ 500 acres (Portion ~~22~~ 23 of Ph) originally granted to[h] ~~Thomas Laycock~~ Penelope Lucas by Crown grant, under the hand of the Governor of the Colony, dated the twenty-sixth day of November 1818. Sec 11 p. 40 [illegible] 29/11/57

k If there be any lease, add the words "except as follows" and insert particulars thereof.

And I/we further declare, that I/we verily believe there does not exist any lease or agreement for lease of the said land, for any term exceeding a tenancy for one year, or from year to year,[k]

l If there be any mortgage, lien, etc., add the words "except as follows" and insert particulars thereof.

Also, that there does not exist any mortgage, lien, writ of execution, charge or encumbrance, will or settlement, or any deed or writing, contract, or dealing (other than such lease or tenancy as aforesaid), giving any right, claim, or interest in or to the said land, or any part thereof, to any other person than myself ~~ourselves~~[l]

m Insert "unoccupied," or "in the occupation of" adding names and addresses of tenants in full. State also nature of tenancy, if not under some lease before mentioned. When the applicant is not in actual occupation, but has a caretaker or manager in occupation, the name of such caretaker or manager should be stated, together with the nature of his occupancy.

n Here insert names and residence of adjacent owners and occupiers on all sides.

and I/we further declare, that there is no person in possession or occupation of the said land or any part thereof adversely to my ~~our~~ Estate or Interest therein, and that the said land is now[m] in my occupation.

and that the owners and occupiers of adjacent lands are as follows[n] :—

State whether on North, South, East, or West.	Name.	State whether owner or occupier.	Address.
SOUTH / WEST	SELF	OWNER & OCCUPIER	
" "	COMMONWEALTH OF AUSTRALIA	"	
NORTH	(Overseas Telecommunications (Australia)	"	12 Spring St Sydney
EAST	MR ANGUS SHAW MACPHERSON (RP) / DOROTHY JEAN MACPHERSON / Tn Lots [illegible] / Tenants	"	BRINGELLY

9 7 [illegible]

Cert. of T. issued Vol. 7682 Fol. 76
Dated 24 APR 1959

10 8

And I further declare, that the annexed Schedule, to which my signature is affixed, and which is to be taken as part of this Declaration, contains a full and correct list [a] of all settlements, deeds, documents, or instruments, maps, plans and papers relating to the land comprised in this application, so far as I have any means of ascertaining the same, distinguishing such as being in my possession or under my control, are herewith lodged and indicating where or with whom, so far as known to me, any others thereof are deposited. Also, that there does not exist any fact or circumstance whatever material to the title, which is not hereby fully and fairly disclosed to the utmost extent of my knowledge, information, and belief; and that there is not, to my knowledge and belief, any action or suit pending affecting the said land, nor any person who has or claims any estate, right, title or interest therein, or in any part thereof, otherwise than by virtue and to the extent of some lease or tenancy hereby fully disclosed [b].

[a] This declaration may be qualified to the extent to which Applicant's title has been previously passed by the Registrar General by inserting the words "Commencing with Conveyance dated ..... registered ..... or as the case may be. Otherwise all documents from the Crown Grant onwards must be entered in the Schedule.

[b] If there be any exception add the words "except as follows:" and insert necessary particulars.

And I make this solemn Declaration, conscientiously believing the same to be true.

DATED at Sydney this 11th day of November 1957.

(RULE UP ALL BLANKS BEFORE SIGNING.)

Made and subscribed by the abovenamed [c]
this 7th day of November 57 *
in the presence of
N. Booth JP.

Signature of Applicant } L.J. Macdonald.

[c] If made in New South Wales this declaration must be attested by the Registrar General or Deputy, or by a Notary Public, or by a Justice of the Peace, or Commissioner for Affidavits. If made outside the State it should be made according to the law of the State where made, before a person authorised by that law to take declarations. If the signature be by mark, the attestation must state that the document was read over to the declarant, and that he appeared fully to understand the contents. This applies also to the subjoined direction, particularly if a different person be nominated to receive certificate.

To the Registrar-General,—

I Lorna Jessie Macdonald

the above declarant, do hereby apply to have the land described in the above declaration brought under the provisions of the Real Property Act, and request you to issue the Certificate of Title in the name of [d] myself.

[d] If to Applicant, say "myself"; if to other person write name at full length, with address and occupation. If to two or more, state whether as joint tenants or tenants in common; if as tenants in common state shares. If to an infant, the age should be stated, and verified by Certificate of Birth, or by Statutory Declaration. If to a married woman, the name of the husband, together with his residence and occupation, should be stated.

DATED at Syd this 11th day of November 1957.

Witness to Signature—
N. Booth JP.

(Signature of Applicant) L.J. Macdonald

* N.B.—The Schedule below and Certificate indorsed on fourth page should be also signed.

In no case can any alterations, however trifling, be allowed to be made after the application has been once declared, unless all the parties re-sign and re-declare the same. If it is discovered that any alterations are necessary, the applicant may make a statutory declaration setting out in what manner he desires the application to be altered, which declaration will then (unless the Registrar General considers that a fresh application ought to be made) be read as one with the application.

(RULE UP ALL BLANKS BEFORE SIGNING.)

SCHEDULE REFERRED TO.*

(TO BE SIGNED BY APPLICANT IMMEDIATELY BELOW THE LAST DOCUMENT SCHEDULED.)

To include not only Title Deeds, Probates, Letters of Administration, etc., but also the Surveyor's Plan or Statement in lieu thereof.

* For the particulars which this Schedule must comprise, see concluding part of Declaration, to which particular attention is directed, as any omission or mis-statement will render applicant liable to the penalties of false Declaration.

No.	Date.	Nature of Instrument.	Parties.	Registration. Book.	Registration. No.	When and by whom Lodged.
			? Documentary title.			
1.	16.8.57	Plan	G.H. Martin.			Herewith.
2.	15.10.57	Stat. Decln.	W. Larkin.			"
3.	15.10.57	do.	R.J.F. Downs			"
4.	16.10.57	do.	A.V. McCann.			"
5.	17.10.57	do.	R.M. Crookston.			"
6.	18.10.57	do.	W.R. Wheatley			"
7.	23.10.57	do.	C.S. McIntosh.			"
8.	7.11.57	do.	L.J. Macdonald.			"
9.			these Receipts.			"
			L.J. Macdonald.			

Rec'd Docs. 2 to 9 inclusive
N. 7/12/57

Should any transaction affecting the land in this application be entered into or any alterations in the buildings or fences be made subsequent to the date of the application, but prior to the issue of the Certificate of Title, the Registrar General should be informed immediately, and all documents evidencing such transaction should be lodged.

SCHEDULE REFERRED TO—(*continued*).*

(TO BE SIGNED BY APPLICANT, IF UTILISED, IMMEDIATELY BELOW THE LAST DOCUMENT SCHEDULED.)

No.	Date.	Nature of Instrument.	Parties.	Registration. Book.	No.	When and by whom Lodged.
9		Bundle of Shire Receipts				
			Rec'd Docs 1 – 9			
			[signature] 5/12/57 for CLSE			
10	15-1-58	Letter	to Deputy Crown Solicitor from Chief Property Officer			Letter 58/4732 21/1/58
11	14-5-58	Letter	from Town Clerk of Liverpool to Solrs.			Solrs. 19/6/58
12	3-4-58	Decln.	by L. J. Macdonald			
13	24-4-58	plan	by George F. Moor (surveyor)			El. 58/43341 11/6/58
14		Probate	in the Will of H. P. Macdonald			Letter 58/47369 1-7-58
15			Summary of prior applications in respect of land.			
16	11-6-58	Letter	from Town Clerk of Liverpool to Solrs.			
17	9-1-59	Stat. Decln.	by B. P. Hocking & annexure "A"			Solrs. 9-1-59
18	15-4-59	"	" " L. J. Macdonald.			Solrs. 20-4-59

Docs. 2 – 18 herewith

Doc. 14 is available to Messrs McLachlan Hoare & Co

Other docs. to remain.

[signature] 5/5

Received document No 14
McLachlan Hoare Mann & Co
per [signature]
12/5/59.

See indorsement overleaf.

I certify that the within application is correct for the purposes of the Real Property Act, 1900†, and that I am the Solicitor for the within named applicant.

† Section 117 requires that this Certificate be signed by Applicant or his Solicitor and renders liable any person falsely or negligently certifying, to a penalty of £50; also, to damages recoverable by parties injured.
If by Solicitor, he should insert—"And that I am the Solicitor of the within-named Applicant," and should add his own address to his signature. The signature should be that of the Solicitor himself and not of his firm.

(*Signature*) Bourke Keane & Co.

RULE UP ALL BLANKS BEFORE SIGNING, EXCEPT SPACE IN SCHEDULE BELOW APPLICANT'S SIGNATURE.)

FEES.

Received plan 48a. 1r. 28p.
Wynyard 3.12.57

PAYMENT OF THESE MUST ACCOMPANY THE APPLICATION.

	£	s.	d.
Certificate of Title	1	10	0
Office Copy of Plan (when a Plan is furnished) ...	0	7	6
Preparation of Plan (when a Plan is not furnished)	1	0	0
Advertisement	1	10	0
Lodgment fee	1	0	0

☞ State to whom all correspondence relating to this Application should be sent, with address, as under, viz.:—

Name McLachlan Keane & Co

Occupation Solicitors

Post Town 6 Wynyard St. Sydney

EXTRA FEES
Diagram
Extra Folios...

Alfred Henry Pettifer, Government Printer.

[redacted]FICATE OF TITLE

NEW SOUTH WALES

[redacted]RTY ACT, 1900, as amended.

Vol. 11889 Fol. 89

Appln. No. 769

Prior Title Vol. 7846 Fol.119

Edition issued 28-7-1972

M601821 CANCELLED

I certify that the person described in the First Schedule is the registered proprietor of the undermentioned estate in the land within described subject nevertheless to such exceptions encumbrances and interests as are shown in the Second Schedule.

Witness

Registrar General.

ESTATE AND LAND REFERRED TO

Estate in Fee Simple in the parts of Portions 21 and 22 shown in the plan hereon in the City of Liverpool Parish of Bringelly and County of Cumberland granted to Charles Reid on 26-11-1818 and Thomas Laycock on 26-11-1818 respectively.

FIRST SCHEDULE

PETER MEDICH PROPERTIES PTY. LTD and LUBO MEDICH PROPERTIES PTY. LTD, as Tenants in Common in equal shares.

Registrar General.

SECOND SCHEDULE

1. Reservations and conditions, if any, contained in the Crown Grants above referred to.
2. Restriction on User No.K454950 of the land shown hatched black in the plan hereon being Lot 5 in Deposited Plan 225205 - see Section 27E(6) Main Roads Act, 1924. Entered 14-12-1966.

Registrar General.

