Phase 1 and Preliminary Phase 2 Environmental Site Assessment - Lindum Vale PSP Area

09 April 2013

MAB Corporation Pty Ltd

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Glossary

Acronym	Definition
AHD	Australian Height Datum
AMG	Australian Map Grid
ANZECC	Australian & New Zealand Environment & Conservation Council
BTEX	Benzene, Toluene, Ethylbenzene, Xylene
COC	Constituent of Concern; Chain of Custody
DNRE	Department of Natural Resources and Environment
EIL	Ecological Investigation Level
EPA	Environment Protection Authority; Environmental Protection Agency
ESA	Environmental Site Assessment
HIL	Health Based Investigation Level
HRA	Health Risk Assessment
mBGL	Metres Below Ground Level
NATA	National Association of Testing Authorities
NEPC	National Environment Protection Council
NEPM	National Environment Protection Measure
OCP/OPP/PCB	Organochlorine Pesticide/Organophosphorus Pesticide/Polychlorinated Biphenyl
OH&S	Occupational Health and Safety
PAH	Polycyclic Aromatic Hydrocarbons
PID	Photo-ionisation Detector
QA/QC	Quality Assurance/Quality Control
RPD	Relative Percent Difference
SWL	Standing Water Level; Static Water Level
TDS	Total Dissolved Solids

Executive summary

Parsons Brinckerhoff Australia Pty Ltd (PB) was commissioned by MAB Corp to conduct an Environmental Site Assessment (ESA) of the Lindum Vale PSP Area. The area extends across approximately 143 hectares across 4 lots proposed to be redeveloped for mixed and residential use. The ESA comprised a desk top review (Phase 1) and a preliminary soil investigation (limited Phase 2).

The key findings of the Phase I desk top review indicated the following:

- The site appears to have been used for a variety of cattle grazing and agricultural activities from at least 1966 (and anticipated to have been used for similar purposes prior to 1966).
- The site inspection undertaken on 21 January 2013 largely confirmed the findings of the site history with the exception of some storage of fuel, chemicals and waste at 2040 Mickleham Road.

The key findings of the limited Phase 2 preliminary soil investigation indicated the following:

- the soil profile comprised 0.0m to 0.4m of topsoil overlying clayey silt/silty clay natural soil;
- no visual and/or olfactory evidence of contamination was noted at any test pit;
- Environmental Investigation Levels were exceeded for arsenic in soil samples TP02 0.1m; TP04 0.5m; and TP11 0.1m; and for Zinc in soil samples TP01 0.1m and TP03 0.1m;
- concentrations of contaminants at all grid and target locations were below adopted criteria (i.e. Health Investigation Level ‘A’ which is criteria commonly used for low density residential land use).
- No asbestos was identified from samples collected.
- A single perched water sample measured concentrations of heavier end hydrocarbons.

Further investigation is recommended once infrastructure has been removed from the dairy area of 2040 Mickleham Road.

The remainder of the site presents ‘low’ potential for contamination on the assessment matrix provided by Department of Sustainability and Environment in the Potentially Contaminated Land General Practice Note[(15)].

Please note that this report cannot provide a specific comment on site suitability. Site suitability can only be determined via an environmental audit in accordance with Part IXD, Section 53X of the Environment Protection Act 1970.

In addition to the above, as part of any proposed redevelopment, where soil is excavated and proposed to be removed off-site, soil would need to be tested and classified in accordance with the Industrial Waste Resource Guidelines, and where necessary, disposed to an approved facility in accordance with the guidelines.

Please note that this executive summary is based upon the limitations provided in this report.

1. Introduction

Parsons Brinckerhoff Australia (Parsons Brinckerhoff) was commissioned by MAB Corporation Pty Ltd (MAB) in December 2012 to undertake a Phase 1 (desktop review) and limited Phase 2 (soil investigation) environmental site assessment (ESA) at Lindum Vale PSP area, inside the Urban Growth Boundary at Mickleham, Victoria (referred to as the 'Site'). A location plan is attached as Figure 1, Appendix A.

It was understood that the purpose of the assessment was to assess the potential suitability of the site to future mixed use and residential zoning. MAB Corporation requires the site to be assessed on the basis that the future intended use will not change. The Site is currently undeveloped Greenfield with a history of dairy farming. It is further understood that the Site is proposed to be redeveloped for residential and mixed use purposes and that the ESA findings would assist with an initial understanding of the entire site's condition.

1.1 Objectives

The objectives of the ESA comprised the following:

- To assess potential presence of near surface soil contamination associated with historical activities;
- Consider the presence of potential risks to site users and/or ecosystems by comparing the results of sampling with relevant guidelines; and,
- Conclude the requirement or otherwise of any further work or the potential suitability of the site for mixed use and residential zoning based on the results of the limited assessment

1.2 Scope of works

The scope of works, as referred to in Parsons Brinckerhoff's proposal dated 28 November 2012 comprised of a Phase 1 desktop review and a Preliminary Phase 2 limited intrusive site investigation.

The Phase 1 desktop review included:

- Review of the regional geological and hydrogeological setting of the site;
- Review of available previous investigation reports (if any);
- Groundwater database search of registered boreholes in the area to assess groundwater use in the vicinity of the site;
- Review of relevant site plans to identify the nature and location of any potential sources of contamination across the site;
- Review of historical maps, title details, council records and EPA Priority Sites register;
- Review of available information that may document historical spills, waste disposal or other polluting activities across the site; and,

- Site Walkover Survey to assess site access for the proposed intrusive investigation locations and potential evidence of historic and current sources of contamination.

The Preliminary Phase 2 intrusive investigation included:

- Excavation of 32 Test Pits using a backhoe to a maximum depth of 1.5m below ground level (mBGL) to assess surface and near surface soil conditions;
- Logging of soils from the Test Pits in accordance with Australian Standard AS1726-1993;
- Collection of three soil samples from each Test Pit from within any shallow fill material, the contact zone between any fill and underlying natural soil and a sample of natural soil or where there is visual or olfactory evidence of contamination. Soil samples were screened for volatile organics using a handheld PID (photo-ionisation detector) by headspace analysis;
- Laboratory analysis of one near surface soil sample from each Test Pit for metals (As, Cd, Cr, Cu, Ni, Pb, Zn, Hg), pH, total petroleum hydrocarbons (TPH), benzene, toluene, ethylbenzene, xylenes (BTEX), polycyclic aromatic hydrocarbons (PAH) and organochlorine pesticides/ organophosphate pesticides (OCP/ OPPs);
- Asbestos analysis of five near surface soil samples;
- Analysis of approximately 50% of the samples from a deeper location and/or natural soil profile for metals (As, Cd, Cr, Cu, Ni, Pb, Zn, Hg) and pH;
- Samples below surface soil samples returning contaminant concentrations above screening criteria analysed for these contaminants in order to delineate the extent of contamination;
- Collection of quality assurance (QA) samples (blind duplicate samples, split duplicate samples) to be analysed be a secondary laboratory and rinsate blanks during soil sampling in accordance with Australian Standard AS4482.1-2005;
- Test pit locations backfilled in reverse order of excavation using the excavator and excavator bucket for compaction.
- Test pit locations were surveyed using a geographical position system (GPS) unit by Parsons Brinckerhoff;
- Compilation of field data (e.g. test pit logs, sampling locations, site plan) and analytical laboratory certificates;

1.3 Variation to Proposed Scope of works

A water sample was collected from a bore location identified during the Phase 1 walkover. The water sample was analysed for TPH, BTEX, pH, OCP / OPPs, TDS, nitrate, nitrite and ammonia.

2. Site setting

A summary of Site setting details is provided in the table below. Further information regarding Site setting is discussed in the following Section.

Table 2.1: Site summary

Site Address	Mt Ridley and Mickleham Roads, Mickleham, Victoria
Title Identification Details	4 Lots – details provided in Section 3.2
Current Property Owner(s)	Harold James Cocking, Noel Thomas Cocking, David Wilfred Cocking, Denise Edith Cocking, Ruth Elsie Cocking
Current Site Use(s)	Agriculture, farm buildings, residential
Zoning	Farming zone (FZ).
Area	Various land sizes totalling approximately 143 hectares (*see Appendix B for land parcel distribution*)
Surrounding land uses	**North**: Urban Growth (UGZ4) and Green Wedge Zone (GWZ) north of property following the western side of Mickleham Road and extending to a strip approximately 200m wide following the eastern side of Mickleham Road. Rural Conservation Zone (RCZ1) to the north east. **East**: Rural Living Zone (RLZ) stretching from the eastern boundary of the property to the Hume Freeway. **South:** Mt Ridley Road, Farming zone (FZ1), east of Jolly Lane Urban Growth Zone (UGZ1), west of Mickleham Rd Green Wedge Zone (GWZ). Further to the east, south of Mt Ridley Road is Craigieburn, Comprehensive Development Zone (CDZ1). **West**: Mickleham Road, Green Wedge Zone (GWZ)
Proposed Site Use	Residential and mixed use

2.1 Regional setting

Mickleham is within the northern suburbs of Greater Melbourne. The site currently consists of fields that are farmed, typically for grazing cattle sheep and horses. Mickleham Primary school is located at the corner of Mickleham and Mount Ridley Road, around 180m from the southwest corner of the site. A tennis club is located immediately adjacent to and east of the school. There are no other sensitive receptors identified within 1 km radius of the site.

2.2 Topography

The site is relatively flat, with land rising slightly to the west and south of the Site. Small dams are located sporadically across the Site.

2.3 Local setting

At the time of conducting the Phase 1 (January 2012) the following immediate neighbouring land uses were identified:

- The eastern boundary of the site is bordered by large residential properties;
- The site is bounded to the south by Mt Ridley Road. South of Mt Ridley Road, east of the Mickleham Road intersection, is a primary school and a tennis club. South of Mt Ridley Road, further to the east, agricultural land is being developed for residential properties;
- The site is bounded to the west Mickleham Road. On the north-west corner of Mickleham and Mt Ridley Roads is currently operating as a poultry farm. Further north along the western side of Mickleham Road is a small olive grove. Much of the rest of the land appears to be pastoral properties.
- The site is bounded to the north by a power line easement. North of the easement is pastoral land.

2.4 Site inspection

A site inspection was conducted by Parsons Brinckerhoff on 21 January 2013, as part of the Phase 1 desk top review. The site inspection included a site walkover and observation of the site and surrounding land uses. The following key findings were identified during the site inspection:

Table 2.2: Findings of Site Inspection

Inspected Area		Observations
On-Site – north	2040 Mickleham Road	Northern portion of the site accessible from farm residence at 2040 Mickleham Road, approximately 1.4 km north of the Mt Ridley Road intersection. House with several small detached buildings. Several sheds including a chicken shed and dairy infrastructure. Two septic tanks adjacent to the house, one on the northern and one on the southern side. A well approximately 2 m in diameter is located within several metres of the southern septic tank. Two small steel fuel tanks on stands. No staining on ground beneath. Groundwater bore estimated to be between 50 and 70 m deep with electric pump in the bore hole about 10m west of the fuel tank. Bore in dairy building used to draw groundwater to cool milk (anecdotal evidence). Bore opening (~50mm) in concrete with pump immediately adjacent. Concrete surface covered in soil appearing damp and oil-stained.

Inspected Area		Observations
		Large shed used for storage of vehicles and fertiliser. Some oil stains on bare earth floor. Small chemical storage shed with concrete floor and asbestos cement sheet walls. Several small piles of scrap metal and tyres. One pile included some empty chemical containers and steel drums. Pasture for dairy cattle grazing with scattered trees and four dams.
On-Site – central	1990 Mickleham Road	House block with septic tank in backyard. Septic tank shows evidence of leaking towards back fence abutting pasture due to trail of green grass. No agricultural equipment or chemicals.
On-Site – South	North east of intersection of Mt Ridley & Mickleham Roads	Accessed through gate on Mickleham Road approximately 450 m north of intersection with Mt Ridley Road. Pastures for dairy cattle grazing, scattered large trees and one dam. No infrastructure or storage of chemicals or equipment.
On-Site – South	1960 Mickleham Road	Private residence. Large bluestone house and several small sheds. Narrow dam or damp depression at rear of block densely covered with rushes.
Surrounding Site	North	Power line easement and pasture.
	West	Pastures, several houses, several dams, an olive grove, duck farm.
	South	Primary school and tennis club on corner, residential development, pasture land.
	East	Large residential blocks.

3. Data reviewed

The following section summarises the information reviewed as part of the environmental site assessment. The information comprised:

- Previous Environmental Site Assessment Reports;
- Current and Historical Titles;
- Current and Proposed Land Use;
- EPA Priority Sites Register;
- Royal Historical Society of Victoria records including the Sands and McDougall records;
- Historical Aerial Photographs;
- Groundwater Database;

3.1 Previous Environmental Site Assessment Reports

No site-related environmental reports were provided to Parsons Brinckerhoff. It is assumed that there were no environmental reports previously undertaken for the site or any parts of the site.

3.2 Current and Historical Titles

A' Beckett Law Searching Service (through the Department of Sustainability and Environment), undertook a title search to reveal the property ownership. The site comprises 4 Lots which are shown on a key plan (and the copies of the title certificates) in Appendix B. Historical titles obtained date back as far as 1888 for the northern portion of the site and 1852 for the southern portion of the site.

Table 3.1: Summary of current and parent certificates of title

PB Lot Ref (1)	Certificate of title		Date of issue	Proprietor	Parent Titles		Land description
	Volume	Folio			Volume	Folio	
P1	11252	194	23/12/2010	Harold James Cocking, Noel Thomas Cocking, David Wilfred Cocking, Denise Edith Cocking, Ruth Elsie Cocking	09539 07471	945 102	Lot 1 on Title Plan 94728N
P2	09539	944	12/01/1984	Denise Edith Cocking	07471 5194 3579 2037 1615	102 630 620 373 913	Lot 1 on plan of subdivision 144228
P3	10008	221	13/03/1991	Carmel Patricia Grgic, Tom Grgic			Lot 1 on Title Plan 839675A (formerly known as part of Portion 11A Parish of Mickleham)
P4	11252	162	23/12/2010	Ruth Elsie Cocking, Noel Thomas Cocking, Nola Albyn Cocking, Harold James Cocking, David Wilfred Cocking	11129	424	Lot 1 on Title Plan 947278H

(1) Refer to Figure in Appendix B

3.3 Current and Proposed Land Use

The site currently comprises entirely of Farming Zone (FZ) under the Hume planning Scheme[11]. The current zone is shown in the environmental planning overlay in Appendix F

Planning overlays, shown in Appendix F, which also give information about the site include:

- Environmental overlay;
- Aboriginal heritage overlay; and
- Heritage planning overlay.

It is understood that MAB propose to develop the site for residential and mixed use zone purposes.

3.4 Priority Sites Register

A search of the Environment Protection Authority Victoria (EPA) Priority Sites Register was conducted on 21 January 2013. The search indicated that the Site was not listed on and was not in the vicinity of a listed Priority Site. A copy of the search results has been included in Appendix C.

3.5 Royal Historical Society

A search of the Victorian Heritage Database was conducted via the Councils Heritage Victoria website on 21 January 2013. The search revealed that the subject site is not listed within the database.

A Search was conducted via the Royal Historical Society of Victoria on 24 January 2013. The search included a review of the Sands and McDougal's Directories (final publication 1974) and listed Mickleham as a small country town with the residents listed in alphabetical order without street names or numbers. The majority of them were engaged in agricultural pursuits - cattle and sheep grazing and some horse studs.

A copy of the Royal Historical Society of Victoria search is provided as Appendix C.

3.6 Historical Aerial Photographs

Aerial photographs taken between 1966 and 1991 were obtained from the Department of Sustainability and Environment Land Victoria Aerial Photography Library. A current aerial photo dated 2013 was also downloaded through Googlemaps. The results of the review have been summarised in Table 3.2:

Table 3.2: Historical aerial photograph summary

Date	Description	Photograph ID
1966	This photograph shows the general area is mostly undeveloped green fields and farming is apparent. Some dams and farm buildings can be seen.	Run 1 - Film 1916-34
1968	No obvious changes to the area when compared to the aerial photograph from 1966.	Run 8 – Film 2211-80
1979	Sheds opposite the site on the north west corner of the intersections of Mt Ridley and Mickleham Roads appear to have been extended. A house has been constructed across Mickleham Road from the central area of the site. Vehicle storage shed on site at 2040 Mickleham Road has been constructed. The powerlines at the northern boundary of the site have been constructed	Run 4 - Film 7822-1/79 – 3326 – 81 Run 5 – Film 7822-1/79 – 3326 - 113
1984	Residence in the central west of the site at 1990 Mickleham Road is being constructed.	Run 4 – 7822-1 – 3911-149
1989	Construction of residence at 1990 Mickleham Road appears complete. Sheds opposite the site on the north west corner of the intersections of Mt Ridley and Mickleham Roads appear to have been extended further. A house has been constructed to the east of the site. More buildings appear to have been constructed at the Primary School site on the south east corner of Mickleham and Mt Ridley Roads. A large building has been constructed immediately east of the school.	Run 8W – 4308-145 1- 1-80
1991	No obvious changes to the area when compared to the aerial photograph from 1989.	Run 6 4398-64
2013	Much more development to the west of the site with many lots of medium density housing built. An orchard is now present across Mickleham Road from the central area of the site. All dams are present in the same locations as observed since 1966.	Google image

Copies of the aerial photographs reviewed have been included in Appendix D.

3.7 Groundwater Database

A search of the Victorian Groundwater Database conducted on 25 February 2013 indicated that there were six registered groundwater wells within the Site boundary and nine registered groundwater wells within 300m of the Site boundary. A map of bore locations obtained from the Visualising Victoria's Groundwater website has been included in Appendix F.

The wells were constructed between 1975 and 2004 and based on the database are used for both domestic and stock use. Limited information was provided in the database. The maximum depth of a well within the Site boundary is 100mBGL. Copies of data obtained from the search have been provided in Appendix F. Table 3.3 below shows the closest registered groundwater wells.

Table 3.3: Groundwater database summary

Well ID	Within Site boundary	Depth (mBGL)	Information provided in the Database
79258	Yes	58	Lithology, coordinates, elevation, stock use
S9018810/1	Yes	100	Coordinates, inactive
79257	Yes	84	Lithology, coordinates, elevation, limited chemical data, 6m screen, domestic and stock use
79268	Yes	96	Lithology, coordinates, elevation, limited chemical data, 6m screen, domestic and stock use
S9028861/1	Yes	100	Coordinates, inactive
120765	No	118	Lithology, coordinates, elevation, limited chemical data, screened 82 – 94 m, domestic and stock use
116348	No	106	Lithology, coordinates, elevation, limited chemical data, 6m screen, Domestic use,
79254	No	57	Lithology, coordinates, screened from 47 to 55m, Domestic & stock use
79263	No	74.67	Lithology, coordinates, screened from 27m to 74.67m, Domestic & stock use
S9020778/1	No	90.5	Lithology, coordinates, elevation, screened from 70m to bottom, Domestic & stock use
S62133/1	No	81	Lithology, coordinates, Domestic & stock use
S9019492/1	No	100	Coordinates

These wells were not identified in the field, however a bore with electric pump was observed on property 2040 Mickleham Road (shown in photographs 12 and 13, Appendix J).

3.8 Summary of Site History and Contaminants of Concern

Based on the results of the Phase I the site appears to have been used for a variety of cattle grazing and agricultural activities from at least the 1966 (and anticipated to have been used for similar purposes prior to 1966). The site inspection undertaken on 21 January 2013 confirmed the site history findings. Some evidence of activities on site which increase the potential for contamination was noted during the site inspection. These include: the storage of farm chemicals; fuel stored in small steel above-ground tanks; and some heaped waste including empty chemical containers, drums, scrap metal and tyres at 2040 Mickleham Road.

Table 3.4 summarises the areas of potential environmental concern based on the results of the desktop review and site inspection.

Table 3.4: Potential sources and contaminants of concern

Environmental Issue	On Site Location	Off Site Location	Contaminants of Concern	Information Source
Residual chemicals from pesticides	2040 Mickleham Rd Poultry shed near farm house	-	OCP/ OPPs, metals, pH	Site inspection
Residual chemicals from stored and discarded herbicides and other farm chemicals	2040 Mickleham Rd Small chemical storage shed and nearby pile of refuse.	-	TPH, BTEX, PAHs, OCP/ OPPs, metals, pH	Site Inspection
Contamination of soil from vehicle fuels and oils.	2040 Mickleham Rd Large shed used for storage of vehicles	-	TPH, BTEX, PAHs, metals. pH	Site inspection
Contamination of groundwater from leaking or spilled pump fuels and oils.	2040 Mickleham Rd Bore hole in dairy building	-	TPH, BTEX, OCP / OPPs, TDS, pH, nitrate, nitrite, ammonia	Site inspection
Asbestos in soil from weathered past and present infrastructure	Across site near buildings and infrastructure, particularly near chemical storage shed at 2040 Mickleham Rd	-	Asbestos	Site inspection
Contamination from past agriculture/ horticulture activities	Across site	-	OCP/ OPPs, metals	Site inspection and desk top review

Note: Contaminants of Concern listed in Table J1 of AS 4482.1-2005, Guide to the investigation and sampling of sites with potentially contaminated soil, Part 1[(2)].

4. Assessment methodology

A guide to the number of soil sampling points required to characterise a site is outlined in Australian Standard (AS4482.1[2]). Based on the size of the site (with reference to Table E1 in AS4482.1) 1573 sampling points would be required to characterise the site. As only a preliminary understanding of the site's contaminant status was required, the number of soil sampling points proposed was reduced (i.e. 32 test pits were proposed). Based on the findings of Phase 1, a limited number of sampling points were used to target potential sources of contamination identified during the site walkover. The following section summarises the methodology adopted during the soil sampling program.

4.1 Soil assessment methodology and procedures

Soil assessment works conducted as part of the investigation were undertaken between 19 and 21 February 2013. The sampling plan consisted of thirty two test pits locations consisting of 4 targeted and 28 grid locations. Targeted locations included those located in the vicinity of a poultry shed; a shed used to store vehicles; debris piles (including empty chemical containers); and an area where a septic tank appeared to be leaking. Due to limited access and a concrete slab within the dairy infrastructure it was proposed to collect a water sample from an open bore hole located within a dairy building surrounded by stained soil. A second water sample was proposed from a well just several metres from a septic tank (this well was found to be dry during field works and no sample was collected). All sample locations are shown in Figure 2 in Appendix A.

Table 4.1 below summarises the methodology adopted during fieldworks.

Table 4.1: Soil assessment methodology

Activity	Details
Service location	Available service plans were obtained prior to the excavation of test pits through the Dial before You Dig website. In addition, an independent contractor identified the location of underground services prior to soil intrusion activities.
Test pitting	Thirty two test pits were excavated using a backhoe between 19 and 21 February 2013. The location of test pits is shown on Figure 2, Appendix A. Test pits were excavated to a maximum depth of 1.5m.
Soil logging	Soil and rock type classifications were based on AS1726[6].
Soil sampling	Soil samples were collected from the excavator bucket. Samples were generally collected at depths of 0.1m, 0.5m, 1.0m and 1.5m. Soil samples were placed in glass jars supplied by the laboratory (primary laboratory ALS, secondary laboratory MGT Labmark).
Water sampling	Depth to water, total depth of bore, and Phase Separated Hydrocarbon (PSH) thickness were measured using an interface probe (IP) prior to sample collection. Field data was collected using a water quality meter prior to the collection of physical samples. Water was removed from the bore using a disposable bailer, transferred into laboratory supplied sample containers, and preserved on ice.
Decontamination procedure	All sampling equipment requiring decontamination (e.g. hand trowel) was triple washed using a Decon 90 detergent solution and potable water.
Soil screening	Soil samples were screened using a photo-ionisation detector (PID) which was calibrated daily to a known concentration of isobutylene gas.
Sample preservation	Samples were stored on ice in an esky while on-site and in transit to the laboratory.

Activity	Details
Disposal of waste soil	Test pits were backfilled with the excavated material and compacted using the backhoe bucket
Laboratory analyses	A near surface sample from each soil test pit location was analysed for total petroleum hydrocarbons (TPH); benzene, toluene, ethylbenzene and xylenes (BTEX); pH; selected metals; organochlorine, organophosphate pesticides and polychlorinated biphenyls (OCP/OPP/PCBs); and polycyclic aromatic hydrocarbons (PAH). Five near surface soil samples were also analysed for asbestos (by Parsons Brinckerhoff). Select samples at greater depths were analysed for select metals and pH. One water sample was analysed for TPH, BTEX, nitrate, nitrite, ammonia, Total Dissolved Solids (TDS), pH, OCP/OPP/PCBs and PAH. All samples were analysed by NATA accredited laboratories.

5. Geology and Hydrogeology

5.1 Regional geology

According to the Sunbury Geological Survey of Victoria[12], Zone 55 (scale 1:63,360), the area Newer Volcanics typically comprises olivine basalt. The vesicular properties of this basalt are variable and units may also comprise of minor limburgite, trachy-andesite, scoria, interbedded sand, clay and tuff. Basalts weather to soil producing soil horizons abundant in the naturally occurring metals of their parent material[16]. Basalts are known to have high concentrations of iron, arsenic, chromium, zinc, manganese and vanadium, to name a few.

5.2 Site specific geology

A geology overlay of the area, provided by Department of Primary Industries, is included in Appendix F. The site specific geology summarised in Table 5.1 shows an inferred profile for the site area based on observations (near surface), well logs from groundwater database, and geology maps.

Table 5.1: Inferred Site Specific Geology (majority of the site)

Approx Depth (mBGL)	Geology
0m to 0.3m	Topsoil / fill
0.3m to 0.5m	Clayey SILT / Silty CLAY
0.5m to 1.5m	Silty CLAY often with BASALT gravel, cobbles and boulders
*1.5m to 30m	*BASALT
*30m to 70m	*BASALT (with layers of clay between flows)/ SANDSTONE/ SILTSTONE

* Soil profile inferred from groundwater database lithology logs of bores within site boundary. Groundwater database lithology logs are attached in Appendix F.

5.3 Regional and site specific hydrogeology

According to the Department of Natural Resources and Environment (DNRE), Victorian Groundwater Beneficial Use Map Series[(1)], Water Table Aquifers (1995); the principal aquifer within the study area is referred to as the Newer Volcanics.

The groundwater regime in the Newer Volcanics Aquifer system comprises a number of basalt flows that are often separated by thin clay layers and silt aquitards. Groundwater occurs in fractures, joints, vesicular openings and in the contact zone between flows. The uppermost aquifer is unconfined with a shallow water table whilst deeper aquifers are confined to semi confined.

The DNRE water table aquifer map indicates that the groundwater in the area contains moderate to high salinity levels, with TDS (Total Dissolved Solids) concentrations ranging from 3,501 – 7,000 mg/L. Based on these TDS concentrations, the regional aquifer is defined as Segment B and has the potential to be used for the following beneficial uses (as defined in the State Environment Protection Policy – Groundwater of Victoria (SEPP GoV, 1997)[(9)].

For Segment B groundwater, the relevant beneficial uses are, Maintenance of aquatic ecosystems, Potable Mineral Water Supply, Agriculture Parks and Gardens, Stock watering, Industrial water use, Primary contact recreation and Buildings and Structures.

Further investigation of the local aquifer depth, nature and contamination status was outside the scope of this report.

6. Soil Assessment Framework

The soil assessment criteria adopted is based on the National Environment Protection Council (1999) National Environment Protection (Assessment of Site Contamination) Measure (NEPM)[7] for residential sites and commercial/industrial use. The guidelines provide Health Investigation Levels (HILs) and Ecological Investigation Levels (EILs), which assess risk to human health and environment respectively.

The planned future use of the Site is mixed and residential use. The State Environment Protection Policy (SEPP) (Prevention and Management of Contamination of Land)[4] commonly referred to as the Land SEPP provides a framework for deciding which beneficial uses need to be protected having regard for the existing and intended uses of a site. In accordance with the Land SEPP, the protected beneficial uses associated to residential use such as planned for the site are represented in Table 6.1 below:

Table 6.1: Protected beneficial uses of land

Beneficial use	Land use						
			Sensitive use				
	Parks & Reserves	Agriculture	High-density	Other	Recreation/ Open space	Commercial	Industrial
Maintenance of ecosystems							
Natural ecosystems	✓						
Modified ecosystems	✓	✓	✓	✓	✓		
Highly modified ecosystems		✓	✓	✓	✓	✓	✓
Human health	✓	✓	✓	✓	✓	✓	✓
Buildings & structures	✓	✓	✓	✓	✓	✓	✓
Aesthetics	✓	✓	✓	✓	✓	✓	
Production of food and flora	✓	✓		✓			

The guidelines adopted to assess the soil quality for the Site were:

- Maintenance of ecosystems
  - NEPM Ecological Investigation Levels (Interim Urban)[5] NEPM-EIL
- Human Health
  - NEPM Health Investigation Levels (HILs)[7] A: Residential with garden/accessible soil
  - NEPM Health Investigation Levels (HILs)[7] F: Commercial/Industrial use
- Buildings and Structures - “pH, sulphate, redox potential, salinity or any chemical substance or waste that may have a detrimental effect on structural integrity”. Australian Standard AS2159(13) (1995) – Piling Design and Installation: Severe to very severe soil exposure conditions for concrete piling[8].

- Aesthetics - "Soils should not be displeasing to the human senses (e.g. odorous, visibly impacted) or give cause for alarm or safety". Currently there are no concentration-based aesthetic criteria for soil; therefore, aesthetics have not been included. While aesthetics observations are subjective, it is considered that if there is discoloration; noticeable odour from the soil on the site, or if there are obvious components of waste such as rubble, slag, bagged waste or similar, then there is a potential aesthetic concern.

- Asbestos – Australian Standard AS4964 (2004) Method for qualitative identification of asbestos in bulk samples

The criteria used to assess impacts to beneficial uses of the land are shown in the soil laboratory data summary (ESDAT) table of analytical results in Appendix H.

7. Water Assessment Framework

The State Environment Protection Policy (SEPP) – Groundwaters of Victoria (SGoV, 1997) provides a basis by which potential beneficial uses of groundwater can be established. The SEPP places groundwater into one of five segments based on background total dissolved solids (TDS) concentrations in groundwater. The potential beneficial uses to be protected are then determined based on which segment applies.

As discussed in Section 5.3, the DNRE water table aquifer map indicates that the groundwater in the area contains moderate to high salinity levels, with TDS (Total Dissolved Solids) concentrations ranging from 3,501 – 7,000 mg/L. Based on these TDS concentrations, the regional aquifer is defined as Segment B and has the potential to be used for the following beneficial uses (as defined in the State Environment Protection Policy – Groundwater of Victoria (SEPP GoV, 1997)[9].

Table 7.1: Identification of Relevant Beneficial Uses based on TDS Concentrations

Beneficial use	Segment (mg/L)				
	A1	A2	B	C	D
	(0 -500)	(501-1,000)	(1,001-3,500)	(3,501-13,000)	(>13,000)
Maintenance of ecosystems	✓	✓	✓	✓	✓
Potable water supply					
▪ Desirable	✓				
▪ Acceptable		✓			
Potable mineral water supply	✓	✓	✓		
Agriculture, parks and gardens	✓	✓	✓		
Stock watering	✓	✓	✓	✓	
Industrial water use	✓	✓	✓	✓	✓
Primary contact recreation (e.g. bathing, swimming)	✓	✓	✓	✓	
Buildings and structures	✓	✓	✓	✓	✓

Notes:

1. The above table is a reproduction of Table 2 from the SGoV SEPP (1997).

Shading denotes the required beneficial uses to be protected under Segment B.

For Segment B groundwater, the relevant beneficial uses are, Maintenance of aquatic ecosystems, Potable Mineral Water Supply, Agriculture Parks and Gardens, Stock watering, Industrial water use, Primary contact recreation and Buildings and Structures.

Further investigation of the local aquifer depth, nature and contamination status was outside the scope of this report. The single water sample collected during Phase 2 works provides perched localised data only and should not be considered representative of groundwater at the site.

8. Results of preliminary site assessment

8.1 Field observations

No visual and/or olfactory evidence of soil contamination was observed during field work. A strong hydrocarbon odour and floating organic matter was noted while collecting the water sample from a bore hole located within the dairy building at 2040 Mickleham Road. Staining observed on the floor surface around the bore hole was on concrete slab and not directly on the soil.

8.2 Headspace analysis

Headspace analysis of soil samples was undertaken in the field using a PID. PID readings ranged from 0.0ppm to 4.6ppm (TP26 at 1.2mBGL). As no visual, olfactory or laboratory evidence of contamination was noted at TP26, elevated PID readings are assumed have resulted from moisture sensitivity of the PID. The depth and location of readings are presented on test pit logs in Appendix G.

8.3 Soil analytical results

All soil concentration analysis presented non-detects with the exception of arsenic and zinc which were measured above Environmental Investigation Levels (EILs). Table 8.1 below summarises the results for each property within the site.

Table 8.1: Summary of results

Area	Property	Summary of analytical findings
North-west	2040 Mickleham Road - East	Two soil samples exceeded the arsenic EIL (TP02 0.1m – 38 mg/kg, and TP04 0.5m – 31 mg/kg) Two soil samples exceeded the zinc EIL (TP01 0.1m - 226 mg/kg, and TP03 0.1m – 485 mg/kg). All underlying samples at these locations and all other locations analysed reported concentrations below the adopted criteria. All arsenic and zinc concentrations were below the Health Investigation Level 'A' (commonly used for low density residential properties).
North-east	2040 Mickleham Road - West	One soil sample exceeded the arsenic EIL (TP11 0.1m – 31mg/kg). The sample analysed from below this sample reported arsenic below the laboratory detection limit (<5mg/kg). All other samples analysed reported results below adopted criteria. The arsenic concentration was below the Health Investigation Level 'A' (commonly used for low density residential properties).
South	1990 and 1960 Mickleham Road	No soil results above adopted criteria.

A complete table of laboratory results is presented in Appendix H.

Figure 2, Appendix A, shows the results geographically.

Exposure conditions for concrete piles in soil (AS2159) consider only pH of soil equal to or less than 5.5, as greater values signify mild to non-aggressive exposure classification (protection of building and structure criteria).

Seven samples had pH results less than or equal to 5.5. Six samples were collected at 0.1mBGL, and one sample was collected from 1.5mBGL. In each case the samples collected below in each test pit recorded pH values higher than 5.5. One exception was noted at location TP15 where a pH of 5.0 was measured at 1.5mBGL, which was the termination depth of the excavation. A sample analysed from above this at 0.1mBGL returned a pH result above 5.5. Therefore, pH values in soil are considered unlikely to impact on footings for buildings.

8.4 Asbestos analysis results

Five soil samples were analysed for asbestos content. No samples contained asbestos materials. Asbestos results are shown in certificates presented in Appendix I.

8.5 Water analytical results

One water sample was collected from a borehole in the dairy building at 2040 Mickleham Road and was analysed for TPH, BTEX, nitrate, nitrite, ammonia, Total Dissolved Solids (TDS), pH, OCP/OPP/PCBs and PAH. The borehole was found to be blocked at 1.24mBGL and the water sample is therefore assumed to be perched and cannot be considered indicative of groundwater quality. The groundwater field sheet is included in Appendix G. The results of laboratory analysis of the water sample have been tabulated in Appendix H and are summarised in Table 8.2 below.

Table 8.2: Summary of detectable concentrations

Sample ID	Analyte	Concentration
SL2	$C_{10} – C_{16}$	200 µg/L
	$C_{10} – C_{14}$	100 µg/L
	$C_{15} – C_{28}$	54,700 µg/L
	C_{16} - C_{34}	122,000 µg/L
	C_{34} - C_{40}	40,900 µg/L
	$C_{10} – C_{40}$ (Sum)	163,000 µg/L
	$C_{29} – C_{36}$	87,900 µg/L
	TPH+$C_{10} – C_{36}$ (sum of total)	54,800 µg/L
	$C_{10} – C_{36}$ (Total)	143,000 µg/L
	Nitrate (as N)	0.77 mg/L
	pH	7.17
	TDS	304 mg/L
	Ammonia (as N)	1.96 mg/L

All other analytes were below the laboratory limit of reporting.

The hydrocarbons measured are predominantly heavier end. It is possible that a portion of the heavy end results could be attributed to organic matter noted during sampling.

8.6 Data Validation

Results summary tables of quality control (QC) checks conducted on the analysis data are included in Appendix H. Laboratory QC reports are included in Appendix I.

9. Conclusions and recommendations

The findings of the site history assessment indicate that the Site appears to have been used for a variety of cattle grazing and agricultural activities from at least the 1966 (and anticipated to have been used for similar purposes prior to 1966). The Site inspection undertaken on 21 January 2013 largely confirmed the findings of the site history with the exception of some storage of fuel, chemicals and waste at 2040 Mickleham Road.

As only a preliminary understanding of the site's contaminant status was required, 32 test pits were excavated across the site (i.e. less than the number of grid soil bores recommended by the Australian Standard). Based on the findings of Phase 1, a reduced number of sampling points were investigated to target potential sources of contamination identified during the site walkover.

The findings of the preliminary site investigation indicated the following:

- the soil profile typically comprised 0.0m to 0.4m of topsoil overlying clayey silt/silty clay overlying basalt, the expected natural profile for the area;
- no visual and/or olfactory evidence of contamination was noted at any test pit locations;
- concentrations of contaminants at all grid and target locations were below adopted Health Investigation Level 'A' criteria (which is commonly used for soil assessment of low density residential land use);
- no asbestos was identified from samples collected; and
- the single perched water sample measured high concentrations of heavier end hydrocarbons, which may partially be attributed to organic matter noted during sampling.

Arsenic and zinc, at the levels measured in natural soil on site, are most likely attributed to weathering of basaltic parent material in the soil formation process.

In terms of site suitability the site has been discussed in three portions:

- Ministerial Direction No.1 – Potentially Contaminated Land(14) requires planning authorities to satisfy themselves that the environmental conditions of land proposed to be used for sensitive use (i.e. residential) is, or will be, suitable for that use. Therefore, in accordance with Department of Sustainability and Environment (DSE) Potentially Contaminated Land General Practice Note(15) the potential contamination of the site is determined by land uses and activities. The site, with the exception of the area of storage and dairy infrastructure at 2040 Mickleham Road, attributes 'low' potential for contamination on the assessment matrix provided by DSE. It is noted that the results of the preliminary assessment do not identify any contaminants of concern that would trigger requirements for an environmental audit nor any contaminants that would suggest that the site would be unsuitable for residential development (or other sensitive uses). As such, it would be reasonable to assume that no further soil assessment would be required and it could therefore be concluded that Parsons Brinckerhoff would not anticipate the inclusion of an Environmental Audit Overlay.

- Due to the infrastructure of the dairy building restricting access to soil and the hydrocarbon results of the perched water sample from beneath the concrete slab it is recommended that further investigation of this portion, shown in Figure 3, Appendix A, of the site be conducted once infrastructure has been removed. The assessment matrix provided by DSE shows 'medium' potential for contamination and a proposed land-use of 'dwellings, residential buildings etc' to 'require a site assessment from a suitably qualified environmental professional if insufficient information is available to determine if an audit is appropriate'. Parsons Brinckerhoff, as a suitably qualified environmental professional, recommends further investigation of this portion of the site to provide more information to determine if an audit is appropriate and/or would be required.

- The storage (of fuel and chemicals) in outbuilding infrastructure at 2040 Mickleham Road categorise a small portion of site (shown in Figure 4, Appendix A), at worst, in 'medium' potential for contamination. The assessment matrix provided by DSE shows 'medium' potential for contamination and a proposed land-use of 'dwellings, residential buildings etc' to 'require a site assessment from a suitably qualified environmental professional if insufficient information is available to determine if an audit is appropriate'. Parsons Brinckerhoff, as a suitably qualified environmental professional, has provided a preliminary site assessment of this portion of the site, with results showing no contaminants of concern that would trigger requirements for an environmental audit nor any contaminants that would suggest that the site would be unsuitable for residential development (or other sensitive uses). As such, it would be reasonable to assume that no further soil assessment would be required and it could therefore be concluded that Parsons Brinckerhoff would not anticipate the inclusion of an Environmental Audit Overlay.

Please note that this report cannot provide a specific comment on site suitability. Site suitability can only be determined via an environmental audit in accordance with Part IXD, Section 53X of the Environment Protection Act 1970.