(Page 1) Vol. 11889 Fol. 89

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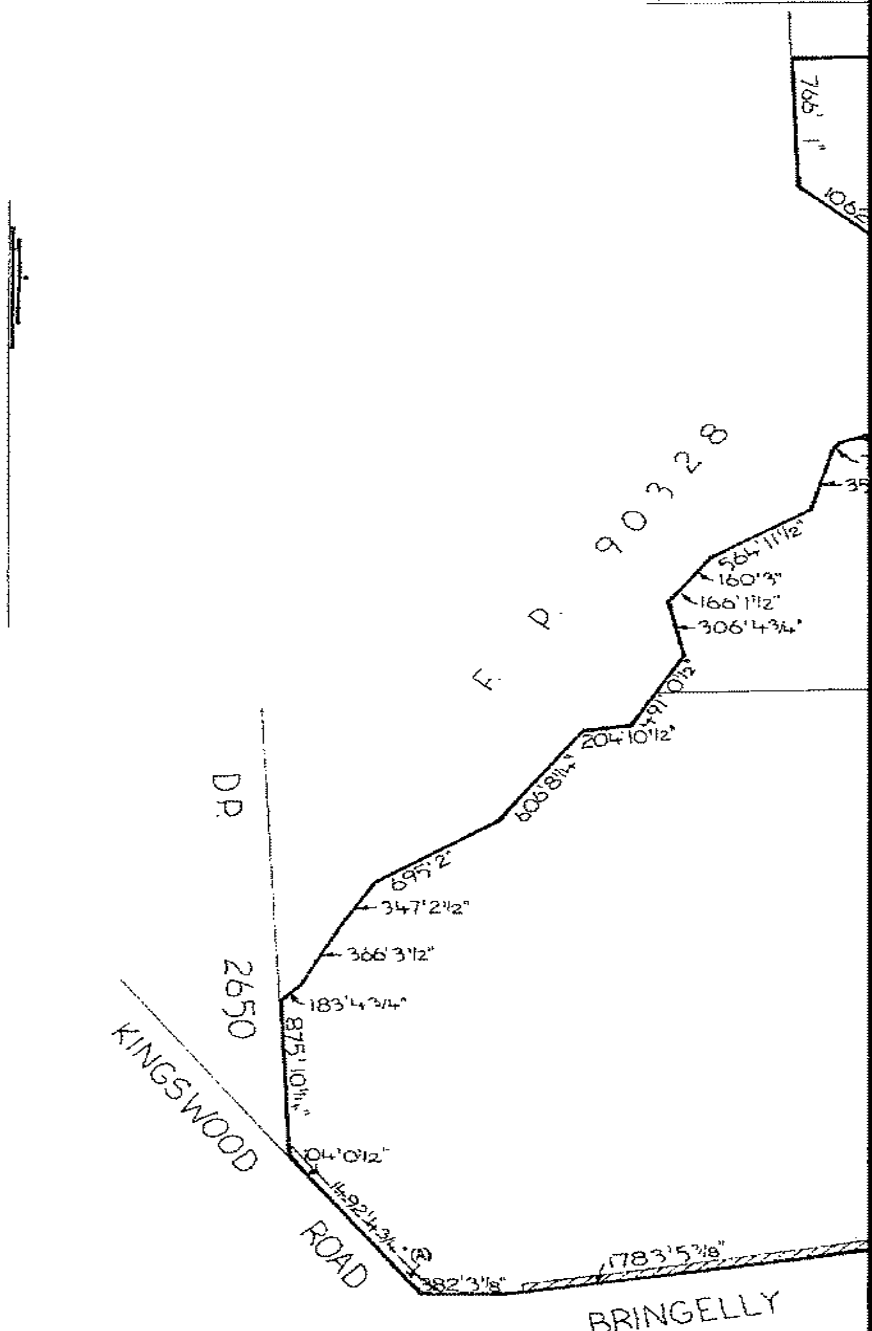
PLAN SHOWING



AREA: 924AC 2R

ALL LENGTHS SHOWN ARE

SCALE: 800 FEET T

M601821

Vol. [illegible] Fol. [illegible]

PLAN SHOWING LOCATION OF LAND

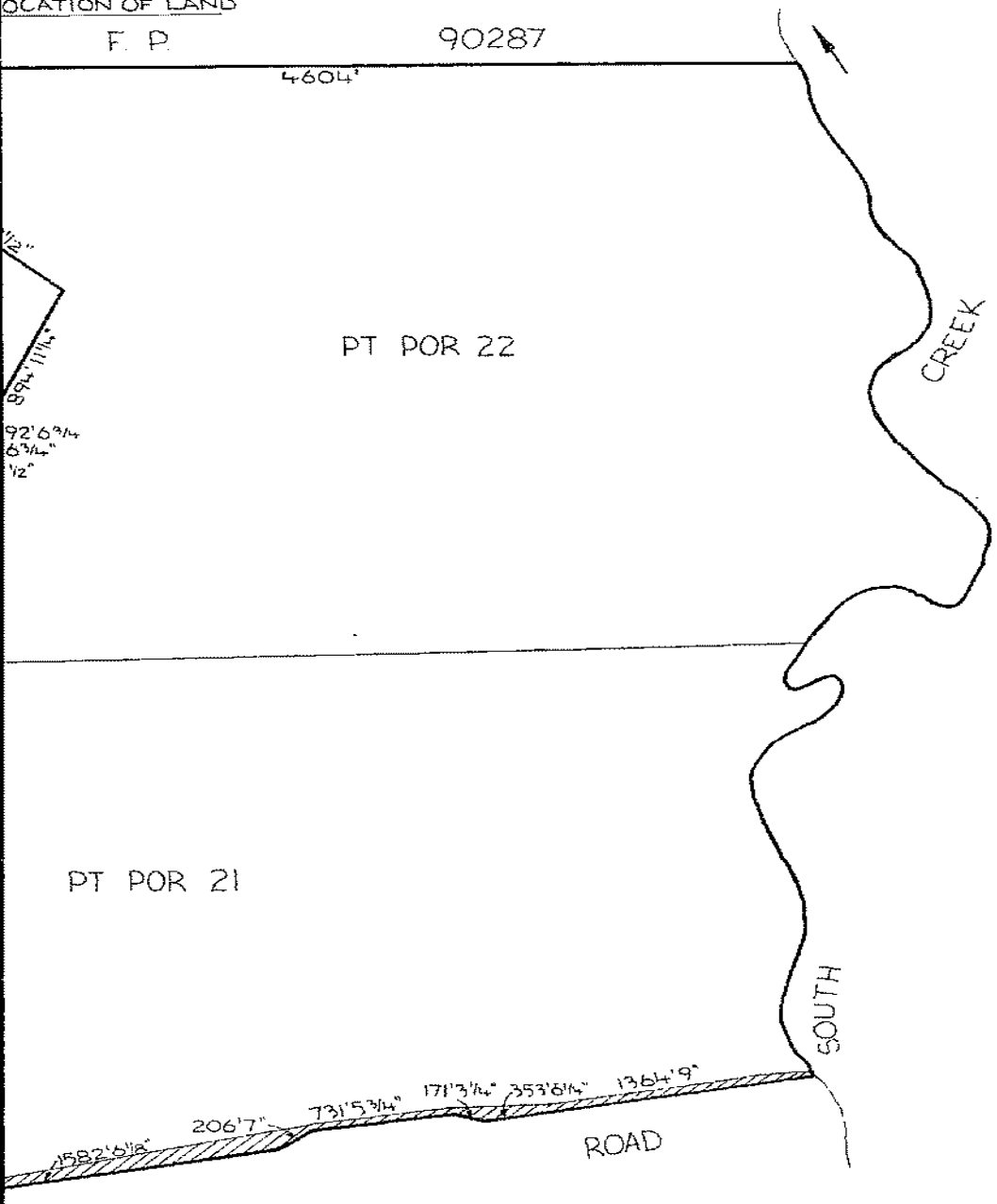
AREA 92AC 2RD 32½P

ALL LENGTHS SHOWN ARE IN FEET AND INCHES

SCALE 800 FEET TO ONE INCH

01821

OCATION OF LAND



32 1/2 P

N FEET AND INCHES
ONE INCH

Vol. 11889 Fol. 89

FIRST SCHEDULE (continued)

REGISTERED PROPRIETOR	INSTRUMENT NATURE	INSTRUMENT NUMBER	INSTRUMENT DATE	ENTERED	Signature of Registrar General
DP 712840 Registered [illegible] This folio is cancelled as to whole/part [illegible] of computer folios for lots [illegible] abovementioned plan.					

P753556 [illegible]
P609376 R
CIT 24.5.76
P753556 TE Lot 4 DP 574556
DP712840 R
AK247004 R R

SECOND SCHEDULE (continued)

INSTRUMENT NATURE	INSTRUMENT NUMBER	INSTRUMENT DATE	PARTICULARS	ENTERED	Signature of Registrar General	CANCELLATION		
~~Mortgage~~	~~[illegible]~~	~~[illegible]~~	~~[illegible]~~	~~[illegible]~~	[signature]	Discharged	P609376	[signature]
Transfer	P753556		of part described (A) being lot 4 in DP 574556 is now road vested in The Commissioner for Main Roads	5-7-1976	[signature]			

The interest of the Council of the Local Government Area in the public road dedicated in DP 712840

Registered 13-5-1985

Interests created pursuant to Section 88B Conveyancing Act, 1919, by the registration of DP 712840

Registered 13-5-1985

The residue of land in this folio comprises road in transfer P753556, road in DP 712840 and part lot 5 DP 574556 (proposed road).

AK 247004 PROPOSED ACQUISITION PURSUANT TO SECTION 11 LAND ACQUISITION (JUST TERMS COMPENSATION) ACT, 1991 AFFECTING THE PART BEING LOT 1 IN DP1212878. REGISTERED 8/3/2016.

NB :PLAN OF ACQUISITION (ROADS ACT, 1993)

NOTE: ENTRIES RULED THROUGH AND AUTHENTICATED BY THE SEAL OF THE REGISTRAR GENERAL ARE CANCELLED

Historical Title

NEW SOUTH WALES LAND REGISTRY SERVICES - HISTORICAL SEARCH

SEARCH DATE
20/11/2023 10:45AM

FOLIO: 27/712840

First Title(s): OLD SYSTEM
Prior Title(s): VOL 7682 FOL 76 VOL 11889 FOLS 88-89

Vol 11889 Folio 89 ONLY

Recorded	Number	Type of Instrument	C.T. Issue
15/5/1985	DP712840	DEPOSITED PLAN	FOLIO CREATED EDITION 1
14/6/1985	V775674	TRANSFER	EDITION 2
27/6/1990	DP803167	DEPOSITED PLAN	FOLIO CANCELLED RESIDUE REMAINS

*** END OF SEARCH ***

40 The Retreat

PRINTED ON 20/11/2023

Received: 20/11/2023 10:45:24

NEW SOUTH WALES $1=0100 STAMP DUTY

[redacted]

V775674

TRANSFER

REAL PROPERTY ACT, 1900

T

C 1 of 1 X (A)

$30-00 R 1/1

Torrens Title Reference	If Part Only, Delete Whole and Give Details	Location
27/712840	WHOLE	BRINGELLY

DESCRIPTION OF LAND
Note (a)

TRANSFEROR
Note (b)

LUBO MEDICH PROPERTIES PTY. LTD.

ESTATE
Note (c)

(the abovenamed TRANSFEROR) hereby acknowledges receipt of the consideration of $120,000.00 and transfers an estate in fee simple Vendors half share. in the land above described to the TRANSFEREE

TRANSFEREE
Note (d)

PETER MEDICH PROPERTIES PTY. LTD. of Shop 3, Lot 104 Homepride Avenue, Warwick Farm.

OFFICE USE ONLY

S

TENANCY
Note (e)

~~xxxxxxxxxxxxxxxxxxxxxxxxxx~~

PRIOR ENCUMBRANCES
Note (f)

subject to the following PRIOR ENCUMBRANCES 1. Reservations and conditions if any contained in Crown Grant.
2. 3.

DATE 6th June 1985

We hereby certify this dealing to be correct for the purposes of the Real Property Act, 1900.

EXECUTION
Note (g)

Signed in my presence by the transferor who is personally known to me
THE COMMON SEAL of LUBO MEDICH PROPERTIES PTY. LTD. was hereunto affixed by authority of the Board of Directors in the presence of:-

Signature of Witness

Name of Witness (BLOCK LETTERS)

Address and occupation of Witness Secretary

LUBO MEDICH PROPERTIES PTY. LTD. Common Seal

Director.

Signature of Transferor

Note (g)

Signed in my presence by the transferee who is personally known to me
THE COMMON SEAL of PETER MEDICH PROPERTIES PTY. LTD. was hereunto affixed by authority of the Board of Directors in the presence of:-

Signature of Witness

Name of Witness (BLOCK LETTERS)

Address and occupation of Witness P. Medich. Secretary.

PETER MEDICH PROPERTIES PTY. LTD. Common Seal

R. A. Medich Director.

Signature of Transferee

TO BE COMPLETED BY LODGING PARTY
Notes (h) and (i)

LODGED BY
O'CONNOR DAVIS & CO.
LEVEL 57, M.L.C. CENTRE, SYDNEY.
DX 659 sydney.

Phone 233-1100

Delivery Box Number 653A

581

LOCATION OF DOCUMENTS

CT	OTHER	
1		Herewith.
		In R.G.O. with
		Produced by

OFFICE USE ONLY

$ 90

Checked EB7	Passed	REGISTERED - -19
Signed	Extra Fee	14 JUN 1985 Registrar General

Secondary Directions		
Delivery Directions	CT	LP

NEW SOUTH WALES LAND REGISTRY SERVICES - HISTORICAL SEARCH

SEARCH DATE

20/11/2023 10:44AM

FOLIO: 272/803167

First Title(s): OLD SYSTEM
Prior Title(s): 27/712840

Recorded	Number	Type of Instrument	C.T. Issue
27/6/1990	DP803167	DEPOSITED PLAN	FOLIO CREATED EDITION 1
27/11/1998	5427528	TRANSFER	
27/11/1998	5427529	MORTGAGE	EDITION 2
2/8/2000	6992686	MORTGAGE	EDITION 3
4/12/2002	9190790	DISCHARGE OF MORTGAGE	
4/12/2002	9190791	MORTGAGE	EDITION 4
28/6/2007	AD231620	DISCHARGE OF MORTGAGE	
28/6/2007	AD231621	MORTGAGE	EDITION 5
10/12/2008	AE380850	DISCHARGE OF MORTGAGE	
10/12/2008	AE380851	MORTGAGE	EDITION 6
1/9/2018	AN678862	DEPARTMENTAL DEALING	
8/9/2018	AN695391	DEPARTMENTAL DEALING	EDITION 7 CORD ISSUED
19/12/2022	AS741439	CAVEAT	EDITION 8

*** END OF SEARCH ***

LAND REGISTRY SERVICES

Title Search

InfoTrack

NEW SOUTH WALES LAND REGISTRY SERVICES - TITLE SEARCH

FOLIO: 272/803167

SEARCH DATE	TIME	EDITION NO	DATE
20/11/2023	10:44 AM	8	19/12/2022

LAND

LOT 272 IN DEPOSITED PLAN 803167
AT BRINGELLY
LOCAL GOVERNMENT AREA LIVERPOOL
PARISH OF BRINGELLY COUNTY OF CUMBERLAND
TITLE DIAGRAM DP803167

FIRST SCHEDULE

ZIVKO MILINKOVIC
JASMINA MILINKOVIC
AS JOINT TENANTS (T 5427528)

SECOND SCHEDULE (4 NOTIFICATIONS)

1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
2 DP803167 RESTRICTION(S) ON THE USE OF LAND
3 AE380851 MORTGAGE TO WESTPAC BANKING CORPORATION
* 4 AS741439 CAVEAT BY SATHIO PROPERTY PTY LTD, CNO GROUP PTY LTD & SCG BRINGELLY PTY LTD

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

APPENDIX 3

Environmental Consulting Services
10 Fort Street
Petersham
NSW 2049

NATA Accredited
Accreditation Number 1261
Site Number 18217

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

Attention: **All results - Simon Caples**

Report **1048219-S**
Project name BRINGELLY
Received Date Nov 27, 2023

Client Sample ID			**RB1**	[G01]**RB2**	**RB3**	**RB4**
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S23-No0066460**	**S23-No0066461**	**S23-No0066462**	**S23-No0066463**
Date Sampled			**Nov 27, 2023**	**Nov 27, 2023**	**Nov 27, 2023**	**Nov 27, 2023**
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50	< 50	< 50
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	< 100	< 100
BTEX						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	56	51	56	INT
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			RB1	[G01]RB2	RB3	RB4
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-No0066460	S23-No0066461	S23-No0066462	S23-No0066463
Date Sampled			Nov 27, 2023	Nov 27, 2023	Nov 27, 2023	Nov 27, 2023
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	111	133	113	106
p-Terphenyl-d14 (surr.)	1	%	107	142	111	103
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 1	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.05
a-HCH	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.05
b-HCH	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.05
d-HCH	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.05
Toxaphene	0.5	mg/kg	< 0.5	< 10	< 0.5	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 1	< 0.1	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	126	127	131	123
Tetrachloro-m-xylene (surr.)	1	%	109	138	112	108
Heavy Metals						
Arsenic	2	mg/kg	9.2	12	11	13
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	18	26	24	20
Copper	5	mg/kg	25	30	30	20
Lead	5	mg/kg	29	31	30	47
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	11	11	11	8.4
Zinc	5	mg/kg	140	63	64	52
Sample Properties						
% Moisture	1	%	20	17	13	14

Client Sample ID			RB5	RB6	RB7	RB8
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-No0066464	S23-No0066465	S23-No0066466	S23-No0066467
Date Sampled			Nov 27, 2023	Nov 27, 2023	Nov 27, 2023	Nov 27, 2023
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	< 50	58
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50	< 50	58
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	< 100	< 100
BTEX						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	72	69	75	68
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	85	99	105	102
p-Terphenyl-d14 (surr.)	1	%	59	80	87	86

Client Sample ID			RB5	RB6	RB7	RB8
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-No0066464	S23-No0066465	S23-No0066466	S23-No0066467
Date Sampled			Nov 27, 2023	Nov 27, 2023	Nov 27, 2023	Nov 27, 2023
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
a-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
d-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Toxaphene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	69	93	103	125
Tetrachloro-m-xylene (surr.)	1	%	71	89	95	95
Heavy Metals						
Arsenic	2	mg/kg	10.0	14	10	12
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	21	21	15	17
Copper	5	mg/kg	32	29	15	17
Lead	5	mg/kg	24	45	25	26
Mercury	0.1	mg/kg	< 0.1	0.1	9.6	< 0.1
Nickel	5	mg/kg	18	9.9	5.4	5.7
Zinc	5	mg/kg	82	96	51	51
Sample Properties						
% Moisture	1	%	11	11	12	8.2

Client Sample ID			RB9	[G01]RB10	RB11	[G01]RB12
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-No0066468	S23-No0066469	S23-No0066470	S23-No0066471
Date Sampled			Nov 27, 2023	Nov 27, 2023	Nov 27, 2023	Nov 27, 2023
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	58	64	64	99
TRH C10-C36 (Total)	50	mg/kg	58	64	64	99
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100	110
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	< 100	110
BTEX						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	67	69	80	67
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	95	102	85	81
p-Terphenyl-d14 (surr.)	1	%	81	87	78	59

Client Sample ID			RB9	[G01]RB10	RB11	[G01]RB12
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-No0066468	S23-No0066469	S23-No0066470	S23-No0066471
Date Sampled			Nov 27, 2023	Nov 27, 2023	Nov 27, 2023	Nov 27, 2023
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 1	< 0.1	< 1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.5
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.5
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.5
a-HCH	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.5
Aldrin	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.5
b-HCH	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.5
d-HCH	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.5
Dieldrin	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.5
Endosulfan I	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.5
Endosulfan II	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.5
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.5
Endrin	0.05	mg/kg	0.07	< 0.5	< 0.05	< 0.5
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.5
Endrin ketone	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.5
g-HCH (Lindane)	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.5
Heptachlor	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.5
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.5
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.5
Methoxychlor	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.5
Toxaphene	0.5	mg/kg	< 0.5	< 10	< 0.5	< 10
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.5
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.5
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 1	< 0.1	< 1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 1	< 0.1	< 1
Dibutylchlorendate (surr.)	1	%	89	82	131	51
Tetrachloro-m-xylene (surr.)	1	%	94	83	95	82
Heavy Metals						
Arsenic	2	mg/kg	7.4	4.7	6.3	6.3
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	12	280	10	17
Copper	5	mg/kg	16	43	14	18
Lead	5	mg/kg	17	34	17	16
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	6.5	190	5.6	8.4
Zinc	5	mg/kg	35	240	36	42
Sample Properties						
% Moisture	1	%	11	14	13	12

Client Sample ID			RBD	[G01]RBP
Sample Matrix			Soil	Soil
Eurofins Sample No.			S23-No0066472	S23-No0066473
Date Sampled			Nov 27, 2023	Nov 27, 2023
Test/Reference	LOR	Unit		
Total Recoverable Hydrocarbons				
TRH C6-C9	20	mg/kg	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	130
TRH C15-C28	50	mg/kg	< 50	180
TRH C29-C36	50	mg/kg	< 50	270
TRH C10-C36 (Total)	50	mg/kg	< 50	580
TRH C6-C10	20	mg/kg	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	140
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	140
TRH >C16-C34	100	mg/kg	< 100	390
TRH >C34-C40	100	mg/kg	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	530
BTEX				
Benzene	0.1	mg/kg	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	65	INT
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5
Polycyclic Aromatic Hydrocarbons				
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	92	116
p-Terphenyl-d14 (surr.)	1	%	70	99