In addition to the above, as part of any proposed redevelopment, where soil is excavated and proposed to be removed off-site, soil would need to be tested and classified in accordance with the Industrial Waste Resource Guidelines, and where necessary, disposed to an approved facility in accordance with the guidelines.

10. Limitations

Scope of services

This environmental site assessment report (the report) has been prepared in accordance with the scope of services set out in the contract, or as otherwise agreed, between the client and PB (scope of services). In some circumstances the scope of services may have been limited by a range of factors such as time, budget, access and/or site disturbance constraints.

Reliance on data

In preparing the report, PB has relied upon data, surveys, analyses, designs, plans and other information provided by the client and other individuals and organisations, most of which are referred to in the report (the data). Except as otherwise stated in the report, PB has not verified the accuracy or completeness of the data. To the extent that the statements, opinions, facts, information, conclusions and/or recommendations in the report (conclusions) are based in whole or part on the data, those conclusions are contingent upon the accuracy and completeness of the data. PB will not be liable in relation to incorrect conclusions should any data, information or condition be incorrect or have been concealed, withheld, misrepresented or otherwise not fully disclosed to PB.

Quantities provided in the asbestos registers are based on estimates obtained during the site investigations. All contractors should perform their own measurements to verify the quantities of asbestos.

Environmental conclusions

In accordance with the scope of services, PB has relied upon the data and has not conducted any environmental field monitoring or testing in the preparation of the report. The conclusions are based upon the data and visual observations and are therefore merely indicative of the environmental condition of the site at the time of preparing the report, including the presence or otherwise of contaminants or emissions.

Within the limitations imposed by the scope of services, the assessment of the site and preparation of this report have been undertaken and performed in a professional manner, in accordance with generally accepted practices and using a degree of skill and care ordinarily exercised by reputable environmental consultants under similar circumstances. No other warranty, expressed or implied, is made.

Report for benefit of client

The report has been prepared for the benefit of the client and no other party. PB assumes no responsibility and will not be liable to any other person or organisation for or in relation to any matter dealt with or conclusions expressed in the report, or for any loss or damage suffered by any other person or organisation arising from matters dealt with or conclusions expressed in the report (including without limitation matters arising from any negligent act or omission of PB or for any loss or damage suffered by any other party in relying upon the matters dealt with or conclusions expressed in the report). Other parties should not rely upon the report or the accuracy or completeness of any conclusions and should make their own enquiries and obtain independent advice in relation to such matters.

Other limitations

PB will not be liable to update or revise the report to take into account any events, emergent circumstances or facts occurring or becoming apparent after the date of the report.

The scope of services did not include any assessment of the title to nor ownership of the properties, buildings and structures referred to in the report, nor the application or interpretation of laws in the jurisdiction in which those properties, buildings and structures are located.

11. References

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Department of Sustainability and Environment. Hume Planning Scheme (2008). http://www.dse.vic.gov.au/planningschemes/hume/maps/hume10zn.pdf

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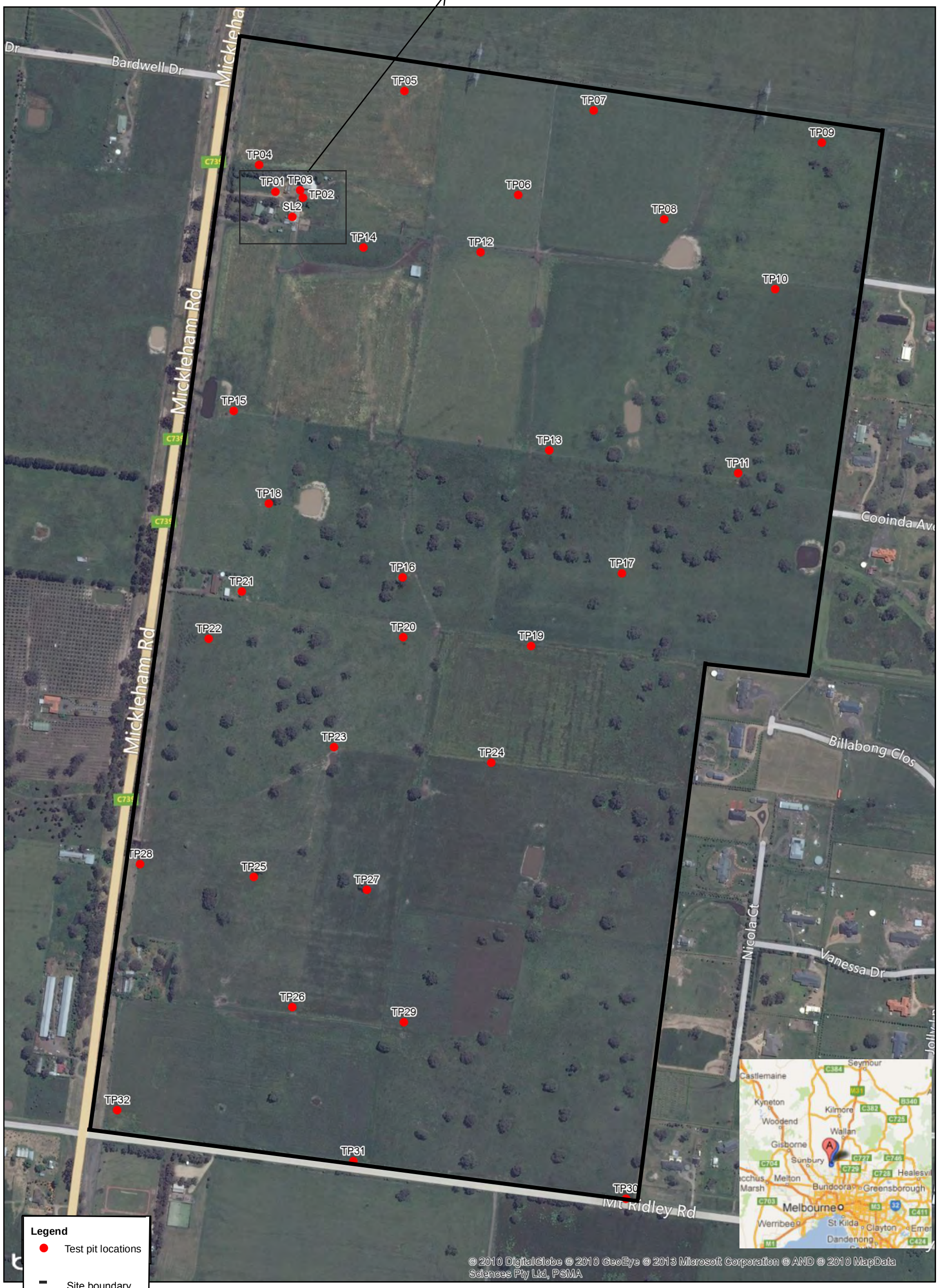
Department of Sustainability and Environment, Potentially contaminated land, General practice note, June 2005

Van de Graaff, RHM, 2012, The role of regolith and soil development with respect to assessing heavy metal contamination in urban soils with particular reference to iron. EGU Assembly 2012, 22-27 April, Vienna, Austria

Appendix A

Figures



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esri Partner Network Silver

Map No: 2189202A_GIS_001_A4

Author: WK

Approved by: SOC

Date: 08/03/13

0 50 100 Meters

1:5,500

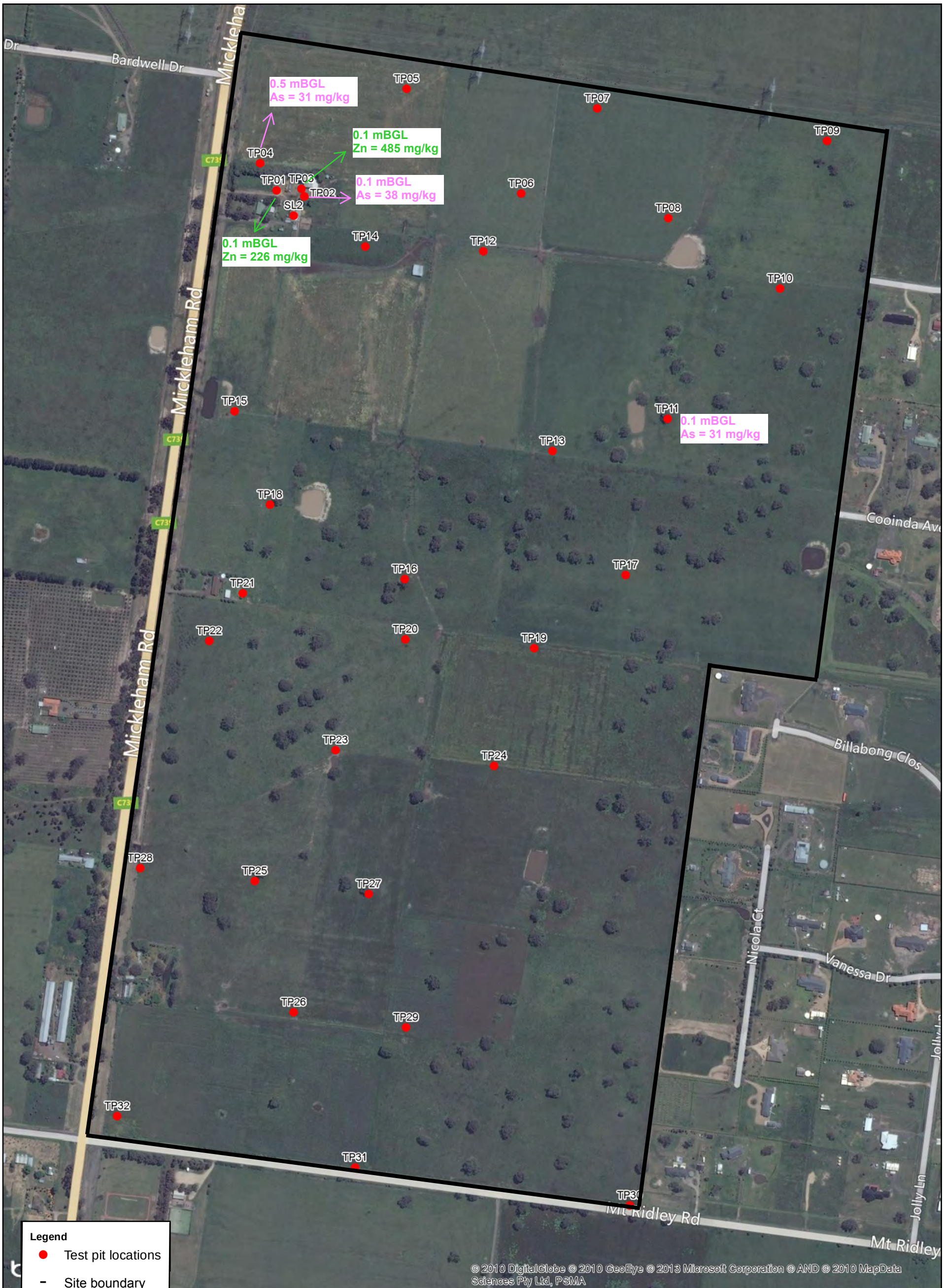
N

Scale ratio correct when printed at A3 Portrait

Projection: Transverse Mercator
Coordinate System: GDA 1994 MGA Zone 55

MAB Lindum Vale PSP site
Figure 1
Test pit locations

PARSONS BRINCKERHOFF



Legend

- Test pit locations
- Site boundary

Data Source: Bing Maps 2013

esri Partner Network Silver

Map No: 2189202A_GIS_001_A3

Author: WK

Approved by: SOC

Date: 07/03/13

0 50 100 Meters

1:5,500

N

Scale ratio correct when printed at A3 Portrait

Projection: Transverse Mercator
Coordinate System: GDA 1994 MGA Zone 55

MAB Lindum Vale PSP site

Figure 2

Soil results

PARSONS BRINCKERHOFF

MAB Lindum Vale PSP site
Figure 3
Area proposed for further investigation

MAB Lindum Vale PSP site
Figure 4
Area of storage - results show no contaminants of concern that would tigger requirments for an enviornmental audit

PARSONS BRINCKERHOFF

Appendix B

Certificate of titles

A' BECKETT LAW SEARCHING SERVICE

TITLE SEARCHES, CORPORATE SEARCHERS & LODGING AGENTS
A.B.N. 19 005 913 655

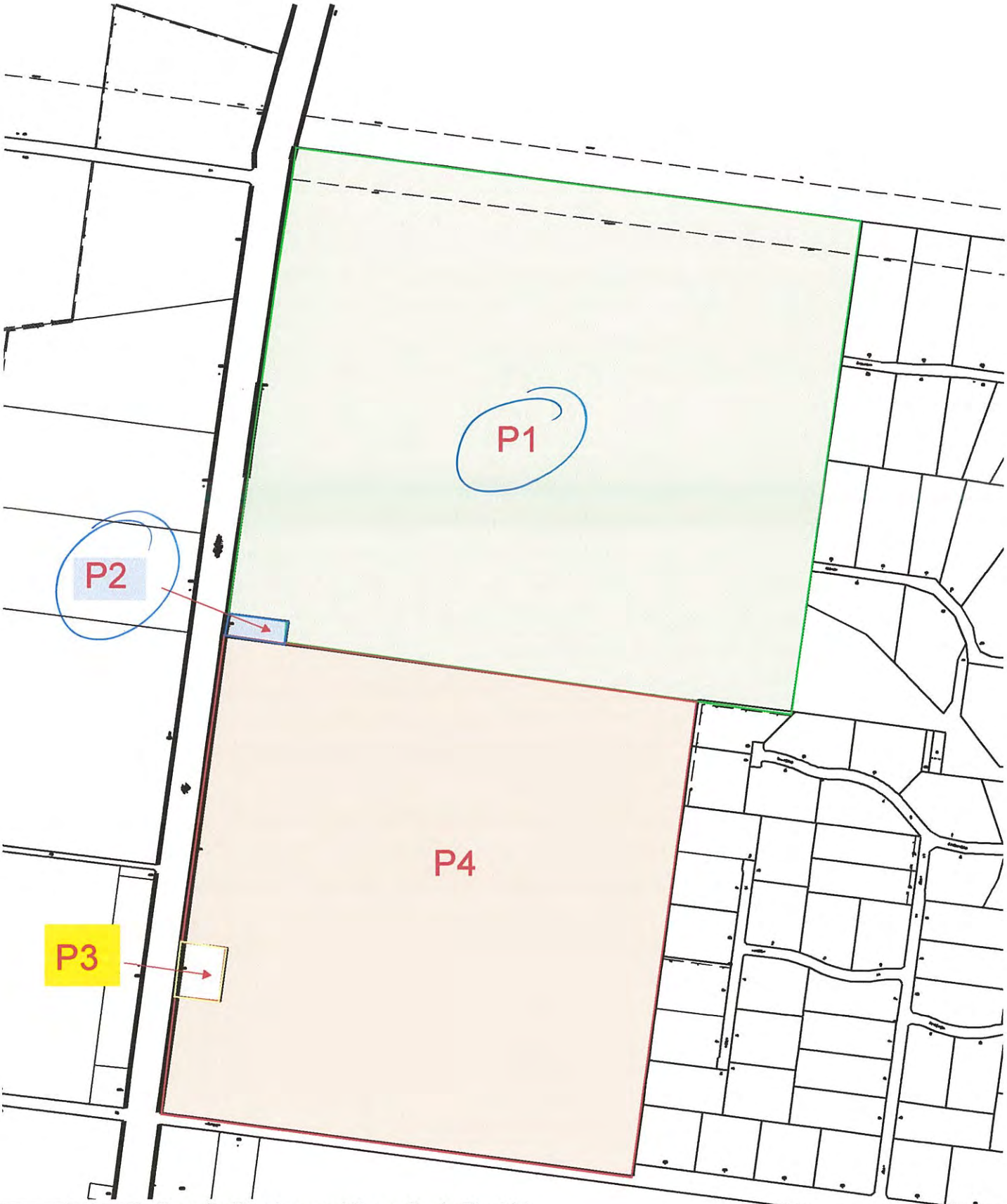
55 Marine Parade, Hastings,Vic. 3915
P.O. Box 151, Hastings Vic 3915
Tel: (03) 5979 5000
Fax: (03) 5979 5050

REF	*Property*
6269	*Mickleham Road, Michleham*

Supplied **NUA = General Law Search**

Title Chain

Volume	*Folio*	*Status*	*Link*	*Volume*	*Folio*	*Status*	*Link*
9539	944	Current	1				
			1	7471	102	Parent	2
			1	5194	630	Parent	2
			1	3579	620	Parent	2
			1	2037	373	Parent	2
			1	1615	913	Parent	2
11252	194	Current	2				
			2	9539	945	Parent	2
10008	221	Current	3				
			3	NUA	SEE AP069036P		
11252	162	Current	4				
			4	11129	424		
			4	NUA	SEE AP108855M		



Speedie Development Consultants Pty. Ltd.

SURVEYORS, ENGINEERS, PLANNERS AND DEVELOPMENT CONSULTANTS

55 Marine Parade, Hastings, 3915
P.O. Box 151, Hastings, 3915
Telephone: (03) 5979 5000
Facsimile: (03) 5979 3355
Facsimile: (03) 5979 5050

REGISTER SEARCH STATEMENT (Title Search) Transfer of Land Act 1958

VOLUME 09539 FOLIO 944

Security no : 124044426289J
Produced 14/01/2013 08:47 am

LAND DESCRIPTION
Lot 1 on Plan of Subdivision 144228.
PARENT TITLE Volume 07471 Folio 102
Created by instrument LP144228 12/01/1984

REGISTERED PROPRIETOR
Estate Fee Simple
Sole Proprietor
DENISE EDITH COCKING of 1990 MICKLEHAM ROAD MICKLEHAM VIC 3064
AH535630Y 05/10/2010

ENCUMBRANCES, CAVEATS AND NOTICES

Any encumbrances created by Section 98 Transfer of Land Act 1958 or Section

24 Subdivision Act 1988 and any other encumbrances shown or entered on the plan or imaged folio set out under DIAGRAM LOCATION below.

DIAGRAM LOCATION
SEE LP144228 FOR FURTHER DETAILS AND BOUNDARIES

ACTIVITY IN THE LAST 125 DAYS

NIL

----------END OF REGISTER SEARCH STATEMENT----------

Additional information: (not part of the Register Search Statement)

Street Address: 1990 MICKLEHAM ROAD MICKLEHAM VIC 3064

DOCUMENT END

HISTORICAL SEARCH STATEMENT

RECORD OF ALTS DEALINGS

Date Lodged for Registration	Date Recorded on Register	Dealing	Imaged	Dealing Type and Details

RECORD OF VOTS DEALINGS

Date Lodged for Registration	Date Recorded on Register	Dealing	Imaged
05/10/2010	05/10/2010	AH535630Y	Y

SURVIVORSHIP APPLICATION
FROM:
ERIC FRANCIS COCKING
DENISE EDITH COCKING
TO:
DENISE EDITH COCKING

RESULTING PROPRIETORSHIP:
Estate Fee Simple
Sole Proprietor
DENISE EDITH COCKING of 1990 MICKLEHAM ROAD MICKLEHAM VIC 3064
AH535630Y 05/10/2010

STATEMENT END

HISTORICAL SEARCH STATEMENT

VOTS Snapshot

VOLUME 09539 FOLIO 944
124035441845J
Produced 05/10/2010 09:31 am

LAND DESCRIPTION
Lot 1 on Plan of Subdivision 144228.
PARENT TITLE Volume 07471 Folio 102
Created by instrument LP144228 12/01/1984

REGISTERED PROPRIETOR
Estate Fee Simple
Joint Proprietors
ERIC FRANCIS COCKING
DENISE EDITH COCKING both of 7 HEALEY STREET CRAIGIEBURN
L241666Y 04/09/1984

ENCUMBRANCES, CAVEATS AND NOTICES

Any encumbrances created by Section 98 Transfer of Land Act 1958 or Section 24 Subdivision Act 1988 and any other encumbrances shown or entered on the plan or imaged folio set out under DIAGRAM LOCATION below.

DIAGRAM LOCATION
SEE LP144228 FOR FURTHER DETAILS AND BOUNDARIES

144228

E.

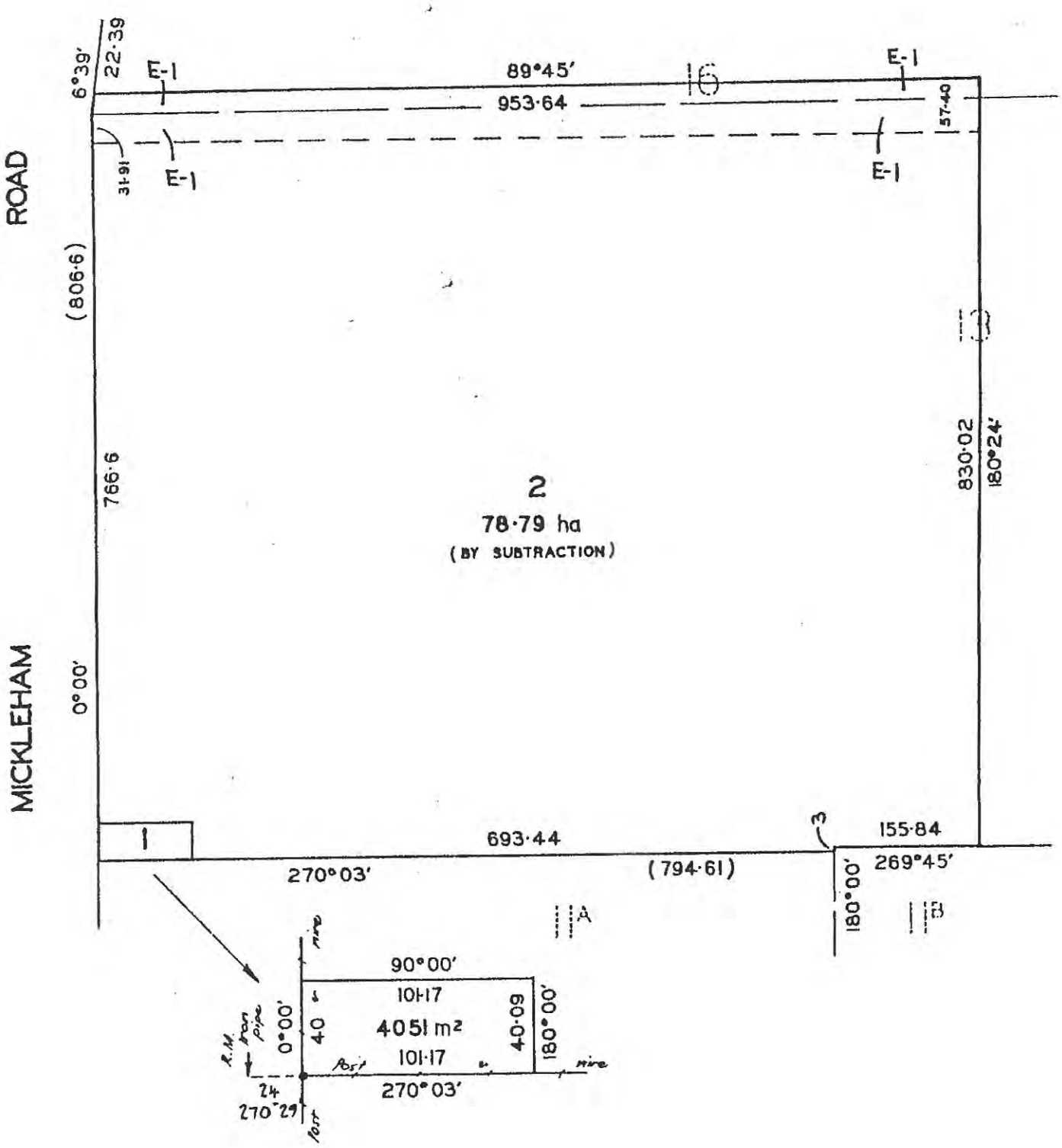
LP144228
EDITION 1
APPROVED 7/12/83.

PLAN OF SUBDIVISION OF:	APPROPRIATIONS	ENCUMBRANCES & OTHER NOTATIONS
PART OF CROWN PORTIONS 13 & 16 PARISH: OF MICKLEHAM COUNTY: OF BOURKE 50 0 50 150 250 LENGTHS ARE IN METRES		BLUE ..... EASEMENT TO STATE ELECTRICITY COMMISSION VIDE C/E F657301 LOT 2 IS NOT THE SUBJECT OF THIS SURVEY.

C/T V.7471 F.102

COLOUR CONVERSION
E-1 = BLUE

APPROVED
7 DEC 1983
LITHO SH



ORIGINAL

NOT TO BE TAKEN FROM THE OFFICE OF TITLES

REGISTER BOOK

VOL. 9539 FOL. 944

VICTORIA

Certificate of Title

UNDER THE "TRANSFER OF LAND ACT"

FRANCIS STOWE COCKING Farmer and RUTH ELSIE COCKING Married Woman - -
both of "Lindum Vale" Mickleham Road Mickleham are proprietors as - - -
TENANTS IN COMMON IN EQUAL SHARES of an estate in fee simple subject to the - -
encumbrances notified hereunder in all that land in the Parish of Mickleham -
County of Bourke being Lot 1 on Plan of Subdivision No.144228 - - - - --
which land is shown enclosed by continuous lines on the map hereon and - - - --
identified by that lot number -

Issued under Regulation 12 -

Derived From
VOL.7471 FOL.102

12/1/'84

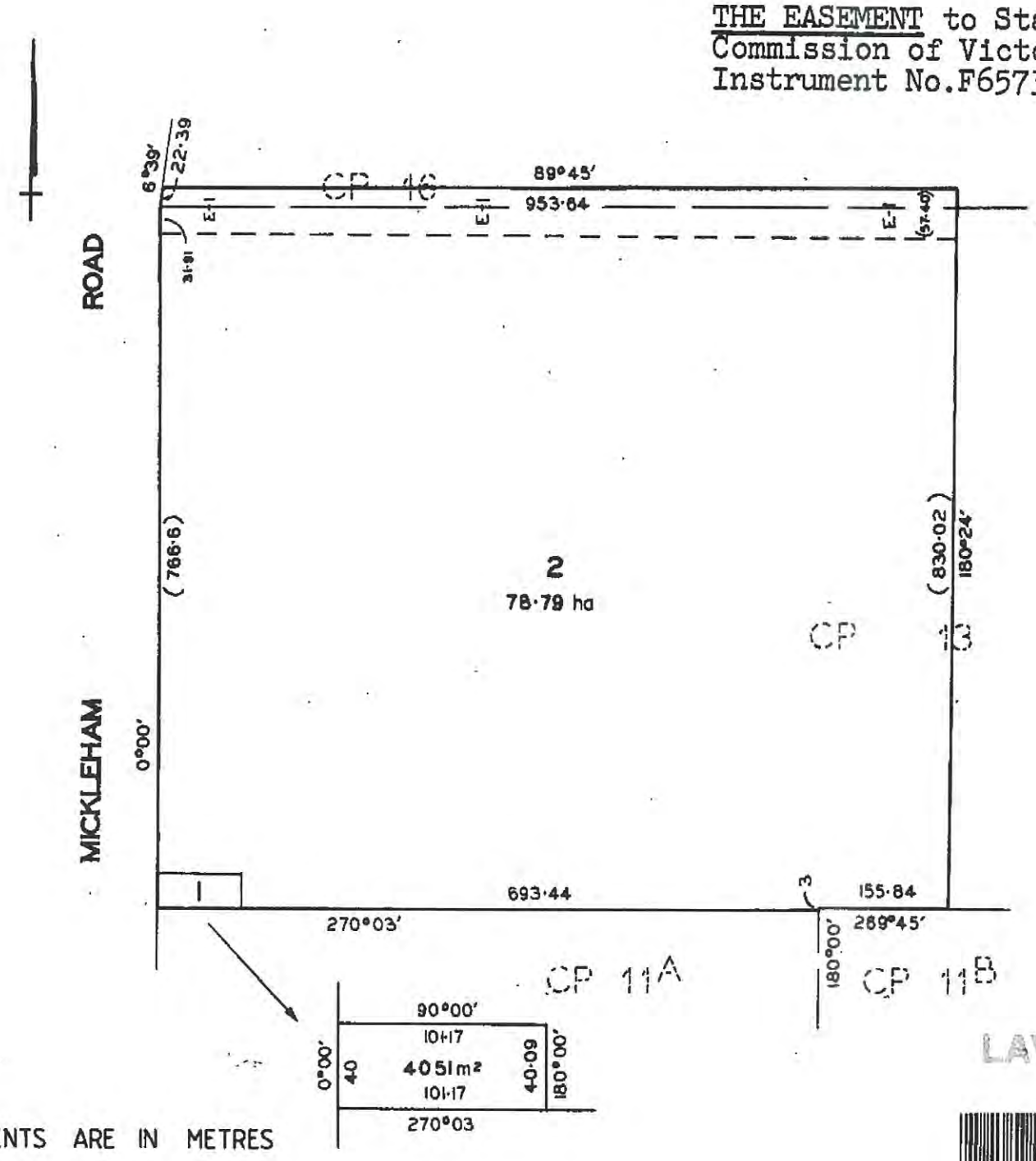
OFFICE OF TITLES VICTORIA

Assistant Registrar of Titles

ENCUMBRANCES REFERRED TO

As to any part of the land marked E-1 on the map that lies within the - - - - - -
above-mentioned Lot -

THE EASEMENT to State Electricity Commission of Victoria created by Instrument No.F657301 -



MEASUREMENTS ARE IN METRES

T09539-944-1-2

ERIC FRANCIS COCKING and DENISE EDITH COCKING both of 7 Healey Street Craigieburn are now JOINT PROPRIETORS

Registered 4th September 1984

No.L241666Y

OFFICE OF TITLES RMS VICTORIA

MORTGAGE TO THE COMMISSIONERS OF THE STATE BANK OF VICTORIA

Registered No. L435473 E

DISCHARGED 21 DEC 1989 -8 MAR 1984

OFFICE OF TITLES M.A.F. VICTORIA

OFFICE OF TITLES D.J.R. VICTORIA

CANCELLED

Entered in the Register Book

Vol. 7471 *Fol.* 102

VICTORIA

Certificate of Title,

UNDER THE "TRANSFER OF LAND ACT 1928."

Francis Stowe Cocking Farmer and Ruth Elsie Cocking Married Woman both of -----
Mickleham via Broadmeadows are now the proprietors as tenants in common -----
in equal shares -
~~now the proprietor~~ *of an Estate in Fee-simple subject to the Encumbrances---*
notified hereunder in All *that piece of Land, delineated and coloured---*
red on the map in the margin containing One hundred and ninety-five acres Three roods
and Two perches or thereabouts being part of Crown Portions Thirteen and Sixteen ----
Parish of Mickleham County of Bourke -

ORIGINAL CERTIFICATE.
Not to be dealt with outside the Titles Office.

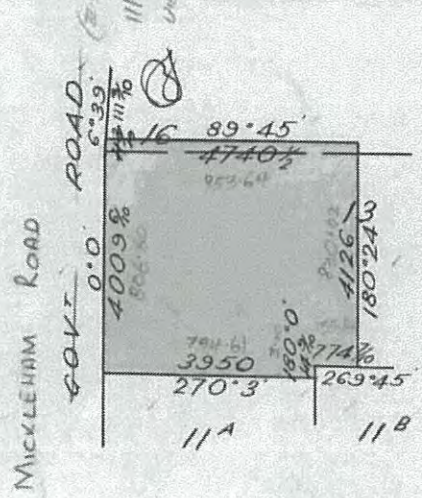
Dated the Sixteenth *day of* October *One thousand nine hundred and* fifty.

OFFICE OF TITLES VICTORIA

Assistant Registrar of Titles.

ENCUMBRANCES REFERRED TO.

A. O. IN P/S 144228 12-6-83



PLAN 144228
AFFECTS LAND HEREIN

ADOPT ROAD NAME VIDE P/S 144228 8.11.83

6.2.6

The Measurements are in links.

A'BECKETT
LAW SEARCHING SERVICE

T07471-102-1-8

Vol. 5194 Fol. 630 Transfer. 2356408 Application.

MORTGAGE to **Commonwealth Bank of Australia**

registered

numbered 962902

DISCHARGED 16 October 1950 26 December 1958

Assistant Registrar of Titles

MORTGAGE to RURAL FINANCE CORPORATION

registered

numbered 977731

DISCHARGED 1 September 1951 3rd September 1958

Assistant Registrar of Titles

MORTGAGE to RURAL FINANCE AND SETTLEMENT COMMISSION

Registered 27th July 1966

No.C550448

DISCHARGED 22 MAR 1973

OFFICE OF TITLES W.P.S. VICTORIA

OFFICE OF TITLES B.A.B. VICTORIA

STATE ELECTRICITY COMMISSION

has pursuant to section 57 of Transfer of Land Act served a notification relating to the compulsory acquisition of an easement over land herein.

Dated 3 APR 1969

Entered 14 APR 1969

No. D357192 *(Plan with letter)*

OFFICE OF TITLES F.N. VICTORIA

CREATION OF EASEMENT

Registered 10th April 1975

No.F657301

OFFICE OF TITLES P.Q. VICTORIA

CANCELLED

The following Titles have been issued Pursuant to Regulation 12 of the Transfer of Land Act

on 12th January 1984

Lots One to 2 in Vol. 9539 Fol. 944

to Vol. 9539 Fol. 945

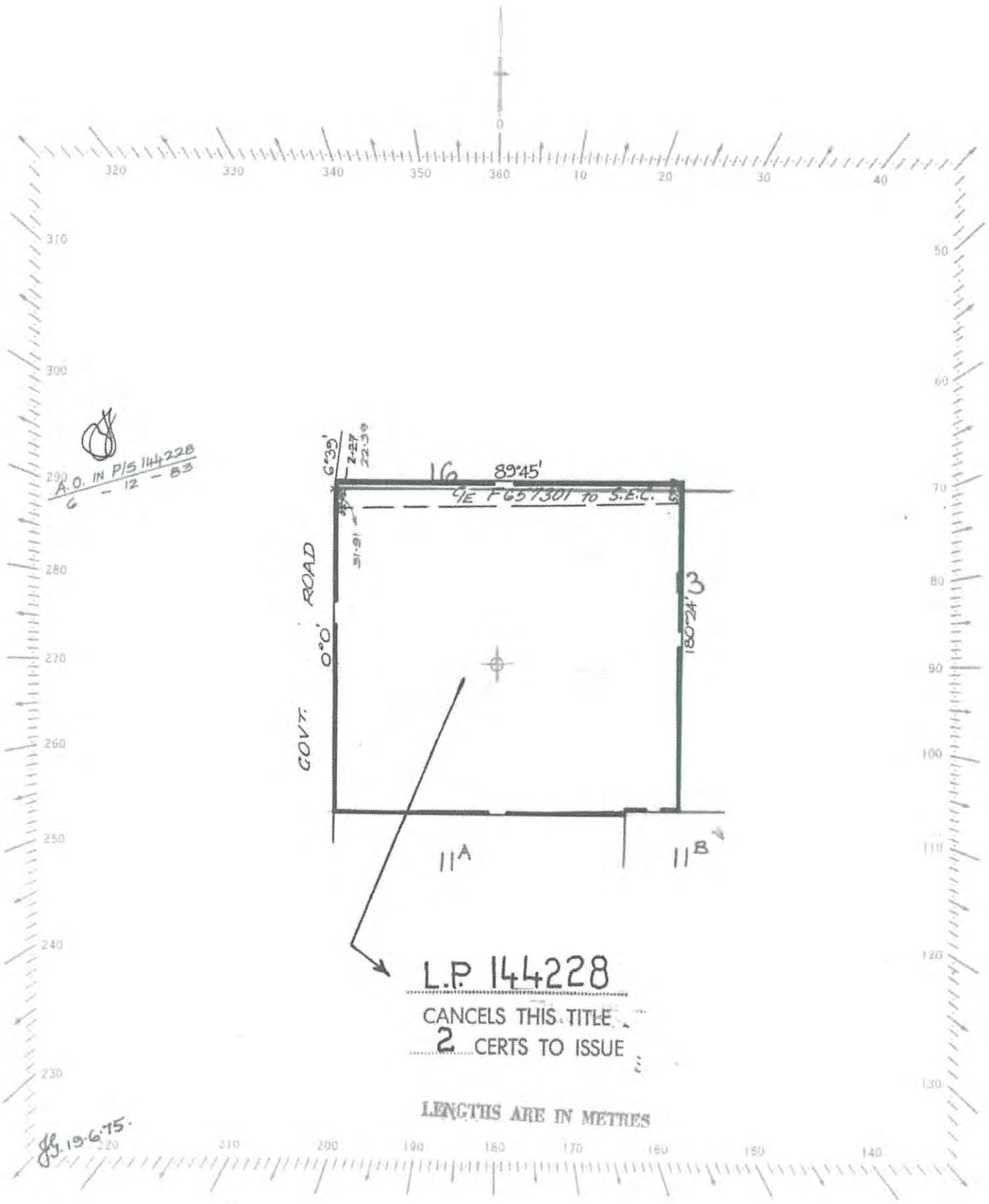
LP 144228

OFFICE OF TITLES D.G.W. VICTORIA

CANCELLED

SCALE 1:12500

Volume 7471. Folio -102



T07471-102-2-6

Natural Resources and Environment

AGRICULTURE • RESOURCES • CONSERVATION • LAND MANAGEMENT

INTENTIONALLY BLANK

Entered in the Register Book **CANCELLED**

Vol. 5194 Fol. 1038630

VICTORIA.

Certificate of Title,

UNDER THE "TRANSFER OF LAND ACT 1915."

B.B.

William Cocking Farmer and Emily Cocking his Wife both of Mickleham are-----

now joint proprietors- -

~~now the proprietor~~ *of an Estate in Fee-simple, subject to the Encumbrances notified hereunder in* All *that piece of Land, delineated and coloured* red on the map in the margin containing One hundred and ninety-five acres Three---- roods and Two perches or thereabouts being part of Crown Portions Thirteen and------ Sixteen Parish of Mickleham County of Bourke- - - - - - - - - - - - - - - - - - ----

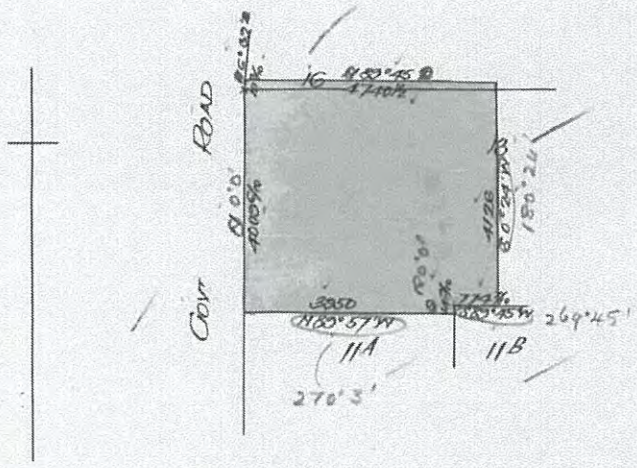
ORIGINAL CERTIFICATE.
Not to be dealt with outside the Titles Office.

Dated the Sixth *day of* August *One thousand nine hundred and* twenty-six.

A E Woodman

Assistant Registrar of Titles.

ENCUMBRANCES REFERRED TO.



T05194-630-1-3

M.H.H

The Measurements are in links

Vol. 3579 Fol. 715620 Transfer. 1279065 Application

MORTGAGE to THE COMMISSIONERS OF THE STATE SAVINGS BANK OF VICTORIA

DISCHARGED
Assistant Registrar of Titles
16th October 1950

6th August registered on
and numbered 552886

Assistant Registrar of Titles.

MORTGAGE Francis Bart Roberts

DISCHARGED
Assistant Registrar of Titles
1st March 1938

6th August registered on
and numbered 552887

Assistant Registrar of Titles.

MORTGAGE

FARMERS' DEBTS ADJUSTMENT BOARD

DISCHARGED
Assistant Registrar of Titles
16th October 1950

on 9th June 1938 registered
numbered 757453

Assistant Registrar of Titles

Red Ink No. 4724092
William Cocking of Kilmore East Farmer
the surviver of the proprietors named herein, is
by direction of The Commissioner of Titles, now
registered as sole proprietor of the land now
comprised herein.

DATED
16th June 1949

Assistant Registrar of Titles.

TRANSFER TO Frances Stowe Cocking and Ruth Elsie Cocking

on 16th October 1950 registered
numbered 2356408

CANCELLED See Certificate of Title
Vol. 7471 Fol. 102

Assistant Registrar of Titles

CANCELLED

DUP. WITH

APR 1950

Entered in the Register Book,

Vol. 3579 *Fol.* 715620

CANCELLED

VICTORIA.

Certificate of Title,

UNDER THE "TRANSFER OF LAND ACT 1890."

ORIGINAL CERTIFICATE.
Not to be dealt with outside the Titles Office.

FRANCIS BART ROBERTS of Warracknabeal Farmer is - - - - - - - -

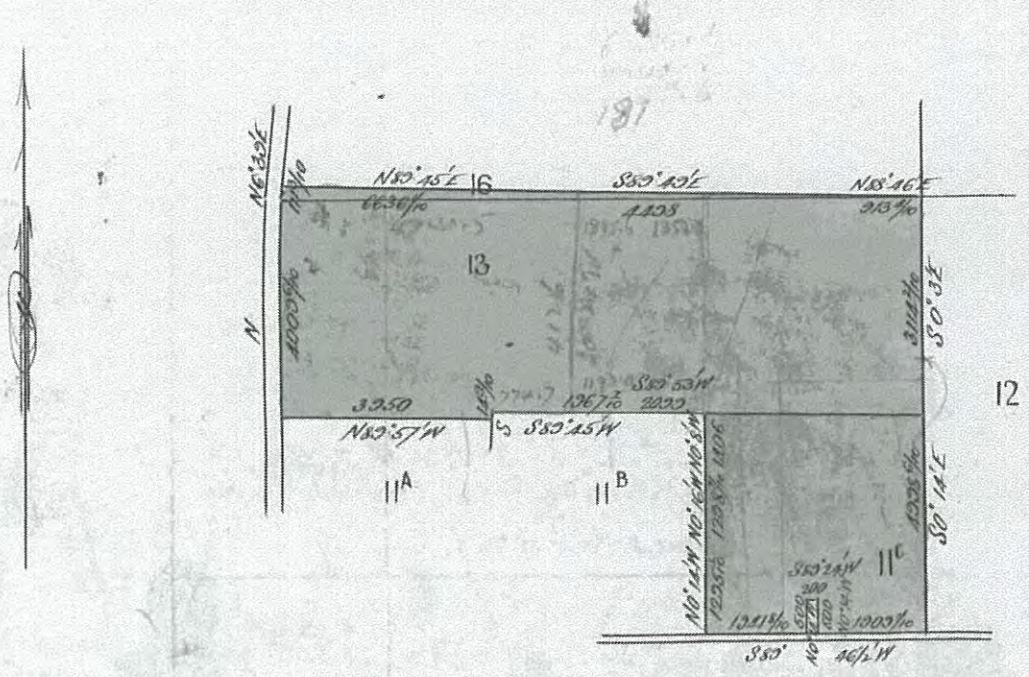
now the proprietor of an Estate in Fee-simple, subject to the Encumbrances notified hereunder in All *that piece of Land, delineated and coloured* red on the map in the margin containing Six hundred and fifty-eight acres and Ten -- perches or thereabouts being Crown Portion thirteen and part of Crown Portions Eleven[C] and Sixteen Parish of Mickleham County of Bourke - - - - - - - - - - - - - - - - - -

T03579-620-1-9

Dated the Fifteenth *day of* February *thousand nine hundred and* twelve.

Assistant Registrar of Titles.

OFFICE OF TITLES VICTORIA



The Measurements are in links.

ENCUMBRANCES REFERRED TO.

As to Crown Portion thirteen - -

SPECIAL RAILWAY CONDITION contained in the Crown Grant to William John Turner Clarke - - -

As to aforesaid part of Crown Portion - Eleven[C] - -

SPECIAL RAILWAY CONDITION contained in the Crown Grant to Thomas Langford - -

As to aforesaid part of Crown Portion - sixteen - - -

SPECIAL RAILWAY CONDITION contained in the Crown Grant to John Hatty and - - - Alexander Hatty - - - -

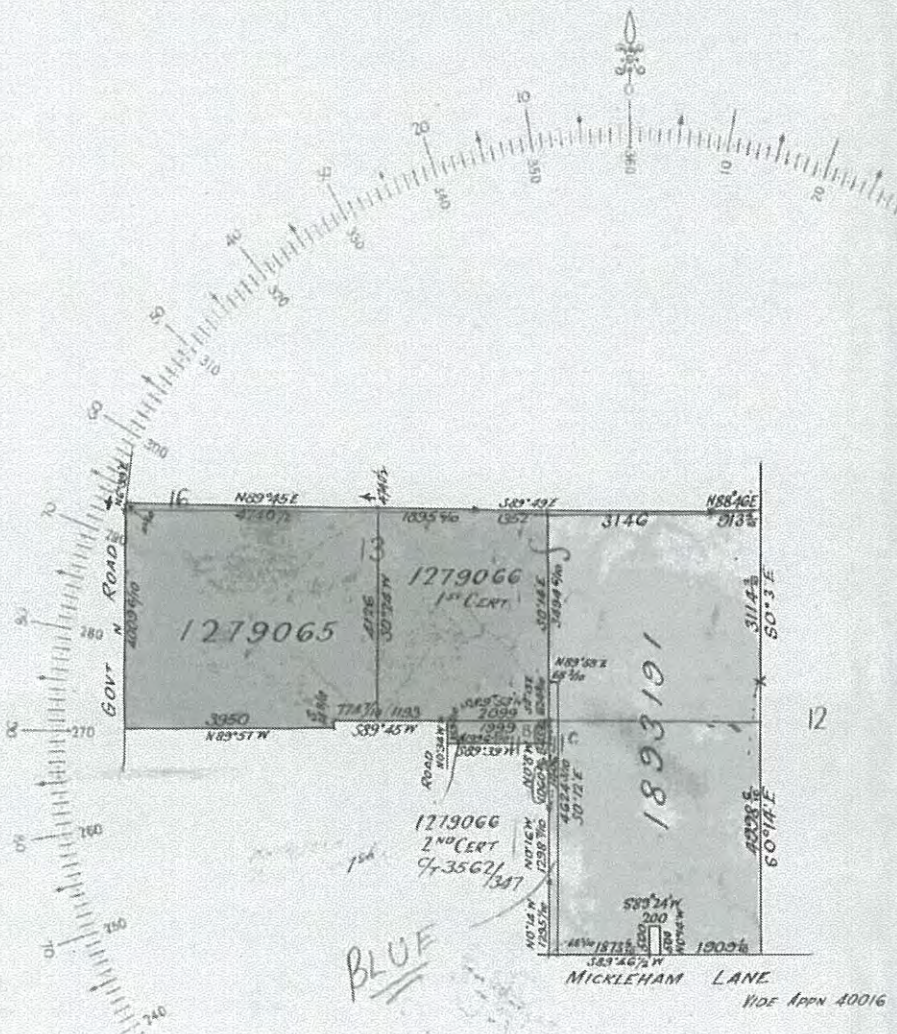
Vol 2037 Fol. 407373 Transfer. 675239 Application

Nature of Instrument.	Day and Hour of its Production.	Names of the Parties to it.	Number or Symbol thereon.
Mortgage DISCHARGED Alf. W. Comport Assistant Registrar of Titles 30th September 1912	The 15th February 1912 at 12.45 pm	Francis Bart Roberts to Duncan Macvean and Francis Wellington Were J. M. Byrne Assistant Registrar of Titles.	303063
Mortgage DISCHARGED Assistant Registrar of Titles 6th August 1926	30th September 1915 at 3.2 pm	Francis Bart Roberts — to — Colin Christison McCulloch William McCulloch and Samuel McCulloch THE UNION TRUSTEE COMPANY OF AUSTRALIA LIMITED Alf. W. Comport. Assistant Registrar of Titles.	353055
Caveat No 50386 lodged 18 March 1919 at 12.39 pm affecting part of the land herein — CAVEAT No 50386 WITHDRAWN 6 December 1921 Assistant Registrar of Titles.			
MORTGAGE to Colin Christison McCulloch William McCulloch Samuel McCulloch DISCHARGED Assistant Registrar of Titles 6th August 1921 THE UNION TRUSTEE COMPANY OF AUSTRALIA LIMITED registered on 6th August 1921 and numbered 435850 Alf. W. Comport. Assistant Registrar of Titles.		MORTGAGE to THE UNION TRUSTEE COMPANY OF AUSTRALIA LIMITED and Samuel Cooke DISCHARGED L. Forbes Assistant Registrar of Titles 13th March 1936 registered 30 January 1931 numbered 659480 J. McRae Assistant Registrar of Titles Assistant Registrar of Titles.	
TRANSFER as to part to William Cocking and Emily Cocking registered on 6th August 1926 and numbered 1279065. CANCELLED as to part See Certificate of Title Vol. 5194 Fol. 1038630 Area 195-3-2 Assistant Registrar of Titles.		MORTGAGE to THE UNION TRUSTEE COMPANY OF AUSTRALIA LIMITED and Samuel Cooke DISCHARGED L. Forbes Assistant Registrar of Titles 13th March 1936 registered 8th January 1932 numbered 672526 John A. Jones Assistant Registrar of Titles Assistant Registrar of Titles.	
TRANSFER as to part and CREATION OF EASEMENT to Edmund Minchinton Davis and Alice Mary Davis registered on 6th August 1926 and numbered 1279066 CANCELLED as to part See Certificate of Title Vol 5194 Fol. 1038631 1038632 Assistant Registrar of Titles.		MORTGAGE to THE UNION TRUSTEE COMPANY OF AUSTRALIA LIMITED and Samuel Cooke registered on 13th March 1936 numbered 721079 L. Forbes. Assistant Registrar of Titles.	

For Continuation of Endorsement See Sheet marked A
Assistant Registrar of Titles

SCALE ~~60~~ 30 chains to one inch

Vol 3579 fol 620
3562 -347



195- 3- 2
134- 3 24
330 2 26

658- 0 - 10
330 2 26
327 1 24

T03579-620-2-7

Natural Resources and Environment

AGRICULTURE • RESOURCES • CONSERVATION • LAND MANAGEMENT

INTENTIONALLY BLANK

T03579-620-3-5

This is the Sheet marked A referred to in Certificate of Title entered in the Register Book Vol. 3579 Fol. 715620.

Assistant Registrar of Titles.

ORIGINAL

MORTGAGE to THE UNION TRUSTEE COMPANY OF AUSTRALIA LIMITED and Samuel Cooke

registered

on 24th March 1939 numbered 771801

Assistant Registrar of Titles

MORTGAGE to Macarthur ~~Pty~~ Macleod Proprietary Limited

registered

on 25th July 1939 numbered 779013

DISCHARGED B. H. Sinclair Assistant Registrar of Titles 25th July 1939

Assistant Registrar of Titles

TRANSFER AS TO BALANCE to Ronald Gordon Baxter

registered

on 25th August 1943 numbered 1893191

CANCELLED See Certificate of Title

Vol. 6675 Fol. 1334848 B. H. Sinclair

Assistant Registrar of Titles

APR 1944

CANCELLED

DUP. WITH

T02037-373-1-9

Entered in the Register Book

Vol. 2037 *Fol.* 407373

VICTORIA.

Certificate of Title,

UNDER THE "TRANSFER OF LAND STATUTE."

ORIGINAL CERTIFICATE.
Not to be dealt with outside the Titles Office.

Robert Barclay Stevenson of Tullock in the parish of Mickleham Farmer is now the proprietor of an Estate in Fee-simple, subject to the Encumbrances notified hereunder in All those pieces of Land, delineated and colored red on the Map in the margin, containing ~~Two~~ three thousand ~~nine hundred~~ and ~~fifty~~ ~~twelve~~ seven acres and ~~eleven~~ thirty two perches or thereabouts being Crown portions nine thirteen fourteen fifteen sixteen nineteen and twenty and part of Crown portions ten eleven C and eighteen parish of Mickleham County of Bourke

Appn: 581/872 24.1.90

Dated the twenty ninth day of June One thousand eight hundred and eighty-eight

Assistant Registrar of Titles.

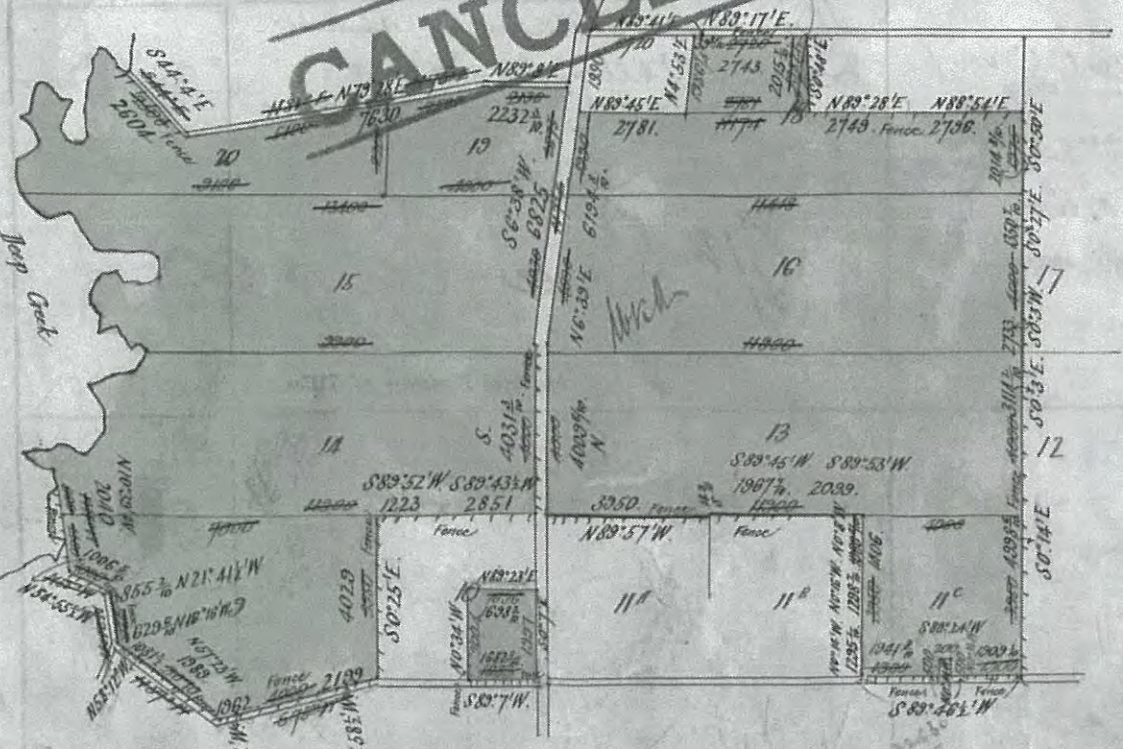
ENCUMBRANCES REFERRED TO.

A Mortgage from Robert Barclay Stevenson to Allan MacVean and Duncan MacVean registered second day of December One thousand eight hundred and eighty seven as Numbered 87017 in the Register Book

Caveat No 39172 affecting mortgage No 87017 as to part.

Caveat No 39172 lapsed 29 October 1909 at 12.15 pm

CANCELLED



The Measurements are in Link.

A'BECKETT
LAW SEARCHING SERVICE

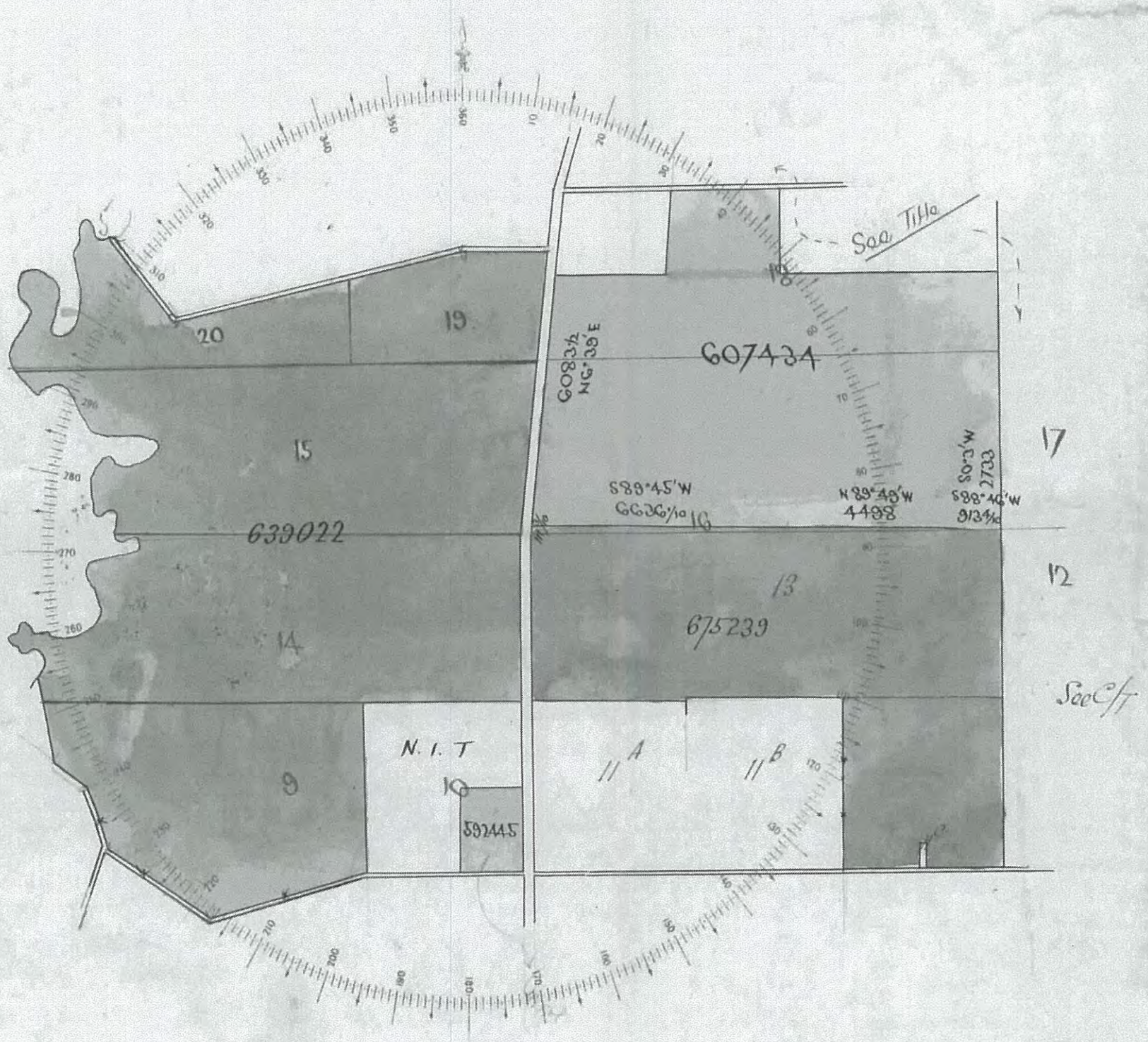
Vol. 1615 Fol. 322911-12-13-14 ~~Transfer~~ R.J. No 406340 Application
1650 329945

Nature of Instrument.	Day and Hour of its Production.	Names of the Parties to It.	Number or Symbol thereon.
Caveat No 39172 lodged 11 November 1908 at 11.4 am affecting mortgage No 87017 as to part Caveat No 39172 lapsed 29 October 1909 at 12.15 p.m.		Assistant Registrar of Titles.	
Transfer as to part CANCELLED as to the LAND in CERTIFICATE OF TITLE VOL. 3337 FOL. 667292 H. Stratten ASSISTANT REGISTRAR OF TITLES	The 7th April 1909 at 9.49 am	Duncan MacVean and Francis Wellington Were to Charles Connor H. Stratten Assistant Registrar of Titles.	592445
Transfer as to part Cancelled as to the land in Certificate of Title, Vol 3377 Fol 675399 area 764 ac 2 Rds. 11 per H. Stratten Asst. Regr. of Titles	The 4th October 1909 at 12.15 pm	Duncan MacVean and Francis Wellington Were to William Henry Cliff John Cliff George Reuben Cliff Herbert James Cliff and Albert Thomas Cliff H. Stratten Assistant Registrar of Titles.	607434
Transfer as to part Cancelled as to the land in Certificate of Title, Vol 3481 Fol 696015 area 1550 ac 3 Rds. 0 per M. Stacey Asst. Regr. of Titles	The 15th December 1910 at 11.33 am	Duncan MacVean and Francis Wellington Were to Samuel Seward M. Stacey Assistant Registrar of Titles.	639022
Transfer as to balance VOL 3579 FOL 715620	The 15th day of February 1912 at 12.45 o'clock in the afternoon	Duncan MacVean and Francis Wellington Were to Francis Bart Roberts J. McBryce Assistant Registrar of Titles.	675239
		Assistant Registrar of Titles.	

SCALE 30Chs to one inch

Titles Office Record of Subdivision

Vol. 2037 fol. 373



T02037-373-2-7

Natural Resources and Environment

AGRICULTURE • RESOURCES • CONSERVATION • LAND MANAGEMENT

INTENTIONALLY BLANK

CANCELLED

Entered in the Register Book Vol. 1615 Fol. 322913

VICTORIA.

Certificate of Title,

UNDER THE "TRANSFER OF LAND STATUTE."

ORIGINAL CERTIFICATE.
Not to be dealt with outside the Titles Office.

Robert Barclay Stevenson of Tullock in the Parish of Mickleham in the County of Bourke Farmer, is now the proprietor of an Estate in Fee-simple, subject to the Encumbrances notified hereunder in All those pieces of Land, delineated and colored red on the Map in the margin, containing one thousand and ninety nine acres, one rood and seventeen perches or thereabouts being part of Crown Portion eleven C. and the whole of Crown Portions thirteen and sixteen, Parish of Mickleham County of Bourke ——

Dated the twentieth day of October —— One thousand eight hundred and eighty four.

CANCELLED

24.1.90

Assistant Registrar of Titles.

OFFICE OF TITLES VICTORIA

See Affm 581 872

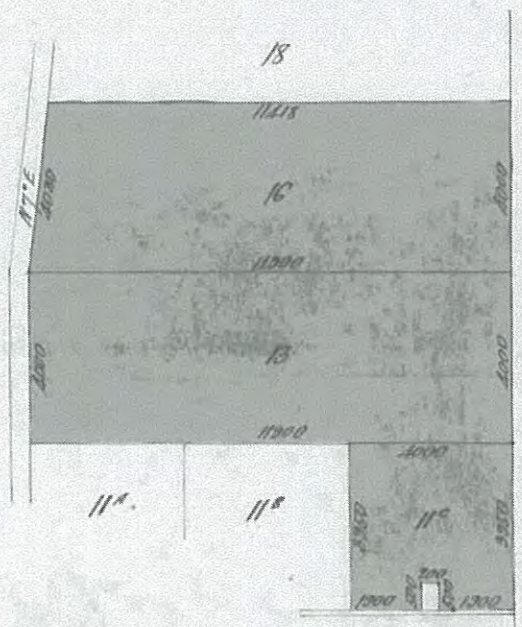
ENCUMBRANCES REFERRED TO.

A Mortgage in fee with power of sale dated the seventh day of March one thousand eight hundred and eighty two, and registered Book 303 Number 20 from Robert Barclay Stevenson to Winfield Attenborough and Charles Prendergast Hackett.

Memo:- The encumbrance notified above has been removed 2nd July 1889

Deputy Registrar of Titles

A-669



The Measurements are in link

T01615-913-1-5

Vol. Fol. Transfer Application 16347

Nature of Instrument.	Day and Hour of its Production.	Names of the Parties to it.	Number or Symbol thereon.
Mortgage	The 2nd day of December 1887. at 2·41 o'clock in the after noon.	Robert Barclay Stevenson — To — Allan Mac Vean and Duncan Mac Vean Assistant Registrar of Titles.	87017.
	The day of 18 at o'clock in the noon.	CANCELLED. SEE CERTIFICATE OF TITLE VOL. 2037 FOL. 407373 ASSISTANT REGISTRAR OF TITLES. Assistant Registrar of Titles.	
	The day of 18 at o'clock in the noon.	Assistant Registrar of Titles.	
	The day of 18 at o'clock in the noon.	Assistant Registrar of Titles.	
	The day of 18 at o'clock in the noon.	Assistant Registrar of Titles.	

REGISTER SEARCH STATEMENT (Title Search) Transfer of Land Act 1958

VOLUME 11252 FOLIO 194

Security no : 124044426389A
Produced 14/01/2013 08:52 am

LAND DESCRIPTION
Lot 1 on Title Plan 947284N.
PARENT TITLE Volume 09539 Folio 945
Created by Application No. 126904Y 23/12/2010

REGISTERED PROPRIETOR
Estate Fee Simple
TENANTS IN COMMON
As to 1 of a total of 8 equal undivided shares
Sole Proprietor
HAROLD JAMES COCKING of 800 OLD SYDNEY ROAD BEVERIDGE VIC 3753
As to 1 of a total of 8 equal undivided shares
Sole Proprietor
NOEL THOMAS COCKING of CANARY ISLAND ROAD APPIN SOUTH VIC 3578
As to 1 of a total of 8 equal undivided shares
Sole Proprietor
DAVID WILFRED COCKING of 1100 SOMERTON ROAD OAKLANDS JUNCTION VIC 3063
AG019973E 11/08/2008
As to 1 of a total of 8 equal undivided shares
Sole Proprietor
DENISE EDITH COCKING of 1990 MICKLEHAM ROAD MICKLEHAM VIC 3064 Legal Personal Representative(s) of ERIC FRANCIS COCKING deceased
AJ326568A 21/11/2011
As to 4 of a total of 8 equal undivided shares
Sole Proprietor
RUTH ELSIE COCKING of "LINDUM VALE" MICKLEHAM ROAD MICKLEHAM VIC 3064
LP144228 12/01/1984

ENCUMBRANCES, CAVEATS AND NOTICES

Any encumbrances created by Section 98 Transfer of Land Act 1958 or Section 24 Subdivision Act 1988 and any other encumbrances shown or entered on the plan set out under DIAGRAM LOCATION below.

DIAGRAM LOCATION
SEE TP947284N FOR FURTHER DETAILS AND BOUNDARIES

ACTIVITY IN THE LAST 125 DAYS

NIL

----------END OF REGISTER SEARCH STATEMENT----------

Additional information: (not part of the Register Search Statement)

REGISTER SEARCH STATEMENT (Title Search) Transfer of Land Act 1958

Street Address: "LINDUM VALE" 2040 MICKLEHAM ROAD MICKLEHAM VIC 3064

DOCUMENT END

TITLE PLAN

EDITION 1

TP947284N

LOCATION OF LAND

PARISH: MICKLEHAM
TOWNSHIP:
SECTION:
CROWN ALLOTMENT:
CROWN PORTION: 13 (PART) & 16 (PART)
LAST PLAN REFERENCE: LOT 2 LP144228
DERIVED FROM: Vol 9539 Fol 945
DEPTH LIMITATION: NIL

NOTATIONS

EASEMENT INFORMATION

E - ENCUMBERING EASEMENT. R - ENCUMBERING EASEMENT (ROAD). A - APPURTENANT EASEMENT.

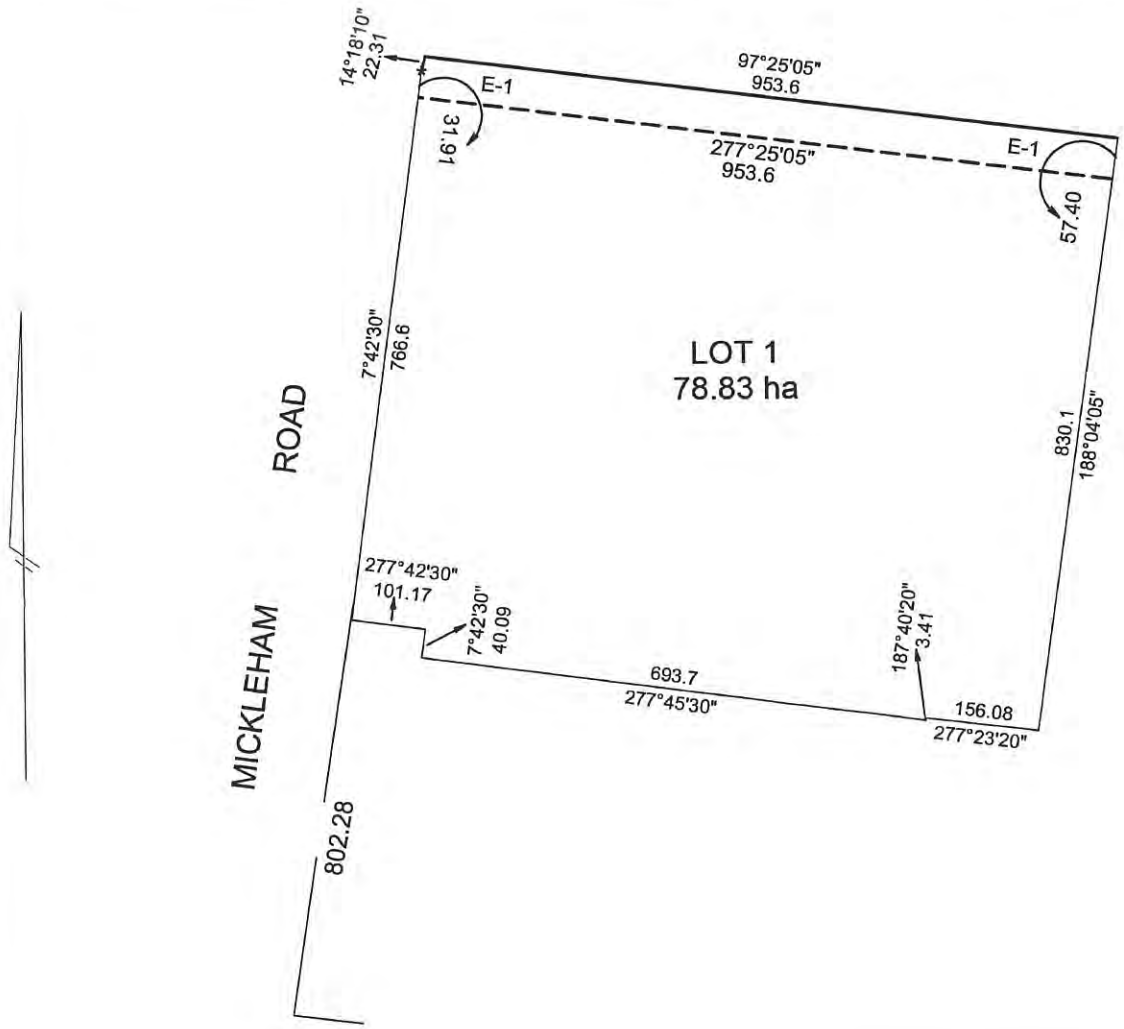
Easement Reference	Purpose / Authority	Width (Metres)	Origin	Land benefited / In favour of
E-1	TRANSMISSION OF ELECTRICITY	SEE DIAG	INST F657301	STATE ELECTRICITY COMMISSION

THIS PLAN HAS BEEN PREPARED BY LAND VICTORIA FOR TITLE DIAGRAM PURPOSES

Checked by: M.H.

Date: 31/01/11

Assistant Registrar of Titles



LENGTHS ARE IN METRES	SCALE	DEALING / FILE No: AP126904Y	DEALING CODE: 103C
	—		SHEET 1 OF 1

REGISTER SEARCH STATEMENT (Title Search) Transfer of Land Act 1958

VOLUME 09539 FOLIO 945 Security no : 124044426331N
No CofT exists Produced 14/01/2013 08:50 am
********** FOLIO IS CANCELLED **********

LAND DESCRIPTION
Lot 2 on Plan of Subdivision 144228.
PARENT TITLE Volume 07471 Folio 102
Created by instrument LP144228 12/01/1984

REGISTERED PROPRIETOR
Estate Fee Simple
TENANTS IN COMMON
As to 1 of a total of 8 equal undivided shares
Sole Proprietor
ERIC FRANCIS COCKING of 1990 MICKLEHAM ROAD MICKLEHAM VIC 3064
As to 1 of a total of 8 equal undivided shares
Sole Proprietor
HAROLD JAMES COCKING of 800 OLD SYDNEY ROAD BEVERIDGE VIC 3753
As to 1 of a total of 8 equal undivided shares
Sole Proprietor
NOEL THOMAS COCKING of CANARY ISLAND ROAD APPIN SOUTH VIC 3578
As to 1 of a total of 8 equal undivided shares
Sole Proprietor
DAVID WILFRED COCKING of 1100 SOMERTON ROAD OAKLANDS JUNCTION VIC 3063
AG019973E 11/08/2008
As to 4 of a total of 8 equal undivided shares
Sole Proprietor
RUTH ELSIE COCKING of "LINDUM VALE" MICKLEHAM ROAD MICKLEHAM
LP144228 12/01/1984

ENCUMBRANCES, CAVEATS AND NOTICES

Any encumbrances created by Section 98 Transfer of Land Act 1958 or Section 24 Subdivision Act 1988 and any other encumbrances shown or entered on the plan or imaged folio set out under DIAGRAM LOCATION below.

DIAGRAM LOCATION
SEE LP144228 FOR FURTHER DETAILS AND BOUNDARIES

ACTIVITY IN THE LAST 125 DAYS

NIL

THIS FOLIO HAS BEEN CANCELLED

REGISTER SEARCH STATEMENT (Title Search) Transfer of Land Act 1958

SEE FOLIOS:
11252/194 LIVE Lot 1 on Title Plan 947284N
----------END OF REGISTER SEARCH STATEMENT----------

Additional information: (not part of the Register Search Statement)

Street Address: "LINDUM VALE" 2040 MICKLEHAM ROAD MICKLEHAM VIC 3064

DOCUMENT END

HISTORICAL SEARCH STATEMENT

Produced 14/01/2013 08:51 AM

Volume 09539 Folio 945
Folio Creation: Created as paper folio continued as computer folio
Parent title Volume 07471 Folio 102

THE IMAGE OF THE FOLIO CEASED TO BE THE DIAGRAM LOCATION ON 14/06/2002 05:00 AM

HISTORICAL SEARCH STATEMENT

RECORD OF ALTS DEALINGS

Date Lodged for Registration	Date Recorded on Register	Dealing	Imaged	Dealing Type and Details

RECORD OF VOTS DEALINGS

Date Lodged for Registration	Date Recorded on Register	Dealing	Imaged
11/08/2008	11/08/2008	AG019972G	Y

TRANSMISSION APPLICATION
FROM:
FRANCIS STOWE COCKING
TO:
ERIC FRANCIS COCKING
HAROLD JAMES COCKING

RESULTING PROPRIETORSHIP:
Estate Fee Simple
TENANTS IN COMMON
As to 1 of a total of 2 equal undivided shares
Joint Proprietors
ERIC FRANCIS COCKING of 1990 MICKLEHAM ROAD MICKLEHAM VIC 3064
HAROLD JAMES COCKING of 800 OLD SYDNEY ROAD BEVERIDGE VIC 3753
Legal Personal Representative(s) of FRANCIS STOWE COCKING who died on 31/03/2007
AG019972G 11/08/2008
As to 1 of a total of 2 equal undivided shares
Sole Proprietor
RUTH ELSIE COCKING of "LINDUM VALE" MICKLEHAM ROAD MICKLEHAM
LP144228 12/01/1984

11/08/2008	11/08/2008	AG019973E	Y

TRANSFER OF LAND BY ENDORSEMENT
FROM:
ERIC FRANCIS COCKING
HAROLD JAMES COCKING
TO:
ERIC FRANCIS COCKING
HAROLD JAMES COCKING
NOEL THOMAS COCKING
DAVID WILFRED COCKING

RESULTING PROPRIETORSHIP:
Estate Fee Simple
TENANTS IN COMMON

HISTORICAL SEARCH STATEMENT

As to 1 of a total of 8 equal undivided shares
Sole Proprietor
ERIC FRANCIS COCKING of 1990 MICKLEHAM ROAD MICKLEHAM VIC 3064
As to 1 of a total of 8 equal undivided shares
Sole Proprietor
HAROLD JAMES COCKING of 800 OLD SYDNEY ROAD BEVERIDGE VIC 3753
As to 1 of a total of 8 equal undivided shares
Sole Proprietor
NOEL THOMAS COCKING of CANARY ISLAND ROAD APPIN SOUTH VIC 3578
As to 1 of a total of 8 equal undivided shares
Sole Proprietor
DAVID WILFRED COCKING of 1100 SOMERTON ROAD OAKLANDS JUNCTION VIC 3063
AG019973E 11/08/2008
As to 4 of a total of 8 equal undivided shares
Sole Proprietor
RUTH ELSIE COCKING of "LINDUM VALE" MICKLEHAM ROAD MICKLEHAM
LP144228 12/01/1984

23/12/2010 01/02/2011 AP126904Y Y

Cancelled by AP126904Y

STATEMENT END

HISTORICAL SEARCH STATEMENT

VOTS Snapshot

Volume 09539 Folio 945
124026948107H
Produced 11/08/2008 02:57 pm

LAND DESCRIPTION
Lot 2 on Plan of Subdivision 144228.
PARENT TITLE Volume 07471 Folio 102
Created by instrument LP144228 12/01/1984

REGISTERED PROPRIETOR
Estate Fee Simple
TENANTS IN COMMON
As to 1 of a total of 2 equal undivided shares
Sole Proprietor
FRANCIS STOWE COCKING of "LINDUM VALE" MICKLEHAM ROAD MICKLEHAM
As to 1 of a total of 2 equal undivided shares
Sole Proprietor
RUTH ELSIE COCKING of "LINDUM VALE" MICKLEHAM ROAD MICKLEHAM
LP144228 12/01/1984

ENCUMBRANCES, CAVEATS AND NOTICES

Any encumbrances created by Section 98 Transfer of Land Act 1958 or Section 24 Subdivision Act 1988 and any other encumbrances shown or entered on the plan or imaged folio set out under DIAGRAM LOCATION below.