Client Sample ID			RBD	[G01]RBP
Sample Matrix			Soil	Soil
Eurofins Sample No.			S23-No0066472	S23-No0066473
Date Sampled			Nov 27, 2023	Nov 27, 2023
Test/Reference	LOR	Unit		
Organochlorine Pesticides				
Chlordanes - Total	0.1	mg/kg	< 0.1	< 1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.5
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.5
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.5
a-HCH	0.05	mg/kg	< 0.05	< 0.5
Aldrin	0.05	mg/kg	< 0.05	< 0.5
b-HCH	0.05	mg/kg	< 0.05	< 0.5
d-HCH	0.05	mg/kg	< 0.05	< 0.5
Dieldrin	0.05	mg/kg	< 0.05	< 0.5
Endosulfan I	0.05	mg/kg	< 0.05	< 0.5
Endosulfan II	0.05	mg/kg	< 0.05	< 0.5
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.5
Endrin	0.05	mg/kg	< 0.05	< 0.5
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.5
Endrin ketone	0.05	mg/kg	< 0.05	< 0.5
g-HCH (Lindane)	0.05	mg/kg	< 0.05	< 0.5
Heptachlor	0.05	mg/kg	< 0.05	< 0.5
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.5
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.5
Methoxychlor	0.05	mg/kg	< 0.05	< 0.5
Toxaphene	0.5	mg/kg	< 0.5	< 10
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.5
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.5
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 1
Dibutylchlorendate (surr.)	1	%	74	81
Tetrachloro-m-xylene (surr.)	1	%	85	102
Heavy Metals				
Arsenic	2	mg/kg	10	< 2
Cadmium	0.4	mg/kg	< 0.4	< 0.4
Chromium	5	mg/kg	17	< 5
Copper	5	mg/kg	19	150
Lead	5	mg/kg	42	< 5
Mercury	0.1	mg/kg	< 0.1	< 0.1
Nickel	5	mg/kg	6.8	< 5
Zinc	5	mg/kg	60	9.2
Sample Properties				
% Moisture	1	%	10	28
Phenols (Halogenated)				
2-Chlorophenol	0.5	mg/kg	-	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	-	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	-	< 1
2.4.6-Trichlorophenol	1	mg/kg	-	< 1
2.6-Dichlorophenol	0.5	mg/kg	-	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	-	< 1
Pentachlorophenol	1	mg/kg	-	< 1
Tetrachlorophenols - Total	10	mg/kg	-	< 10
Total Halogenated Phenol*	1	mg/kg	-	< 1

Client Sample ID			RBD	[G01]RBP
Sample Matrix			Soil	Soil
Eurofins Sample No.			S23-No0066472	S23-No0066473
Date Sampled			Nov 27, 2023	Nov 27, 2023
Test/Reference	LOR	Unit		
Phenols (non-Halogenated)				
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	-	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	-	< 5
2-Nitrophenol	1	mg/kg	-	< 1
2.4-Dimethylphenol	0.5	mg/kg	-	< 0.5
2.4-Dinitrophenol	5	mg/kg	-	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	-	< 1
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	-	< 2
Total cresols*	0.5	mg/kg	-	< 2
4-Nitrophenol	5	mg/kg	-	< 5
Dinoseb	20	mg/kg	-	< 20
Phenol	0.5	mg/kg	-	< 2
Phenol-d6 (surr.)	1	%	-	92
Total Non-Halogenated Phenol*	20	mg/kg	-	< 20

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
Eurofins Suite B9			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Sydney	Nov 30, 2023	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Nov 30, 2023	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Nov 30, 2023	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Sydney	Nov 30, 2023	14 Days
- Method: LTM-ORG-2010 BTEX and Volatile TRH			
Polycyclic Aromatic Hydrocarbons	Sydney	Nov 30, 2023	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Organochlorine Pesticides	Sydney	Nov 30, 2023	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Metals M8	Sydney	Nov 30, 2023	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
% Moisture	Sydney	Nov 27, 2023	14 Days
- Method: LTM-GEN-7080 Moisture			
Phenols (Halogenated)	Sydney	Nov 29, 2023	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (non-Halogenated)	Sydney	Nov 29, 2023	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			

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

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

Melbourne	Geelong	Sydney	Canberra	Brisbane	Newcastle
6 Monterey Road	19/8 Lewalan Street	179 Magowar Road	Unit 1,2 Dacre Street	1/21 Smallwood Place	1/2 Frost Drive
Dandenong South	Grovedale	Girraween	Mitchell	Murarrie	Mayfield West
VIC 3175	VIC 3216	NSW 2145	ACT 2911	QLD 4172	NSW 2304
+61 3 8564 5000	+61 3 8564 5000	+61 2 9900 8400	+61 2 6113 8091	T: +61 7 3902 4600	+61 2 4968 8448
NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261
Site# 1254	Site# 25403	Site# 18217	Site# 25466	Site# 20794	Site# 25079 & 25289

Eurofins ARL Pty Ltd
ABN: 91 05 0159 898

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

Eurofins Environment Testing NZ Ltd
NZBN: 9429046024954

Auckland	Auckland (Asb)	Christchurch	Tauranga
35 O'Rorke Road	Unit C1/4 Pacific Rise,	43 Detroit Drive	1277 Cameron Road,
Penrose,	Mount Wellington,	Rolleston,	Gate Pa,
Auckland 1061	Auckland 1061	Christchurch 7675	Tauranga 3112
+64 9 526 4551	+64 9 525 0568	+64 3 343 5201	+64 9 525 0568
IANZ# 1327	IANZ# 1308	IANZ# 1290	IANZ# 1402

Company Name: Environmental Consulting Services
Address: 10 Fort Street
Petersham
NSW 2049

Project Name: BRINGELLY

Order No.:
Report #: 1048219
Phone: 02 9518 1161
Fax:

Received: Nov 27, 2023 12:30 PM
Due: Dec 4, 2023
Priority: 5 Day
Contact Name: All results - Simon Caples

Eurofins Analytical Services Manager : Bonnie Pu

Sample Detail						Phenols (Speciated)	Moisture Set	Eurofins Suite B9
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X
External Laboratory								
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**			
1	RB1	Nov 27, 2023		Soil	S23-No0066460		X	X
2	RB2	Nov 27, 2023		Soil	S23-No0066461		X	X
3	RB3	Nov 27, 2023		Soil	S23-No0066462		X	X
4	RB4	Nov 27, 2023		Soil	S23-No0066463		X	X
5	RB5	Nov 27, 2023		Soil	S23-No0066464		X	X
6	RB6	Nov 27, 2023		Soil	S23-No0066465		X	X
7	RB7	Nov 27, 2023		Soil	S23-No0066466		X	X
8	RB8	Nov 27, 2023		Soil	S23-No0066467		X	X
9	RB9	Nov 27, 2023		Soil	S23-No0066468		X	X
10	RB10	Nov 27, 2023		Soil	S23-No0066469		X	X
11	RB11	Nov 27, 2023		Soil	S23-No0066470		X	X
12	RB12	Nov 27, 2023		Soil	S23-No0066471		X	X
13	RBD	Nov 27, 2023		Soil	S23-No0066472		X	X
14	RBP	Nov 27, 2023		Soil	S23-No0066473	X	X	X

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

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

Melbourne	Geelong	Sydney	Canberra	Brisbane	Newcastle
6 Monterey Road	19/8 Lewalan Street	179 Magowar Road	Unit 1,2 Dacre Street	1/21 Smallwood Place	1/2 Frost Drive
Dandenong South	Grovedale	Girraween	Mitchell	Murarrie	Mayfield West
VIC 3175	VIC 3216	NSW 2145	ACT 2911	QLD 4172	NSW 2304
+61 3 8564 5000	+61 3 8564 5000	+61 2 9900 8400	+61 2 6113 8091	T: +61 7 3902 4600	+61 2 4968 8448
NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261
Site# 1254	Site# 25403	Site# 18217	Site# 25466	Site# 20794	Site# 25079 & 25289

Eurofins ARL Pty Ltd
ABN: 91 05 0159 898

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

Eurofins Environment Testing NZ Ltd
NZBN: 9429046024954

Auckland	Auckland (Asb)	Christchurch	Tauranga
35 O'Rorke Road	Unit C1/4 Pacific Rise,	43 Detroit Drive	1277 Cameron Road,
Penrose,	Mount Wellington,	Rolleston,	Gate Pa,
Auckland 1061	Auckland 1061	Christchurch 7675	Tauranga 3112
+64 9 526 4551	+64 9 525 0568	+64 3 343 5201	+64 9 525 0568
IANZ# 1327	IANZ# 1308	IANZ# 1290	IANZ# 1402

Company Name: Environmental Consulting Services
Address: 10 Fort Street
Petersham
NSW 2049

Project Name: BRINGELLY

Order No.:
Report #: 1048219
Phone: 02 9518 1161
Fax:

Received: Nov 27, 2023 12:30 PM
Due: Dec 4, 2023
Priority: 5 Day
Contact Name: All results - Simon Caples

Eurofins Analytical Services Manager : Bonnie Pu

Sample Detail	Phenols (Speciated)	Moisture Set	Eurofins Suite B9
Sydney Laboratory - NATA # 1261 Site # 18217	X	X	X
Test Counts	1	14	14

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follow guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013. They 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 weight basis unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion unless otherwise stated.
4. For CEC results where the sample's origin is unknown or environmentally contaminated, the results should be used advisedly.
5. Actual LORs are matrix dependent. Quoted LORs may be raised where sample extracts are diluted due to interferences.
6. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
7. SVOC analysis on waters is performed on homogenised, unfiltered samples unless noted otherwise.
8. Samples were analysed on an 'as received' basis.
9. Information identified in this report with blue colour indicates data provided by customers that may have an impact on the results.
10. This report replaces any interim results previously issued.

Holding Times

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

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

Holding times apply from the date of sampling; therefore, compliance with 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, the holding time is 14 days.

Units

mg/kg: milligrams per kilogram	**mg/L:** milligrams per litre	**ppm:** parts per million
µg/L: micrograms per litre	**ppb:** parts per billion	**%:** Percentage
org/100 mL: Organisms per 100 millilitres	**NTU:** Nephelometric Turbidity Units	**MPN/100 mL:** Most Probable Number of organisms per 100 millilitres
CFU: Colony forming unit	**Colour:** Pt-Co Units	

Terms

APHA	American Public Health Association
CEC	Cation Exchange Capacity
COC	Chain of Custody
CP	Client Parent - QC was performed on samples pertaining to this report
CRM	Certified Reference Material (ISO17034) - reported as percent recovery.
Dry	Where moisture has been determined on a solid sample, the result is expressed on a dry weight basis.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
LOR	Limit of Reporting.
LCS	Laboratory Control Sample - 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.
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC represents the sequence or batch that client samples were analysed within.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
SRA	Sample Receipt Advice
Surr - Surrogate	The addition of a similar compound to the analyte target is reported as percentage recovery. See below for acceptance criteria.
TBTO	Tributyltin oxide (*bis*-tributyltin oxide) - individual tributyltin compounds cannot be identified separately in the environment; however, free tributyltin was measured, and its values were converted stoichiometrically into tributyltin oxide for comparison with regulatory limits.
TCLP	Toxicity Characteristic Leaching Procedure
TEQ	Toxic Equivalency Quotient or Total Equivalence
QSM	US Department of Defense Quality Systems Manual Version 5.4
US EPA	United States Environmental Protection Agency
WA DWER	Sum of PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC - Acceptance Criteria

The acceptance criteria should only be used as a guide and may be different when site-specific Sampling Analysis and Quality Plan (SAQP) have been implemented.

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

Results <10 times the LOR:	No Limit
Results between 10-20 times the LOR:	RPD must lie between 0-50%
Results >20 times the LOR:	RPD must lie between 0-30%

NOTE: pH duplicates are reported as a range, not as RPD

Surrogate Recoveries: Recoveries must lie between 20-130% for Speciated Phenols & 50-150% for PFAS. SVOCs recoveries 20 – 150%, VOC recoveries 70 – 130%

PFAS field samples containing surrogate recoveries above the QC limit designated in QSM 5.4, where no positive PFAS results have been reported or reviewed, and no data was affected.