DIAGRAM LOCATION
SEE LP144228 FOR FURTHER DETAILS AND BOUNDARIES

ORIGINAL

NOT TO BE TAKEN FROM THE OFFICE OF TITLES

REGISTER BOOK

VOL. 9539 FOL. 945

VICTORIA

Certificate of Title

UNDER THE "TRANSFER OF LAND ACT"

FRANCIS STOWE COCKING Farmer and RUTH ELSIE COCKING Married Woman - -
both of "Lindum Vale" Mickleham Road Mickleham are proprietors as - - -
TENANTS IN COMMON IN EQUAL SHARES of an estate in fee simple subject to the - -
encumbrances notified hereunder in all that land in the Parish of Mickleham -
County of Bourke being Lot 2 on Plan of Subdivision No.144228 - - - --
which land is shown enclosed by continuous lines on the map hereon and - - - --
identified by that lot number -

Issued under Regulation 12 -

Derived From
VOL.7471 FOL.102

12/1/'84

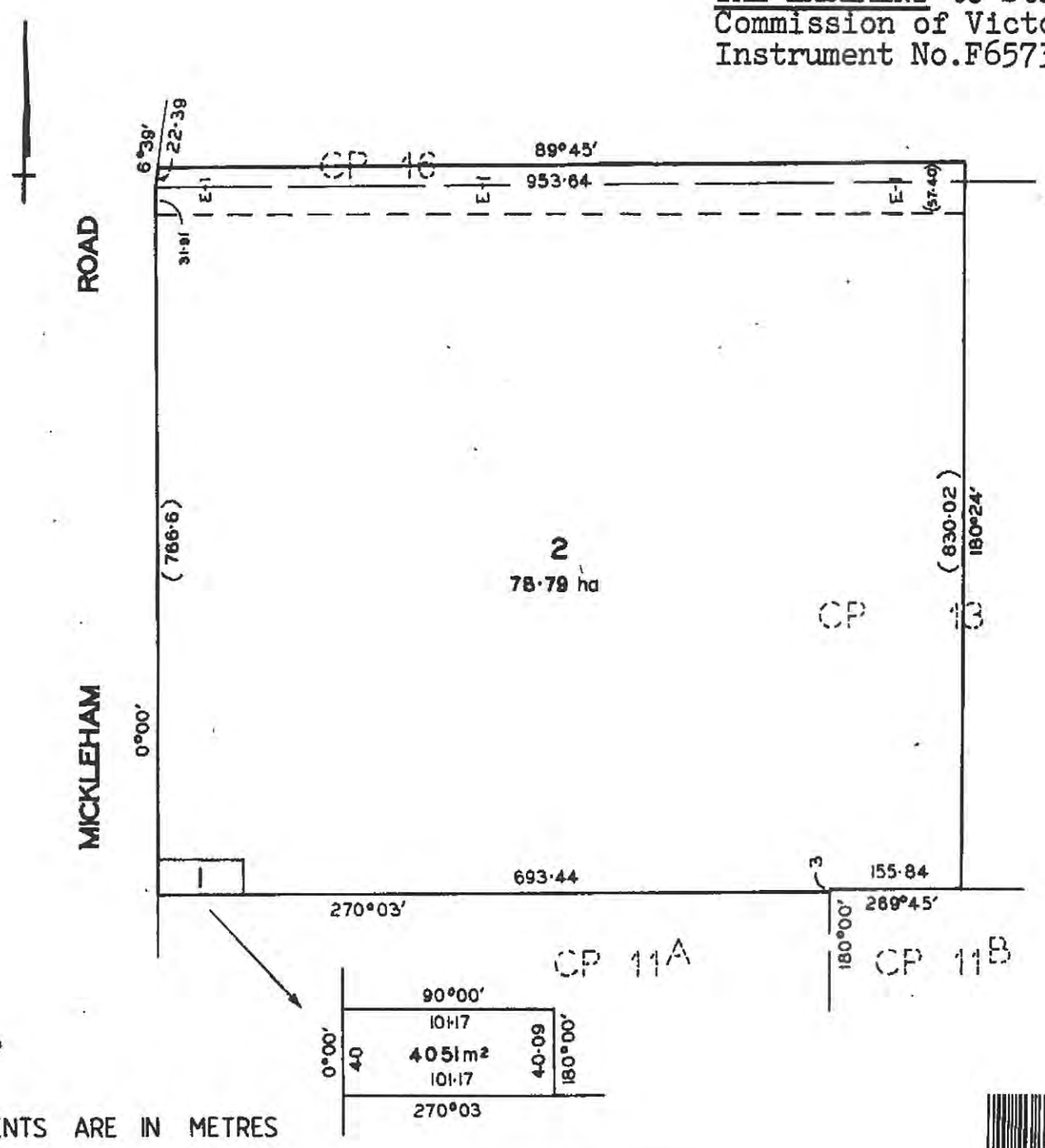
OFFICE OF TITLES VICTORIA

Assistant Registrar of Titles

ENCUMBRANCES REFERRED TO

As to any part of the land marked E-1 on the map that lies within the - - - - - -
above-mentioned Lot -

THE EASEMENT to State Electricity Commission of Victoria created by Instrument No.F657301 -

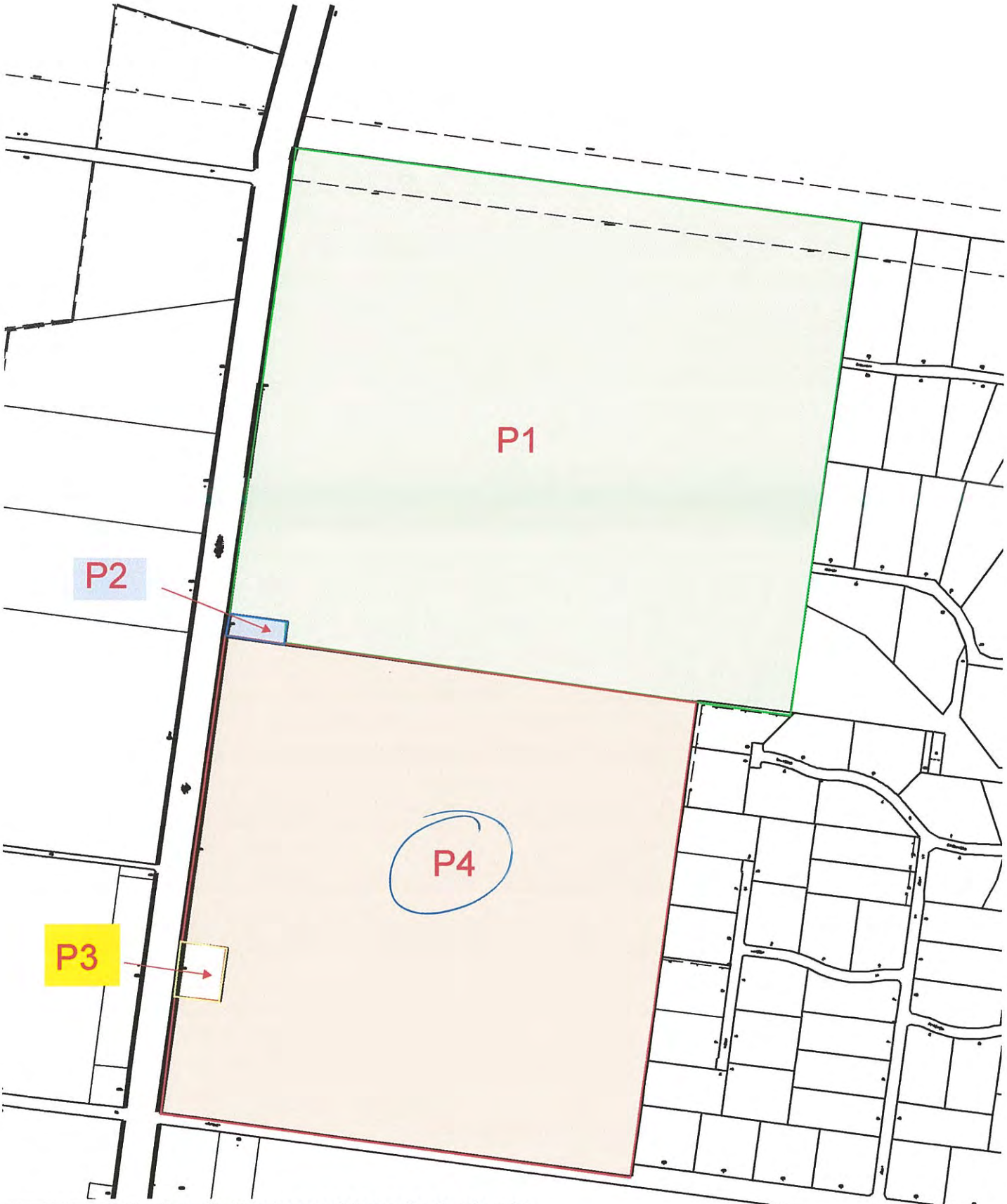


MEASUREMENTS ARE IN METRES

T09539-945-1-9

FULLY CONVERTED TITLE

THIS IS A SUPERSEDED FOLIO OF THE REGISTER. Both text and diagram for this Folio have been fully converted to a computer Folio.



Speedie Development Consultants Pty. Ltd.

SURVEYORS, ENGINEERS, PLANNERS AND DEVELOPMENT CONSULTANTS

55 Marine Parade, Hastings, 3915
P.O. Box 151, Hastings, 3915
Telephone: (03) 5979 5000
Facsimile: (03) 5979 3355
Facsimile: (03) 5979 5050

REGISTER SEARCH STATEMENT (Title Search) Transfer of Land Act 1958

VOLUME 11252 FOLIO 162 Security no : 124044426450J
Produced 14/01/2013 08:54 am

LAND DESCRIPTION
Lot 1 on Title Plan 947278H.
PARENT TITLE Volume 11129 Folio 424
Created by Application No. 126903B 23/12/2010

REGISTERED PROPRIETOR
Estate Fee Simple
TENANTS IN COMMON
As to 4 of a total of 16 equal undivided shares
Sole Proprietor
RUTH ELSIE COCKING of "LINDUM VALE" MICKLEHAM ROAD MICKLEHAM VIC 3064
As to 5 of a total of 16 equal undivided shares
Sole Proprietor
NOEL THOMAS COCKING of CANARY ISLAND ROAD APPIN SOUTH VIC 3578
As to 4 of a total of 16 equal undivided shares
Sole Proprietor
NOLA ALBYN COCKING of 1420 CANARY ISLAND ROAD LODDON VALE VIC 3575
As to 1 of a total of 16 equal undivided shares
Sole Proprietor
HAROLD JAMES COCKING of 800 OLD SYDNEY ROAD BEVERIDGE VIC 3753
As to 1 of a total of 16 equal undivided shares
Sole Proprietor
DAVID WILFRED COCKING of 1100 SOMERTON ROAD OAKLANDS JUNCTION VIC 3063
AG455186U 16/04/2009
As to 1 of a total of 16 equal undivided shares
Sole Proprietor
DENISE EDITH COCKING of 1990 MICKLEHAM ROAD MICKLEHAM VIC 3064 Legal Personal Representative(s) of ERIC FRANCIS COCKING deceased
AJ602427G 16/04/2012

ENCUMBRANCES, CAVEATS AND NOTICES
MORTGAGE AG941990K 23/12/2009
CRAYRIDGE PTY LTD
AMENDMENT OF MORTGAGEE NAME AH022912Y 08/02/2010

Any encumbrances created by Section 98 Transfer of Land Act 1958 or Section

24 Subdivision Act 1988 and any other encumbrances shown or entered on the plan set out under DIAGRAM LOCATION below.

DIAGRAM LOCATION
SEE TP947278H FOR FURTHER DETAILS AND BOUNDARIES

ACTIVITY IN THE LAST 125 DAYS

NIL

REGISTER SEARCH STATEMENT (Title Search) Transfer of Land Act 1958

----------END OF REGISTER SEARCH STATEMENT----------

Additional information: (not part of the Register Search Statement)

Street Address: 1960 MICKLEHAM ROAD MICKLEHAM VIC 3064

DOCUMENT END

TITLE PLAN

EDITION 1

TP947278H

LOCATION OF LAND

PARISH: MICKLEHAM
TOWNSHIP:
SECTION:
CROWN ALLOTMENT:
CROWN PORTION: 11A (PT)
LAST PLAN REFERENCE:
DERIVED FROM: Vol 11129 Fol 424
DEPTH LIMITATION: NIL

NOTATIONS

EASEMENT INFORMATION

E - ENCUMBERING EASEMENT. R - ENCUMBERING EASEMENT (ROAD). A - APPURTENANT EASEMENT.

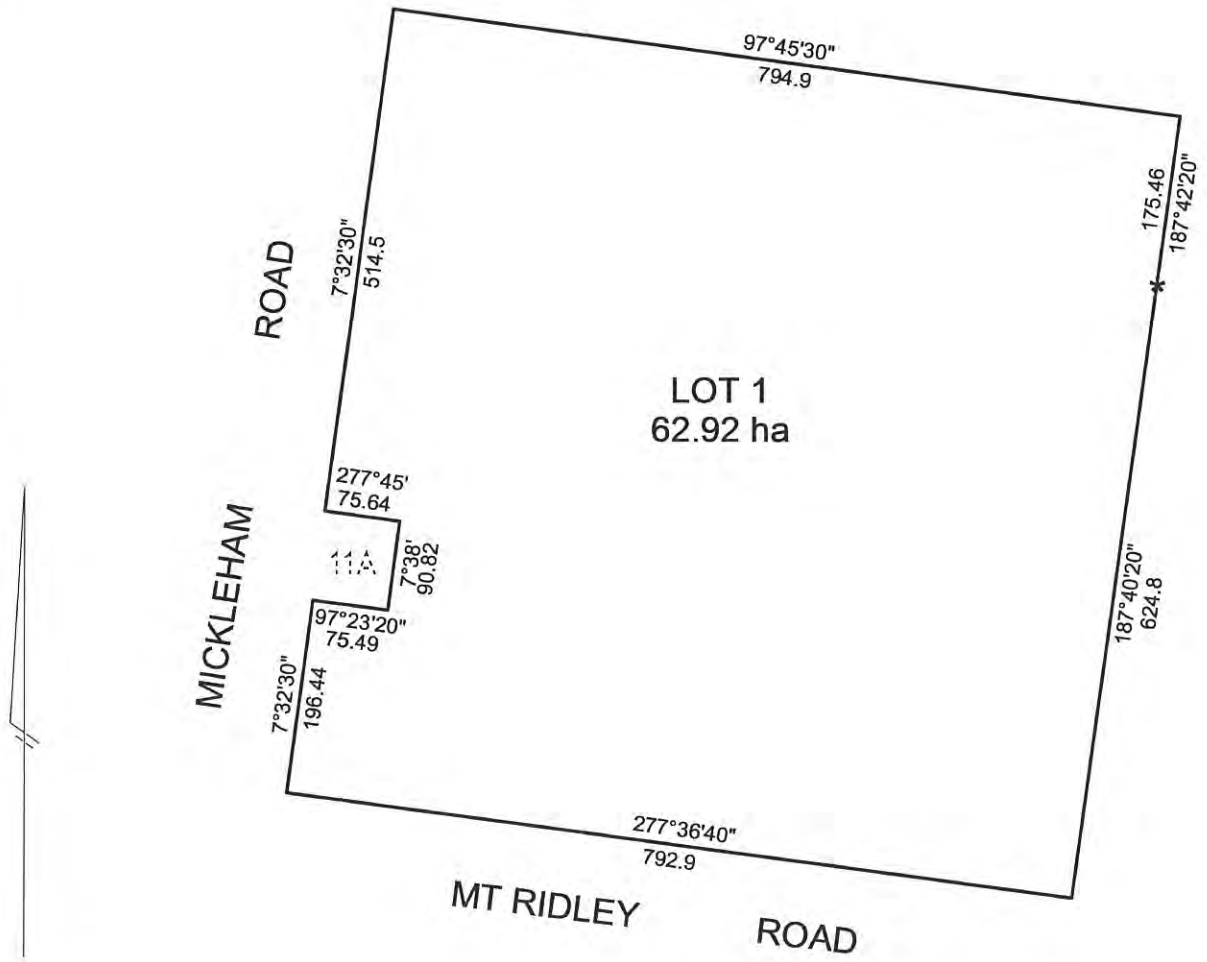
Easement Reference	Purpose / Authority	Width (Metres)	Origin	Land benefited / In favour of

THIS PLAN HAS BEEN PREPARED BY LAND REGISTRY, LAND VICTORIA, FOR TITLE DIAGRAM PURPOSES

Checked by: DSG

Date: 17/04/2009

Assistant Registrar of Titles



LENGTHS ARE IN METRES	SCALE	DEALING / FILE No: AP126903B	DEALING CODE: 103C
			SHEET 1 OF 1

REGISTER SEARCH STATEMENT (Title Search) Transfer of Land Act 1958

VOLUME 11129 FOLIO 424 Security no : 124044426431E
No CofT exists Produced 14/01/2013 08:54 am
********** FOLIO IS CANCELLED **********

LAND DESCRIPTION
Lot 1 on Title Plan 943445M.
Created by Application No. 108855M 16/04/2009

REGISTERED PROPRIETOR
Estate Fee Simple
TENANTS IN COMMON
As to 4 of a total of 16 equal undivided shares
Sole Proprietor
RUTH ELSIE COCKING of 2040 MICKLEHAM ROAD MICKLEHAM VIC 3064
As to 5 of a total of 16 equal undivided shares
Sole Proprietor
NOEL THOMAS COCKING of 1420 CANARY ISLAND ROAD LODDON VALE VIC 3575
As to 4 of a total of 16 equal undivided shares
Sole Proprietor
NOLA ALBYN COCKING of 1420 CANARY ISLAND ROAD LODDON VALE VIC 3575
As to 1 of a total of 16 equal undivided shares
Sole Proprietor
ERIC FRANCIS COCKING of 1990 MICKLEHAM ROAD MICKLEHAM VIC 3064
As to 1 of a total of 16 equal undivided shares
Sole Proprietor
HAROLD JAMES COCKING of 800 OLD SYDNEY ROAD BEVERIDGE VIC 3753
As to 1 of a total of 16 equal undivided shares
Sole Proprietor
DAVID WILFRED COCKING of 1100 SOMERTON ROAD GREENVALE VIC 3059
AG455186U 16/04/2009

ENCUMBRANCES, CAVEATS AND NOTICES
MORTGAGE AG941990K 23/12/2009
CRAYRIDGE PTY LTD
AMENDMENT OF MORTGAGEE NAME AH022912Y 08/02/2010

Any encumbrances created by Section 98 Transfer of Land Act 1958 or Section

24 Subdivision Act 1988 and any other encumbrances shown or entered on the plan set out under DIAGRAM LOCATION below.

Warning as to Dimensions
Any dimension and connecting distance shown is based on the description of the land as contained in the General Law Title and is not based on survey information which has been investigated by the Registrar of Titles.

DIAGRAM LOCATION

REGISTER SEARCH STATEMENT (Title Search) Transfer of Land Act 1958

SEE TP943445M FOR FURTHER DETAILS AND BOUNDARIES

ACTIVITY IN THE LAST 125 DAYS

NIL

THIS FOLIO HAS BEEN CANCELLED

SEE FOLIOS:
11252/162 LIVE Lot 1 on Title Plan 947278H
----------END OF REGISTER SEARCH STATEMENT----------

Additional information: (not part of the Register Search Statement)

Street Address: 1960 MICKLEHAM ROAD MICKLEHAM VIC 3064

DOCUMENT END

HISTORICAL SEARCH STATEMENT

Produced 14/01/2013 08:52 AM

Volume 11129 Folio 424
Folio Creation: Created as a computer folio

HISTORICAL SEARCH STATEMENT

RECORD OF ALTS DEALINGS

Date Lodged for Registration	Date Recorded on Register	Dealing	Imaged	Dealing Type and Details

RECORD OF VOTS DEALINGS

Date Lodged for Registration	Date Recorded on Register	Dealing	Imaged
16/04/2009	17/04/2009	AG455186U	Y

TRANSFER OF LAND BY ENDORSEMENT
FROM:
RUTH ELSIE COCKING
NOEL THOMAS COCKING
NOLA ALBYN COCKING
ERIC FRANCIS COCKING
HAROLD JAMES COCKING
TO:
RUTH ELSIE COCKING
NOEL THOMAS COCKING
NOLA ALBYN COCKING
ERIC FRANCIS COCKING
HAROLD JAMES COCKING
DAVID WILFRED COCKING

RESULTING PROPRIETORSHIP:
Estate Fee Simple
TENANTS IN COMMON
As to 4 of a total of 16 equal undivided shares
Sole Proprietor
RUTH ELSIE COCKING of 2040 MICKLEHAM ROAD MICKLEHAM VIC 3064
As to 5 of a total of 16 equal undivided shares
Sole Proprietor
NOEL THOMAS COCKING of 1420 CANARY ISLAND ROAD LODDON VALE VIC 3575
As to 4 of a total of 16 equal undivided shares
Sole Proprietor
NOLA ALBYN COCKING of 1420 CANARY ISLAND ROAD LODDON VALE VIC 3575
As to 1 of a total of 16 equal undivided shares
Sole Proprietor
ERIC FRANCIS COCKING of 1990 MICKLEHAM ROAD MICKLEHAM VIC 3064
As to 1 of a total of 16 equal undivided shares
Sole Proprietor
HAROLD JAMES COCKING of 800 OLD SYDNEY ROAD BEVERIDGE VIC 3753
As to 1 of a total of 16 equal undivided shares
Sole Proprietor
DAVID WILFRED COCKING of 1100 SOMERTON ROAD GREENVALE VIC 3059

HISTORICAL SEARCH STATEMENT

```
        AG455186U 16/04/2009

23/12/2009        23/12/2009        AG941990K        Y

MORTGAGE OF LAND
    MORTGAGE  AG941990K 23/12/2009
    CRAYRIDGE PROPERTY LTD

08/02/2010        08/02/2010        AH022912Y        Y

AMENDMENT OF MORTGAGEE NAME
    MORTGAGE  AG941990K 23/12/2009
        CRAYRIDGE PTY LTD
        AMENDMENT OF MORTGAGEE NAME AH022912Y 08/02/2010


23/12/2010        31/01/2011        AP126903B        Y

Cancelled by AP126903B



STATEMENT END
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HISTORICAL SEARCH STATEMENT

VOTS Snapshot

VOLUME 11129 FOLIO 424
124029434494N
Produced 17/04/2009 03:56 pm

LAND DESCRIPTION
Lot 1 on Title Plan 943445M.
Created by Application No. 108855M 16/04/2009

REGISTERED PROPRIETOR
Estate Fee Simple
TENANTS IN COMMON
As to 1 of a total of 4 equal undivided shares
Sole Proprietor
RUTH ELSIE COCKING of "LINDUM VALE" MICKLEHAM ROAD MICKLEHAM VIC 3064
As to 1 of a total of 4 equal undivided shares
Sole Proprietor
NOEL THOMAS COCKING of "LINDUM VALE" MICKLEHAM ROAD MICKLEHAM VIC 3064
As to 1 of a total of 4 equal undivided shares
Sole Proprietor
NOLA ALBYN COCKING of "LINDUM VALE" MICKLEHAM ROAD MICKLEHAM VIC 3064
As to 1 of a total of 4 equal undivided shares
Joint Proprietors
ERIC FRANCIS COCKING of 1990 MICKLEHAM ROAD MICKLEHAM VIC 3064
HAROLD JAMES COCKING of 800 OLD SYDNEY ROAD BEVERIDGE VIC 3753
Application No. 108855M 16/04/2009

ENCUMBRANCES, CAVEATS AND NOTICES

Any encumbrances created by Section 98 Transfer of Land Act 1958 or Section 24 Subdivision Act 1988 and any other encumbrances shown or entered on the plan set out under DIAGRAM LOCATION below.

Warning as to Dimensions
Any dimension and connecting distance shown is based on the description of the land as contained in the General Law Title and is not based on survey information which has been investigated by the Registrar of Titles.

DIAGRAM LOCATION
SEE TP943445M FOR FURTHER DETAILS AND BOUNDARIES

../ 2

TITLE PLAN

EDITION 1

TP943445M

LOCATION OF LAND

PARISH: MICKLEHAM
TOWNSHIP:
SECTION:
CROWN ALLOTMENT:
CROWN PORTION: 11A (PT)
LAST PLAN REFERENCE:
DERIVED FROM:
DEPTH LIMITATION: NIL

NOTATIONS

WARNING AS TO DIMENSIONS:
ANY DIMENSION AND CONNECTING DISTANCE SHOWN IS BASED ON THE DESCRIPTION OF THE LAND CONTAINED IN THE GENERAL LAW TITLE AND IS NOT BASED ON SURVEY INFORMATION WHICH HAS BEEN INVESTIGATED BY THE REGISTRAR OF TITLES.

EASEMENT INFORMATION

E - ENCUMBERING EASEMENT. R - ENCUMBERING EASEMENT (ROAD). A - APPURTENANT EASEMENT.

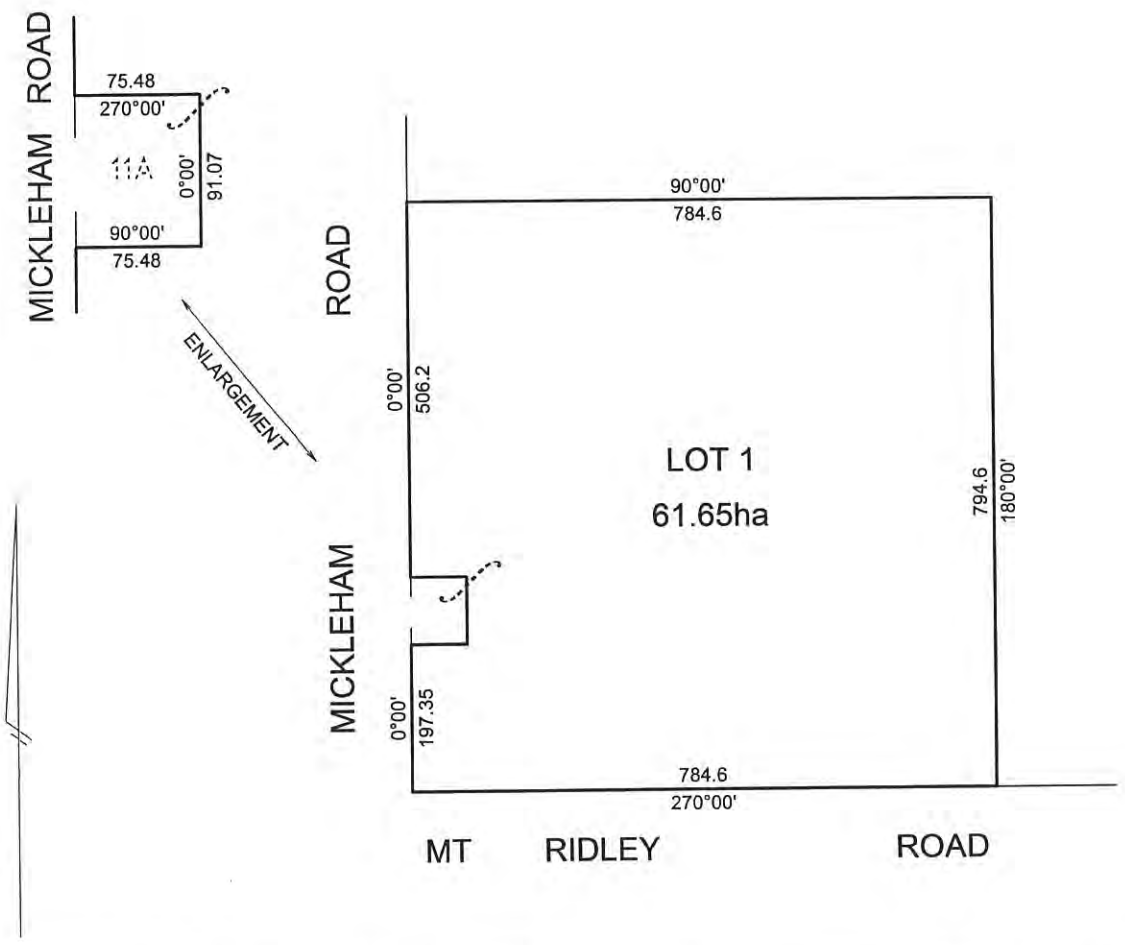
Easement Reference	Purpose / Authority	Width (Metres)	Origin	Land benefited / In favour of

THIS PLAN HAS BEEN PREPARED BY LAND REGISTRY, LAND VICTORIA, FOR TITLE DIAGRAM PURPOSES

Checked by: DSG

Date: 17/04/2009

Assistant Registrar of Titles



LENGTHS ARE IN METRES	SCALE	DEALING / FILE No: AP108855M	DEALING CODE: 14
	—	GOVERNMENT GAZETTE No:	SHEET 1 OF 1

(General Law Search Library)

Search of general law title

AP108855M
16/04/2009 $99.90 14

Section 26F Transfer of Land Act 1958

14-9-2007
1-5-2008

LAND SEARCHED

~~Whole~~/Part — Crown Allotment ~~or~~ 11A
Portion — at LOT 2.
Section — at
Town
Parish MICKLEHAM. — County

and being the land sketched on page ** 5 attached, and being ~~whole or~~ part of the land described in Book 725 No. 328 ~~or Crown Grant No.~~ from which this search starts.

1. I certify that I have made searches against the names on the index sheets (pages** 2-3), and that extracts of all memorials disclosed by my search which affect the above land are set out on pages** 7-15. attached.

2. I also certify that I have searched in the Registers of Executions, Lis Pendens, Crown Debtors and Settlements and Arrangements against the names of all persons who appear from the memorials to have had a beneficial interest in the land during the past 30 years, with the following RESULT:

NIL ~~or *see page attached search.~~

~~*Additional Searches (Adverse Possession)*~~

3. ~~I also certify that I have searched the name of the last registered owner and the register of Councils, the Public Trustee (and Curator of Intestate Estates) and the Registrar of the County Court as set out on index sheet number(s) with the result set out on page(s)~~

TITLE PLAN AVAILABLE

APN SEC 26F: NIL
12-8-08

Date: 27-10-1999.

Signed: J. Goudy
J. Goudy. (signature of searcher)

AXIS SEARCHING & SETTLEMENTS
11/459 Little Collins Street Melbourne 3000
Box 1772 Melbourne / DX 285 Melbourne
Ph: 03 9679 5800 Fax: 03 9670 8644

* *Delete where not applicable*
** *Attached pages must be numbered consecutively and each must be signed by the searcher.*

PEIGL & NEWELL
TITLE SEARCHERS
BOX 2343V, G.P.O.
MELB. 3001 (DX 301)
Ph: 9602 1436

PETER C WILSON

General Law Search Library
Memorials Extracted

H.P. 108855.

List of Dealings Affecting Land on Sketch of Land Searched

Extract No.			Book	No.	LAND	Dep. Deed No./Office Use
	S/L	F/E				
1			PRIOR APPLICATION 69036		P/ MICKLEHAM. P. 11A.	
2	✓	✓	725	328	SAME.	✓ D.D. 130250. X
3	✓	✓	732.	652	PART A. 11A. LOT 2.	✓ D.D. 130251. X
4	✓	✓	753	935.	SAME.	✓ D.D. 130252 X
5	✓	✓	753	936	↕	✓ D.D. 130253. X
6	✓	✓	796	691.	↕	✓ D.D 130254. X
7		✓	832	510	SAME 1A.	M. 130255. D.D. 124913 X
8		✓	854	775	SAME.	✓
9		✓	861	369.	↕	✓ ✓
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
TOTALS		8.				

SEARCHER INITIALS	

S/L = Single line extraction
F/E = Full extraction

Page No. 1

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General Law Search Library
INDEX SHEET

LAND SEARCHED:

A.P. 108355

NAME	Old Series	New Series	Dealings
			PRIOR APPLICATION 69036
EMMA LENA LOBB JOSEPH CHARLES LOBB		220 - 276	725 - 328 732 - 652 737 - 745 N/A LOT 753 - 935 796 - 691 REC
LENSWORTH FINANCE (Vic) P/L 732 - 652 753 - 935	61 - 13	222 - 173 147 - 193 109 - 294 236 - 80	753 - 936 796 - 691 832 - 510
T + G MUTUAL LIFE SOCIETY LIMITED	57 - 1	234 - 383 263	832 - 510
THE NATIONAL MUTUAL LIFE ASSOCIATION OF AUSTRALASIA		140 - 92 127 133	854 - 775 861 - 369

Memorials extracted to be ticked
Memorials not applicable to be marked "N.A."

Page No. 2

SEARCHER INITIALS

C:\DATA\SEP\INDEXYB.DOC

General Law Search Library
INDEX SHEET

LAND SEARCHED:

NAME	Old Series	New Series	Dealings
FRANCIS STOWE COCKING.		N.L	N.L
RUTH ELSIE COCKING.		N.L	N.L
NOEL THOMAS COCKING.		N.L	N.L
NOLA ALBYN COCKING.		168 - 158	N.L

Memorials extracted to be ticked
Memorials not applicable to be marked "N.A."

Page No. 3

SEARCHER INITIALS

C:\DATA\SEP\INDEXYB.DOC

r of the
Act 1958"

'Y that this Memorial contains a just and true account of the several particulars
lorth.

Signature

Qualification

JOSEPH CHARLES LOBB of Mickleham in the State of Victoria Farmer (as Executor of Emma Lena Lobb deceased) of the one part -and- JOSEPH CHARLES LOBB of Mickleham in the State of Victoria Farmer of the other par	NAMES AND ADDITIONS OF EACH PARTY
R.H. POOLE J.P.	NAMES OF THE WITNESSES

ALL that piece or parcel of land situated in the Parish of Mickleham in the County of Bourke in the State of Victoria containing by admeasurement One hundred and fifty four acres and eight perches or thereabouts and being Crown Portion 11A in the said Parish of Mickleham bounded on the West by a road three chains wide bearing North thirty nine chains fifty links on the North by part of Portion Thirteen containing four hundred and seventy six acres bearing Eastthirty nine chains on the East by portion eleven B containing one hundred and fifty eight acres bearing South thirty nine chains fifty links and on the South by a road One chain wide bearing West thirty nine chains.

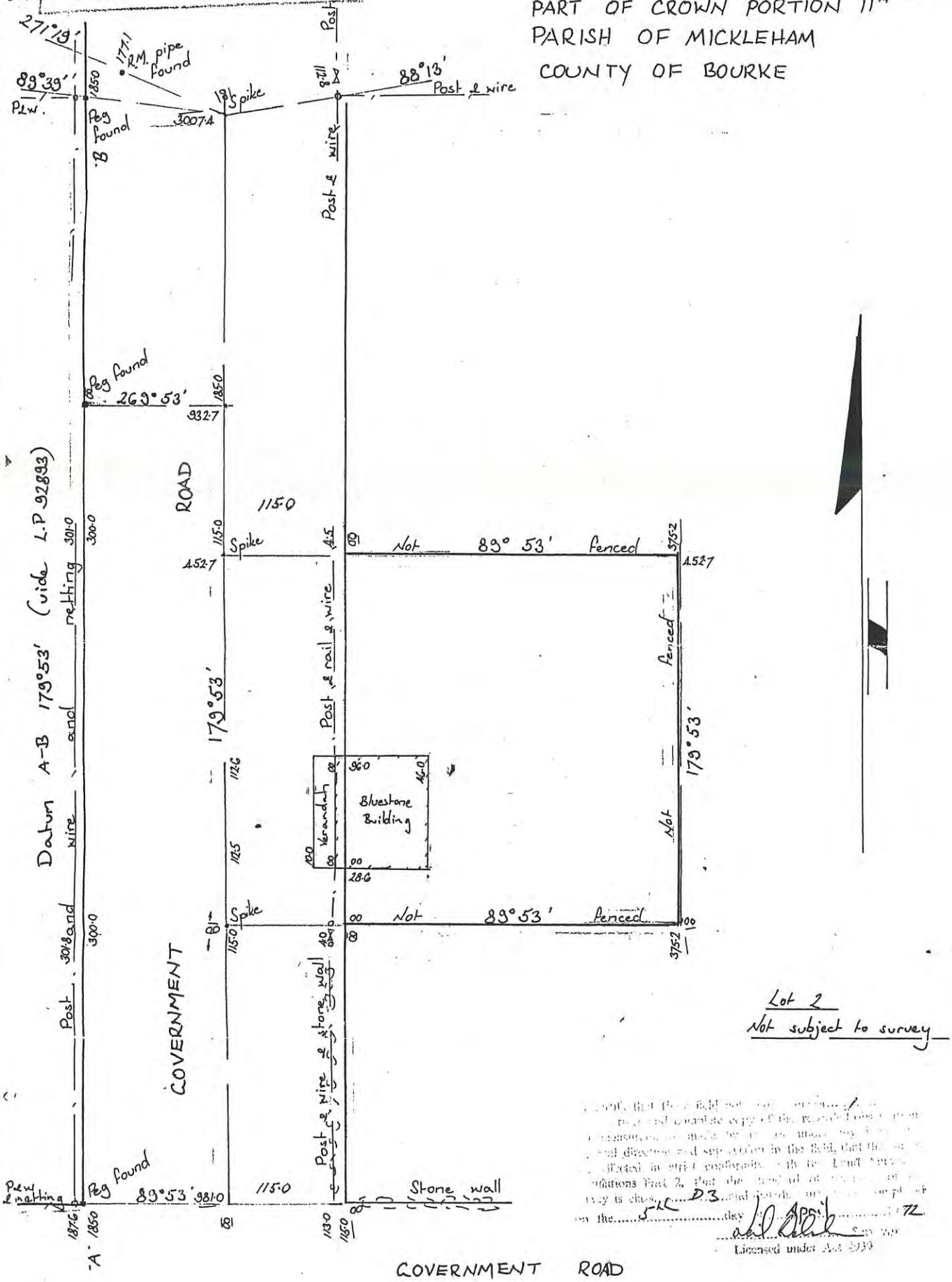
DESCRIPTION OF THE LANDS OR PROPERTY CONVEYED

The original document to which this memorial/copy relates has been deposited under Section 15 Property Law Act.
No. 130250

for the purposes of carrying out the trusts of the Will of the said Emma Lena Lobb deceased.	CONSIDERATION PAID OR PAYABLE
The within memorialized Indenture recites EMMA LENA LOBB late of Mickleham in the State of Victoria Widow deceased died on the 28th day of August One thousand nine hundred and sixty three and was at the time of her death seized of an estate in fee simple in the within described land. The said Emma Lena Lobb left her last Will dated the Twelfth day of December One thousand nine hundred and fifty-six whereby she appointed her son the said Joseph Charles Lobb to be Executor thereof. Probate of the said Will was granted to the said Joseph Charles Lobb by the Supreme Court of Victoria on the 7th day of November One thousand nine hundred and sixty-threeand duly issued. By her said Will the said deceased devised and bequeathed all her real estate to the said Joseph Charles Lobb and all debts, funeral and testamentary expenses and all Probate and Estate Duties payable in respect of the Estate of the said Emma Lena Lobb have been paid.	AT THE TIME OF THE CONVEYANCE

54762

COPY OF FIELDNOTES OF SURVEY
PART OF CROWN PORTION 11A
PARISH OF MICKLEHAM
COUNTY OF BOURKE

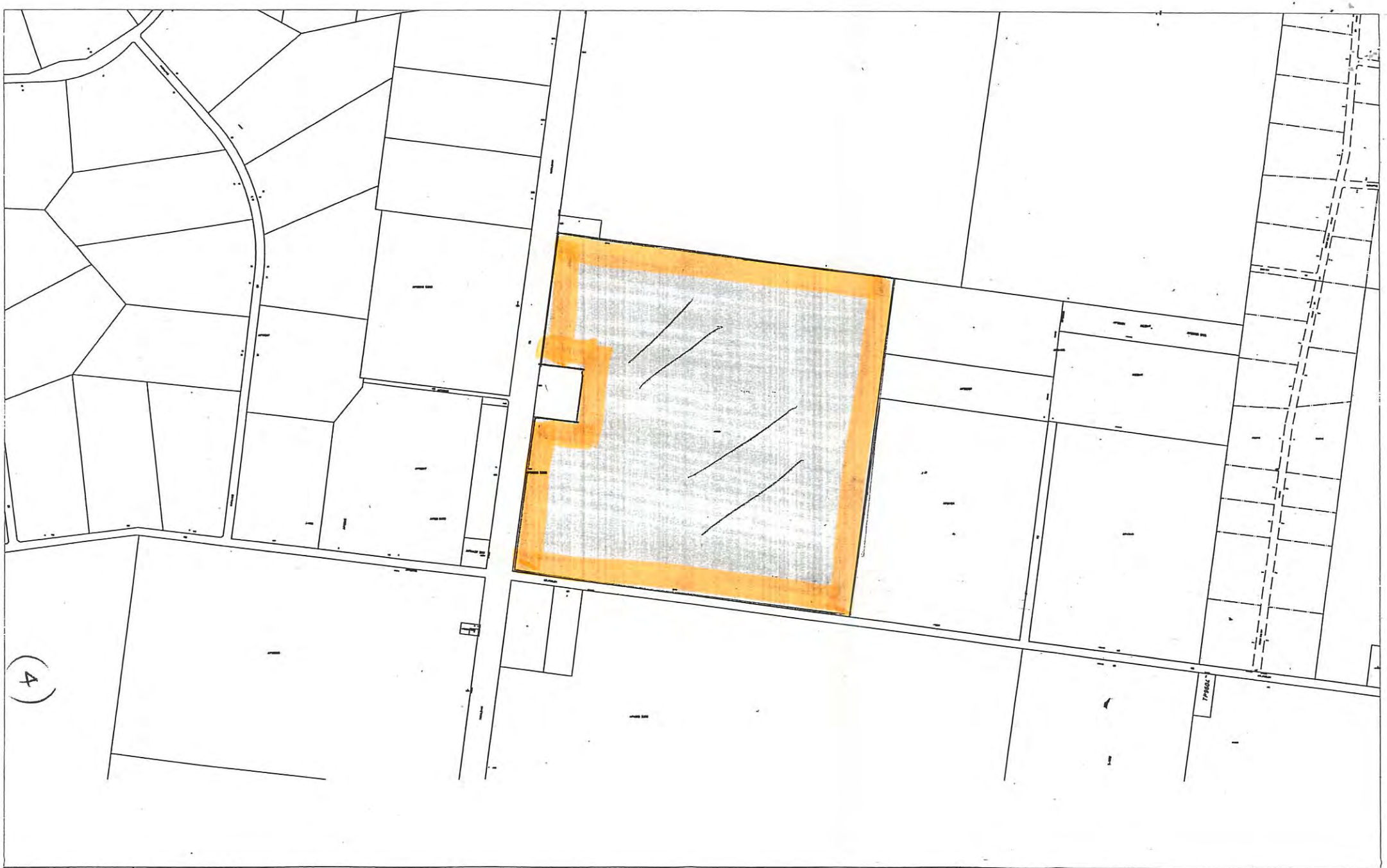


Lot 2
Not subject to survey

I certify that this field note is a true and complete copy of the record made by me of measurements actually made by me or under my direct supervision and supervision in the field, that the survey is correctly delineated in strict conformity with the Land Survey Regulations Part 2, that the survey is closed within the prescribed limits of error and that the date of the survey is the 5th day of April 1972

Licensed under Act 5939

(3A)

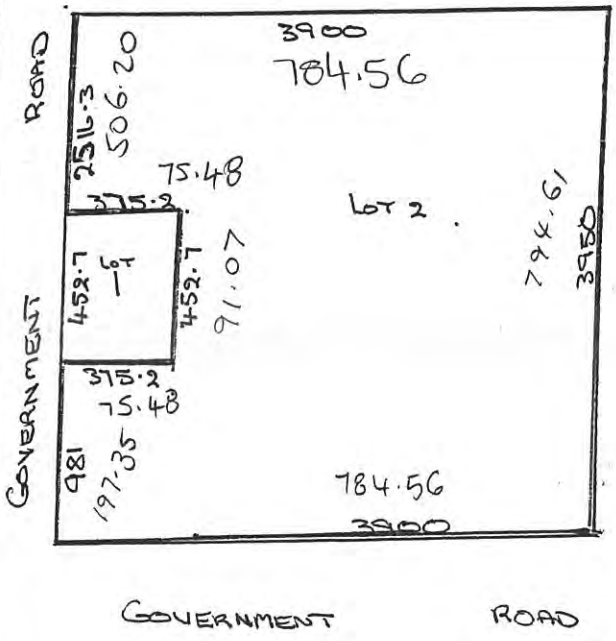


Co-ordinates of Plot Corners		LAND VICTORIA		CADASTRAL MAP SYSTEM		Co-ordinates of Plot Corners	
NW	311200, 5841800	0 80 160 240 320 400 480 560 640 720 800	AMG Zone 55	No guarantee or warranty is given as to the accuracy	Source file [Metro] 3045840.165	NE	314400, 5841800
SW	311200, 5839800	Scale of Metres (1:8000)	Vicroads 78 G2	or completeness of the details shown on this map. Any dimensions measured from this map are only approximate. Refer to title register for further information.	Last updated 08/06/1999	SE	314400, 5839800
					Printed 10:58am 15/10/1999		

General Law Search Library

EXTRACTION SHEET

	Book	No.	Deed Type	PARTIES	LAND
D.D 130251	732 DATED 26-5-1972 REG'D 29-6-1972	652	CONTRACT OF SALE $114,262	JOSEPH CHARLES LOBB (1) LENSWORTH FINANCE (Vic) PTY LIMITED (2)	PART A.M.A. LOT 2 152A 1R 16
	MEASUREMENTS		LINKS		
D.D 0252	753 DATED 1-12-1974 REG'D 14-2-1975	935	CONVEY $114262	JOSEPH CHARLES LOBB (1) LENSWORTH FINANCE (Vic) PTY LTD (2)	SAME



SEARCHER INITIALS

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General Law Search Library
EXTRACTION SHEET

	Book	No.	Deed Type	PARTIES	LAND
D.D. 30253	753 DATED 1-12-1974 REG'D 14-2-1975.	936	MTGE $59,446.50.	LENSWORTH FINANCE (Vic) PTY LTD (1) JOSEPH CHARLES LOBB (2).	SAME.
D.D. 30254	796 DATED 8-6-1980 REG'D. 16-7-1980.	691	RECONVEY 753-936.	JOSEPH CHARLES LOBB (1) LENSWORTH FINANCE (Vic) PTY LTD (2)	SAME.
D.D. 24913 1 30255	832 DATED 1-8-1984 REG'D. 5-12-1984	510.	CONVEY	LENSWORTH FINANCE (Vic) PTY LTD (VENDOR) (1) T + G MUTUAL LIFE SOCIETY LIMITED (PURCHASER) (2) THE NATIONAL MUTUAL LIFE ASSOCIATION OF AUSTRALASIA (GRANTEE). (3) CONSIDERATION:- SEE PHOTO COPY. LAND:- 4TH LY DESCRIBED.	SAME i.e.

Page No. 9

SEARCHER INITIALS

C:\DATA\SEP\EXTRACYR.DOC

General Law Search Library
EXTRACTION SHEET

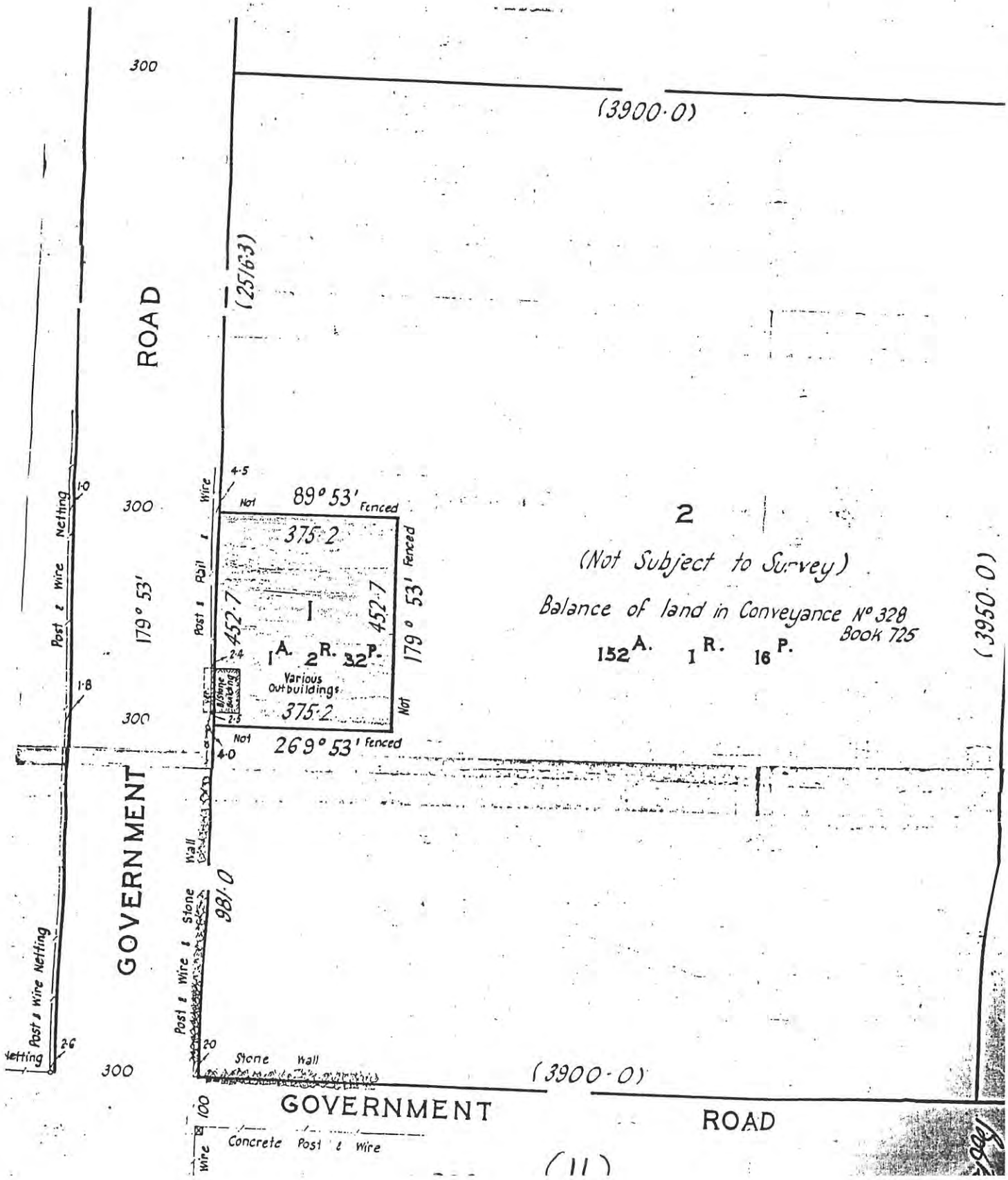
Book	No.	Deed Type	PARTIES	LAND
854 DATED 23-3-1987 REG'D 22-5-1987	775	CONTRACT OF SALE $230,000	THE NATIONAL MUTUAL LIFE ASSOCIATION OF AUSTRALASIA LIMITED. (1) FRANCIS STOWE COCKING, RUTH ELSIE COCKING, NOEL THOMAS COCKING & NOLA ALBYN COCKING. (2)	SAME
861 DATED 18-1-1988 REG'D 20-2-1988	369	CONVEY $230,000	THE NATIONAL MUTUAL LIFE ASSOCIATION OF AUSTRALASIA LIMITED (1) FRANCIS STOWE COCKING, DEC'D RUTH ELSIE COCKING, NOEL THOMAS COCKING & NOLA ALBYN COCKING. (2)	SAME T.C.E
			NO FURTHER DEALINGS 1-10-1999 J. Sandy. NO FURTHER DEALINGS REGISTERED 12-8-2008	

SEARCHER INITIALS

C:\DATA\SEP\EXTRACY8.DOC

CROWN PORTION 11A
PARISH OF MICKLEHAM
COUNTY OF BOURKE

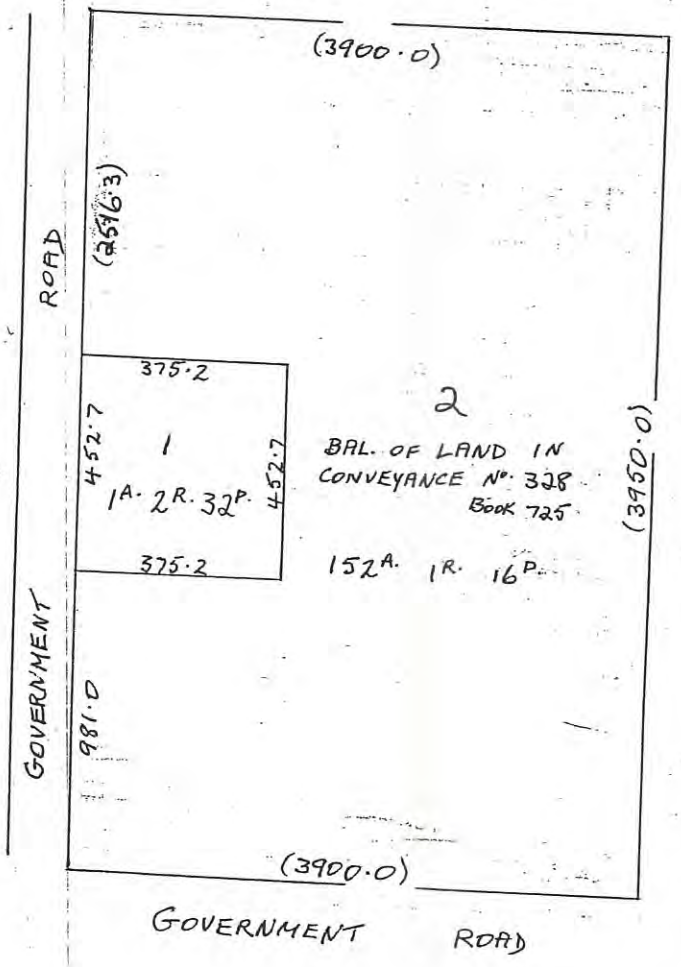
2 0 2 4
SCALE OF CHAINS
0 50 100
SCALE OF METRES



No. 05 2 Book 752

Not Changed

NATURE OF INSTRUMENT	NAMES, ADDRESSES AND ADDITIONS OF EACH PARTY	NAMES OF THE WITNESSES	DESCRIPTION OF THE LANDS OR PROPERTY CONVEYED	CONSIDERATION AND HOW PAID	RECITALS AND ANY OTHER PARTICU THAT THE CASE MAY R
Contract of Sale	JOSEPH CHARLES LOBB of Mickleham, Farmer Vendor LENSWORTH FINANCE (VIC.) PTY. LIMITED of 176 Queen Street, Melbourne Purchaser		ALL THAT piece of land containing 152 acres 1 rood 16 perches or thereabouts and being Lot 2 on a Plan of Subdivision being prepared by Richard Rogalsky Pty. Ltd. Surveyors of 107 Buckley Street Essendon and coloured red on the plan endorsed hereon and being part of the land described in Deed of Conveyance No. 328 Book 725 part Allotment 11A Parish of Mickleham	ONE HUNDRED AND FOURTEEN THOUSAND TWO HUNDRED AND SIXTY-TWO DOLLARS (114,262.00) Deposit of $35,000.00 of which sum $11,425.00 on or before signing of Contract of Sale and $23,575.00 at the expiration of 30 days from the date of Contract. Residue by annual instalments of $9907.75 the first of which shall be paid on the 26th day of May 1973 and thereafter on the 26th day of May in every year until the 26th day of May 1980 when the whole of the then outstanding balance of purchase money and interest shall become due and payable	



The original document to which this memorial/copy relat has been deposited under Secti 15 Property Law Act. No. 130251

Matter of the
Law Act 1958" }

ERTIFY that this Memorial contains a just and true account of the several particulars in set forth.

Signature Mark Fogarty

Qualification Barrister & Solicitor

EXECUTED by LENSWORTH FINANCE (VIC.) PTY. LIMITED by being signed sealed and delivered by its Attorneys under Power of Attorney No. 185566 in the presence of :

DALE STANLEY SUTHERL

Michael John C

1 236/81 ✓

2 234/383 263 X

The original instrument to which this memorial/copy relates has been deposited under Section 15 Stamp Duty Law Act.

No. 124913 / M130255 $826,963.50 MT

AP 108855.

person certifying any party signing memorial should at the end of morial.

rt name, address qualification of on certifying.

ll assist ration if capacity Grantor, gagor etc.) own in 3.

t as headings 4, 5, 7 the following:— Names of the Witnesses:— Pecuniary or other onsideration:— Recitals and any other particulars hat the case may equire:— Description of the roperty intended o be affected:— g out thereafter levant nation (or in the of 7 drawing any nt plan).

MEMORIAL BOOK 832 NO. 510

I, ANDREW WARNER ERIKSON, Solicitor, of 121 William Street, Melbourne certify that this memorial contains a just and true account of the several particulars hereunder set forth of an instrument to be registered in the Office of the Registrar-General.

PARTICULARS REFERRED TO

1. DATE OF INSTRUMENT:— 1 / 8 /19 84 TIME 0000
2. NATURE OF INSTRUMENT:— CONVEYANCE R/N056929 05/12/84 03 CD#09$ 9.00
3. NAME, ADDRESS AND DESCRIPTION OF EACH PARTY:—

LENSWORTH FINANCE (VIC.) PTY. LIMITED of 176 Queen Street, Melbourne in the State of Victoria ("the Vendor")

First part

T. & G. MUTUAL LIFE SOCIETY LIMITED of 147 Collins Street, Melbourne in the said State ("the Purchaser")

Second part

and

THE NATIONAL MUTUAL LIFE ASSOCIATION OF AUSTRALASIA LIMITED of 447 Collins Street, Melbourne in the said State ("the Grantee")

Third part

4. Names of Witnesses :-
Joanne Fraser.

5. Consideration :- FIRST the sum of $11,821,384-03 paid by the Purchaser and the Grantee to the Vendor. SECONDLY an Agreement dated the 4th day of March, 1983 between the Purchaser and the Grantee.

6. Recitals :- the entitlement of the Grantee to a Conveyance for an estate in fee simple by virtue of the provisions of the Agreement dated the 4th day of March, 1983.

7. Land Description:-

FIRST ALL THAT piece or parcel of land situate in the Parish of Mickleham County of Bourke and State of Victoria being part Portion Number 18 of the said Parish commencing at a point eighty-one chains sixty links distant from the North west corner or angle of the said Portion bounded on the North by a road one chain wide and a line bearing East twenty-seven chains twenty links on the East by a right of way of half a chain and a line bearing South nineteen chains seventy-five links or thereabouts on the South by other part of said Portion Number Eighteen and a line bearing West Twenty-seven chains eighty-one links or thereabouts and on the West by other part of the said Portion Number Eighteen being the land hereinafter described and a line bearing North Easterly Nineteen chains seventy-eight and three quarters links or thereabouts to the commencing point being part of the land described in Conveyance No. 311 Book 754.

See AP 633500 Conversion 26E lgd 803 7/6/88

Received into the Office of the Registrar General of the State of Victoria this 5th day of Dec 19 84 at the hour of 1:35 in the after noon

A. W. Erikson
Solicitor Melbourne

Prepared by ..... toria

The reverse side of this sheet must be used before a further sheet is added. If further sheets are added each must be of the same size and quality as this sheet, and have the same margins, and all sheets must be numbered and signed by both the party signing and beneath the number of the sheet by the person certifying.

13

SECONDLY - ALL THAT piece or parcel of land situate in the Parish of Mickleham aforesaid being part of said Portion Eighteen commencing at a point fifty-four chains forty links distant from the North west corner or angle of the said portion bounded on the North by a road one chain wide and a line bearing East twenty-seven chains twenty links or thereabouts on the east by other part of the said portion being the land firstly hereinbefore described and a line bearing South westerly nineteen chains seventy eight and three quarters links or thereabouts on the South by other part of the said portion in a line bearing West Twenty-seven chains eighty-one links or thereabouts and on the West by other part of the said Portion in a line bearing North easterly Nineteen chains Eighty-two and one half links to the commencing point being part of the land described in Conveyance No. 311 Book 754.

THIRDLY - ALL THAT piece or parcel of land being part of Portion 2A in the Parish of Mickleham in the County of Bourke in the State of Victoria and which said piece or parcel of land commences at a point on the North East corner of the said Portion 2A and is bounded on the East by Portion One being a line bearing South 27 chains 74 links be the same more or less on the South by other portions of said Portion 2A being a line at right angles to the last line bearing West 12 chains 13 links then on the West by a private lane 50 links wide and being a line at right angles to the last line bearing North 27 chains 74 links or thereabouts then on the North by a Government Road one chain wide and being a line at right angles to the last line bearing East 12 chains 13 links to the commencing point being part of the land described in Conveyance No. 406 Book 756.

FOURTHLY - ALL THAT piece of land containing 152 acres 1 rood and 16 perches or thereabouts being part of Crown Portion 11A Parish of Mickleham and being Lot 2 on a Plan of Subdivision by Licensed Surveyor Neil Alfred Webster dated the 5th April, 1972 which Plan has been deposited in the Office of the Registrar General Number 54762 and being part of the land described in Deed of Conveyance Number 328 Book 725.

EXECUTED by LENSWORTH FINANCE (VIC.) PTY. LIMITED by being signed sealed and delivered by its Attorneys under Power of Attorney dated 7th July, 1982 a certified copy of which has been lodged in the Permanent Order Book No. 276 Page 290 in the presence of :

JAMES SWAN
State Operations Manager

PETER MURRAY MALBOURNE
Credit Controller

EXECUTED by T. & G. MUTUAL LIFE SOCIETY LIMITED by being signed sealed and delivered by its Attorneys NEIL HENRY ELLIOTT and KENNETH EASON HIGGS under Power of Attorney dated ~~19th July~~ 29 MAY, 198~~2~~4 a certified copy of which is filed in the Permanent Order Book No. 276 Page 29~~8~~5 in the presence of : J Fraser

EXECUTED by THE NATIONAL MUTUAL LIFE ASSOCIATION OF AUSTRALASIA LIMITED by being signed sealed and delivered by its Attorneys NEIL HENRY ELLIOTT and KENNETH EASON HIGGS under Power of Attorney dated ~~12th April~~ 29 MAY, 198~~2~~4 a certified copy of which is filed in the Permanent Order Book No. 276 Page 29~~8~~5 in the presence of : J Fraser

C 140/127

A.P. 108855

S/A 10,000

MEMORIAL BOOK 861 NO. 369

I, GARY CHARLES BLENKIRON of 59 O'Shanassy Street, Sunbury in the State of Victoria, Solicitor certify that this memorial contains a just and true account of the several particulars hereunder set forth of an instrument to be registered in the Office of the Registrar-General.

PARTICULARS REFERRED TO

1. DATE OF INSTRUMENT:— 1st 1/1988
2. NATURE OF INSTRUMENT:— DEED OF CONVEYANCE
3. NAME, ADDRESS AND DESCRIPTION OF EACH PARTY:— THE NATIONAL MUTUAL LIFE ASSOCIATION OF AUSTRALASIA LIMITED of 447 Collins Street, Melbourne (therein called "the Vendor") of the one part and FRANCIS STOWE COCKING, RUTH ELSIE COCKING, NOEL THOMAS COCKING and NOLA ALBYN COCKING all of "Lindum Vale" Mickleham Road, Mickleham as tenants in common in equal shares (therein called "the Purchasers") of the other part.
4. WITNESS C. Curtain
5. CONSIDERATION: TWO HUNDRED AND THIRTY THOUSAND DOLLARS ($230,000-00)
6. RECITALS: NIL
7. LAND DESCRIPTION: ALL THAT piece of land containing 152 acres 1 rood and 16 perches or thereabouts being part of Crown Portion 11A Parish of Mickleham and being Lot 2 on Plan of Subdivision by Licensed Surveyor Neil Alfred Webster dated the 5th April, 1972 which Plan has been deposited in the Office of the Registrar General No. 54762 and being part of the land described in Deed of Conveyance No. 510 Book 832.

FSC x F. S. Cocking

REC x R. E. Cocking

NTC x N. T. Cocking

NAC x Nola A. Cocking

G. C. Blenkiron
Signature of person certifying

Received into the Office of the Registrar General of the State of Victoria this 20th day of FEB 19 88 at the hour of 11.20 in the forenoon
A memorial of the within deed

Prepared by G.C. BLENKIRON, Solicitor for the Purchasers, 59 O'Shanassy Street, Sunbury.

The reverse side of this sheet must be used before a further sheet is added. If further sheets are added each must be of the same size and quality as this sheet, and have the same margins, and all sheets must be numbered and signed by both the party signing and beneath the number of the sheet by the person certifying.

15

Harston, Partridge & Co. Printers, Melbourne L 37

TITLE PLAN

EDITION 1

TPDRAFT

LOCATION OF LAND

PARISH: MICKLEHAM
TOWNSHIP:
SECTION:
CROWN ALLOTMENT: 11A (PT)
CROWN PORTION:
LAST PLAN REFERENCE:
DERIVED FROM:
DEPTH LIMITATION: NIL

NOTATIONS

WARNING AS TO DIMENSIONS:
ANY DIMENSION AND CONNECTING DISTANCE SHOWN IS BASED ON THE DESCRIPTION OF THE LAND CONTAINED IN THE GENERAL LAW TITLE AND IS NOT BASED ON SURVEY INFORMATION WHICH HAS BEEN INVESTIGATED BY THE REGISTRAR OF TITLES.

EASEMENT INFORMATION

E - ENCUMBERING EASEMENT. R - ENCUMBERING EASEMENT (ROAD). A - APPURTENANT EASEMENT.

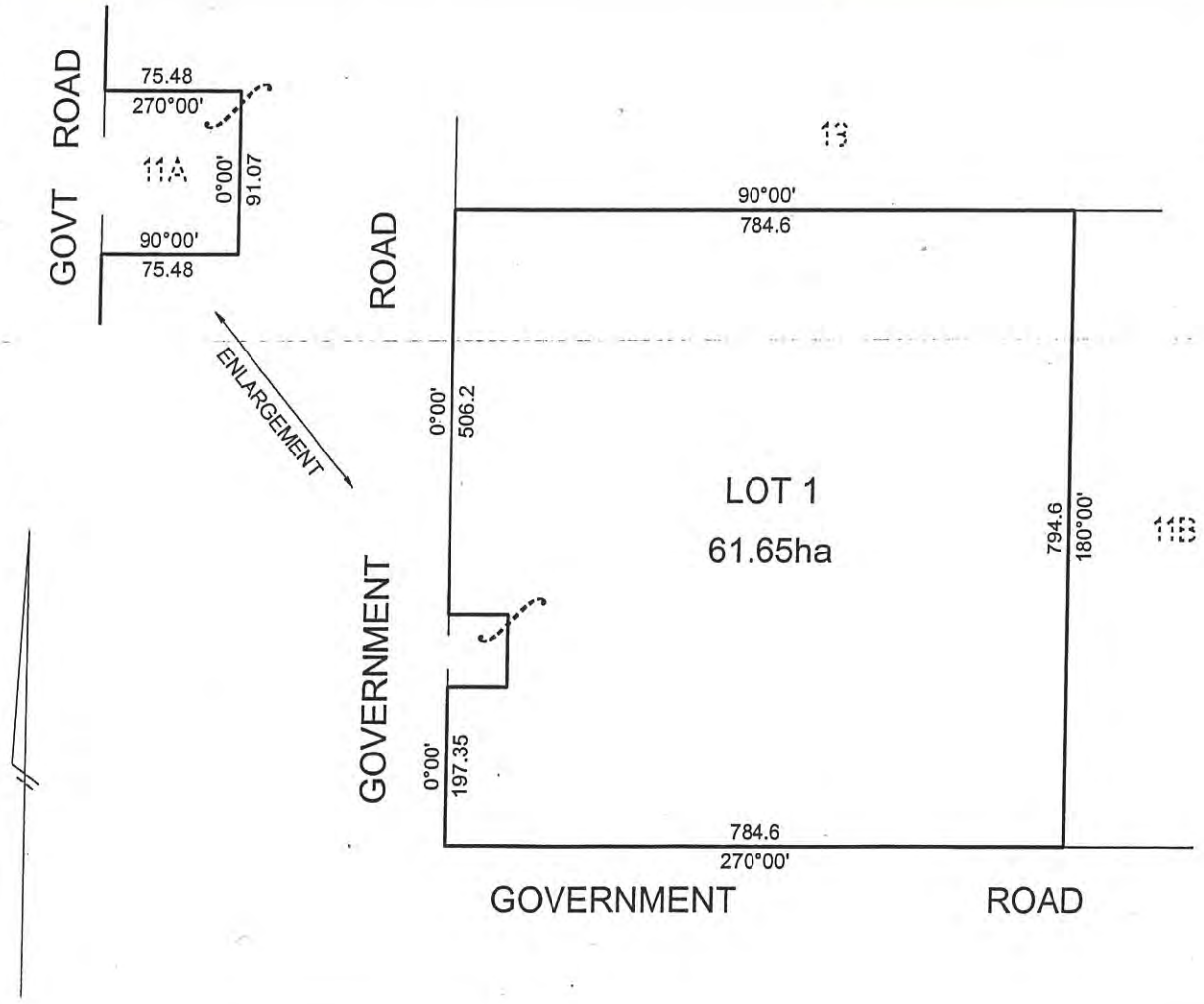
Easement Reference	Purpose / Authority	Width (Metres)	Origin	Land benefited / In favour of

THIS PLAN HAS BEEN PREPARED BY LAND REGISTRY, LAND VICTORIA, FOR TITLE DIAGRAM PURPOSES

Checked by:

Date:

Assistant Registrar of Titles



LENGTHS ARE IN METRES	SCALE	DEALING / FILE No: AP108855	DEALING CODE: 14
	—	GOVERNMENT GAZETTE No:	SHEET 1 OF 1

SKETCH OF LAND SEARCHED AP 108855

Land Searched

Parish: Micklham.

Town:

Section:

Crown Allotment: ~~Whole~~ / Part 11A. LOT 2.

Crown Portion: Whole / Part

LTO base record:

Plan Reference:

Last Registered Owners

Book 861 No. 369.

Encumbrances (other than easements)

Mortgage Book_____ No._____

Mortgage Book_____ No._____

Mortgage Book_____ No._____

Covenant Book_____ No._____

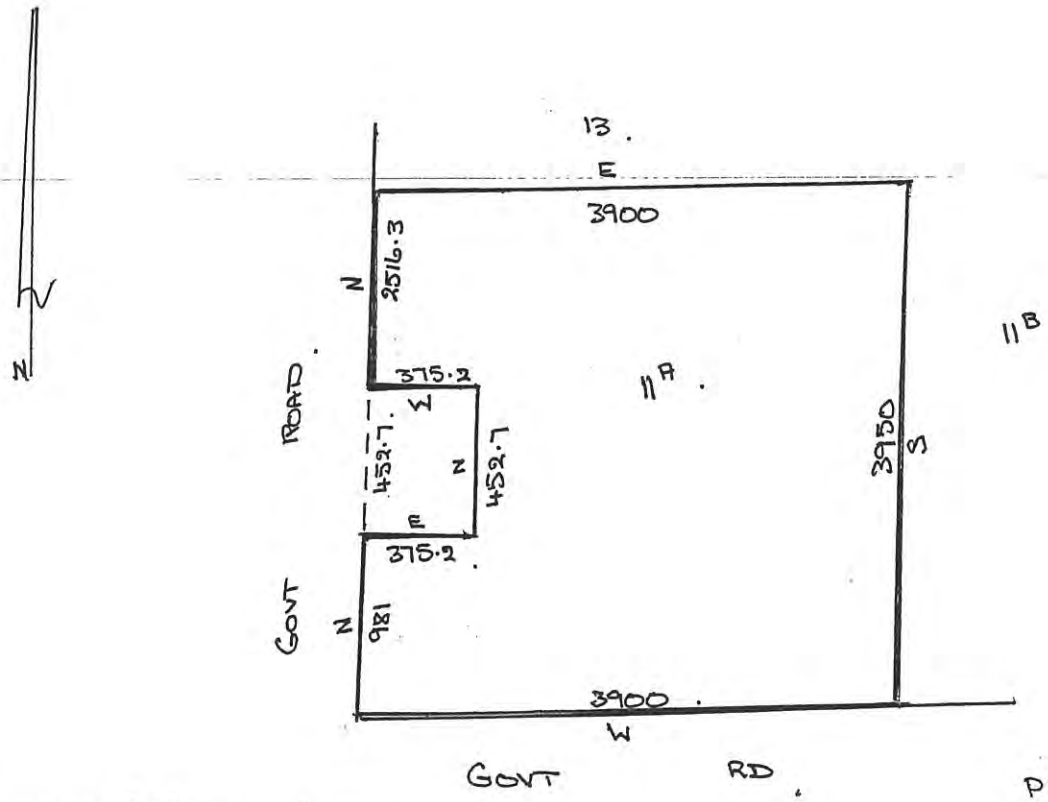
Charge Book_____ No._____

Notices Book_____ No._____

Other Book_____ No._____

Easements (Encumbering or Appurtenant)

Easement Reference eg (E-1, A-1)	Purpose/Authority	Width	Origin Book No.	Land benefitted/In favour of (If apparent from search)



PLAN FROM D.D 54762.

LENGTHS ARE IN Links.

Dimensions are from ~~Crown Grant~~ / Book 732 No. 652.

Connection is from Book _____ No. _____ / Other _____

Note to Legal Practitioners

(Taken from Schedule 5A Transfer of Land Act) Where the land description includes rights of appurtenancy, abuttal, etc. justified in any deed which forms part of a separate chain of title, a photocopy of the deed, certified by the Legal Practitioner making the certificate, must be produced. That chain of title must also be produced, except those parts which have been accepted by the Registrar under a prior conversion.

AP 108855

SCALE OF CHAINS 0 2 4

SCALE OF METRES 0 50 100

AP69036

Pt 11A

P/ Mickleham

(3900·0)

(2516·3)

ROAD

300

300

300

300

100

179° 53'

179° 53'

89° 53' Fenced

375·2

AP69036

I

452·7

452·7

1A. 2R. 32P.

Various Outbuildings

375·2

269° 53' Fenced

Not Fenced

Not Fenced

Not

4·5

2·4

2·5

4·0

Post & Rail & Wire

Post & Wire & Stone Wall

2

(Not Subject to Survey)

Balance of land in Conveyance N° 328 Book 725

152A. 1R. 16P.

(3950·0)

981·0

1·0

1·8

2·6

2·0

Stone Wall

(3900·0)

GOVERNMENT ROAD

GOVERNMENT ROAD

Concrete Post & Wire

Concrete Post & Wire

NEIL ALFRED WEBSTER

Note: Dimensions in brackets are not based on survey.

The Council of the Shire of Bulla hereby consent to this plan of subdivision and affix the common seal of the Municipality hereto.

Dated 4th September 1972

April 72

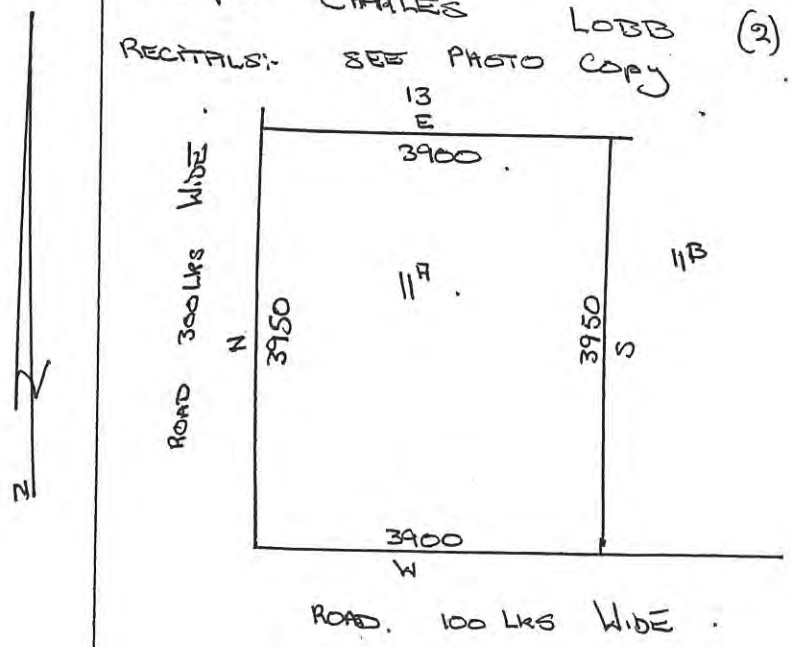
Neil Webster

12-4-72

General Law Search Library

EXTRACTION SHEET

Book	No.	Deed Type	PARTIES	LAND
			THE CHAIN OF TITLE UP TO BUT NOT INCLUDING BOOK 725 NO. 328 HAS BEEN ACCEPTED BY THE REGISTRAR OF TITLES IN A PRIOR APPLICATION/ 69036. CONVERSION AND NEED NOT BE PRODUCED WHEN BRINGING LAND UNDER THE TRANSFER OF LAND ACT. FOR REGISTRAR OF TITLES	P/ MICKLEHA P. 11A
D.O 30250. 725	328			
DATED 21-4-1971 REG'D 30-4-1971		CONVEY / DEVISE.	JOSEPH CHARLES LOBB (EXECUTOR OF EMMA LENA LOBB DEC'D.) (1) JOSEPH CHARLES LOBB (2) RECITALS:- SEE PHOTO COPY.	SAME.



MEASUREMENTS LINKS.

SEARCHER INITIALS

C:\DATA\SEP\EXTRACYB.DOC

AP108855M
16/04/2009 $99.90 14

TO: The Registrar of Titles

I, Stephen Terence Fair of Fair Legal, 360 Little Bourke Street, Melbourne, Solicitors, having examined a search made up to 12 August 2008 as disclosed in the attached search of title against the land in the schedule, having examined the documents forming the chain of title to the land from the crown grant or last deed known to the Registrar of Titles or accepted by the Registrar of Titles in a prior conversion save and except any documents set out in clause 7 of the schedule and having examined the searches and enquiries as I consider necessary DO CERTIFY THAT:

1 the persons shown in clause 3 of the schedule have acquired a good safe holding and marketable title to the land including such appurtenances, abuttal rights, etc as are set out in clause 2 of the schedule subject to the mortgages, encumbrances, claims, rights, estates or interests set out in clauses 4, 5 and 6, of the schedule and the qualifications set out in clause 7 of the schedule;

2 the root of title is the following instrument:

Deed of Conveyance Book 753 No. 935;

3 the land is not subject to control under the laws relating to bankruptcy or insolvency;

4 the value of the land including all buildings and other improvements thereon is $8,015,800.00 or thereabouts;

5 I am a natural person who is a current practitioner within the meaning of the *Legal Profession Act 2004*.

Date: 14 April 2009

Stephen Terence Fair

STEPHEN TERENCE FAIR
An Australian Legal Practitioner
(within the meaning of *Legal Profession Act 2004*)
1/360 Little Bourke Street
Melbourne, 3000

SCHEDULE

1	**Address of property**	1960 Mickleham Road, Mickleham
2	**Land**	All that piece or parcel of land containing 152 acres 1 rood and 16 perches or thereabouts being part of Crown Portion 11A Parish of Mickleham and being Lot 2 on plan of subdivision by Licensed Surveyor Neil Alfred Webster dated 5th April 1972 which plan has been deposited in the Office of the Registrar General No. 54762 and being part of the land described in Deed of Conveyance No. 510 Book 832
3	**Full name and address of owner**	Ruth Elsie Cocking, Noel Thomas Cocking and Nola Albyn Cocking all of "Lindum Vale" Mickleham Road, Mickleham 3064 and Eric Francis Cocking of 1990 Mickleham Road, Mickleham 3064 and Harold James Cocking of 800 Old Sydney Road, Beveridge 3753 as Executors of the will of Francis Stowe Cocking as JP