QC Data General Comments

1. Where a result is reported as 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 are not data from your samples.
3. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore, laboratory analysis is unlikely to be completed within holding time.Analysis will begin as soon as possible after sample receipt.
4. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery, the term "INT" appears against that analyte.
5. For Matrix Spikes and LCS results, a dash "-" in the report means that the specific analyte was not added to the QC sample.
6. Duplicate RPDs are calculated from raw analytical data; thus, it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
BTEX							
Benzene	mg/kg	< 0.1			0.1	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Xylenes - Total*	mg/kg	< 0.3			0.3	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-HCH	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-HCH	mg/kg	< 0.05			0.05	Pass	
d-HCH	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
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-HCH (Lindane)	mg/kg	< 0.05			0.05	Pass	
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.05			0.05	Pass	
Toxaphene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
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							
Phenols (Halogenated)							
2-Chlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4.5-Trichlorophenol	mg/kg	< 1			1	Pass	
2.4.6-Trichlorophenol	mg/kg	< 1			1	Pass	
2.6-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
4-Chloro-3-methylphenol	mg/kg	< 1			1	Pass	
Pentachlorophenol	mg/kg	< 1			1	Pass	
Tetrachlorophenols - Total	mg/kg	< 10			10	Pass	
Method Blank							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	mg/kg	< 20			20	Pass	
2-Methyl-4.6-dinitrophenol	mg/kg	< 5			5	Pass	
2-Nitrophenol	mg/kg	< 1			1	Pass	
2.4-Dimethylphenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dinitrophenol	mg/kg	< 5			5	Pass	
2-Methylphenol (o-Cresol)	mg/kg	< 0.2			0.2	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/kg	< 0.4			0.4	Pass	
4-Nitrophenol	mg/kg	< 5			5	Pass	
Dinoseb	mg/kg	< 20			20	Pass	
Phenol	mg/kg	< 0.5			0.5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons							
TRH C6-C9	%	102			70-130	Pass	
TRH C10-C14	%	84			70-130	Pass	
TRH C6-C10	%	100			70-130	Pass	
TRH >C10-C16	%	85			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	100			70-130	Pass	
Toluene	%	107			70-130	Pass	
Ethylbenzene	%	104			70-130	Pass	
m&p-Xylenes	%	116			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
o-Xylene	%	105			70-130	Pass	
Xylenes - Total*	%	113			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	74			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	100			70-130	Pass	
Acenaphthylene	%	100			70-130	Pass	
Anthracene	%	106			70-130	Pass	
Benz(a)anthracene	%	97			70-130	Pass	
Benzo(a)pyrene	%	90			70-130	Pass	
Benzo(b&j)fluoranthene	%	94			70-130	Pass	
Benzo(g.h.i)perylene	%	88			70-130	Pass	
Benzo(k)fluoranthene	%	95			70-130	Pass	
Chrysene	%	103			70-130	Pass	
Dibenz(a.h)anthracene	%	94			70-130	Pass	
Fluoranthene	%	103			70-130	Pass	
Fluorene	%	101			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	90			70-130	Pass	
Naphthalene	%	98			70-130	Pass	
Phenanthrene	%	100			70-130	Pass	
Pyrene	%	109			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	86			70-130	Pass	
4.4'-DDD	%	77			70-130	Pass	
4.4'-DDE	%	86			70-130	Pass	
4.4'-DDT	%	91			70-130	Pass	
a-HCH	%	81			70-130	Pass	
Aldrin	%	85			70-130	Pass	
b-HCH	%	81			70-130	Pass	
d-HCH	%	82			70-130	Pass	
Dieldrin	%	86			70-130	Pass	
Endosulfan I	%	80			70-130	Pass	
Endosulfan II	%	76			70-130	Pass	
Endosulfan sulphate	%	82			70-130	Pass	
Endrin	%	89			70-130	Pass	
Endrin aldehyde	%	76			70-130	Pass	
Endrin ketone	%	86			70-130	Pass	
g-HCH (Lindane)	%	84			70-130	Pass	
Heptachlor	%	88			70-130	Pass	
Heptachlor epoxide	%	87			70-130	Pass	
Hexachlorobenzene	%	85			70-130	Pass	
Methoxychlor	%	89			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	97			80-120	Pass	
Cadmium	%	102			80-120	Pass	
Chromium	%	99			80-120	Pass	
Copper	%	100			80-120	Pass	
Lead	%	97			80-120	Pass	
Mercury	%	99			80-120	Pass	
Nickel	%	99			80-120	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Zinc	%	100			80-120	Pass	
LCS - % Recovery							
Phenols (Halogenated)							
2-Chlorophenol	%	95			25-140	Pass	
2.4-Dichlorophenol	%	99			25-140	Pass	
2.4.5-Trichlorophenol	%	101			25-140	Pass	
2.4.6-Trichlorophenol	%	96			25-140	Pass	
2.6-Dichlorophenol	%	99			25-140	Pass	
4-Chloro-3-methylphenol	%	92			25-140	Pass	
Pentachlorophenol	%	98			25-140	Pass	
Tetrachlorophenols - Total	%	99			25-140	Pass	
LCS - % Recovery							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	%	97			25-140	Pass	
2-Methyl-4.6-dinitrophenol	%	93			25-140	Pass	
2-Nitrophenol	%	95			25-140	Pass	
2.4-Dimethylphenol	%	102			25-140	Pass	
2.4-Dinitrophenol	%	85			25-140	Pass	
2-Methylphenol (o-Cresol)	%	95			25-140	Pass	
3&4-Methylphenol (m&p-Cresol)	%	96			25-140	Pass	
4-Nitrophenol	%	85			25-140	Pass	
Dinoseb	%	95			25-140	Pass	
Phenol	%	92			25-140	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Total Recoverable Hydrocarbons				Result 1					
TRH C6-C9	S23-No0069459	NCP	%	86			70-130	Pass	
TRH C10-C14	S23-No0076249	NCP	%	76			70-130	Pass	
TRH C6-C10	S23-No0069459	NCP	%	86			70-130	Pass	
TRH >C10-C16	S23-No0076249	NCP	%	73			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	S23-No0069459	NCP	%	78			70-130	Pass	
Toluene	S23-No0069459	NCP	%	87			70-130	Pass	
Ethylbenzene	S23-No0069459	NCP	%	87			70-130	Pass	
m&p-Xylenes	S23-No0069459	NCP	%	95			70-130	Pass	
o-Xylene	S23-No0069459	NCP	%	87			70-130	Pass	
Xylenes - Total*	S23-No0069459	NCP	%	92			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
Naphthalene	S23-No0069459	NCP	%	72			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Benz(a)anthracene	S23-No0069355	NCP	%	70			70-130	Pass	
Benzo(a)pyrene	S23-No0063588	NCP	%	79			70-130	Pass	
Benzo(b&j)fluoranthene	S23-No0063588	NCP	%	76			70-130	Pass	
Benzo(g.h.i)perylene	S23-No0069355	NCP	%	85			70-130	Pass	
Benzo(k)fluoranthene	S23-No0069355	NCP	%	86			70-130	Pass	
Dibenz(a.h)anthracene	S23-No0063588	NCP	%	74			70-130	Pass	
Indeno(1.2.3-cd)pyrene	S23-No0069355	NCP	%	79			70-130	Pass	
Phenanthrene	S23-No0069355	NCP	%	76			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Chlordanes - Total	S23-No0070374	NCP	%	88			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
4.4'-DDD	S23-No0070374	NCP	%	72			70-130	Pass	
4.4'-DDE	S23-No0070374	NCP	%	88			70-130	Pass	
4.4'-DDT	S23-No0070374	NCP	%	93			70-130	Pass	
a-HCH	S23-No0070374	NCP	%	73			70-130	Pass	
Aldrin	S23-No0070374	NCP	%	89			70-130	Pass	
b-HCH	S23-No0069275	NCP	%	82			70-130	Pass	
d-HCH	S23-No0069275	NCP	%	71			70-130	Pass	
Dieldrin	S23-No0070374	NCP	%	84			70-130	Pass	
Endosulfan I	S23-No0070374	NCP	%	93			70-130	Pass	
Endosulfan II	S23-No0070374	NCP	%	84			70-130	Pass	
Endosulfan sulphate	S23-No0070374	NCP	%	89			70-130	Pass	
Endrin	S23-No0070374	NCP	%	101			70-130	Pass	
Endrin aldehyde	S23-No0070374	NCP	%	87			70-130	Pass	
Endrin ketone	S23-No0070374	NCP	%	89			70-130	Pass	
g-HCH (Lindane)	S23-No0070374	NCP	%	82			70-130	Pass	
Heptachlor	S23-No0070374	NCP	%	80			70-130	Pass	
Heptachlor epoxide	S23-No0070374	NCP	%	82			70-130	Pass	
Hexachlorobenzene	S23-No0070374	NCP	%	83			70-130	Pass	
Methoxychlor	S23-No0070374	NCP	%	80			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S23-No0066465	CP	%	108			75-125	Pass	
Cadmium	S23-No0066465	CP	%	112			75-125	Pass	
Chromium	S23-No0066465	CP	%	108			75-125	Pass	
Copper	S23-No0066465	CP	%	113			75-125	Pass	
Lead	S23-No0066465	CP	%	106			75-125	Pass	
Mercury	S23-No0066465	CP	%	107			75-125	Pass	
Nickel	S23-No0066465	CP	%	108			75-125	Pass	
Zinc	S23-No0066465	CP	%	75			75-125	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	S23-No0066469	CP	%	95			70-130	Pass	
Acenaphthylene	S23-No0066469	CP	%	91			70-130	Pass	
Anthracene	S23-No0066469	CP	%	82			70-130	Pass	
Chrysene	S23-No0066469	CP	%	86			70-130	Pass	
Fluoranthene	S23-No0066469	CP	%	73			70-130	Pass	
Fluorene	S23-No0066469	CP	%	93			70-130	Pass	
Naphthalene	S23-No0066469	CP	%	91			70-130	Pass	
Pyrene	S23-No0066469	CP	%	75			70-130	Pass	
Spike - % Recovery									
Phenols (Halogenated)				Result 1					
2-Chlorophenol	N23-No0064473	NCP	%	80			30-130	Pass	
2.4-Dichlorophenol	N23-No0064473	NCP	%	74			30-130	Pass	
2.4.5-Trichlorophenol	N23-No0064473	NCP	%	79			30-130	Pass	
2.4.6-Trichlorophenol	N23-No0064473	NCP	%	73			30-130	Pass	
2.6-Dichlorophenol	N23-No0064473	NCP	%	71			30-130	Pass	
Spike - % Recovery									
Phenols (non-Halogenated)				Result 1					
2.4-Dimethylphenol	N23-No0064473	NCP	%	78			30-130	Pass	
Phenol	N23-No0064473	NCP	%	93			30-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C10-C14	N23-No0070658	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	N23-No0070658	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	N23-No0070658	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C10-C16	N23-No0070658	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	N23-No0070658	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	N23-No0070658	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	S23-No0070368	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	S23-No0070368	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	S23-No0070368	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	S23-No0070368	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	S23-No0070368	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	S23-No0070368	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	S23-No0070368	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	S23-No0070368	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	S23-No0070368	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	S23-No0070368	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	S23-No0070368	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	S23-No0070368	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	S23-No0070368	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	S23-No0070368	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	S23-No0070368	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	S23-No0070368	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	S23-No0070368	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	S23-No0070368	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	S23-No0070368	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	S23-No0070368	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-HCH	S23-No0070368	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	S23-No0070368	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-HCH	S23-No0070368	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-HCH	S23-No0070368	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	S23-No0070368	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	S23-No0070368	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	S23-No0070368	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	S23-No0070368	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	S23-No0070368	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	S23-No0070368	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	S23-No0070368	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-HCH (Lindane)	S23-No0070368	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	S23-No0070368	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	S23-No0070368	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	S23-No0070368	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	S23-No0070368	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Toxaphene	S23-No0070368	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C6-C9	S23-No0066462	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C6-C10	S23-No0066462	CP	mg/kg	< 20	< 20	<1	30%	Pass	

Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S23-No0066462	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	S23-No0066462	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	S23-No0066462	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	S23-No0066462	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	S23-No0066462	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total*	S23-No0066462	CP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	S23-No0066462	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S23-No0066464	CP	mg/kg	10.0	8.6	15	30%	Pass	
Cadmium	S23-No0066464	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	S23-No0066464	CP	mg/kg	21	19	8.0	30%	Pass	
Copper	S23-No0066464	CP	mg/kg	32	26	23	30%	Pass	
Lead	S23-No0066464	CP	mg/kg	24	19	26	30%	Pass	
Mercury	S23-No0066464	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	S23-No0066464	CP	mg/kg	18	15	15	30%	Pass	
Zinc	S23-No0066464	CP	mg/kg	82	70	16	30%	Pass	
Duplicate									
Sample Properties				Result 1	Result 2	RPD			
% Moisture	S23-No0066466	CP	%	12	12	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C6-C9	S23-No0066472	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C6-C10	S23-No0066472	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S23-No0066472	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	S23-No0066472	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	S23-No0066472	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	S23-No0066472	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	S23-No0066472	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total*	S23-No0066472	CP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	S23-No0066472	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Phenols (Halogenated)				Result 1	Result 2	RPD			
2-Chlorophenol	S23-No0067194	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dichlorophenol	S23-No0067194	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4.5-Trichlorophenol	S23-No0067194	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4.6-Trichlorophenol	S23-No0067194	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.6-Dichlorophenol	S23-No0067194	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chloro-3-methylphenol	S23-No0067194	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Pentachlorophenol	S23-No0067194	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Tetrachlorophenols - Total	S23-No0067194	NCP	mg/kg	< 10	< 10	<1	30%	Pass	
Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
2-Cyclohexyl-4.6-dinitrophenol	S23-No0067194	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
2-Methyl-4.6-dinitrophenol	S23-No0067194	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Nitrophenol	S23-No0067194	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4-Dimethylphenol	S23-No0067194	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dinitrophenol	S23-No0067194	NCP	mg/kg	< 5	< 5	<1	30%	Pass	

Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
2-Methylphenol (o-Cresol)	S23-No0067194	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
3&4-Methylphenol (m&p-Cresol)	S23-No0067194	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
4-Nitrophenol	S23-No0067194	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Dinoseb	S23-No0067194	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
Phenol	S23-No0067194	NCP	mg/kg	< 0.5	< 0.5	<1	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
G01	The LORs have been raised due to matrix interference
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:

Adam Bateup	Analytical Services Manager
Fang Yee Tan	Senior Analyst-Metal
Mickael Ros	Senior Analyst-Metal
Roopesh Rangarajan	Senior Analyst-Organic
Roopesh Rangarajan	Senior Analyst-Volatile

Glenn Jackson
Managing Director

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

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

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

eurofins | Environment Testing

www.eurofins.com.au EnviroSales@eurofins.com

Eurofins Environment Testing Australia Pty Ltd

ABN: 50 005 085 521

Melbourne	Geelong	Sydney	Canberra	Brisbane	Newcastle
6 Monterey Road	19/8 Lewalan Street	179 Magowar Road	Unit 1,2 Dacre Street	1/21 Smallwood Place	1/2 Frost Drive
Dandenong South	Grovedale	Girraween	Mitchell	Murarrie	Mayfield West
VIC 3175	VIC 3216	NSW 2145	ACT 2911	QLD 4172	NSW 2304
+61 3 8564 5000	+61 3 8564 5000	+61 2 9900 8400	+61 2 6113 8091	T: +61 7 3902 4600	+61 2 4968 8448
NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261
Site# 1254	Site# 25403	Site# 18217	Site# 25466	Site# 20794	Site# 25079 & 25289

Eurofins ARL Pty Ltd

ABN: 91 05 0159 898

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

Eurofins Environment Testing NZ Ltd

NZBN: 9429046024954

Auckland	Auckland (Asb)	Christchurch	Tauranga
35 O'Rorke Road	Unit C1/4 Pacific Rise,	43 Detroit Drive	1277 Cameron Road,
Penrose,	Mount Wellington,	Rolleston,	Gate Pa,
Auckland 1061	Auckland 1061	Christchurch 7675	Tauranga 3112
+64 9 526 4551	+64 9 525 0568	+64 3 343 5201	+64 9 525 0568
IANZ# 1327	IANZ# 1308	IANZ# 1290	IANZ# 1402

Sample Receipt Advice

Company name:	Environmental Consulting Services
Contact name:	All results - Simon Caples
Project name:	BRINGELLY
Project ID:	Not provided
Turnaround time:	5 Day
Date/Time received	Nov 27, 2023 12:30 PM
Eurofins reference	1048219

Sample Information

✓	A detailed list of analytes logged into our LIMS, is included in the attached summary table.
✓	Sample Temperature of chilled sample on the batch as recorded by Eurofins Sample Receipt : 23.5 degrees Celsius.
✓	All samples have been received as described on the above COC.
✓	COC has been completed correctly.
N/A	Attempt to chill was evident.
✓	Appropriately preserved sample containers have been used.
✓	All samples were received in good condition.
✓	Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.
✓	Appropriate sample containers have been used.
✓	Sample containers for volatile analysis received with zero headspace.
X	Split sample sent to requested external lab.
X	Some samples have been subcontracted.
N/A	Custody Seals intact (if used).

Notes

Contact

If you have any questions with respect to these samples, please contact your Analytical Services Manager:

Bonnie Pu on phone : or by email: BonniePu@eurofins.com

Results will be delivered electronically via email to All results - Simon Caples - simon@ecsgroup.com.au.

ENVIRONMENTAL CONSULTING SERVICES

Chain of Custody

Project: BRINGELLY

Environmental Consulting Services Pty Ltd	Manager: Simon Caples	Ph: 0415 225 474	Email: simon@ecsgroup.com.au
Event Number:	Matrix	Analysis	

Lab Number	Sample Number	Sample Date	Soil	Water	Other	BTEX	TPH	PAH	Phenol	Metals	Asbestos	Suite B7	Suite B9	Suite B10	Suite R16	Phenols
	RB1	27/11	✓								✓		✓			
	RB2		✓								✓		✓			
	RB3		✓								✓		✓			
	RB4		✓								✓		✓			
	RB5		✓								✓		✓			
	RB6		✓								✓		✓			
	RB7		✓								✓		✓			
	RB8		✓								✓		✓			
	RBD		✓										✓			
	RBP		✓										✓			✓
	RB9		✓								✓		✓			
	RB10		✓								✓		✓			
	RB11		✓								✓		✓			
	RB12		✓								✓		✓			

Turn Around Time: 5 DAYS

Comments: ASBESTOS ID ONLY

Relinquished By: Tom C | Signed: | Date: 27/11 | Received By: Aranu | Signed: | Date: 27/11

1048218 1048219 12:30pm 23.5 NOC

Environmental Consulting Services
10 Fort Street
Petersham
NSW 2049

NATA Accredited
Accreditation Number 1261
Site Number 18217

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

Attention: **All results - Simon Caples**

Report **1059323-W**
Project name BRINGELLEY
Received Date Jan 12, 2024

Client Sample ID			**A**	**B**	**C**
Sample Matrix			**Water**	**Water**	**Water**
Eurofins Sample No.			**S24-Ja0013856**	**S24-Ja0013857**	**S24-Ja0013858**
Date Sampled			**Jan 12, 2024**	**Jan 12, 2024**	**Jan 12, 2024**
Test/Reference	LOR	Unit			
Total Recoverable Hydrocarbons					
TRH C6-C9	0.02	mg/L	< 0.02	< 0.02	< 0.02
TRH C10-C14	0.05	mg/L	< 0.05	< 0.05	< 0.05
TRH C15-C28	0.1	mg/L	0.1	0.1	< 0.1
TRH C29-C36	0.1	mg/L	< 0.1	< 0.1	< 0.1
TRH C10-C36 (Total)	0.1	mg/L	0.1	0.1	< 0.1
TRH C6-C10	0.02	mg/L	< 0.02	< 0.02	< 0.02
TRH C6-C10 less BTEX (F1)[N04]	0.02	mg/L	< 0.02	< 0.02	< 0.02
TRH >C10-C16	0.05	mg/L	< 0.05	< 0.05	< 0.05
TRH >C10-C16 less Naphthalene (F2)[N01]	0.05	mg/L	< 0.05	< 0.05	< 0.05
TRH >C16-C34	0.1	mg/L	0.1	0.1	< 0.1
TRH >C34-C40	0.1	mg/L	< 0.1	< 0.1	< 0.1
TRH >C10-C40 (total)*	0.1	mg/L	0.1	0.1	< 0.1
BTEX					
Benzene	0.001	mg/L	< 0.001	< 0.001	0.001
Toluene	0.001	mg/L	< 0.001	< 0.001	0.002
Ethylbenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001
m&p-Xylenes	0.002	mg/L	< 0.002	< 0.002	< 0.002
o-Xylene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Xylenes - Total*	0.003	mg/L	< 0.003	< 0.003	< 0.003
4-Bromofluorobenzene (surr.)	1	%	119	125	122
Total Recoverable Hydrocarbons - 2013 NEPM Fractions					
Naphthalene[N02]	0.01	mg/L	< 0.01	< 0.01	< 0.01
Polycyclic Aromatic Hydrocarbons					
Acenaphthene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Acenaphthylene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Benz(a)anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Benzo(a)pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Benzo(b&j)fluoranthene[N07]	0.001	mg/L	< 0.001	< 0.001	< 0.001
Benzo(g.h.i)perylene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Benzo(k)fluoranthene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Chrysene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Dibenz(a.h)anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Fluoranthene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Fluorene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Indeno(1.2.3-cd)pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001