4	**Mortgages**	Nil TICES
5	**Encumbrances**	Nil
6	**Claims, rights, estates or interests**	Nil
7	**Qualifications**	Deed of contract of Sale Book 854 No. 775 is missing.

Department of Sustainability and Environment

Folio Report

Produced: 17/04/2009 4:52:10 PM

VOLUME 11129 FOLIO 424

LAND DESCRIPTION

Lot 1 on Title Plan 943445M.
Created by Application No. 108855M 16/04/2009

REGISTERED PROPRIETOR

Estate Fee Simple
TENANTS IN COMMON
As to 4 of a total of 16 equal undivided shares
Sole Proprietor
RUTH ELSIE COCKING of 2040 MICKLEHAM ROAD MICKLEHAM VIC 3064
As to 5 of a total of 16 equal undivided shares
Sole Proprietor
NOEL THOMAS COCKING of 1420 CANARY ISLAND ROAD LODDON VALE VIC 3575
As to 4 of a total of 16 equal undivided shares
Sole Proprietor
NOLA ALBYN COCKING of 1420 CANARY ISLAND ROAD LODDON VALE VIC 3575
As to 1 of a total of 16 equal undivided shares
Sole Proprietor
ERIC FRANCIS COCKING of 1990 MICKLEHAM ROAD MICKLEHAM VIC 3064
As to 1 of a total of 16 equal undivided shares
Sole Proprietor
HAROLD JAMES COCKING of 800 OLD SYDNEY ROAD BEVERIDGE VIC 3753
As to 1 of a total of 16 equal undivided shares
Sole Proprietor
DAVID WILFRED COCKING of 1100 SOMERTON ROAD GREENVALE VIC 3059
AG455186U 16/04/2009

ENCUMBRANCES, CAVEATS AND NOTICES

Any encumbrances created by Section 98 Transfer of Land Act 1958 or Section 24 Subdivision Act 1988 and any other encumbrances shown or entered on the plan set out under DIAGRAM LOCATION below.

Warning as to Dimensions
Any dimension and connecting distance shown is based on the description of the land as contained in the General Law Title and is not based on survey information which has been investigated by the Registrar of Titles.

DIAGRAM LOCATION

SEE TP943445M FOR FURTHER DETAILS AND BOUNDARIES

Department of Sustainability and Environment

Folio Report

Produced: 17/04/2009 4:52:10 PM

ACTIVITY IN THE LAST 125 DAYS

NUMBER		STATUS	DATE
AP108855M	NON-SURVEY CONVERSION	Registered	17/04/2009
AG455186U	TRANSFER	Registered	17/04/2009

----------END OF FOLIO REPORT----------

Additional information: (not part of the Folio Report)

Street Address: 1960 MICKLEHAM ROAD MICKLEHAM VIC 3064

DOCUMENT END

TITLE PLAN

EDITION 1

TP943445M

LOCATION OF LAND

PARISH: MICKLEHAM
TOWNSHIP:
SECTION:
CROWN ALLOTMENT:
CROWN PORTION: 11A (PT)
LAST PLAN REFERENCE:
DERIVED FROM:
DEPTH LIMITATION: NIL

NOTATIONS

WARNING AS TO DIMENSIONS:
ANY DIMENSION AND CONNECTING DISTANCE SHOWN IS BASED ON THE DESCRIPTION OF THE LAND CONTAINED IN THE GENERAL LAW TITLE AND IS NOT BASED ON SURVEY INFORMATION WHICH HAS BEEN INVESTIGATED BY THE REGISTRAR OF TITLES.

EASEMENT INFORMATION

E - ENCUMBERING EASEMENT. R - ENCUMBERING EASEMENT (ROAD). A - APPURTENANT EASEMENT.

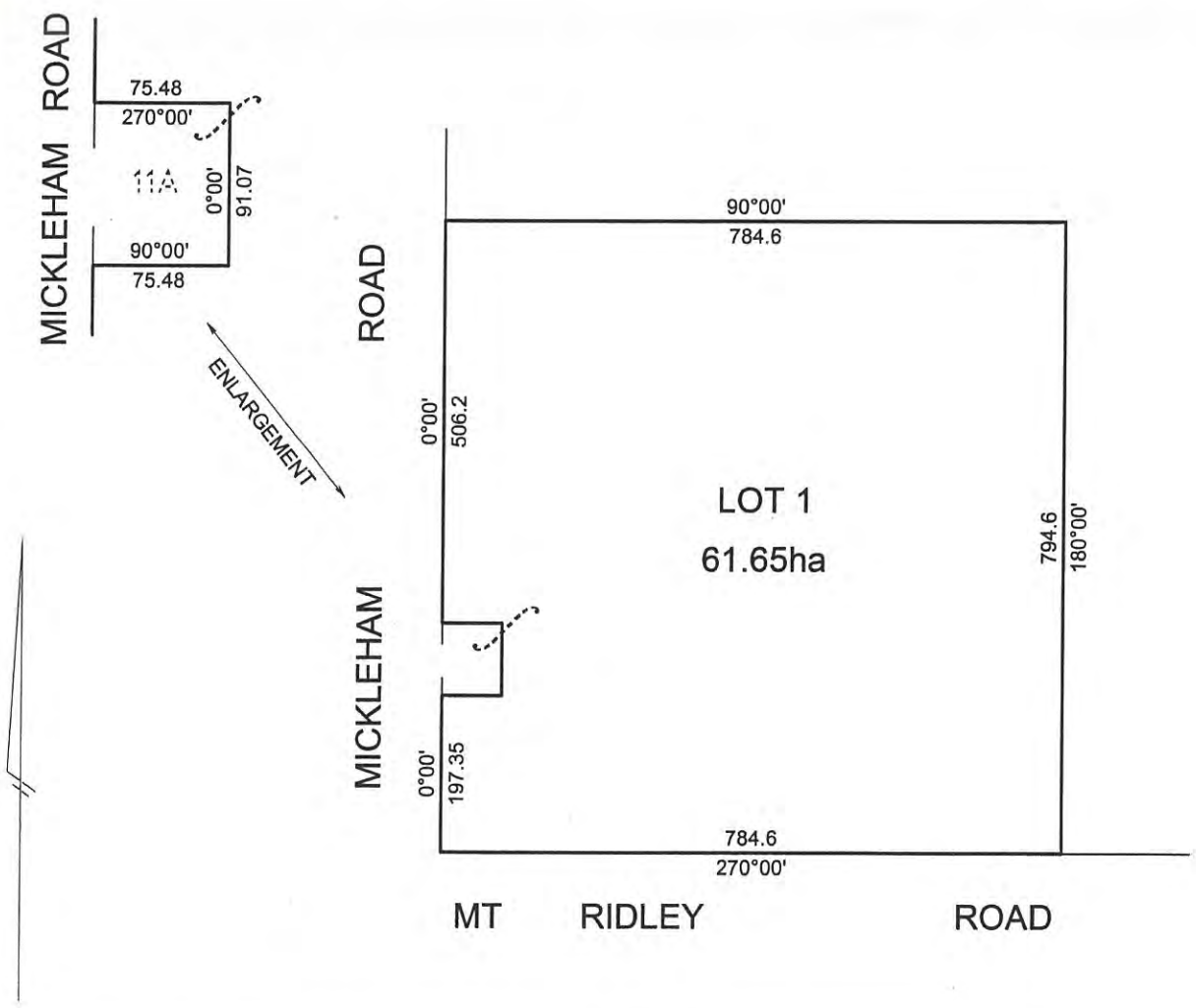
Easement Reference	Purpose / Authority	Width (Metres)	Origin	Land benefited / In favour of

THIS PLAN HAS BEEN PREPARED BY LAND REGISTRY, LAND VICTORIA, FOR TITLE DIAGRAM PURPOSES

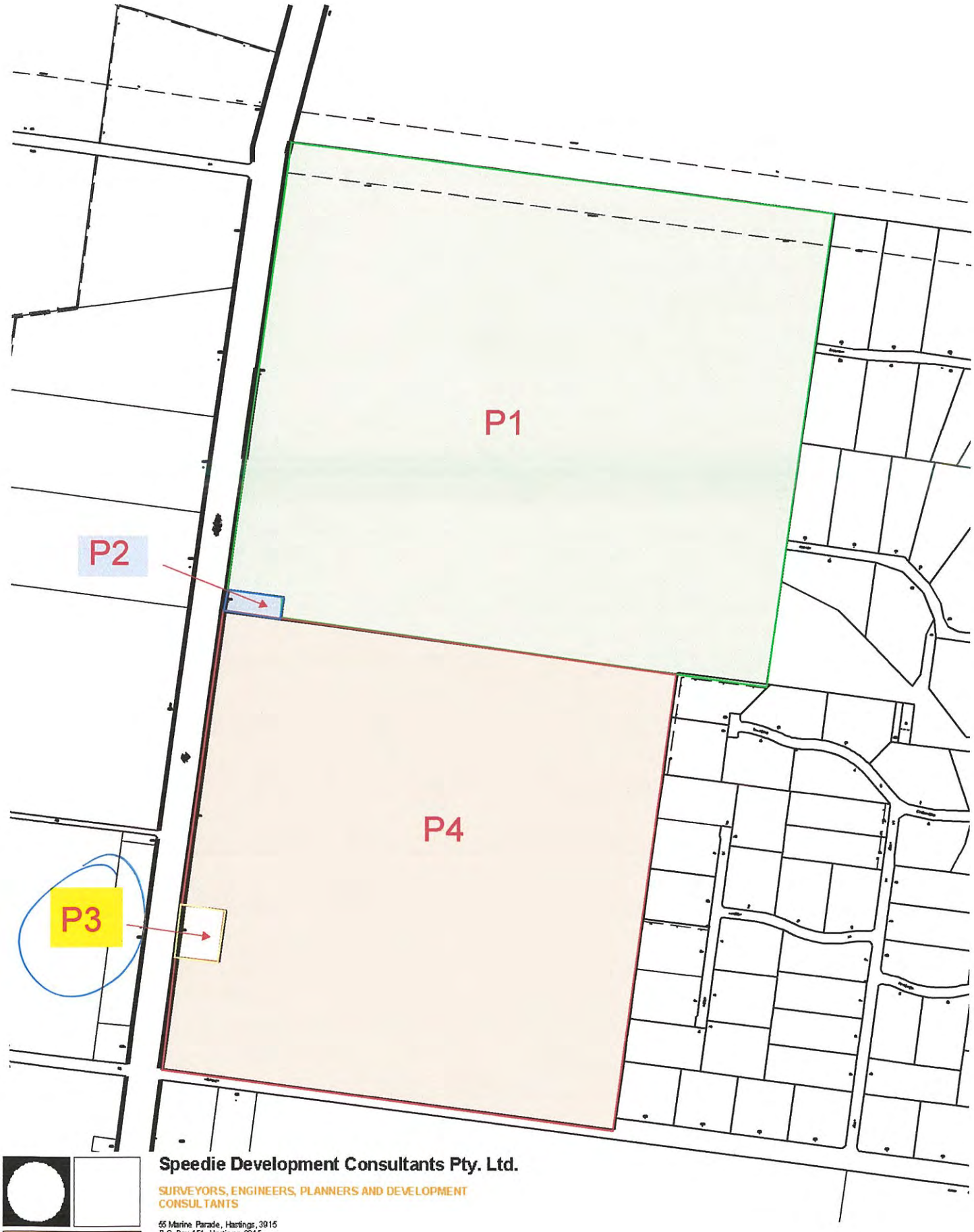
Checked by: DSG

Date: 17/04/2009

Assistant Registrar of Titles



LENGTHS ARE IN METRES	SCALE	DEALING / FILE No: AP108855M	DEALING CODE: 14
	—	GOVERNMENT GAZETTE No:	SHEET 1 OF 1



Speedie Development Consultants Pty. Ltd.

SURVEYORS, ENGINEERS, PLANNERS AND DEVELOPMENT CONSULTANTS

55 Marine Parade, Hastings, 3915
P.O. Box 151, Hastings, 3915
Telephone: (03) 5979 5000
Facsimile: (03) 5979 3355
Facsimile: (03) 5979 5050

VOLUME 10008 FOLIO 221

Security no : 124044429726X
Produced 14/01/2013 11:12 am

LAND DESCRIPTION

Lot 1 on Title Plan 839675A (formerly known as part of Portion 11A Parish of Mickleham).
Created by Application No. 069036P 13/03/1991

REGISTERED PROPRIETOR

Estate Fee Simple
Joint Proprietors
CARMEL PATRICIA GRGIC
TOM GRGIC both of 1920 MICKLEHAM ROAD MICKLEHAM
Application No. 069036P

ENCUMBRANCES, CAVEATS AND NOTICES

MORTGAGE Book 864 No.981
COMMONWEALTH BANK OF AUSTRALIA
(AP69036P)

MORTGAGE AC782727U 05/04/2004
COMMONWEALTH BANK OF AUSTRALIA

Any encumbrances created by Section 98 Transfer of Land Act 1958 or Section 24 Subdivision Act 1988 and any other encumbrances shown or entered on the plan set out under DIAGRAM LOCATION below.

Warning as to Dimensions
Any dimension and connecting distance shown is based on the description of the land as contained in the General Law Title and is not based on survey information which has been investigated by the Registrar of Titles.

DIAGRAM LOCATION

SEE TP839675A FOR FURTHER DETAILS AND BOUNDARIES

ACTIVITY IN THE LAST 125 DAYS

NIL

----------END OF REGISTER SEARCH STATEMENT----------

Additional information: (not part of the Register Search Statement)

Street Address: 1920 MICKLEHAM ROAD MICKLEHAM VIC 3064

DOCUMENT END

TITLE PLAN

EDITION 1 **TP 839675A**

Location of Land

Parish MICKLEHAM
Township : --
Crown Allotment : -
Crown Portion : 11 A (PART)
Section : --
Last Plan Reference : --
Title Reference : VOL. 10008 FOL. 221
Depth Limitation : NIL

Notations
NOTE 1 : LOT 1 = PART OF CROWN PORTION 11 A

WARNING AS TO DIMENSIONS
ANY DIMENSION AND CONNECTING DISTANCE SHOWN IS BASED ON THE DESCRIPTION OF THE LAND AS CONTAINED IN THE GENERAL LAW TITLE AND IS NOT BASED ON SURVEY INFORMATION WHICH HAS BEEN INVESTIGATED BY THE REGISTRAR OF TITLES

Easement Information
E – Encumbering Easement R – Encumbering Easement (ROAD) A – Appurtenant Easement

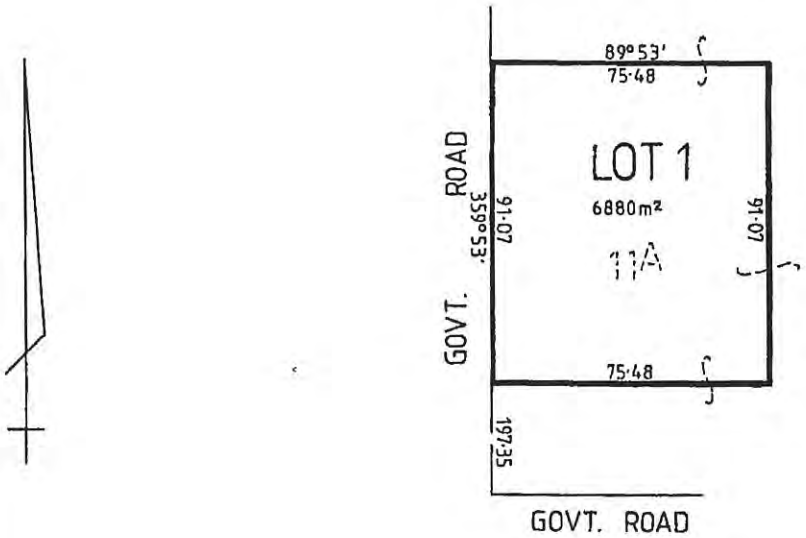
Easement Reference	Purpose/ Authority	Width (Metres)	Origin	Land benefited / In favour of

THIS PLAN HAS BEEN PREPARED BY LAND REGISTRY, LAND VICTORIA FOR TITLE DIAGRAM PURPOSES

Checked by :

Assistant Registrar of Titles

Date 20/7/04



LENGTHS ARE IN METRES	SCALE	SHEET SIZE A3	

HISTORICAL SEARCH STATEMENT Land Victoria

Produced 17/01/2013 01:15 PM

Volume 10008 Folio 221
Folio Creation: Created as paper folio continued as computer folio

THE IMAGE OF THE FOLIO CEASED TO BE THE DIAGRAM LOCATION ON 22/07/2004 09:05 AM

RECORD OF ALTS DEALINGS

Date Lodged for Registration	Date Recorded on Register	Dealing	Imaged	Dealing Type and Details

RECORD OF VOTS DEALINGS

Date Lodged for Registration	Date Recorded on Register	Dealing	Imaged
05/04/2004	15/04/2004	AC782727U	Y

MORTGAGE OF LAND
MORTGAGE AC782727U 05/04/2004
COMMONWEALTH BANK OF AUSTRALIA

STATEMENT END

VOTS Snapshot

Volume 10008 Folio 221
124009895899R
Produced 15/04/2004 04:24 pm

LAND DESCRIPTION

Lot 1 on Title Plan 839675A (formerly known as part of Portion 11A Parish of Mickleham).
Created by Application No. 069036P 13/03/1991

REGISTERED PROPRIETOR

Estate Fee Simple
Joint Proprietors
CARMEL PATRICIA GRGIC
TOM GRGIC both of 1920 MICKLEHAM ROAD MICKLEHAM
Application No. 069036P

ENCUMBRANCES, CAVEATS AND NOTICES

MORTGAGE Book 864 No.981
COMMONWEALTH BANK OF AUSTRALIA
(AP69036P)

Any encumbrances created by Section 98 Transfer of Land Act 1958 or Section 24 Subdivision Act 1988 and any other encumbrances shown or entered on the plan set out under DIAGRAM LOCATION below.

Warning as to Dimensions
Any dimension and connecting distance shown is based on the description of the land as contained in the General Law Title and is not based on survey information which has been investigated by the Registrar of Titles.

DIAGRAM LOCATION

SEE DIAGRAM ON IMAGED FOLIO VOLUME 10008 FOLIO 221 FOR FURTHER DETAILS AND BOUNDARIES

ORIGINAL

NOT TO BE TAKEN FROM THE OFFICE OF TITLES

VICTORIA

REGISTER BOOK

VOL. 10008 FOL. 221

Certificate of Title

UNDER THE "TRANSFER OF LAND ACT"

FOL.

VOL.

TOM GRGIC and CARMEL PATRICIA GRGIC both of 1920 Mickleham Road Mickleham are JOINT PROPRIETORS of an estate in fee simple subject to the encumbrances notified hereunder in all that piece of land in the Parish of Mickleham being part of Crown Portion 11A which land is shown enclosed by continuous lines on the map hereon- -

Dated 13/3/1991

DERIVED FROM APPLICATION 69036P

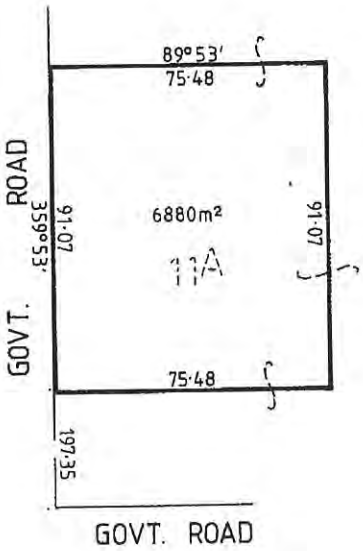
ENCUMBRANCES

OFFICE OF TITLES VICTORIA

Assistant Registrar of Titles

Mortgage to Commonwealth Bank of Australia registered Book 864 No. 981 (AP69036P)

Warning as to Dimensions
Any dimension and connecting distance shown is based on the description of the land as contained in the General Law Title and is not based on survey information which has been investigated by the Registrar of Titles.



GV

T10008-221-1-4

MEASUREMENTS ARE IN METRES

VOL. 10008 FOL. 221

MORTGAGE

COMMONWEALTH SAVINGS BANK OF AUSTRALIA

REGISTERED: 13/03/1991

R234908G

DISCHARGED 13 FEB 1992

OFFICE OF TITLES L.H. VICTORIA

OFFICE OF TITLES M. S. VICTORIA

AP069036P

$0 AP

SEARCH OF TITLE (G

Section 26F of the Transf

AP069

AP.6

LAND SEARCHED

~~Whole~~/Part Crown Allotment ~~or~~ 11A

Portion ~~at~~

~~Section~~ ~~at~~

~~Town~~

Parish of Mickleham County

and being the land sketched on page** 6 Attached , and being *~~the whole~~ of/part of the land described in ~~Book~~ ~~No.~~ or Crown Grant No. 2525L , from which this search starts.

1. I certify that I have made searches against the names on the index sheets ** (pages 1 to 4) and that extracts of all memorials by my search which affect the above land are set out on pages 7 to 39 ** attached.

2. I also certify that I have searched in the Registers of Executions, Lis Pendens, Crown Debtors, and Settlements and Arrangements, against the names of all persons who appear from the memorials to have had a beneficial interest in the land during the past thirty years, with the following
RESULT:-

*Nil or *see page of attached search.

ADDITIONAL SEARCHES

ADVERSE POSSESSION

3.* I certify that I have searched the names of the current owner and prior adverse possessors provided to me and the Municipality, Public Trustee and the Registrar of the County Court as set out on index sheet number(s)_____ with the results set out on page(s)_____.

4.* I also certify that I have searched in the Registers of Executions, Lis Pendens, Crown Debtors and Settlements and Arrangments against the names of all persons referred to in Clause 3.

BANKRUTPCY

5. I also certify that I have searched in the Bankruptcy Registers held in the Register-General's Office against all persons referred to in Clause 3 and those shown in the Land Register to have an interest in the above land during the past 20 years, up to 28-3-1990 being the date of the microfiche, with the following results:

*Nil or *see page of attached search.

SIGNED: ..... DATE 4 / 5 /1990
(Signature of Searcher)

* delete where not applicable

** attached pages should be numbered consecutively and each should be signed or initialled by

AP 69036

TO 1/88/02

INDEX SHEET

NAME 1 of 1 on Plan of Subdivision of Allotment 11 A

LAND SEARCHED Parish of Middleham.

	OLD SERIES	NEW SERIES	DEALINGS
Wright Edward	25-A	72-45	E Wright S-129 ✓ 9-375 ✓ 179-68 ✓
Parnell George	13-189	30-259	G Parnell Nil.
Barber Chase	2-259	2-195	C Barber 151-743 ✓
Parnell Thirza Harman Robert		69-326 22-173	T. Parnell R. Harman 321-706 ✓
Harman Arthur Samuel		67-371	A S. Harman 287-190 ✓ (A) 321-707 ✓ " 376-16 ✓ (B) 438-336 ✓ (A1) 443-88 ✓ " 492-198 ✓ " 568-888 "
Couchman Augusta Ann.		173-286	A A Couchman 321-705 ✓

Memorials extracted to be ticked

Memorials not applicable to be marked "N.A."

LTO 12/87/14

INDEX SHEET

NAME

LAND SEARCHED

	OLD SERIES	NEW SERIES	DEALINGS
Couchman Thomas Oseland		172.103	T.O. Couchman Nil.
Howat George		147.371	G. Howat 438-321 ✓ 322 ✓
Commercial Bank of Aust.		213.48	CBA 443-817 ✓
Harman Sarah Jane		138.3	S.J. Harman 443-818 ✓ 492-198 ✓ 568-888 ✓
Stockdale Mary		66.358	M. Stockdale 448-86 ✓
Stockdale William		64-38	W. Stockdale 448-86 ✓
Stockdale Benjamin		201-12	B. Stockdale 448-86 ✓
Stockdale John Samuel		137.133	J.S. Stockdale 492-198 ✓

Memorials extracted to be ticked

Memorials not applicable to be marked "N.A."

LTO 12/87/14

INDEX SHEET

NAME

LAND SEARCHED

OLD SERIES	NEW SERIES	DEALINGS
Simmons Ernest	62-117	E. Simmons 492-198 ✓
Mackinnon Lachlan Kennedy Scobie	11-330	LKS Mackinn 492-198 ✓
Stockdale Mary Ann " Sarah Ann	129-288	MA & SA Stockdale 568-887 ✓
Lobb Emma Lena " Joseph Charles	220-276.	EL & JC Lobb 725-328 ✓ AP108855H 17/4/09 732-652 NA(Lo 737-745 ✓ 753-935 NA(L 796-691 NA
Capper Thomas Hutchinson Wendy Fay	114-47	TH & WF Capper 737-970 ✓ 793-159 ✓
Bank of NSW	MIF	NSW 793-158 ✓
Angliss William Arthur Wendy Elizabeth	136-110	WA & WE Angliss 793-160 ✓ 827-902 ✓

Memorials extracted to be ticked

Memorials not applicable to be marked "N.A."

INDEX SHEET

NAME

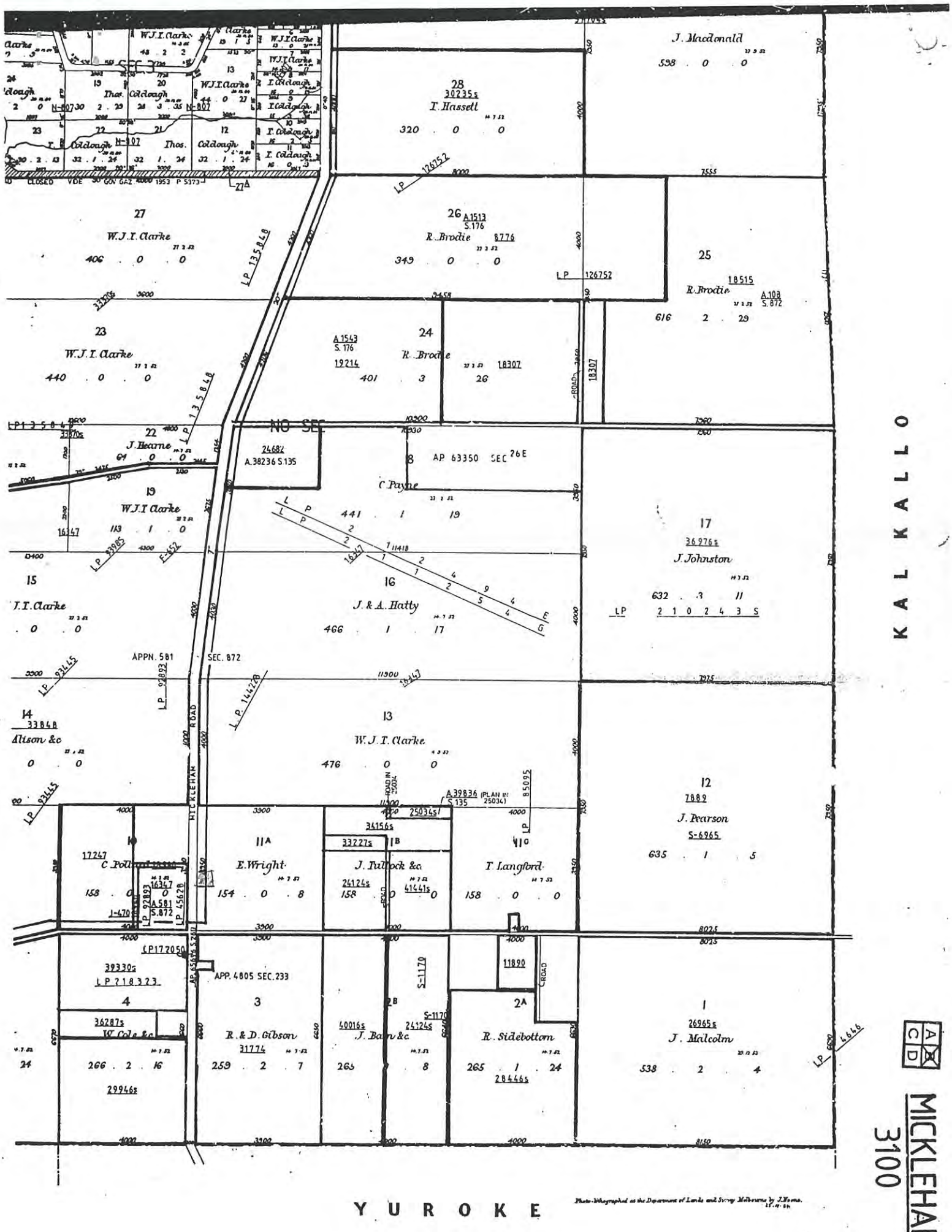
LAND SEARCHED

	OLD SERIES	NEW SERIES	DEALINGS
Peebles. John Millar. Denise Margaret		152-158	J M & D M Peebles 828-72 ✓ " 327 ✓ 862-584 ✓ 864-980 ✓
ANZ Bank	52-2	MIF	ANZ 864-978 ✓ 979 ✓
Cvrgic Tom Carmel Patricia		165-388	T & C.P. Cvrgic 864-981. ✓
Commonwealth Bank	54-2		C'wealth ~~Last 878-540 N/A~~ Last 882-953 N/A
National Australia Bank		MIF	NAB 827-901 ✓

Ind Search
Wm 12.45
19/3/91

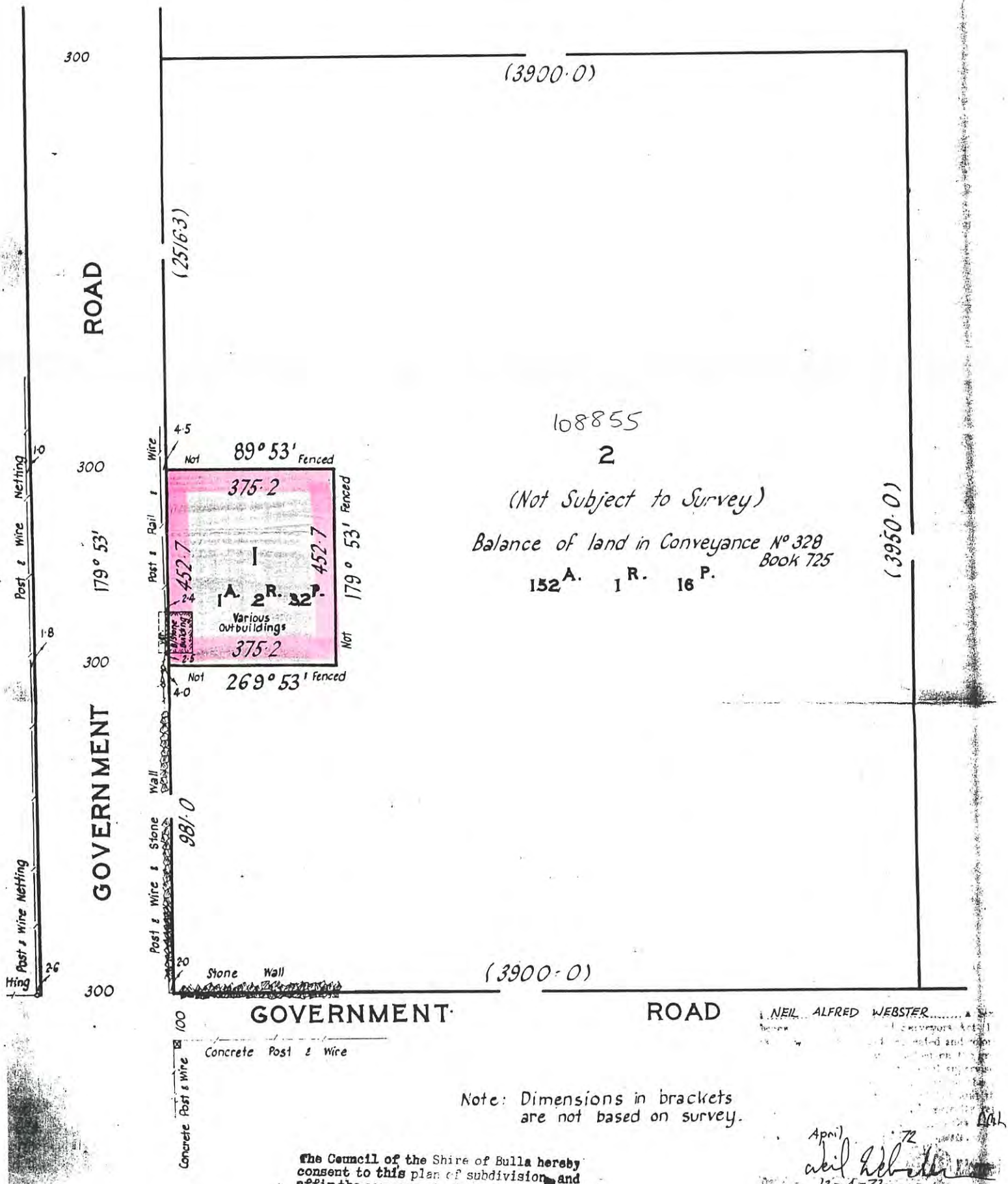
Memorials extracted to be ticked

Memorials not applicable to be marked "N.A."


KALKALLO
YUROKE
MICKLEHAM
3100
J. Macdonald
538 . 0 . 0
28
30235s
T. Hassett
320 . 0 . 0
27
W.J.T. Clarke
406 . 0 . 0
26 A.1513 S.176
R. Brodie 8776
349 . 0 . 0
25
R. Brodie 18515 A.108 S.872
616 . 2 . 29
23
W.J.T. Clarke
440 . 0 . 0
A.1543 S.176
19214
24
R. Brodie 18307
401 . 3 . 26
NO SEC
22
J. Bearne
64 . 0 . 0
24682
A.38236 S.135
8 AP 63350 SEC 26E
C. Payne
441 . 1 . 19
19
W.J.T. Clarke
113 . 1 . 0
16347
17
36976s
J. Johnston
632 . 3 . 11
LP 2 1 0 2 4 3 S
15
T.T. Clarke
16
J. & A. Hatty
466 . 1 . 17
APPN. 581
SEC. 872
14
33848
Alison &c
0 . 0
13
W.J.T. Clarke
476 . 0 . 0
A.39836 (PLAN IN 25034) S.135
12
7889
J. Pearson
S-6965
635 . 1 . 5
17247
C. Pollard
158 . 0
11A
E. Wright
154 . 0 . 8
11B
33227s
J. Tullock &c
158 . 0
11C
T. Langford
158 . 0 . 0
A.581 S.872
LP 45628
LP 172050
39330s
LP 218323
APP. 4805 SEC. 233
4
36287s
W. Cole &c
24
266 . 2 . 16
29946s
3
R. & D. Gibson
31774
259 . 2 . 7
2B
40016s
J. Barr &c
263 . 8
2A
11890
R. Sidebottom
265 . 1 . 24
28446s
1
26965s
J. Malcolm
538 . 2 . 4
LP 4646
CLOSED VDE 30 GOV GAZ 1953 P 5373
Thos. Coldough
W.J.T. Clarke
I. Coldough
T. Coldough
N-807
LP 135848
LP 126752
LP 93985
LP 92445
LP 92893
LP 144228
LP 85095
LP 93445
HICKLEHAM ROAD
ROAD
18307
Photo-lithographed at the Department of Lands and Survey Melbourne by J. Ferns.

2 0 2 4
SCALE OF CHAINS
0 50 100
SCALE OF METRES

2GO Plan No 2038
Dep. Deed No 54762



NEIL ALFRED WEBSTER

Note: Dimensions in brackets are not based on survey.

April 72
Neil Webster
12-4-72

The Council of the Shire of Bulla hereby consent to this plan of subdivision and affix the common seal of the Municipality hereto.

Dated 4th September 1975

NOT DEPOSITED

CROWN GRANT NO. 20-254.

TO Edward Wright

DATED 14-7-1852.

ENROLLED 1-9-1852. REGISTER NO. 2 FOLIO 40

CONSIDERATION

AREA _____ACRES _____ROODS _____PERCHES

BEING ALLOTMENT

PORTION

SECTION

TOWNSHIP

PARISH

DIAGRAM

See copy attached.

THE MEASUREMENTS ARE IN:

40

VICTORIA.

LAND PURCHASE.

GRANTEE Edward Wright
DATE 14th July 1852
COUNTY Bourke
AC 154 R. 0 P. 8

VICTORIA, by the Grace of God of the United Kingdom of Great Britain and Ireland, Queen, Defender of the Faith, and so forth :—

TO ALL to whom these Presents shall come Greeting :—

25254

WHEREAS, in conformity with the Laws now in force for the Sale of Crown Lands in our Colony of VICTORIA, and Our Royal Instructions under Our Signet and Sign Manual, issued in pursuance thereof, Edward Wright of Collingwood has become the Purchaser of the Land hereinafter described for the Sum of One hundred and fifty four pounds one shilling Sterling; NOW KNOW YE, THAT for and in consideration of the said Sum for and on Our behalf, well and truly paid into the Colonial Treasury of Our said Colony, before these Presents are issued, And in further consideration of the Quit-Rent hereinafter Reserved, WE HAVE GRANTED and for Us, Our Heirs and Successors, Do HEREBY GRANT unto the said Edward Wright his Heirs and Assigns, Subject to the several and respective Reservations hereinafter mentioned, ALL THAT Piece or Parcel of Land in Our said Colony containing by Admeasurement one hundred and fifty four acres and eight perches be the same more or less, situated in the County of Bourke and Parish of Mucklehauer portion eleven A bounded on the west by a road three chains wide bearing north thirty nine chains fifty links on the north by part of portion thirteen containing four hundred and seventy six acres bearing east thirty nine chains on the east by portion eleven B containing one hundred and fifty eight acres bearing south thirty nine chains fifty links and on the south by a road one chain wide bearing west thirty nine chains being the land put up to sale by Auction as lot No 148 in pursuance of the proclamation of the twentieth day of December one thousand eight hundred and fifty one and subsequently selected by the said Edward Wright under the eleventh paragraph of the regulations of the first day of March one thousand eight hundred and fifty three with all the Rights and Appurtenances whatsoever thereto belonging; TO HOLD unto the said Edward Wright his Heirs and Assigns for ever, YIELDING and Paying therfore Yearly unto Us, Our Heirs and Successors, the Quit-Rent of One Peppercorn for ever, if demanded; PROVIDED NEVERTHELESS, AND WE DO HEREBY RESERVE unto Us, our Heirs and Successors, all such parts and so much of the said Land as may hereafter be required for making Public Ways, Canals, or Railroads, in, over, and through the same, to be set out by Our LIEUTENANT GOVERNOR for the time being of Our said Colony; or some Person by Him authorised in that respect; AND ALSO, all Sand, Clay, Stone, Gravel, and Indigenous Timber, and all other Materials, the natural produce of the said Land, which may be required at any time or times hereafter for the construction and repair of any Public Ways, Bridges, Canals, and Railroads, or any Fences, Embankments, Dams, Sewers, or Drains, necessary for the same, together with the right of taking and removing all such Materials; AND WE DO HEREBY FURTHER RESERVE unto Us, Our Heirs and Successors, the right of full and free ingress, egress, and regress, into, out of, and upon the said Land, for the several purposes aforesaid; IN TESTIMONY WHEREOF, WE have caused this Our Grant to be Sealed with the Seal of Our said Colony.

WITNESS Our Trusty and Well-beloved CHARLES JOSEPH LA TROBE, *Esquire, Lieutenant Governor of Our said Colony and its Dependencies, at Melbourne,* VICTORIA, *aforesaid, this* fourteenth *day of* July *in the* sixteenth *Year of Our Reign; And in the Year of Our Lord One Thousand Eight Hundred and Fifty* two

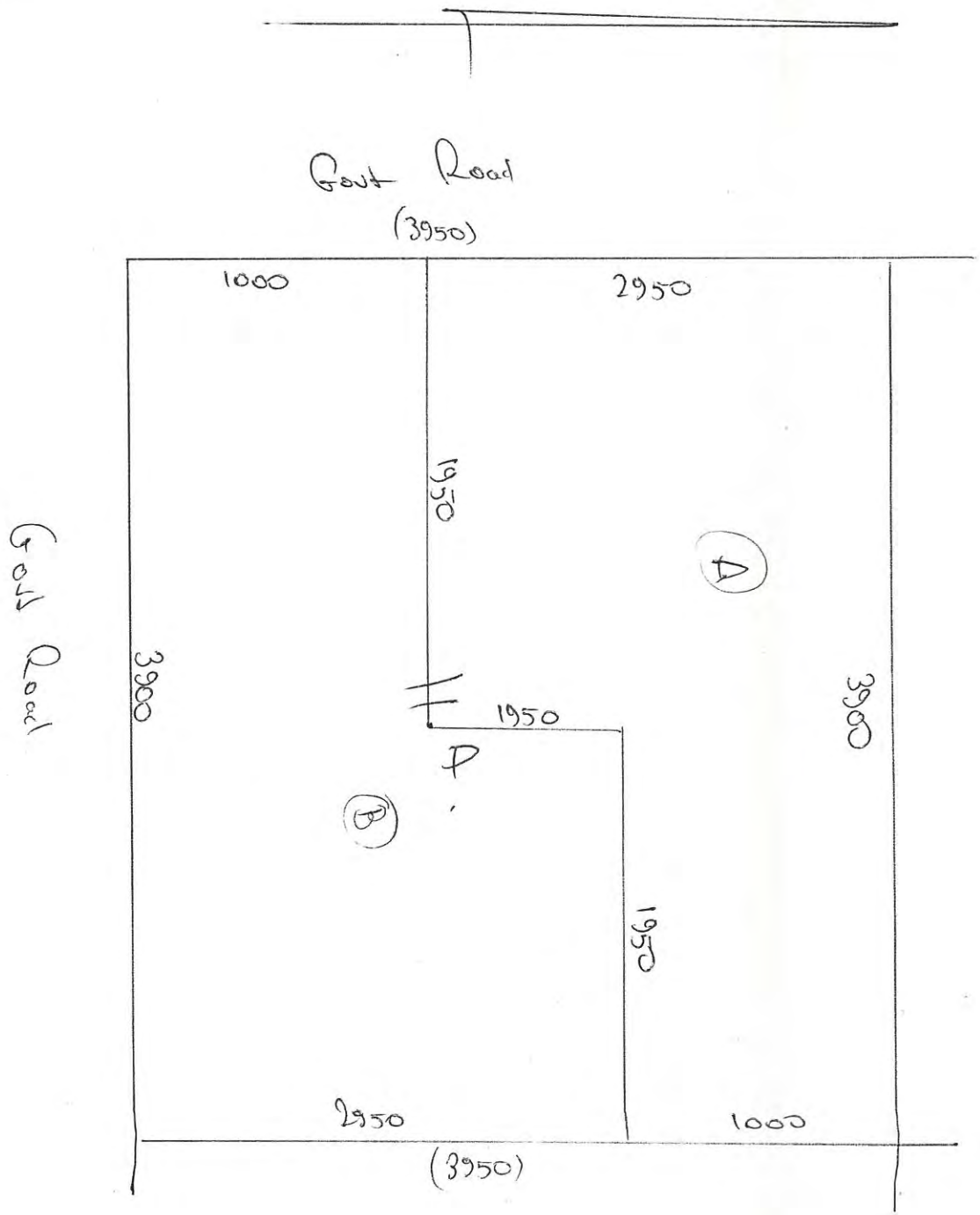
L.S. (Signed) C J La Trobe

in the Register of land purchases No 5 page 77

ENTERED on Record by me, this fourteenth *day of* July *One Thousand Eight Hundred and Fifty* two

W Lonsdale

COLONIAL SECRETARY AND REGISTRAR.


Govt Road
(3950)
1000
2950
1950
A
3900
1950
P
B
3900
1950
2950
1000
(3950)
Govt Road

(A) land

BOOK S

NO. 129.

DATE 29/10/1852.

REGN. 30/10/1852.

SIGNED BY

PREPARED BY —

CONSIDERATION

RECITALS

LAND

CONVEYANCE.

PARTIES D.D. 13023

See copy attached.

LTO 12/87/10

A & B land

BOOK 9

NO. 375.

DATE 22/2/1854.

REGN. 27/3/1854.

SIGNED BY

PREPARED BY —

CONSIDERATION £300.0.0.

RECITALS —

LAND Same.

MORTGAGE. NOT DEPOSITED

PARTIES

Edward Wright

1st Part.

Chase Barber.

2nd Part

Memorial

No 129 Book 18

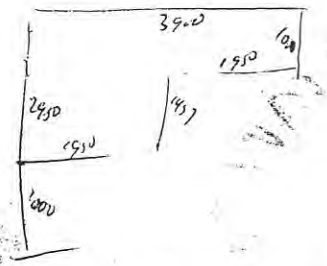
Nature of Instrument	Name of the parties	Names of the witnesses	Description of the land or property conveyed	Consideration and how paid	Any other particulars that the case may require
Conveyance	Edward Wright of the one part and George Parnell of the other part	Jno. W. Jones	All that piece or parcel of Land situate lying and being in the Parish of Nuckleham in the County of Bourke in the Colony of Victoria being part and parcel of a piece or parcel of Land described in the hereinbefore recited Deed Poll as portion 11 A of the said Parish of Nuckleham commencing at a point Ten Chains north from the South West corner or angle of the said portion number Eleven A bounded on the West by a Road three chains wide bearing north Twenty nine chains and fifty links on the North by part of portion number thirteen containing four hundred and seventy six acres bearing east thirty nine chains on the East by portion Eleven B containing one hundred and fifty eight acres bearing South Ten Chains on the South by other part of portion Eleven A being a line at right angles to the last line bearing Westerly nineteen chains and fifty links then by a line at right angles to the last line bearing further South nineteen chains and fifty seven links and then by a line bearing further westerly nineteen chains and fifty links home to the commencing point Together &c &c	The Sum of Seventy seven pounds and ten shillings paid by the said George Parnell to the said Edward Wright	

Supreme Court of the Colony of Victoria

[illegible] Jones of Melbourne in the Colony of [illegible] maketh Oath and saith That the above [illegible] a just and true account of the several [illegible] set forth

[illegible] Melbourne in the Colony of [illegible] the [illegible] day of October [illegible] Lord one thousand eight [illegible] two. } Jno. W. Jones

J. M. Macintosh



Edward Wright

NOT DEPOSITE

BOOK 151

NO. 743.

DATE 21/7/1865.

REGN. 25/7/1865.

SIGNED BY

PREPARED BY —

CONSIDERATION Moniesupaid

RECITALS —

LAND Same.

RE-CONVEYANCE. OF MORTGAGE NO. 305 BK. 9.

PARTIES

Chase Barber. 1st part.

Edward Wright 2nd part

LTO 12/87/10

B land

BOOK 179

NO. 68.

DATE 29/4/1868.

REGN. 29/4/1868.

SIGNED BY

PREPARED BY —

CONSIDERATION

RECITALS

LAND

CONVEYANCE.

PARTIES D.D. 13023'

See copy attached.

Memorial.

No. 68 BOOK. 179

MEMORIAL

Names of the Parties. Nature of Instrument. Lands or Property Conveyed.

No. 68 Book 179

ENT.	NATURE OF INSTRUMENT.	NAMES OF THE PARTIES.	NAMES OF THE WITNESSES.	DESCRIPTION OF THE LANDS OR PROPERTY CONVEYED.	CONSIDERATION, AND HOW PAID.	ANY OTHER PARTICULARS THA THE CASE MAY REQUIRE.
day of our Lord, ninety eight	Conveyance	Edward Wright of the one part and George Harnell of the other part	Chas Hellins Solicitor Melbourne	All that piece or parcel of land situate lying and being in the Parish of Mickleham in the County of Bourke in the Colony of Victoria being part of Portion Number Eleven A of the said Parish Commencing at the South West corner of the said portion and bounded on the West by a road three chains wide bearing from the said Commencing point North twenty nine chains bounded on the North by other part of said Parish now or late the property of the said George Harnell on a line at right angles to the last line bearing East Nineteen chains fifty links thence again on the West by the said property of the said George Harnell on a line at right angles to the last line bearing again North Nineteen chains fifty seven links thence again on the North by the said property of the said George Harnell on a line at right angles to the last line bearing again East Nineteen chains fifty links thence on the East by Portion Eleven B of the said Parish in a line at right angles to the last line bearing South twenty nine chains fifty links thence on the South by a road one chain wide in a line at right angles to the last line bearing West thirty nine chains to the commencing point.	In consideration of the sum of Two hundred and sixty nine pounds ten shillings to the said Edward Wright paid by George Harnell at or before the execution of the now memorializing Indenture	

Transferred

Vide Deeds - See Vol 190 Folio 287
705 Folio 341
NB → 706 341
707 311

Court
TORIA.

ck to Messrs Parton and Hellins Solicitors Melbourne

t the above Memorial contains a just and true account of the several particulars therein set forth.

Edward Wright

Harnell Jan 1917

1950

Paid 3d

Now

3900

Edward Wright

Examiner of Titles for verifying Memorials.

BOOK 287

NO. 190.

DATE 10/4/1880.

REGN. 27/4/1880.

SIGNED BY

PREPARED BY —.

CONSIDERATION

RECITALS

LAND

MORTGAGE.

PARTIES

D.D. 130233

See copy attached.

LTO 12/87/10

BOOK 321

NO. 705.

DATE 2/2/1885.

REGN. 16/2/1885.

SIGNED BY

PREPARED BY —.

CONSIDERATION Monies repaid

RECITALS —

LAND Same with others

RE-CONVEYANCE.

PARTIES

Augusta Ann Couchman.

1st Part.

Arthur Samuel Harman.

2nd Part

Deposited Deed no.

M130233.

MEMORIAL

No. 190 Book 281

NATURE OF INSTRUMENT.	NAMES OF THE PARTIES.	NAMES OF THE WITNESSES.	DESCRIPTION OF THE LANDS OR PROPERTY CONVEYED.	CONSIDERATION, AND HOW PAID.	ANY OTHER PARTICULARS THAT THE CASE MAY REQUIRE.
Mortgage	Arthur Samuel Harman of the first part and Augusta Ann Couchman (wife of Thomas Oseland Couchman) of the other part	Jno W Dickinson Couchman A Waugh	all that piece or parcel of land situate lying and being in the parish of Melbourne in the said Colony of Victoria being part and parcel of a piece or parcel of land described in a certain Deed Poll under the hand and seal of Charles Joseph La Trobe Esquire Lieutenant Governor of the said Colony of Victoria dated the 14th day of July 1852 whereby the piece or parcel of land expressed to be granted by the memorializing mortgagor was (inter alia) granted to one Edward Wright his heirs and assigns as portion Eleven A of the said parish of Melbourne commencing at a point ten chains north from the South west corner or angle of the said portion number Eleven A Bounded on the west by a road three chains wide) bearing north twenty nine chains and fifty links On the north by part of portion number Thirteen containing four hundred and seventy six acres bearing East thirty nine chains On the East by portion Eleven B containing one hundred and fifty eight acres bearing South ten chains On the South by other part of portion Eleven A being a line at right angles to the east line bearing westerly nineteen chains and fifty links Then by a line at right angles to the last line bearing further South nineteen chains and fifty seven links and then by a line bearing further westerly nineteen chains and fifty links home to the commencing point Together &c.	Two hundred and twenty pounds of which Sixty to the said Arthur Samuel Harman on the advance and paid by the said Augusta Ann Couchman as for immediately before the execution of these memorials by me Geo	250 1000

Arthur Samuel Harman

...rt)

...ction of Prince Street Fitzroy in the Colony of ...

...man

...Memorial contains a just and true account of the several particulars therein set forth.

...e ...received in the ... day of ... our Lord One thousand ...

Geo W Dickinson

Couchman

A Commissioner of the Supreme Court ... verifying Memorials.

The original document to which this memorial/copy relates has been deposited under Section 15 Property Law Act.

No. H 30232

BOOK 321

NO. 706.

DATE 20/3/1879.

REGN. 16/2/1885.

SIGNED BY

PREPARED BY —

CONSIDERATION —

RECITALS

LAND

ASSURANCE AND RELEASE.

PARTIES D.D. 130236

See copy attached.

LTO 12/87/10

BOOK 321

NO. 707.

DATE 3/12/1885

REGN. 16/12/1885.

SIGNED BY

PREPARED BY Buchan & Perano.

CONSIDERATION £400-0-0.

RECITALS —

LAND Same.

MORTGAGE.

PARTIES

Arthur Samuel Harman.

1st Part.

George Howard

2nd Part

Deposited Deed no.

130237.

NATURE OF INSTRUMENT.	NAMES OF THE PARTIES.	NAMES OF THE WITNESSES.	DESCRIPTION OF THE LANDS OR PROPERTY CONVEYED.	CONSIDERATION, AND HOW PAID.	ANY OTHER PARTICULARS CASE MAY BE REQUIRED.
Assurance and Release	Robert Norman of the one part and Arthur Samuel Norman of the other part	W. S. Hoolcotts Solr 39 Queen St Melbourne	All that the share of him the said Robert Norman of and in the real and personal estate of Grace Parnell Widow deceased devised and bequeathed by her last Will dated the Twenty fifth of January one thousand eight hundred and seventy eight and duly proved in the Supreme Court of the Colony of Victoria in its probate jurisdiction on the Sixth day of February one thousand eight hundred and seventy nine Note. Is Thirza Parnell the widow of George Parnell	Subject to the payment of Seven hundred and fifty pounds to the said Robert Norman paid by the said Arthur Samuel Norman	

Supreme Court of the
Y OF VICTORIA.

Emanuel Davis of No 114 Collins Street West in Melbourne in the Colony of Victoria Articled r David Brahaw of the same place Solicitor say that the above Memorial contains a just and true account particulars therein set forth.

Melbourne in the Colony of
Sixteenth day
in the year of our Lord
hundred and eighty five

E. Davis

Wm Williams

Commissioner of the Supreme Court of the Colony of Victoria for verifying Memorials.

The original document to which this memorial/copy relates has been deposited under Section 15 Property Law Act.
130236

Arthur S. Ha

BOOK 376

NO. 16.

DATE 22/8/1892.

REGN. 23/8/1892.

SIGNED BY

PREPARED BY Braham & Perane.

CONSIDERATION

RECITALS

LAND

MORTGAGE.

PARTIES D.P. 130239

See copy attached.

LTO 12/87/10

BOOK 438

NO. 321.

DATE 19/12/1906.

REGN. 3/5/1907.

SIGNED BY

PREPARED BY Braham & Perane

CONSIDERATION Moneis repaid

RECITALS —

LAND Same.

RE-CONVEYANCE BY ENDORSEMENT.

PARTIES

George Howard.

1st part.

Arthur Samuel Harman

2nd part

Deposited Deed no.

130238.

MEMORIAL.

No. 16 Book 376

NAMES AND ADDITIONS OF THE PARTIES.	NAMES OF THE WITNESSES	DESCRIPTION OF THE LANDS OR PROPERTY CONVEYED.	CONSIDERATION, AND HOW PAID.	ANY OTHER PARTICULARS THAT THE CASE MAY REQUIRE.
Arthur Samuel Harman of Mickleham in the Colony of Victoria Farmer of the one part and George Horvat of Queen Street in the City of Melbourne in the said Colony Stock and Station Agent of the other part	Jas Williams Jas Melbourne	All that piece or parcel of land situate lying and being in the parish of Mickleham in the County of Bourke in the Colony of Victoria being part of portion a number eleven A of the said parish commencing at the South West corner of the said Portion and bounded on the West by a road three chains wide bearing from the said commencing point North ten chains thence bounded on the North by other part of the said portion formerly the property of George Parnell in a line at right angles to the last line bearing East nineteen chains fifty links thence again on the West by the said property of the said George Parnell in a line at right angles to the last line bearing again North nineteen chains fifty seven links thence again on the North by the said property of the said George Parnell in a line at right angles to the last line bearing again East nineteen chains fifty links thence on the East by Portion eleven B of the said parish in a line at right angles to the last line a bearing South twenty nine chains fifty links thence on the South by a road one chain wide in a line at right angles to the last line bearing West twenty nine chains to the commencing point Arthur S. Harman	The sum of Eight hundred and forty Eight pounds ten shillings and nine pence lent and advanced to the said Arthur Samuel Harman by the said George Horvat	

Court }
VICTORIA

...nd Rosenthal of No 321 Collins Street in the ...e Colony of Victoria articled Clerk to Mr Zand Graham ...ector,

...he above Memorial contains a just and true account of the several

...ony of Victoria, this ...August ...sand eight hundred } John E D Rosenthal

...me, Howard Davis

The original document to which this memorial or abstract has been deposited under section 15 Property Law Act.

BOOK 438

NO. 322.

DATE 19/12/1907.

REGN. 3/5/1907.

SIGNED BY

PREPARED BY Graham & Perrine.

CONSIDERATION Nominal

RECITALS —

LAND Same.

RE-CONVEYANCE BY ENDORSEMENT.

PARTIES

George Stewart.
1st Part

Arthur Samuel Harman
2nd Part

Deposited Deed No. 130240

LTO 12/87/10

BOOK 438

NO. 336.

DATE 28/12/1906.

REGN. 6/5/1907.

SIGNED BY

PREPARED BY —

CONSIDERATION

RECITALS

LAND

MORTGAGE.

PARTIES

D.D. 130241

See copy attached.

No. 336 BOOK 138

Nature of Instrument.	Names of the Parties.	Address and Addition of each Party.	Name of the Witness.	Description of the Lands or Property Conveyed.	Consideration, and how paid.	Any other particulars that the case may require.
Mortgage	Arthur Samuel Harman of Nicklehan Farmer (hereinafter called the Mortgagor) of the one part and The Commercial Bank of Australia Limited whose registered office is at 337 and 339 Collins Street Melbourne (hereinafter termed the Mortgagee) of the other part.		H. J. Bakewell 337 Collins Street Melbourne	All that piece or parcel of land situate lying and being in the Parish of Nicklehan in the County of Bourke in the Colony of Victoria being part of portion Number Eleven B of the said Parish commencing at the South West corner of the said portion, and bounded on the West by a road three chains wide bearing from the said commencing point North Ten chains thence bounded on the North by other part of the said portion formerly the property of George Parnell in a line at right angles to the last line bearing East nineteen chains fifty links thence again on the West by the said property of the said George Parnell in a line at right angles to the last line bearing again North nineteen chains fifty seven links thence again on the North by the said property of the said George Parnell in a line at right angles to the last line bearing East Nineteen chains fifty links thence on the East by portion Eleven B. of the said parish in a line at right angles to the last line bearing South Twenty nine chains fifty links thence on the South by a road one chain wide in a line at right angles to the last line bearing West thirty nine chains to the commencing point. And also All that piece or parcel of land situate lying and being in the Parish of Nicklehan in the said Colony of Victoria being part and parcel of portion Eleven B of the said Parish commencing at a point ten chains North from the South West corner or angle of the said portion Number Eleven B bounded on the West by a road three chain wide bearing North Twenty nine chains and fifty links on the North by part of portion Number Thirteen bearing East Thirty nine chains, on the East by portion Eleven B bearing South Ten chains on the South by other part of portion Eleven B being a line at right angles to the last line bearing Westerly Nineteen chains and fifty links then by a line at right angles to the last line bearing further South Nineteen chains and fifty seven links and then by a line bearing further Westerly Nineteen chains and fifty links home to the commencing point.	Whereas by a Mortgage made or which may hereafter be made by the said Bank to the said Arthur Samuel Harman.	This original document to which this memorial/copy relates has been dismissed under Section 15 Property Law Act. 30 244

Real Property Act 1890

Harold J. Evans of 337 Collins Street Melbourne Bank

The above Memorial contains a just and true account of the several particulars

the State
h
ne thousand
ven

Harold J. Evans.

Arthur S. Harman

BOOK 443

NO. 817.

DATE 30/6/1908.

REGN. 3/7/1908.

SIGNED BY

PREPARED BY —

CONSIDERATION Moneys paid

RECITALS —

LAND Same.

RE-CONVEYANCE ENDORSED ON MTGE. NO. 336 BK. 438

PARTIES

The Commercial Bank of Australia Limited

1st Part

Arthur Samuel Harman

2nd Part.

Deposited Deed no. 13024

LTO 12/87/10

BOOK 443.

NO. 818.

DATE 30/6/1908.

REGN. 3/7/1908.

SIGNED BY

PREPARED BY —

CONSIDERATION Advances.

RECITALS —.

LAND Same.

MORTGAGE.

PARTIES

Arthur Samuel Harman
Sarah June Harman.

1st Part.

Mary Stockdale.

2nd Part

Deposited Deed no. 13024

BOOK 448.

NO. 86.

DATE 26/4/1909

REGN. 17/6/1909.

SIGNED BY

PREPARED BY Blake & Riggall

CONSIDERATION Moneys paid

RECITALS —

LAND Same as Bk. 443 no. 818.

TRANSFER OF MORTGAGE

PARTIES

William Stockdale.
Benjamin Stockdale.

1st Part

John Samuel Stockdale

2nd Part

Deposited Deed no. 130244

LTO 12/87/10

BOOK 492.

NO. 198.

DATE 30/7/1920

REGN. 20/10/1920.

SIGNED BY

PREPARED BY —

CONSIDERATION

RECITALS

LAND

TRANSFER OF MORTGAGE

PARTIES

See copy attached.

D.D. 130244

MEMORIAL.

No. 198 Book 492

TYPE OF INSTRUMENT	NAMES OF THE PARTIES.	ADDRESSES AND ADDITIONS OF EACH PARTY.	NAMES OF THE WITNESSES.	DESCRIPTION OF THE LANDS OR PROPERTY CONVEYED.	CONSIDERATION AND HOW PAID.	ANY OTHER PARTICULARS THAT THE CASE MAY REQUIRE.
	Ernest Simmons of Grange Road Caulfield Gentleman and Lauchlan Mackinnon of Mackinnon Street Hotham Victoria Acting the Executors to the Will of John Samuel Stockdale late of Hotham Gent deceased and Sarah Harman Fabre deceased Widow granted by the Supreme Court of Victoria on the 26 day of January 1915 of the one part and Mary Ann Stockdale and Sarah Ann Stockdale both of Wodonga Spinsters of the other part		Ino. Burnett Clerk to Blake & Riggall Solicitors Melbourne	All the land more fully described in Indenture of Mortgage dated the thirtieth day of June One Thousand nine hundred and eighteen between Arthur Samuel Harman and Sarah Jane Harman of the one part and Mary Stockdale of the other part registered by Memorial Number 818 Book 442	The consideration of the sum of One Thousand five hundred pounds now paid to the Mortgagees by the said Mary Ann Stockdale and Sarah Ann Stockdale on the execution of the new mortgage herein mentioned	The new memorialising Deed recites The memorialising Indenture is supplemental to an Indenture of Mortgage dated 30th June 1918 made between Arthur Samuel Harman and Sarah Jane Harman of the one part and Mary Stockdale of the other part registered Book 442 and to an Indenture of Transfer of Mortgage dated 30 April 1919 made between William Stockdale and Benjamin Stockdale of the one part and said John Samuel Stockdale of the other part registered Book 445

Matter of the
erty Act 1915."

Matthew Middleton of 12 William Street Melbourne Gent. Blake and Riggall of the same place Solicitors

that this Memorial contains a just and true account of the several particulars

n the State of Victoria, this
ay of October
One thousand nine hundred
Before me

Deputy Registrar General.

The original document to which this memorial/copy relates has been deposited under Section 15 Property Law Act.
No. 130245

BOOK 568

NO. 887.

DATE 13 / 5 / 1941.

REGN. 12 / 6 / 1941.

SIGNED BY

PREPARED BY —

CONSIDERATION

RECITALS

LAND

RE-CONVEYANCE.

PARTIES

See copy attached.

D.D. 130248

LTO 12/87/10

BOOK

NO.

DATE / /

REGN. / /

SIGNED BY

PREPARED BY

CONSIDERATION

RECITALS

LAND

PARTIES

Stamps Act

MEMORIAL.

No. 887 Book 568

ATURE OF STRUMENT	NAMES, ADDRESSES AND ADDITIONS OF EACH PARTY	NAMES OF THE WITNESSES	DESCRIPTION OF THE LANDS OR PROPERTY CONVEYED	CONSIDERATION AND HOW PAID	ANY OTHER PARTICULARS THAT THE CASE MAY REQUIRE
Reconveyance	(1) Mary Ann Stockdale and Sarah Ann Stockdale both of Washington Street Toorak Spinsters of the one part — and — Sarah Jane Harman formerly of Mackellar in the State of Victoria Widow but now of Tahura in the said State Widow of the other part.	Jas. McClean 34 Washington St. Toorak Auctioneer	All and singular the lands hereditaments and premises comprised in an Indenture of Mortgage made the 13th June 1908 between Arthur Samuel Harman and said Sarah Jane Harman of the one part and Mary Stockdale of the other part Registered No. 818 Book 443	In consideration of all principal interest and other moneys in respect of said Mortgage having been paid	Now manor whereas it was agreed that the said Mary Ann Stockdale and Sarah Ann Stockdale are proprietors of said Mortgage And that said Arthur Samuel Harman died and Probate of his Will was granted to said Sarah Jane Harman on the [illegible] day of October 1928.

ig Matter of the
Law Act 1928"

~~Sam Hawkes of Gold Coast of 170 William Street Melbourne Hairdresser of Blake St Prahran of the place Solicitor~~
Margaret Manley of 414 Collins Street Melbourne Clerk
say that this Memorial contains a just and true account of the several particulars

ourne in the State of Victoria this
day of June 1941

Before me

Crawford McAlister
Deputy Registrar General

M. A. Stockdale

S. A. Stockdale

James McClean
34 Washington St
Toorak Auctioneer

The original document to which this memorial/copy relates has been deposited under Section 15 Property Law Act.
No. 130248

D.D. 130249

No.: 888 Book: 568

Date of Conveyance
Memorial: 14/5/41.
Regn. : 12/6/41.

Solicitor: McNAB & McNAB

Consideration: £2,151.1s.6d

Land: C.P. 11A PARISH MICKLEHAM
PART C.P. 10 PARISH MICKLEHAM

PARTIES:

SARAH JANE HARMAN

to

EMMA LENA LOBB

See copy attached

No.: 328 Book: 725

Date of CONVEYANCE
Memorial: 21/4/71.
Regn. : 30/4/71.

Solicitor: McNAB & McNAB

Consideration: BY DEVISE

Land: CP 11A PARISH MICKLEHAM

PARTIES:

D.D. 130225

JOSEPH CHARLES LOBB
as executor of EMMA LENA LOBB

and

JOSEPH CHARLES LOBB

See copy attached

No.: 745 Book: 737

Date of Conveyance
Memorial: 12/1/72.
Regn. : 12/3/73.

Solicitor: Hyett & Hyett

Consideration: $ 2,750.00

Land: LOT 1 PART C.P. 11A
PARISH MICKELHAM

PARTIES:

JOSEPH CHARLES LOBB

to

THOMAS HUTCHINSON CAPPER
WENDY FAY CAPPER

" "

See copy attached

P

MEMORIAL.

No. 888 Book 568

NAMES, ADDRESSES AND ADDITIONS OF EACH PARTY	NAMES OF THE WITNESSES.	DESCRIPTION OF THE LANDS OR PROPERTY CONVEYED	CONSIDERATION AND HOW PAID.	ANY OTHER PARTICULARS THAT THE CASE MAY REQUIRE.
SARAH JANE HARMAN formerly of Mickleham but now of Tatura in the State of Victoria Widow of the one part and EMMA LENA LOBB of Mickleham in the said State Widow of the other part	George Henry Groves Farmer Tatura	FIRSTLY All that piece or parcel of land situated in the Parish of Mickleham in the County of Bourke in the State of Victoria containing by admeasurement One hundred and fifty four acres and eight perches or thereabouts and being Crown Portion 11A in the said Parish of Mickleham bounded on the West by a road three chains wide bearing North thirty nine chains fifty links on the North by part of Portion thirteen containing four hundred and seventy six acres bearing East thirty-nine chains on the East by portion eleven B containing one hundred and fifty eight acres bearing South thirty nine chains fifty links and on the South by a road one chain wide bearing West thirty-nine chains. SECONDLY All that piece or parcel of land situate in the said Parish of Mickleham containing about thirty-three acres more or less being part of Portion Ten in the said Parish of Mickleham commencing at a point twenty chains and twenty-five links North from a point on the South East corner or angle of the said Portion Number Ten bounded on the South by a road or way of fifty links wide being a line bearing West seventeen chains twenty-one links and three-fourths of a link then on the West by another Portion of the said Portion Number Ten being a line at right angles to the last line bearing North nineteen chains twenty-five links then on the North by part of Portion Number 14 being a line at right angles to the last line bearing East seventeen chains twenty-one links and three fourths of a link then on the East by a road three chains wide being a line at right angles to the last line bearing South nineteen chains and twenty-five links home to the commencing point.	In consideration of the sum of Two thousand one hundred and fifty-one pounds one shilling and six pence paid by the said Emma Lena Lobb to the said Sarah Jane Harman	Arthur Samuel Harman late of Mickleham Farmer died on the 16th day of May One thousand nine hundred and thirty two and probate of his last Will dated the 5th day of April One thousand eight hundred and eighty seven was on the 19th day of October One thousand nine hundred and thirty two granted to the said Sarah Jane Harman

of the
Act 1928"

...ned Manley of 414 Collins Street
Clerk to mend what omitted of same place.

Memorial contains a just and true account of the several particulars

State of Victoria this
...ne 1941

Manley

...ford McAlister

Sarah Jane Harman

Witness George Henry Groves
Farmer Tatura

The original document to which this memorial/copy relates has been deposited under Section 15 Property Law Act.
No. 130299

No. 328 Book 725

NATURE OF DOCUMENT	NAMES, ADDRESSES AND ADDITIONS OF EACH PARTY	NAMES OF THE WITNESSES	DESCRIPTION OF THE LANDS OR PROPERTY CONVEYED	CONSIDERATION AND HOW PAID	RECITALS AND ANY OTHER PARTICULARS THAT THE CASE MAY REQUIRE
	JOSEPH CHARLES LOBB of Mickleham in the State of Victoria Farmer (as Executor of Emma Lena Lobb deceased) of the one part -and- JOSEPH CHARLES LOBB of Mickleham in the State of Victoria Farmer of the other part	R.H. POOLE J.P.	ALL that piece or parcel of land situated in the Parish of Mickleham in the County of Bourke in the State of Victoria containing by admeasurement One hundred and fifty four acres and eight perches or thereabouts and being Crown Portion 11A in the said Parish of Mickleham bounded on the West by a road three chains wide bearing North thirty nine chains fifty links on the North by part of Portion Thirteen containing four hundred and seventy six acres bearing East thirty nine chains on the East by portion eleven B containing one hundred and fifty eight acres bearing South thirty nine chains fifty links and on the South by a road One chain wide bearing West thirty nine chains.	for the purposes of carrying out the trusts of the Will of the said Emma Lena Lobb deceased.	The within memorialized Indenture recites EMMA LENA LOBB late of Mickleham in the State of Victoria Widow deceased died on the 28th day of August One thousand nine hundred and sixty three and was at the time of her death seized of an estate in fee simple in the within described land. The said Emma Lena Lobb left her last Will dated the Twelfth day of December One thousand nine hundred and fifty-six whereby she appointed her son the said Joseph Charles Lobb to be Executor thereof. Probate of the said Will was granted to the said Joseph Charles Lobb by the Supreme Court of Victoria on the 7th day of November One thousand nine hundred and sixty-three and duly issued. By her said Will the said deceased devised and bequeathed all her real estate to the said Joseph Charles Lobb and all debts, funeral and testamentary expenses and all Probate and Estate Duties payable in respect of the Estate of the said Emma Lena Lobb have been paid.

...er of the
... Act 1958" }

...Y that this Memorial contains a just and true account of the several particulars ...forth.

Signature Colin Emerson

Qualification Solicitor

The original document to which this memorial/copy relates has been deposited under Section 15 Property Law Act.
No. 130250

J. C. Lobb

MEMORIAL

No. 745 Book 737

$42 dt

NAMES, ADDRESSES AND ADDITIONS OF EACH PARTY	NAMES OF THE WITNESSES	DESCRIPTION OF THE LANDS OR PROPERTY CONVEYED	CONSIDERATION AND HOW PAID	RECITALS AND ANY OTHER PARTICULARS THAT THE CASE MAY REQUIRE
SEPH CHARLES LOBB of Mickleham in e State of Victoria Farmer (hereafter called "the vendor") of the e part and THOMAS HUTCHINSON PPER Project Officer and WENDY FAY PPER Social Worker both of 50 tyview Road North Balwyn in the id State (hereinafter called "the rchasers") of the other part	Richard John Leicester C. W. Deedes	ALL THAT piece of land containing one acre two roods and thirty-two perches being Lot 1 on Plan of Subdivision annexed hereto the original thereof having been lodged with the Registrar-General at Melbourne pursuant to Section 15 of the Property Law Act in Reference Number 54762 being part of Crown Portion 11A Parish of Mickleham County of Bourke T H Capper. Wendy F. Capper	In consideration of the sum of Two thousand seven hundred and fifty dollars ($2,750.00) paid by the purchasers to the vendor	Covenant to Produce the following documents :- 1. Indenture of Conveyance No. 129 Book 5 2. Indenture of Conveyance No. 68 Book 179 3. Probate Parchment of George Parnell deceased 4. Probate Parchment of Thirza Parnell deceased 5. Release No. 706 Book 121 6. Indenture of Mortgage No. 190 Book 287 Indenture of Reconveyance No. 705 Book 321 7. Indenture of Mortgage No. 16 Book 376 Indenture of Reconveyance No. 322 Book 438 8. Indenture of Mortgage No. 707 Book 321 Indenture of Reconveyance No. 321 Book 438 9. Indenture of Mortgage No. 336 Book 438 Indenture of Reconveyance No. 817 Book 443 10. Indenture of Mortgage No. 818 Book 443 11. Transfer of Mortgage No. 86 Book 448 12. Transfer of Mortgage No. 198 Book 492 13. Extension of Mortgage 14. Indenture of Reconveyance No. 887 Book 568 15. Indenture of Conveyance No. 888 Book 568 16. Indenture of Conveyance No. 328 Book 725

ne
ct 1958" }

t this Memorial contains a just and true account of the several particulars

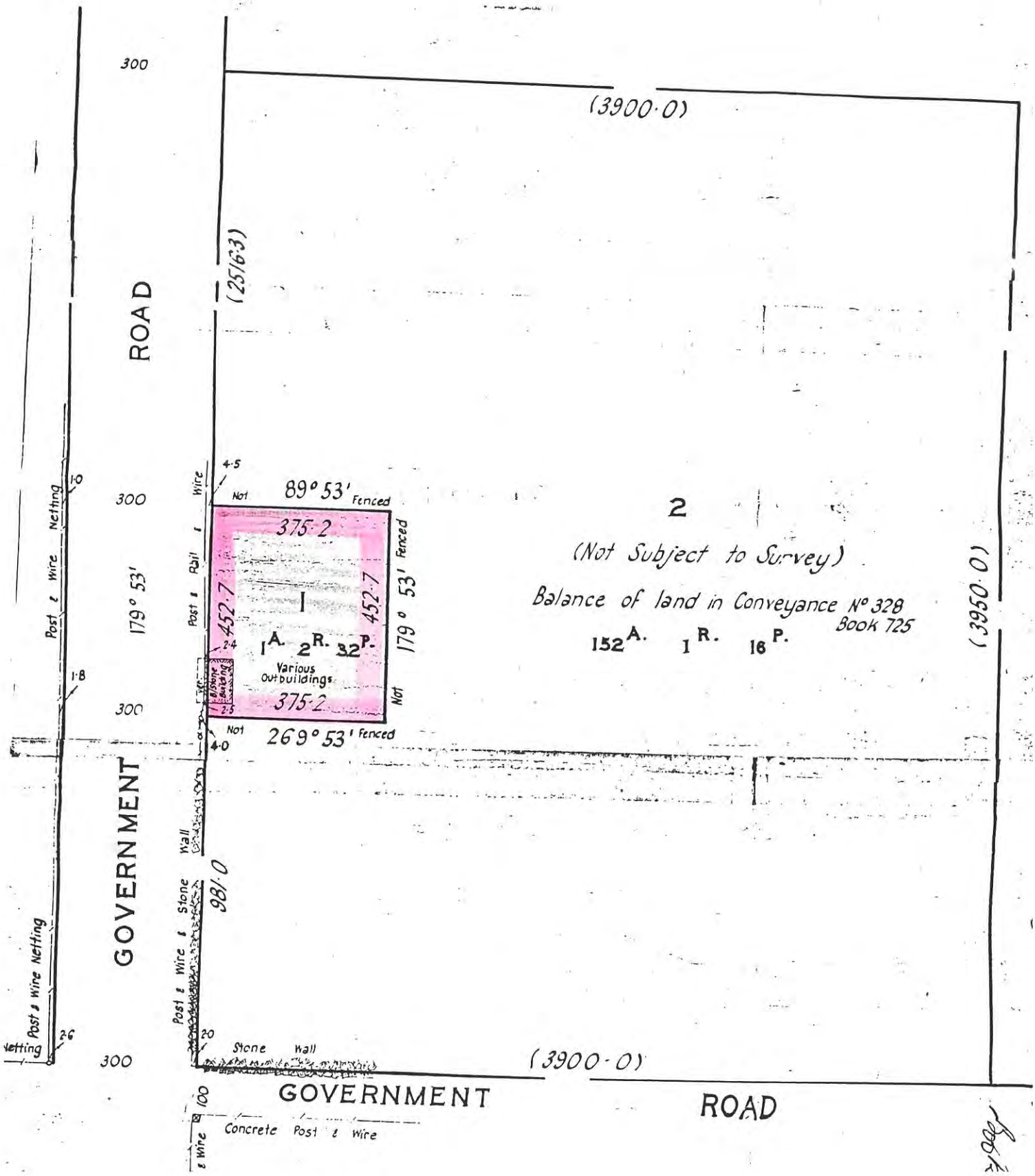
Signature .....

Qualification .....

MAP OF SUBDIVISION

CROWN PORTION 11A
PARISH OF MICKLEHAM
COUNTY OF BOURKE

2 0 2 4
SCALE OF CHAINS
0 50 100
SCALE OF METRES



No.: 970 Book: 737

Date of Memorial: MORTGAGE 12/1/73.
Regn. : 28/3/73.

Solicitor: N/S.

Consideration: N/S

Land: LOT 1 PART C.P. 11A PARISH MICKELHAM

PARTIES:

THOMAS HUTCHINSON CAPPER
WENDY FAY CAPPER

to

BANK OF NEW SOUTH WALES SAVINGS BANK LIMITED

No.: 158 Book: 793

Date of Memorial: RECONVEYANCE 30/10/79.
Regn. : 13/2/80.

Solicitor: (BANK OF N.S.W)

Consideration: MTGE: BK 737 NO. 970

Land: Same

PARTIES:

BANK OF NEW SOUTH WALES SAVINGS BANK LIMITED

to

THOMAS HUTCHINSON CAPPER
WENDY FAY CAPPER

No.: 159 Book: 793

Date of Memorial: CONVEYANCE 29/10/79.
Regn. : 13/2/80.

Solicitor: KIRBY & Co.

Consideration: $65,000 -

Land: Same

PARTIES:

THOMAS HUTCHINSON CAPPER
WENDY FAY CAPPER

to

WILLIAM ARTHUR ANGLISS Junior
WENDY ELIZABETH ANGLISS

.2

No.: 160 Book: 793

Date of MORTGAGE
Memorial: 11/12/79.
Regn. : 13/2/80.

Solicitor: NAB

Consideration: N/S

Land: Same

PARTIES:

WILLIAM ARTHUR ANGLISS
WENDY ELIZABETH ANGLISS

to

THE NATIONAL BANK SAVINGS BANK LIMITED.

No.: 901 Book: 827

Date of RECONVEYANCE
Memorial: 15/3/84.
Regn. : 15/6/84.

Solicitor: NAB

Consideration: MTGE: BK. 793 NO. 160

Land: Same

PARTIES:

NATIONAL AUSTRALIA SAVINGS BANK LIMITED

to

WILLIAM ARTHUR ANGLISS
WENDY ELIZABETH ANGLISS

No.: 902 Book: 827

Date of CONVEYANCE
Memorial: 19/3/84.
Regn. : 15/6/84.

Solicitor: PERILLO, ADAMI + FRANK

Consideration: $113,600.00

Land: Same

PARTIES:

WILLIAM ARTHUR ANGLISS
WENDY ELIZABETH ANGLISS

to

JOHN MILLAR PEEBLES
DENISE MARGARET PEEBLES

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C 1 136 / 110
2

$3,495.00

MEMORIAL BOOK 827 NO. 902

I, VALENTINO ADAMI of 209 Nicholson Street, Footscray Nicholson Footscray Solicitor certify

that this memorial contains a just and true account of the several particulars hereunder set forth of an instrument to be registered in the Office of the Registrar-General.

PARTICULARS REFERRED TO

TIME 0000

1. DATE OF INSTRUMENT:— 19 / 3 /1984 R/N034804 15/06/84 00 00=09: 9.00
2. NATURE OF INSTRUMENT:— Conveyance.
3. NAME, ADDRESS AND DESCRIPTION OF EACH PARTY:—

(1) WILLIAM ARTHUR ANGLISS Junior, Grazier and (2) WENDY ~~ELIZABETH~~ ELIZABETH ANGLISS Home Duties, both formerly of Marnong Donnybrook in the State of Victoria, but now of "The Old Post Office", Mickleham Road, Mickleham in the said State as vendors of the one part and JOHN MILLAR PEEBLES, Gentleman and DENISE MARGARET PEEBLES Married Woman, both of 217 Mickleham Road, Tullamarine in the said State as purchasers of the other part

4. WITNESSES: ~~STEPHANIE HEATH KIRBY~~ BRUCE MALCOLM KING
To Vendors signatures.

5. CONSIDERATION: the sum of ONE HUNDRED AND THIRTEEN THOUSAND SIX HUNDRED DOLLARS ($113,600.00) paid by the purchasers to the vendor on or before the execution hereof.

DMP

6. THE LAND: All that piece ~~or parcel~~ or parcel of land being situated in the Parish of Mickleham and containing as is set out thereon one acre two roods and thirty two perches and being Lot one on Plan of Subdivision reference No. 54762 lodged with the Registrar General at Melbourne and being part of Crown Portion 11A, Parish of Mickleham, County of ~~Bourke~~ Bourke and being the same land as that described in Conveyance, memoralized in Memorial No. 745, Book 737 and to hold the same to and ~~unto~~ unto the use of the purchasers as joint tenants in fee simple. DMP

W. A. Angliss
Wendy Angliss

Denise M. Peebles

Received into the Office of the Registrar General of the State of Victoria this 15th day of June 1984 at the hour of 1.45 in the afternoon

Prepared by Messrs. Perillo, Adami & Frank, Solicitors of 209 Nicholson Street, Footscray.

The reverse side of this sheet must be used before a further sheet is added. If further sheets are added each must be of the same size and quality as this sheet, and have the same margins, and all sheets must be numbered and signed by both the party signing and beneath the number of the sheet by the person certifying.

Harston, Partridge & Co. Printers, Melbourne L 37

No.: 72 Book: 828

Date of MORTGAGE
Memorial: 19/3/84.
Regn. : 22/6/84.

Solicitor: ANZ

Consideration: N/S

Land: Same

PARTIES:

JOHN MILLAR PEEBLES
DENISE MARGARET PEEBLES

to

AUSTRALIA AND NEW ZEALAND SAVINGS BANK LIMITED

No.: 327 Book: 828

Date of MORTGAGE
Memorial: 19/3/84.
Regn. : 2/7/84.

Solicitor: ANZ

Consideration: N/S

Land: Same

PARTIES:

JOHN MILLAR PEEBLES
DENISE MARGARET PEEBLES

to

AUSTRALIA AND NEW ZEALAND BANKING GROUP LIMITED

No.: Book:

Date of
Memorial: / / .
Regn. : / / .

Solicitor:

Consideration:

Land:

PARTIES:

NO FURTHER DEALING
22/2

NOT PRODUCE

BOOK 862.

NO. 584.

DATE / /

REGN. / /

SIGNED BY

PREPARED BY

CONSIDERATION

RECITALS

LAND

CONVEYANCE OF EQUITY OF REDEMPTION

PARTIES

See copy attached

LTO 12/87/10

BOOK 864

NO. 978

DATE 26/4/1988.

REGN. 18/7/1988.

SIGNED BY

PREPARED BY —

CONSIDERATION Moneys repaid

RECITALS —

LAND Same as Bk. 828 no. 72.

RE-CONVEYANCE OF MORTGAGE BY ENDORSEMENT

PARTIES

John Millar Peebles.

Denise Margaret Peebles

1st Part

Australia & New Zealand Savings Bank Limited

2nd Part.

1. 152/158.
2.

$61

MEMORIAL BOOK 862 NO. 584

I, PAULA MARGARET DAVIES

of 459 Collins Street, Melbourne certify that this memorial contains a just and true account of the several particulars hereunder set forth of an instrument to be registered in the Office of the Registrar-General.

PARTICULARS REFERRED TO

1. DATE OF INSTRUMENT:— 18 / 3 / 1988
2. NATURE OF INSTRUMENT:— Conveyance of Equity of Redemption
3. NAME, ADDRESS AND DESCRIPTION OF EACH PARTY:—
   JOHN MILLAR PEEBLES of 2 Mickleham Road, Mickleham Motor Vehicle Wholesaler
   and DENISE MARGARET PEEBLES of
   as Vendors
   JOHN MILLAR PEEBLES of 2 Mickleham Road, Mickleham Motor Vehicle Wholesaler
   as Purchaser
4. WITNESSES: STEPHEN SPIERS
5. CONSIDERATION: An Agreement made pursuant to Section 86 of the Family Law Act registered in the Family Court of Australia on the 22nd day of December, 1987 in Suit No. M2173 of 1987.
6. RECITALS:

   WHEREAS the said hereditaments were conveyed to Australia and New Zealand Savings Bank Limited in fee simple by way of Mortgage registered No. 72 Book 828 to secure advances made to the Vendors.
   AND WHEREAS subject to the said mortgage registered No. 72 Book 828 the said hereditaments were conveyed to Australia and New Zealand Banking Group Limited in fee simple by way of Mortgage registered No. 327 Book 828 to secure advances made to the Vendors.
   AND WHEREAS the sums totalling $20,000.00 remain owing on the security of said mortgages registered No. 72 Book 828 and No. 327 Book 828 but all interest for the same has been paid up to the date of these presents;
   AND WHEREAS the Vendors have agreed pursuant to Section 86 of the Family Law Act registered in the Family Court of Australia on the 22nd day of December, 1987 in Suit No. M2173 of 1987 to convey their equity of redemption in the said hereditaments to the Purchaser.
7. LAND: All that piece of land situate in the Parish of Mickleham and being Lot 1 on Plan of Subdivision Reference Number 54762 lodged with the Registrar General at Melbourne and being part of Crown Portion 11A Parish of Mickleham County of Bourke and being the land described in Conveyance registered No. 827 Book 902.

Received into the Office of the Registrar General of the State of Victoria this 13th day of April 19 88 at the hour of 11.55 in the ~~pre~~ noon

Paula M Davies

Prepared by BARKER GOSLING MURPHY & MOLONEY

The reverse side of this sheet must be used before a further sheet is added. If further sheets are added each must be of the same size and quality as this sheet, and have the same margins, and all sheets must be numbered and signed by both the party signing and beneath the number of the sheet by the person certifying.

Harston, Partridge & Co. Printers, Melbourne L 37

BOOK 864

NO. 979.

DATE 26/4/1988

REGN. 18/7/1988.

SIGNED BY

PREPARED BY

CONSIDERATION Mortgage paid

RECITALS —.

LAND Same as Bk. 828 No. 327.

RE-CONVEYANCE OF MORTGAGE BY ENDORSEMENT

PARTIES

John Millar Peebles
Denise Margaret Peebles
1st Part

Australia & New Zealand Banking Group Limited
2nd Part

LTO 12/87/10

BOOK 864.

NO. 980.

DATE / /

REGN. / /

SIGNED BY

PREPARED BY

CONSIDERATION

RECITALS

LAND

CONVEYANCE.

PARTIES

See copy attached.

1 152/158.
2

$441

$7,600.MP.

The person certifying and any party signing the memorial should sign at the end of memorial.

Insert name, address and qualification of person certifying.

MEMORIAL BOOK 864 NO. 980

I, VALENTINO ADAMI of