Client Sample ID			A	B	C
Sample Matrix			Water	Water	Water
Eurofins Sample No.			S24-Ja0013856	S24-Ja0013857	S24-Ja0013858
Date Sampled			Jan 12, 2024	Jan 12, 2024	Jan 12, 2024
Test/Reference	LOR	Unit			
Polycyclic Aromatic Hydrocarbons					
Naphthalene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Phenanthrene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Total PAH*	0.001	mg/L	< 0.001	< 0.001	< 0.001
2-Fluorobiphenyl (surr.)	1	%	69	76	61
p-Terphenyl-d14 (surr.)	1	%	INT	INT	INT
Organochlorine Pesticides					
Chlordanes - Total	0.002	mg/L	< 0.002	< 0.002	< 0.002
4.4'-DDD	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002
4.4'-DDE	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002
4.4'-DDT	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002
a-HCH	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002
Aldrin	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002
b-HCH	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002
d-HCH	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002
Dieldrin	0.0002	mg/L	< 0.0002	< 0.001	< 0.0002
Endosulfan I	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002
Endosulfan II	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002
Endosulfan sulphate	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002
Endrin	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002
Endrin aldehyde	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002
Endrin ketone	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002
g-HCH (Lindane)	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002
Heptachlor	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002
Heptachlor epoxide	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002
Hexachlorobenzene	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002
Methoxychlor	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002
Toxaphene	0.005	mg/L	< 0.005	< 0.005	< 0.005
Aldrin and Dieldrin (Total)*	0.0002	mg/L	< 0.0002	< 0.001	< 0.0002
DDT + DDE + DDD (Total)*	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002
Vic EPA IWRG 621 OCP (Total)*	0.002	mg/L	< 0.002	< 0.002	< 0.002
Vic EPA IWRG 621 Other OCP (Total)*	0.002	mg/L	< 0.002	< 0.002	< 0.002
Dibutylchlorendate (surr.)	1	%	145	149	135
Tetrachloro-m-xylene (surr.)	1	%	139	INT	146
Conductivity (at 25 °C)	10	uS/cm	5700	6800	13000
pH (at 25 °C)	0.1	pH Units	7.6	7.6	7.4
Heavy Metals					
Arsenic (filtered)	0.001	mg/L	0.006	0.016	< 0.001
Cadmium (filtered)	0.0002	mg/L	0.0002	0.0003	< 0.0002
Chromium (filtered)	0.001	mg/L	< 0.001	0.004	< 0.001
Copper (filtered)	0.001	mg/L	0.001	0.015	< 0.001
Lead (filtered)	0.001	mg/L	0.002	0.017	< 0.001
Mercury (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001
Nickel (filtered)	0.001	mg/L	0.052	0.048	0.044
Zinc (filtered)	0.005	mg/L	0.10	0.14	0.042

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
Eurofins Suite B9 (filtered metals)			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Sydney	Jan 16, 2024	7 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jan 15, 2024	7 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jan 16, 2024	7 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Sydney	Jan 15, 2024	14 Days
- Method: LTM-ORG-2010 BTEX and Volatile TRH			
Polycyclic Aromatic Hydrocarbons	Sydney	Jan 16, 2024	7 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Organochlorine Pesticides	Sydney	Jan 16, 2024	7 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Metals M8 filtered	Sydney	Jan 16, 2024	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Conductivity (at 25 °C)	Sydney	Jan 16, 2024	28 Days
- Method: LTM-INO-4030 Conductivity			
pH (at 25 °C)	Sydney	Jan 16, 2024	0 Hour
- Method: LTM-GEN-7090 pH in water by ISE			

eurofins

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

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

Melbourne	Geelong	Sydney	Canberra	Brisbane	Newcastle
6 Monterey Road	19/8 Lewalan Street	179 Magowar Road	Unit 1,2 Dacre Street	1/21 Smallwood Place	1/2 Frost Drive
Dandenong South	Grovedale	Girraween	Mitchell	Murarrie	Mayfield West
VIC 3175	VIC 3216	NSW 2145	ACT 2911	QLD 4172	NSW 2304
+61 3 8564 5000	+61 3 8564 5000	+61 2 9900 8400	+61 2 6113 8091	T: +61 7 3902 4600	+61 2 4968 8448
NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261
Site# 1254	Site# 25403	Site# 18217	Site# 25466	Site# 20794	Site# 25079 & 25289

Eurofins ARL Pty Ltd
ABN: 91 05 0159 898

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

Eurofins Environment Testing NZ Ltd
NZBN: 9429046024954

Auckland	Auckland (Asb)	Christchurch	Tauranga
35 O'Rorke Road	Unit C1/4 Pacific Rise,	43 Detroit Drive	1277 Cameron Road,
Penrose,	Mount Wellington,	Rolleston,	Gate Pa,
Auckland 1061	Auckland 1061	Christchurch 7675	Tauranga 3112
+64 9 526 4551	+64 9 525 0568	+64 3 343 5201	+64 9 525 0568
IANZ# 1327	IANZ# 1308	IANZ# 1290	IANZ# 1402

Company Name: Environmental Consulting Services
Address: 10 Fort Street
Petersham
NSW 2049

Project Name: BRINGELLEY

Order No.:
Report #: 1059323
Phone: 02 9518 1161
Fax:

Received: Jan 12, 2024 11:30 AM
Due: Jan 19, 2024
Priority: 5 Day
Contact Name: All results - Simon Caples

Eurofins Analytical Services Manager : Bonnie Pu

Sample Detail						Conductivity (at 25 °C)	pH (at 25 °C)	Eurofins Suite B9 (filtered metals)
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X
External Laboratory								
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**			
1	A	Jan 12, 2024		Water	S24-Ja0013856	X	X	X
2	B	Jan 12, 2024		Water	S24-Ja0013857	X	X	X
3	C	Jan 12, 2024		Water	S24-Ja0013858	X	X	X
Test Counts						3	3	3

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follow guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013. They 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 weight basis unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion unless otherwise stated.
4. For CEC results where the sample's origin is unknown or environmentally contaminated, the results should be used advisedly.
5. Actual LORs are matrix dependent. Quoted LORs may be raised where sample extracts are diluted due to interferences.
6. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
7. SVOC analysis on waters is performed on homogenised, unfiltered samples unless noted otherwise.
8. Samples were analysed on an 'as received' basis.
9. Information identified in this report with blue colour indicates data provided by customers that may have an impact on the results.
10. This report replaces any interim results previously issued.

Holding Times

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

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

Holding times apply from the date of sampling; therefore, compliance with 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, the holding time is 14 days.

Units

mg/kg: milligrams per kilogram	**mg/L:** milligrams per litre	**ppm:** parts per million
µg/L: micrograms per litre	**ppb:** parts per billion	**%:** Percentage
org/100 mL: Organisms per 100 millilitres	**NTU:** Nephelometric Turbidity Units	**MPN/100 mL:** Most Probable Number of organisms per 100 millilitres
CFU: Colony forming unit	**Colour:** Pt-Co Units	

Terms

APHA	American Public Health Association
CEC	Cation Exchange Capacity
COC	Chain of Custody
CP	Client Parent - QC was performed on samples pertaining to this report
CRM	Certified Reference Material (ISO17034) - reported as percent recovery.
Dry	Where moisture has been determined on a solid sample, the result is expressed on a dry weight basis.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
LOR	Limit of Reporting.
LCS	Laboratory Control Sample - 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.
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC represents the sequence or batch that client samples were analysed within.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
SRA	Sample Receipt Advice
Surr - Surrogate	The addition of a similar compound to the analyte target is reported as percentage recovery. See below for acceptance criteria.
TBTO	Tributyltin oxide (*bis*-tributyltin oxide) - individual tributyltin compounds cannot be identified separately in the environment; however, free tributyltin was measured, and its values were converted stoichiometrically into tributyltin oxide for comparison with regulatory limits.
TCLP	Toxicity Characteristic Leaching Procedure
TEQ	Toxic Equivalency Quotient or Total Equivalence
QSM	US Department of Defense Quality Systems Manual Version 5.4
US EPA	United States Environmental Protection Agency
WA DWER	Sum of PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC - Acceptance Criteria

The acceptance criteria should only be used as a guide and may be different when site-specific Sampling Analysis and Quality Plan (SAQP) have been implemented.

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

Results <10 times the LOR:	No Limit
Results between 10-20 times the LOR:	RPD must lie between 0-50%
Results >20 times the LOR:	RPD must lie between 0-30%

NOTE: pH duplicates are reported as a range, not as RPD

Surrogate Recoveries: Recoveries must lie between 20-130% for Speciated Phenols & 50-150% for PFAS. SVOCs recoveries 20 – 150%, VOC recoveries 70 – 130%

PFAS field samples containing surrogate recoveries above the QC limit designated in QSM 5.4, where no positive PFAS results have been reported or reviewed, and no data was affected.

QC Data General Comments

1. Where a result is reported as 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 are not data from your samples.
3. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore, laboratory analysis is unlikely to be completed within holding time.Analysis will begin as soon as possible after sample receipt.
4. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery, the term "INT" appears against that analyte.
5. For Matrix Spikes and LCS results, a dash "-" in the report means that the specific analyte was not added to the QC sample.
6. Duplicate RPDs are calculated from raw analytical data; thus, it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons							
TRH C6-C9	mg/L	< 0.02			0.02	Pass	
TRH C10-C14	mg/L	< 0.05			0.05	Pass	
TRH C15-C28	mg/L	< 0.1			0.1	Pass	
TRH C29-C36	mg/L	< 0.1			0.1	Pass	
TRH C6-C10	mg/L	< 0.02			0.02	Pass	
TRH >C10-C16	mg/L	< 0.05			0.05	Pass	
TRH >C16-C34	mg/L	< 0.1			0.1	Pass	
TRH >C34-C40	mg/L	< 0.1			0.1	Pass	
Method Blank							
BTEX							
Benzene	mg/L	< 0.001			0.001	Pass	
Toluene	mg/L	< 0.001			0.001	Pass	
Ethylbenzene	mg/L	< 0.001			0.001	Pass	
m&p-Xylenes	mg/L	< 0.002			0.002	Pass	
o-Xylene	mg/L	< 0.001			0.001	Pass	
Xylenes - Total*	mg/L	< 0.003			0.003	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/L	< 0.01			0.01	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/L	< 0.001			0.001	Pass	
Acenaphthylene	mg/L	< 0.001			0.001	Pass	
Anthracene	mg/L	< 0.001			0.001	Pass	
Benz(a)anthracene	mg/L	< 0.001			0.001	Pass	
Benzo(a)pyrene	mg/L	< 0.001			0.001	Pass	
Benzo(b&j)fluoranthene	mg/L	< 0.001			0.001	Pass	
Benzo(g.h.i)perylene	mg/L	< 0.001			0.001	Pass	
Benzo(k)fluoranthene	mg/L	< 0.001			0.001	Pass	
Chrysene	mg/L	< 0.001			0.001	Pass	
Dibenz(a.h)anthracene	mg/L	< 0.001			0.001	Pass	
Fluoranthene	mg/L	< 0.001			0.001	Pass	
Fluorene	mg/L	< 0.001			0.001	Pass	
Indeno(1.2.3-cd)pyrene	mg/L	< 0.001			0.001	Pass	
Naphthalene	mg/L	< 0.001			0.001	Pass	
Phenanthrene	mg/L	< 0.001			0.001	Pass	
Pyrene	mg/L	< 0.001			0.001	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/L	< 0.002			0.002	Pass	
4.4'-DDD	mg/L	< 0.0002			0.0002	Pass	
4.4'-DDE	mg/L	< 0.0002			0.0002	Pass	
4.4'-DDT	mg/L	< 0.0002			0.0002	Pass	
a-HCH	mg/L	< 0.0002			0.0002	Pass	
Aldrin	mg/L	< 0.0002			0.0002	Pass	
b-HCH	mg/L	< 0.0002			0.0002	Pass	
d-HCH	mg/L	< 0.0002			0.0002	Pass	
Dieldrin	mg/L	< 0.0002			0.0002	Pass	
Endosulfan I	mg/L	< 0.0002			0.0002	Pass	
Endosulfan II	mg/L	< 0.0002			0.0002	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Endosulfan sulphate	mg/L	< 0.0002			0.0002	Pass	
Endrin	mg/L	< 0.0002			0.0002	Pass	
Endrin aldehyde	mg/L	< 0.0002			0.0002	Pass	
Endrin ketone	mg/L	< 0.0002			0.0002	Pass	
g-HCH (Lindane)	mg/L	< 0.0002			0.0002	Pass	
Heptachlor	mg/L	< 0.0002			0.0002	Pass	
Heptachlor epoxide	mg/L	< 0.0002			0.0002	Pass	
Hexachlorobenzene	mg/L	< 0.0002			0.0002	Pass	
Methoxychlor	mg/L	< 0.0002			0.0002	Pass	
Toxaphene	mg/L	< 0.005			0.005	Pass	
Method Blank							
Conductivity (at 25 °C)	uS/cm	< 10			10	Pass	
Method Blank							
Heavy Metals							
Arsenic (filtered)	mg/L	< 0.001			0.001	Pass	
Cadmium (filtered)	mg/L	< 0.0002			0.0002	Pass	
Chromium (filtered)	mg/L	< 0.001			0.001	Pass	
Copper (filtered)	mg/L	< 0.001			0.001	Pass	
Lead (filtered)	mg/L	< 0.001			0.001	Pass	
Mercury (filtered)	mg/L	< 0.0001			0.0001	Pass	
Nickel (filtered)	mg/L	< 0.001			0.001	Pass	
Zinc (filtered)	mg/L	< 0.005			0.005	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons							
TRH C6-C9	%	82			70-130	Pass	
TRH C10-C14	%	70			70-130	Pass	
TRH C6-C10	%	91			70-130	Pass	
TRH >C10-C16	%	70			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	122			70-130	Pass	
Toluene	%	110			70-130	Pass	
Ethylbenzene	%	94			70-130	Pass	
m&p-Xylenes	%	98			70-130	Pass	
o-Xylene	%	94			70-130	Pass	
Xylenes - Total*	%	97			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	94			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	90			70-130	Pass	
Acenaphthylene	%	96			70-130	Pass	
Anthracene	%	107			70-130	Pass	
Benz(a)anthracene	%	93			70-130	Pass	
Benzo(a)pyrene	%	91			70-130	Pass	
Benzo(b&j)fluoranthene	%	95			70-130	Pass	
Benzo(g.h.i)perylene	%	93			70-130	Pass	
Benzo(k)fluoranthene	%	93			70-130	Pass	
Chrysene	%	97			70-130	Pass	
Dibenz(a.h)anthracene	%	95			70-130	Pass	
Fluoranthene	%	105			70-130	Pass	
Fluorene	%	97			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	93			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Naphthalene	%	79			70-130	Pass	
Phenanthrene	%	100			70-130	Pass	
Pyrene	%	111			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	89			70-130	Pass	
4.4'-DDD	%	88			70-130	Pass	
4.4'-DDE	%	91			70-130	Pass	
4.4'-DDT	%	85			70-130	Pass	
a-HCH	%	82			70-130	Pass	
Aldrin	%	84			70-130	Pass	
b-HCH	%	89			70-130	Pass	
d-HCH	%	89			70-130	Pass	
Dieldrin	%	94			70-130	Pass	
Endosulfan I	%	91			70-130	Pass	
Endosulfan II	%	87			70-130	Pass	
Endosulfan sulphate	%	89			70-130	Pass	
Endrin	%	89			70-130	Pass	
Endrin aldehyde	%	92			70-130	Pass	
Endrin ketone	%	87			70-130	Pass	
g-HCH (Lindane)	%	88			70-130	Pass	
Heptachlor	%	82			70-130	Pass	
Heptachlor epoxide	%	88			70-130	Pass	
Hexachlorobenzene	%	82			70-130	Pass	
Methoxychlor	%	81			70-130	Pass	
LCS - % Recovery							
Conductivity (at 25 °C)	%	104			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic (filtered)	%	88			80-120	Pass	
Cadmium (filtered)	%	89			80-120	Pass	
Chromium (filtered)	%	88			80-120	Pass	
Copper (filtered)	%	84			80-120	Pass	
Lead (filtered)	%	89			80-120	Pass	
Mercury (filtered)	%	87			80-120	Pass	
Nickel (filtered)	%	89			80-120	Pass	
Zinc (filtered)	%	87			80-120	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Total Recoverable Hydrocarbons				Result 1					
TRH C6-C9	N24-Ja0010500	NCP	%	83			70-130	Pass	
TRH C10-C14	N24-Ja0014482	NCP	%	88			70-130	Pass	
TRH C6-C10	N24-Ja0010500	NCP	%	90			70-130	Pass	
TRH >C10-C16	N24-Ja0014482	NCP	%	82			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	N24-Ja0010500	NCP	%	79			70-130	Pass	
Toluene	N24-Ja0010500	NCP	%	86			70-130	Pass	
Ethylbenzene	N24-Ja0010500	NCP	%	84			70-130	Pass	
m&p-Xylenes	N24-Ja0010500	NCP	%	88			70-130	Pass	
o-Xylene	N24-Ja0010500	NCP	%	91			70-130	Pass	
Xylenes - Total*	N24-Ja0010500	NCP	%	89			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Naphthalene	N24-Ja0010500	NCP	%	117			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic (filtered)	S24-Ja0013858	CP	%	106			75-125	Pass	
Cadmium (filtered)	S24-Ja0013858	CP	%	96			75-125	Pass	
Chromium (filtered)	S24-Ja0013858	CP	%	89			75-125	Pass	
Copper (filtered)	S24-Ja0013858	CP	%	82			75-125	Pass	
Lead (filtered)	S24-Ja0013858	CP	%	88			75-125	Pass	
Mercury (filtered)	S24-Ja0013858	CP	%	84			75-125	Pass	
Nickel (filtered)	S24-Ja0013858	CP	%	81			75-125	Pass	
Zinc (filtered)	S24-Ja0013858	CP	%	86			75-125	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C10-C14	S24-Ja0013045	NCP	mg/L	0.07	0.07	3.0	30%	Pass	
TRH C15-C28	S24-Ja0013045	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
TRH C29-C36	S24-Ja0013045	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
TRH >C10-C16	S24-Ja0013045	NCP	mg/L	0.07	0.07	1.8	30%	Pass	
TRH >C16-C34	S24-Ja0013045	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
TRH >C34-C40	S24-Ja0013045	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Conductivity (at 25 °C)	S24-Ja0014930	NCP	uS/cm	790	850	7.7	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic (filtered)	S24-Ja0018266	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Cadmium (filtered)	S24-Ja0018266	NCP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass	
Chromium (filtered)	S24-Ja0018266	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Copper (filtered)	S24-Ja0018266	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Lead (filtered)	S24-Ja0018266	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Mercury (filtered)	S24-Ja0018266	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
Nickel (filtered)	S24-Ja0018266	NCP	mg/L	0.019	0.020	1.3	30%	Pass	
Zinc (filtered)	S24-Ja0018266	NCP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C6-C9	S24-Ja0013858	CP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
TRH C6-C10	S24-Ja0013858	CP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S24-Ja0013858	CP	mg/L	0.001	0.001	18	30%	Pass	
Toluene	S24-Ja0013858	CP	mg/L	0.002	0.002	16	30%	Pass	
Ethylbenzene	S24-Ja0013858	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
m&p-Xylenes	S24-Ja0013858	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass	
o-Xylene	S24-Ja0013858	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Xylenes - Total*	S24-Ja0013858	CP	mg/L	< 0.003	< 0.003	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	S24-Ja0013858	CP	mg/L	< 0.01	< 0.01	<1	30%	Pass	

Comments

Sample Integrity

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

Qualifier Codes/Comments

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

Authorised by:

Ursula Long	Analytical Services Manager
Fang Yee Tan	Senior Analyst-Metal
Roopesh Rangarajan	Senior Analyst-Organic
Roopesh Rangarajan	Senior Analyst-Volatile
Ryan Phillips	Senior Analyst-Inorganic

Glenn Jackson
Managing Director

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.

www.eurofins.com.au EnviroSales@eurofins.com

Eurofins Environment Testing Australia Pty Ltd

ABN: 50 005 085 521

Melbourne	Geelong	Sydney	Canberra	Brisbane	Newcastle
6 Monterey Road	19/8 Lewalan Street	179 Magowar Road	Unit 1,2 Dacre Street	1/21 Smallwood Place	1/2 Frost Drive
Dandenong South	Grovedale	Girraween	Mitchell	Murarrie	Mayfield West
VIC 3175	VIC 3216	NSW 2145	ACT 2911	QLD 4172	NSW 2304
+61 3 8564 5000	+61 3 8564 5000	+61 2 9900 8400	+61 2 6113 8091	T: +61 7 3902 4600	+61 2 4968 8448
NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261
Site# 1254	Site# 25403	Site# 18217	Site# 25466	Site# 20794	Site# 25079 & 25289

Eurofins ARL Pty Ltd

ABN: 91 05 0159 898

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

Eurofins Environment Testing NZ Ltd

NZBN: 9429046024954

Auckland	Auckland (Asb)	Christchurch	Tauranga
35 O'Rorke Road	Unit C1/4 Pacific Rise,	43 Detroit Drive	1277 Cameron Road,
Penrose,	Mount Wellington,	Rolleston,	Gate Pa,
Auckland 1061	Auckland 1061	Christchurch 7675	Tauranga 3112
+64 9 526 4551	+64 9 525 0568	+64 3 343 5201	+64 9 525 0568
IANZ# 1327	IANZ# 1308	IANZ# 1290	IANZ# 1402

Sample Receipt Advice

Company name:	Environmental Consulting Services
Contact name:	All results - Simon Caples
Project name:	BRINGELLEY
Project ID:	Not provided
Turnaround time:	5 Day
Date/Time received	Jan 12, 2024 11:30 AM
Eurofins reference	1059323

Sample Information

✓	A detailed list of analytes logged into our LIMS, is included in the attached summary table.
✓	Sample Temperature of chilled sample on the batch as recorded by Eurofins Sample Receipt : 22.3 degrees Celsius.
✓	All samples have been received as described on the above COC.
✓	COC has been completed correctly.
✓	Attempt to chill was evident.
✓	Appropriately preserved sample containers have been used.
✓	All samples were received in good condition.
✓	Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.
✓	Appropriate sample containers have been used.
✓	Sample containers for volatile analysis received with zero headspace.
X	Split sample sent to requested external lab.
X	Some samples have been subcontracted.
N/A	Custody Seals intact (if used).

Notes

Contact

If you have any questions with respect to these samples, please contact your Analytical Services Manager:

Bonnie Pu on phone : or by email: BonniePu@eurofins.com

Results will be delivered electronically via email to All results - Simon Caples - simon@ecsgroup.com.au.

Global Leader - Results you can trust

ENVIRONMENTAL CONSULTING SERVICES

Chain of Custody

Project: BRIDGELEY																				
Environmental Consulting Services Pty Ltd						Manager: Simon Caples									Ph: 0415 225 474				Email: simon@ecsgroup.com.au	
Event Number:			Matrix			Analysis														
Lab Number	Sample Number	Sample Date	Soil	Water	Other	BTEX	TPH	PAH	Phenol	Metals	Asbestos	Suite B7	Suite B9	Suite B10	Suite R16	pH	Ec			
	A	12/1		x									x			x	x			
	B	12/1		x									x			x	x			
	C	12/1		x									x			x	x			
Turn Around Time:						Comments: FILTER FOR METALS														
Relinquished By: SIMON		Signed:				Date:		Received By: Aramy			Signed:			Date: 12.1.1						

1059323 11.30am 22.3 NO Chill