209 Nicholson Street, Footscray Solicitor certify that this memorial contains a just and true account of the several particulars hereunder set forth of an instrument to be registered in the Office of the Registrar-General.

PARTICULARS REFERRED TO

? Didn't Denise Margaret Peebles transfer her interest to John Millar Peebles in Book 862 No 584

1. DATE OF INSTRUMENT:— 2 / 6 /1988
2. NATURE OF INSTRUMENT:— Conveyance
3. NAME, ADDRESS AND DESCRIPTION OF EACH PARTY:—

It will assist registration if capacity (e.g. Grantor, Mortgagor etc.) is shown in 3.

JOHN MILLAR PEEBLES Gentleman and DENISE MARGARET PEEBLES Married Woman both of "Old Post Office" 1920 Mickleham Road Mickleham in the State of Victoria as Vendors of the one part and TOM GRGIC Cleaning Contractor and CARMEL PATRICIA GRGIC Married Woman both of 12 Lincoln Road Essendon in the said State, as Purchasers of the other part.

Insert as headings 4, 5, 6 & 7 the following:
4. Names of the Witnesses:—
5. Pecuniary or other consideration:—
6. Recitals and any other particulars that the case may require:—
7. Description of the property intended to be affected:—
setting out thereafter the relevant information (or in the case of 7 drawing any relevant plan).

4. WITNESSES:- VALENTINO ADAMI
HEIDI WATCHAM

5. COSIDERATION:- $190000.00.

the sum of ONE HUNDRED AND NINETY THOUSAND DOLLARS (190,000.00) paid by the purchasers to the Vendors on or before the execution hereof.

6. 7 THE LAND:-

All that piece or parcel of land being situated in the Parish of Mickleham and containing as is set our thereon one acre two roods and thirty two perches and being Lot one on Plan of Subdivision reference No. 54762 lodged with the Registrar General at Melbourne and being part of Crown Portion 11A, Parish of Mickleham County of Bourke and being the same land as that described in Conveyance, memoralized in Memorial No. 745 Book 737 and to hold the same to and unto the use of the purchasers as joint tenants in fee simple.

C Grgic

Received into the Office of the Registrar General of the State of Victoria this 18th day of July 19 88 at the hour of 2.25 in the Afternoon A memorial of the within deed

Prepared by LOFT & ASSOCIATES OF 16 DROOP STREET, FOOTSCRAY

The reverse side of this sheet must be used before a further sheet is added. If further sheets are added each must be of the same size and quality as this sheet, and have the same margins, and all sheets must be numbered and signed by both the party signing and beneath the number of the sheet by the person certifying.

Harston, Partridge & Co Printers, Melbourne L 37

SAVE

P

Mortgage

BOOK 864.

NO. 981

PARTIES

DATE / /

REGN. / /

SIGNED BY

See copy attached.

PREPARED BY

CONSIDERATION

RECITALS

LAND

LTO 12/87/10

BOOK

NO.

PARTIES

DATE / /

NO FURTHER REGISTERED DEALINGS: - 4 MAY 1990

S. R. COHEN & Co.
P.O. BOX 27, RINGWOOD EAST. 3135

REGN. / /

SIGNED BY

PREPARED BY

CONSIDERATION

RECITALS

LAND

M + × + × 165/388

$45.

$10 IMP

The person certifying and any party signing the memorial should sign at the end of memorial.

Insert name, address and qualification of person certifying.

MEMORIAL BOOK 864 NO. 981

I, Lance William Maher of 226 Elizabeth Street Melbourne A Commissioner for Taking Affidavits certify that this memorial contains a just and true account of the several particulars hereunder set forth of an instrument to be registered in the Office of the Registrar-General.

PARTICULARS REFERRED TO

1. DATE OF INSTRUMENT:— 19/4/1988
2. NATURE OF INSTRUMENT:— Mortgage
3. NAME, ADDRESS AND DESCRIPTION OF EACH PARTY:—

It will assist registration if capacity (e.g. Grantor, Mortgagor etc.) is shown in 3.

Tom GRGIC Cleaning Contractor and Carmel Patricia GRGIC Married Woman both of 12 Lincoln Road Essendon in the said state of Victoria (Mortgagors) of the first part

Tom GRGIC Cleaning Contractor and Carmel Patricia GRGIC Married Woman both of 12 Lincoln Road Essendon (Debtors) of the second part

and

Commonwealth Bank of Australia of 367 Collins Street Melbourne and elsewhere Bankers (Mortgagee) of the third part

Insert as headings 4, 5, 6 & 7 the following:-

4. Names of the Witnesses:--
5. Pecuniary or other consideration:--
6. Recitals and any other particulars that the case may require:—
7. Description of the property intended to be affected:—

setting out thereafter the relevant information (or in the case of 7 drawing any relevant plan).

4. Susan Hoadley

5. The document here memorialized has been made for the purpose of securing for the Bank or its Assigns due payment and satisfaction of all principal and interest moneys therein mentioned or referred to

6. NIL

7. The land and hereditaments expressed to be conveyed by Indenture of Conveyance received into the Office of the Registrar General of the State of Victoria Memorial No 902 Book 827

Witness S Hoadley

Witness S Hoadley

C Grgic

L. W. Maher
A Commissioner for Taking Affidavits

Received into the Office of the Registrar General of the State of Victoria this 18th day of July 19 88 at the hour of 2.25 in the Afternoon A memorial of the within deed

Prepared by

The reverse side of this sheet must be used before a further sheet is added. If further sheets are added each must be of the same size and quality as this sheet, and have the same margins, and all sheets must be numbered and signed by both the party signing and beneath the number of the sheet by the person certifying.

Harston, Partridge & Co. Printers, Melbourne L 37

LODGE WITH
PETER BU

APC69036P

SCHEDULE 5A

PART 1 - SOLICITOR'S CERTIFICATE AS TO TITLE

(Freehold General Law Land)

3011

To: The Registrar of Titles,

I, IAN ANTHONY LOFT of Loft & Associates 16 Droop Street Footscray Solicitor having caused a search to be made up to 4/5/1990 as disclosed in the attached search of title against the land in the Schedule, having examined the documents forming the chain of title to the land from the Crown Grant or last deed known to the Registrar of Titles or accepted by the Registrar of Titles in a prior conversion save and expect any documents set out in Clause 7 of the Schedule and having made the searches and enquiries as I consider necessary DO CERTIFY THAT:

1. The persons shown in Clause 3 of the Schedule have aquired a good safe holding and marketable title to the land including such appurtenances, abuttal rights, etc. as are set out in Clause 2 of the Schedule, subject to the mortgages encumbrances claims rights estates or interests set out in Clause 7 or the Schedule.

2. The Root of Title is conveyance No. 888 Book 568 Sarah Jane Harman to Emma Lena Lobb dated 14/5/1941 Deposited No. 130249.

3. The land is not subject to control under the laws relating to bankruptcy or insolvency.

4. The value of the land including all buildings and other improvements thereon is $230,000.00. or thereabouts.

5. I hold a current practising certificate issued pursuant to the provisions of the Legal Professional Act 1958.

Dated the 25th day of October 1990.

.....
IAN ANTHONY LOFT

SCHEDULE

1. Address of property:
1920 Michleham Road, Mickleham.

2. Land:
All that piece or parcel of land being Lot 1 on Plan of Subdivision reference No. 54762 lodged with the Registrar General at Melbourne

and being part of Crown Portion 11A Parish of Mickleham County of Bourke and being the same land as that described in Conveyance memorialized in Memorial No. 902 Book 827.

3. Tom Grgic and Carmel Patricia Grgic both of 1920 Mickleham Road Mickleham. 3064

4. Mortgages:
Tom Grgic and Carmel Patricia Grgic to Commonwealth Bank of Australia Book 864 No. 981.

5. Encumbrances:
Nil.

6. Claims, rights, estates or interests:
Nil.

7. Qualifications:
(i) Crown Grant No. 25254 to Edward Wright.

(ii) Mortgage Book 9 No. 375 Edward Wright to Chase Barber.

(ii) Reconveyance Book 151 No. 743 Chase Barber to Edward Wright.

4. Conveyance of Equity of Redemption Book 862 No. 584 John Millar Peebles and Denise Margaret Peebles to John Millar Peebles.

Document 13/3/91

Want on payment of $100 in bank

Conveyance No 584 Book 862
not produced – not considered
by sol to form part of chain

ORIGINAL

NOT TO BE TAKEN FROM THE OFFICE OF TITLES

VICTORIA

REGISTER BOOK

VOL. 10008 FOL. 221

Certificate of Title

UNDER THE "TRANSFER OF LAND ACT"

FOL.

VOL.

TOM GRGIC and CARMEL PATRICIA GRGIC both of 1920 Mickleham Road Mickleham are JOINT PROPRIETORS of an estate in fee simple subject to the encumbrances notified hereunder in all that piece of land in the Parish of Mickleham being part of Crown Portion 11A which land is shown enclosed by continuous lines on the map hereon- -

Dated 13/3/1991

DERIVED FROM APPLICATION 69036P

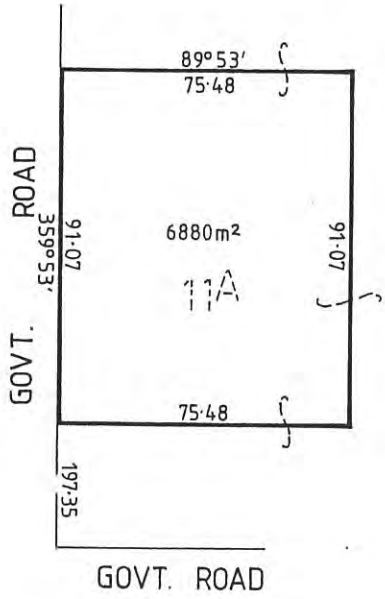
ENCUMBRANCES

OFFICE OF TITLES VICTORIA

Assistant Registrar of Titles

Mortgage to Commonwealth Bank of Australia registered Book 864 No. 981 (AP69036P)

Warning as to Dimensions
Any dimension and connecting distance shown is based on the description of the land as contained in the General Law Title and is not based on survey information which has been investigated by the Registrar of Titles.



MEASUREMENTS ARE IN METRES

Appendix C

EPA priority site search – Royal Historical Society of Victoria (Sands and McDougall)

Extract of EPA Priority Site Register

PROPERTY INQUIRY DETAILS:

STREET ADDRESS: 1990 MICKLEHAM ROAD
SUBURB: MICKLEHAM
MUNICIPALITY: CITY OF HUME
MAP REFERENCES: Melways 40th Edition, Street Directory, Map 365 Reference J9
Melways 40th Edition, Street Directory, Map 365 Reference H9

DATE OF SEARCH: 21st January 2013

PRIORITY SITES REGISTER REPORT:

A search of the Priority Sites Register for the above map references, corresponding to the address given above, has indicated that this site is not listed on, and is not in the vicinity of a site listed on the Priority Sites Register at the above date.

IMPORTANT INFORMATION ABOUT THE PRIORITY SITES REGISTER:

You should be aware that the Priority Sites Register lists only those sites for which EPA has requirements for active management of land and groundwater contamination. Appropriate clean up and management of these sites is an EPA priority, and as such, EPA has issued either a:

Clean Up Notice pursuant to section 62A, or a
Pollution Abatement Notice pursuant to section 31A or 31B

of the Environment Protection Act 1970 on the occupier of the site to require active management of these sites.

The Priority Sites Register does not list all sites known to be contaminated in Victoria. A site should not be presumed to be free of contamination just because it does not appear on the Priority Sites Register.

Persons intending to enter into property transactions should be aware that many properties may have been contaminated by past land uses and EPA may not be aware of the presence of contamination. EPA has published information advising of potential contaminating land uses. Municipal planning authorities hold information about previous land uses, and it is advisable that such sources of information also be consulted.

For sites listed on the Priority Sites Register, a copy of the relevant Notice, detailing the reasons for issue of the Notice, and management requirements, is available on request from EPA for $8 per Notice.

For more information relating to the Priority Sites Register, refer to EPA contaminated site information bulletin: Priority Sites Register & Contaminated Land Audit Site Listing (EPA Publication 735). For a copy of this publication, copies of relevant Notices, or for more information relating to sites listed on the Priority Sites Register, please contact EPA as given below:

EPA Information Centre
Herald & Weekly Times Tower
40 City Road, Southbank 3006
Tel: (03)9695 2700 Fax:(03)9695 2710

[Extract of Priority Sites Register] # 13763371 - 13763371132050 '1990 Mickleham Rd'

Extract of EPA Priority Site Register

PROPERTY INQUIRY DETAILS:

STREET ADDRESS: "LINDUM VALE" 2040 MICKLEHAM ROAD
SUBURB: MICKLEHAM
MUNICIPALITY: CITY OF HUME
MAP REFERENCES: Melways 40th Edition, Street Directory, Map 365 Reference J8
Melways 40th Edition, Street Directory, Map 365 Reference J9

DATE OF SEARCH: 21st January 2013

PRIORITY SITES REGISTER REPORT:

A search of the Priority Sites Register for the above map references, corresponding to the address given above, has indicated that this site is not listed on, and is not in the vicinity of a site listed on the Priority Sites Register at the above date.

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Clean Up Notice pursuant to section 62A, or a
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of the Environment Protection Act 1970 on the occupier of the site to require active management of these sites.

The Priority Sites Register does not list all sites known to be contaminated in Victoria. A site should not be presumed to be free of contamination just because it does not appear on the Priority Sites Register.

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EPA Information Centre
Herald & Weekly Times Tower
40 City Road, Southbank 3006
Tel: (03)9695 2700 Fax:(03)9695 2710

[Extract of Priority Sites Register] # 13763402 - 13763402132537 '2040 Mickleham Rd'

Extract of EPA Priority Site Register

PROPERTY INQUIRY DETAILS:

STREET ADDRESS: 1920 MICKLEHAM ROAD
SUBURB: MICKLEHAM
MUNICIPALITY: CITY OF HUME
MAP REFERENCES: Melways 40th Edition, Street Directory, Map 365 Reference H10
Melways 40th Edition, Street Directory, Map 365 Reference H11

DATE OF SEARCH: 21st January 2013

PRIORITY SITES REGISTER REPORT:

A search of the Priority Sites Register for the above map references, corresponding to the address given above, has indicated that this site is not listed on, and is not in the vicinity of a site listed on the Priority Sites Register at the above date.

IMPORTANT INFORMATION ABOUT THE PRIORITY SITES REGISTER:

You should be aware that the Priority Sites Register lists only those sites for which EPA has requirements for active management of land and groundwater contamination. Appropriate clean up and management of these sites is an EPA priority, and as such, EPA has issued either a:

Clean Up Notice pursuant to section 62A, or a
Pollution Abatement Notice pursuant to section 31A or 31B

of the Environment Protection Act 1970 on the occupier of the site to require active management of these sites.

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EPA Information Centre
Herald & Weekly Times Tower
40 City Road, Southbank 3006
Tel: (03)9695 2700 Fax:(03)9695 2710

[Extract of Priority Sites Register] # 13763434 - 13763434132936 '1920 Mickleham Rd'

Extract of EPA Priority Site Register

PROPERTY INQUIRY DETAILS:

STREET ADDRESS: 1960 MICKLEHAM ROAD
SUBURB: MICKLEHAM
MUNICIPALITY: CITY OF HUME
MAP REFERENCES: Melways 40th Edition, Street Directory, Map 365 Reference J10
Melways 40th Edition, Street Directory, Map 365 Reference H10

DATE OF SEARCH: 21st January 2013

PRIORITY SITES REGISTER REPORT:

A search of the Priority Sites Register for the above map references, corresponding to the address given above, has indicated that this site is not listed on, and is not in the vicinity of a site listed on the Priority Sites Register at the above date.

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You should be aware that the Priority Sites Register lists only those sites for which EPA has requirements for active management of land and groundwater contamination. Appropriate clean up and management of these sites is an EPA priority, and as such, EPA has issued either a:

Clean Up Notice pursuant to section 62A, or a
Pollution Abatement Notice pursuant to section 31A or 31B

of the Environment Protection Act 1970 on the occupier of the site to require active management of these sites.

The Priority Sites Register does not list all sites known to be contaminated in Victoria. A site should not be presumed to be free of contamination just because it does not appear on the Priority Sites Register.

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EPA Information Centre
Herald & Weekly Times Tower
40 City Road, Southbank 3006
Tel: (03)9695 2700 Fax:(03)9695 2710

[Extract of Priority Sites Register] # 13763445 - 13763445133146 '1960 Mickleham Rd'

ROYAL HISTORICAL SOCIETY OF VICTORIA INC.
239 A'Beckett Street, Melbourne 3000

Date: **24 January 2013**

Attention: **Sam O'Connor**

Company: **Parsons Brinckerhoff**

From: **Gerardine Horgan (Administrative Officer)**

SITE SEARCH: 1960, 1990, 2040 Mickleham Road, Mickleham, 3064

These sites run north on the east side of Mickleham Road from the junction of the Mount Ridley Road corner.
We regret that we have no information on this site. The Melway street directories show this as an area of open land up to 2012. A search on Google Earth shows that from 2002 to 2012 the area was open land, obviously used as a farm.
The Sands and McDougall Directories , which finished publication in 1974, listed Mickleham as a small country town with the residents listed in alphabetical order without street names or numbers. The majority of them were engaged in agricultural pursuits - cattle and sheep grazing and some horse studs.

We have no further information on this site.

Research by Margaret Fleming

Tel: (03) 9326 9288 Fax: (03) 9326 9477
Email: office@historyvictoria.org.au ABN 36 520 675 471 Reg. No: A2529
Find out more about us on our website: www.historyvictoria.org.au

ROYAL HISTORICAL SOCIETY OF VICTORIA INC.
239 A'Beckett Street, Melbourne 3000

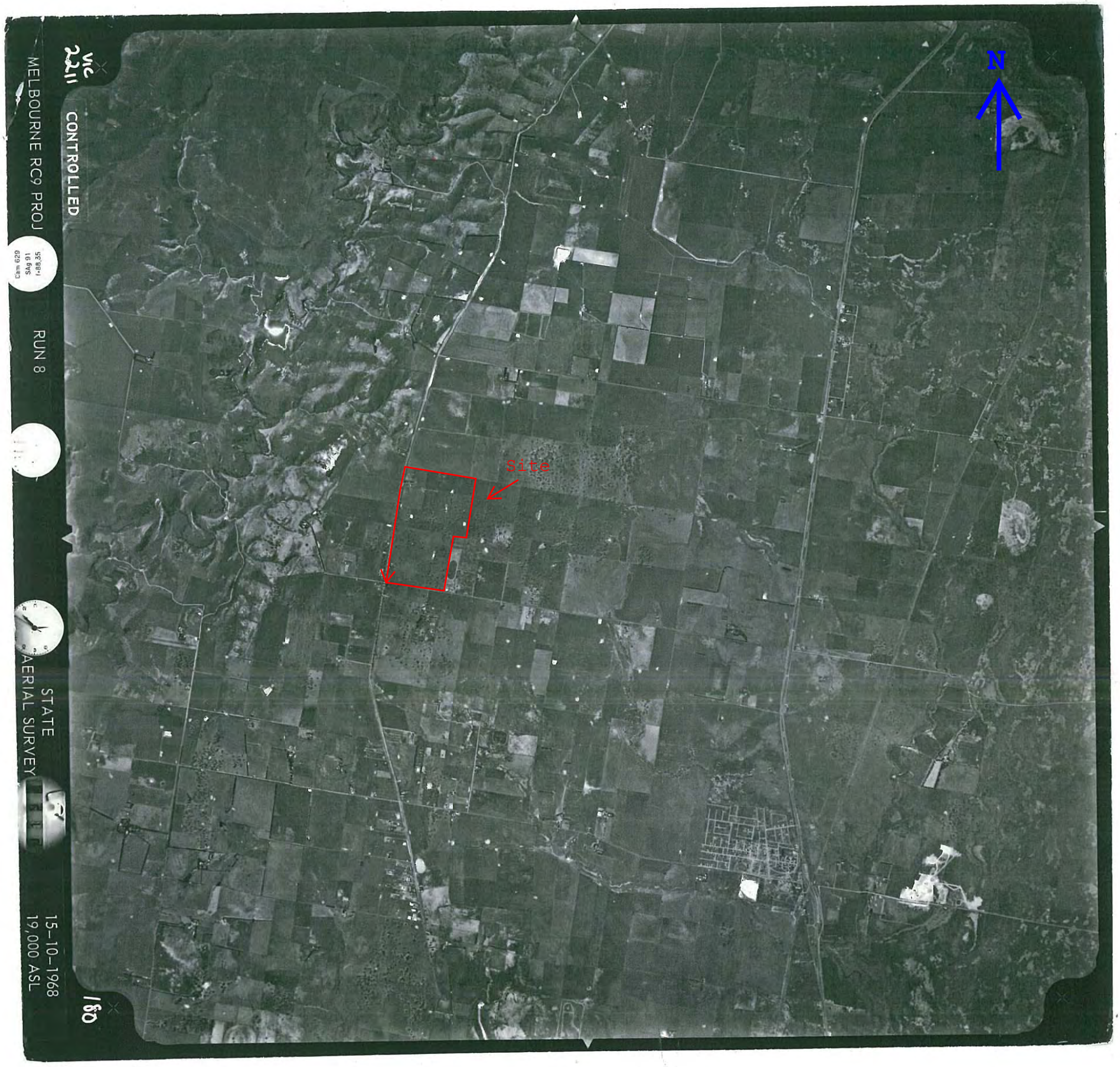
Tel: (03) 9326 9288 Fax: (03) 9326 9477
Email: office@historyvictoria.org.au ABN 36 520 675 471 Reg. No: A2529
Find out more about us on our website: www.historyvictoria.org.au

Appendix D

Aerial photograph


VIC
1916
N
MELBOURNE 1966 PROJECT RUN 1 8·2·66 LENS 122 151·75MM 9,800' ADASTRAPHOTO
34
Site

1966


N
Site
VIC
2211
CONTROLLED
MELBOURNE RC9 PROJ
RUN 8
STATE
AERIAL SURVEY
15-10-1968
19,000 ASL
180

1968


N
Site
VIC
3326
81
DEPT. OF CROWN
LANDS & SURVEY
VICTORIA ©
BROADMEADOWS
7822-1/79
RUN 4
H:5700'ASL
18.1.79

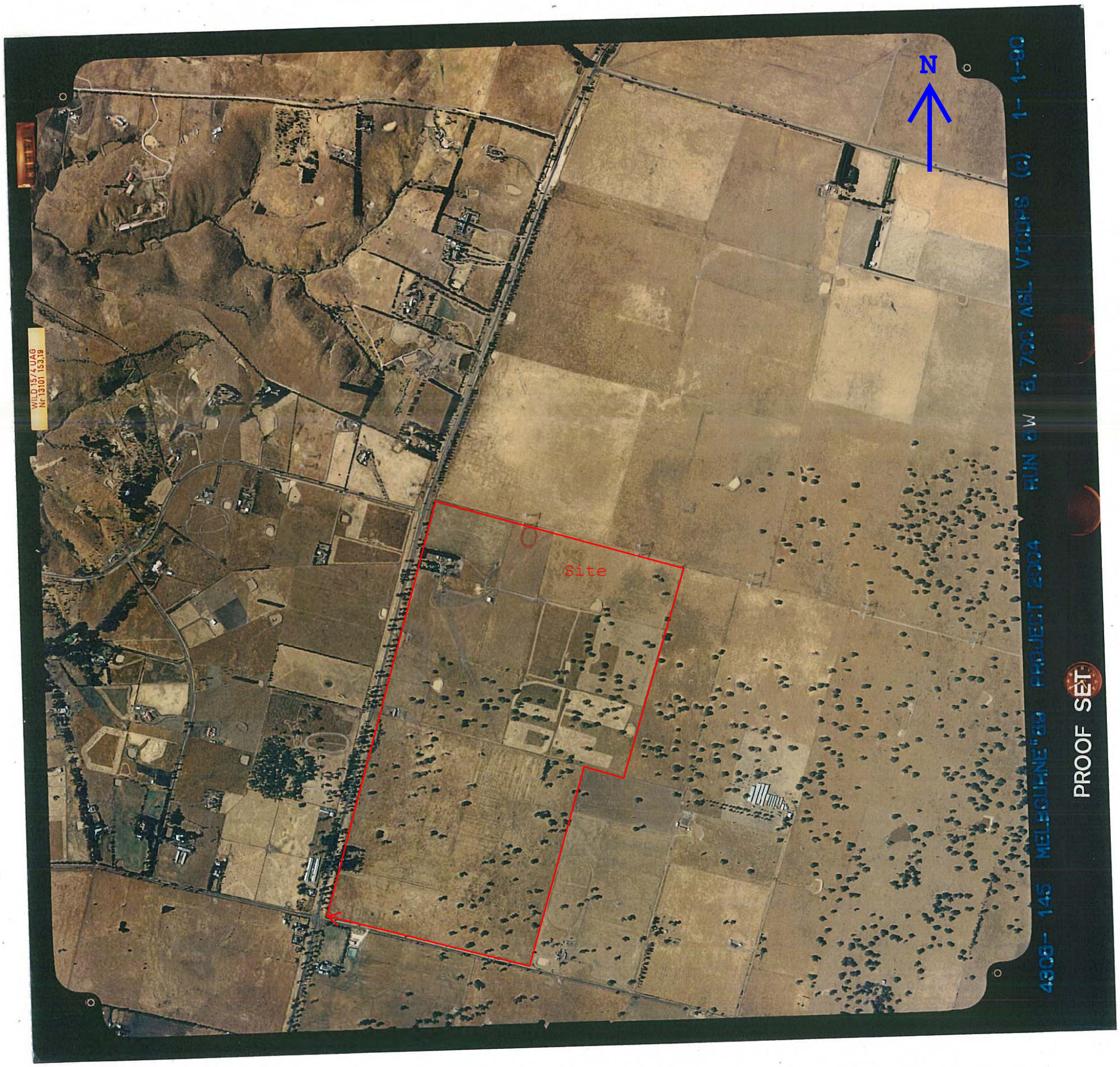
1979


DEPT. OF CROWN
LANDS & SURVEY
VICTORIA ©
7822-1/79
BROADMEADOWS
RUN 5
H:5700'ASL
18.1.79
//3
VIC
3326
Site
N

1979


N
Site
3911-149
B.MEADOWS 7822-1 M/S RUN 4
5,800' ASL VIC DLS©
28-12-84

1984


N
Site
4308- 145 MELBOURNE'89 PROJECT 2004 RUN 8W 8,700'ASL VICDPS (c) 1- 1-89
PROOF SET
WILD 15/4 UAG
Nr 13101 15319

1989

1991


WILD 1574 UAG
Nr 13101 153,19
N
Site
4398-64 MELBOURNE 1991 PROJ NO. 2072 RUN 6 8,300'ASL VICDPS (C) 17-3-91
LIBRARY PRINT


Map
Traffic
Site
200 m
1000 ft
Imagery ©2013 Cnes/Spot Image, DigitalGlobe, GeoEye, Sinclair Knight Merz & Fugro
Report a problem

2013


Map
Traffic
Site
100 m
200 ft
Imagery ©2013 DigitalGlobe, GeoEye, Sinclair Knight Merz & Fugro
Edit in Google Map Maker
Report a problem

2013

2013


Site
Map
Traffic
100 m
200 ft
Imagery ©2013 DigitalGlobe, GeoEye, Sinclair Knight Merz & Fugro
Report a problem

2013

Appendix E

Underground service location plans
– DBYD documentation

Job No 6089487

Phone: 1100
www.1100.com.au

Caller Details

Contact:	Mr Samuel O'Connor	**Caller Id:**	1138519	**Phone:**	0398612366
Company:	Parsons Brinckerhoff	**Mobile:**	0420430229	**Fax:**	Not Supplied
Address:	Level 15 28 Freshwater SOUTHBANK VIC 3006	**Email:**	soconnor@pb.com.au		

Dig Site and Enquiry Details

WARNING: The map below only displays the location of the proposed dig site and does not display any asset owners' pipe or cables. The area highlighted has been used only to identify the participating asset owners, who will send information to you directly.

User Reference: Lindum vale

Working on Behalf of:
Private

Enquiry Date:	**Start Date:**	**End Date:**
07/02/2013	13/02/2013	18/02/2013

Address:
2040 Mickleham Rd
Mickleham VIC 3064

Job Purpose: Excavation
Onsite Activity: Mechanical Excavation
Location of Workplace: Private Property
Location in Road: Not Supplied

- Check that the location of the dig site is correct. If not you must submit a new enquiry.
- Should the scope of works change, or plan validity dates expire, you must submit a new enquiry.
- Do NOT dig without plans. Safe excavation is your responsibility. If you do not understand the plans or how to proceed safely, please contact the relevant asset owners.

Notes/Description of Works:
33 Small excavations to 1.5mbgs for soil test pits

Your Responsibilities and Duty of Care

- If plans are not received within 2 working days, contact the asset owners directly & quote their Sequence No.
- ALWAYS perform an onsite inspection for the presence of assets. Should you require an onsite location, contact the asset owners directly. Please remember, plans do not detail the exact location of assets.
- Pothole to establish the exact location of all underground assets using a hand shovel, before using heavy machinery.
- Ensure you adhere to any State legislative requirements regarding Duty of Care and safe digging requirements.
- If you damage an underground asset you MUST advise the asset owner immediately.
- By using this service, you agree to Privacy Policy and the terms and disclaimers set out at **www.1100.com.au**
- **For more information on safe excavation practices, visit www.1100.com.au**

Asset Owner Details

The assets owners listed below have been requested to contact you with information about their asset locations within 2 working days. Additional time should be allowed for information issued by post. It is **your responsibility** to identify the presence of any underground assets in and around your proposed dig site. Please be aware, that not all asset owners are registered with the Dial Before You Dig service, so it is **your responsibility** to identify and contact any asset owners not listed here directly.
** Asset owners highlighted by asterisks ** require that you visit their offices to collect plans.
# Asset owners highlighted with a hash require that you call them to discuss your enquiry or to obtain plans.

Seq. No.	Authority Name	Phone	Status
27884169	Jemena Electricity Networks (Vic)	0385449672	NOTIFIED
27884171	Optus and/or Uecomm, Vic	1800505777	NOTIFIED
27884170	Telstra VICTAS	1800653935	NOTIFIED
27884172	Tenix	0399312046	NOTIFIED
27884173	Tenix	0399312046	NOTIFIED
27884174	Yarra Valley Water Ltd.	98721456	NOTIFIED

END OF UTILITIES LIST

Jemena Electricity Networks (Vic) Ltd.
321 Ferntree Gully Rd
Mt Waverley, VIC 3149
Phone: 03 8544 9672
Fax: 03 8544 9904
ABN: 82 064 651 083

Dial Before You Dig Enquiry Response

Jemena Electricity Networks (Vic) Ltd. Underground Cable Locations – Assets Affected

To: Mr Samuel O'Connor
Parsons Brinckerhoff
Level 15 28 Freshwater
Southbank, VIC 3006

Date: 07/02/2013

Re: DBYD Sequence No. 27884169			
Customer ID :	1138519	Fax :	Not Supplied
Company :	Parsons Brinckerhoff	Phone :	0398612366
E-Mail :	soconnor@pb.com.au	Mobile :	0420430229

We refer to the above Dial Before You Dig notification at:

2040 Mickleham Rd, Mickleham, VIC 3064			
Side of Street :		Private/Road/Both :	P
Map Type :	Melways	Map Reference :	365H10, 365H11, 36

DBYD Message - 33 Small excavations to 1.5mbgs for soil test pits

Attached to this response are the following documents:

Attached documents - 3 page cover letter and dig site map/s

Comments & Plans:
FB153_103,ZN82,JDA139,JDA138,JDD141,JDC141,JDD142
JDD143,JDC139,JDC140

Jemena Electricity Networks (Vic) Ltd. Underground Cable Location Details - Assets Affected

SEQUENCE NUMBER : 27884169
DATE OF ISSUE : 07/02/2013

NOTE: Other Utilities may have electrical assets in the vicinity of your work about which we have no information. This office does not usually have plans of privately owned cables on private property. Your attention is expressly drawn to the information and disclaimers below and '**The Conditions for Working in the Vicinity of Underground Cables'** attached.

1. Jemena Electricity Networks (Vic) Ltd. takes all reasonable care in providing details of its cables, however, due to the nature of underground cables and the age of some cables and records, it is impossible to conclusively ascertain the location of all cables. The accuracy and/or completeness of the information cannot be guaranteed and, accordingly, is intended to be indicative only. Information should not be solely relied upon when undertaking underground works.

2. Due to the inherent dangers associated with excavation in the vicinity of underground cables, precautions should be taken in the undertaking of any underground works, including (but not limited to) the following:

- All excavation sites should be examined visually for underground cables by careful hand excavation. Cable cover slabs if present must not be disturbed;
- Particular attention should be paid to areas surrounding Pole type Substations, High Voltage Switches and Kiosk Substations as there are often unrecorded earth wires buried in the vicinity;
- If any undisclosed underground cables are located, Jemena Electricity Networks (Vic) Ltd. should be notified immediately on telephone 131 626
- All personnel must be properly briefed, particularly those associated with the use of earth moving equipment, trenching, boring and pneumatic equipment &;
- & All work must be undertaken in accordance with the Electricity Safety Act 1998 and the Electricity Safety (Network Assets) Regulations 1999.

3. Except to the extent that liability may not be capable of lawful exclusion, Jemena Electricity Networks (Vic) Ltd. and its servants and agents shall be under no liability whatsoever to any person for loss or damage (including indirect or consequential loss or damage) however caused (including, without limitation, breach of contract negligence and/or breach of statute) which may be suffered or incurred from or in connection with this information sheet or any Plans attached hereto. For the purposes of this condition, Jemena Electricity Networks (Vic) Ltd. has contracted on behalf of its servants and agents.

4. Except as expressly provided to the contrary in this information sheet or the attached Plans, all terms, conditions, warranties, undertakings or representations (whether expressed or implied) are excluded to the fullest extent permitted by law.

5. Any information provided is valid only for 28 days from the date of issue.

OVERHEAD NO GO ZONES

If any overhead powerlines are near your proposed work, will your equipment intrude into a NO GO Zone?

If the answer is YES, or you are NOT SURE, then please phone **131 626** to discuss No Go Zone matters.

Further information concerning NO Go Zones may be obtained from
www.ocei.vic.gov.au/industry/ngzone.html

CONDITIONS FOR WORKING IN THE VICINITY OF UNDERGROUND CABLES

SEQUENCE NUMBER : 27884169
DATE OF ISSUE : 07/02/2013

Before work commences, you must follow the NO GO ZONE safety procedures. See website www.workcover.com.au

Protective Covers
Our electrical cables usually have protective covers of;

1. Concrete or PVC cover slabs;
2. PVC, A.C. or galvanised iron pipe;
3. Concrete encased PVC pipe;
4. Thin Plastic marker tape; or
5. Wooden troughing;

Note: Some cables are known to be buried without protection.
To assist in the identification of an underground cable, some installations have marker tape installed above the cover slab or conduit protecting the cable. You must not rely on marker tape as a test for existence of underground cables.

Location of Cable(s)
All reasonable care is taken to ensure that the location and level of cable(s) shown on our office drawing/s is correct at the time of installation, however, reference points may change and therefore proving of the cable(s) is essential when working in close proximity to them.

Excavating parallel to Cable(s)
Generally there is no restriction to excavating parallel to our cable(s) to a depth not exceeding that of the cable. When proposed excavations are within 500mm of our cable(s), trial holes shall be hand dug at regular intervals to prove the actual locations of the cable(s).
If excavation is to exceed the depth of the cable(s) and it is likely that the protective covers or the bedding material around the cable(s) may be disturbed, then our office shall be informed.

Excavating across Cable(s)
It is essential that the location of cable(s) is proven by careful hand digging before using mechanical excavating machinery within 500mm of the cable(s).
A Minimum clearance of 300mm above from a cable shall be maintained.
If the width or depth of the excavation is such that the cable(s) will be exposed, our office shall be contacted to determine whether the cable(s) should be taken out of service, or whether they need to be protected or supported.
In no case shall a cable protective cover be removed without approval.
A cable protective cover may only be replaced under the supervision of our Supervisor.

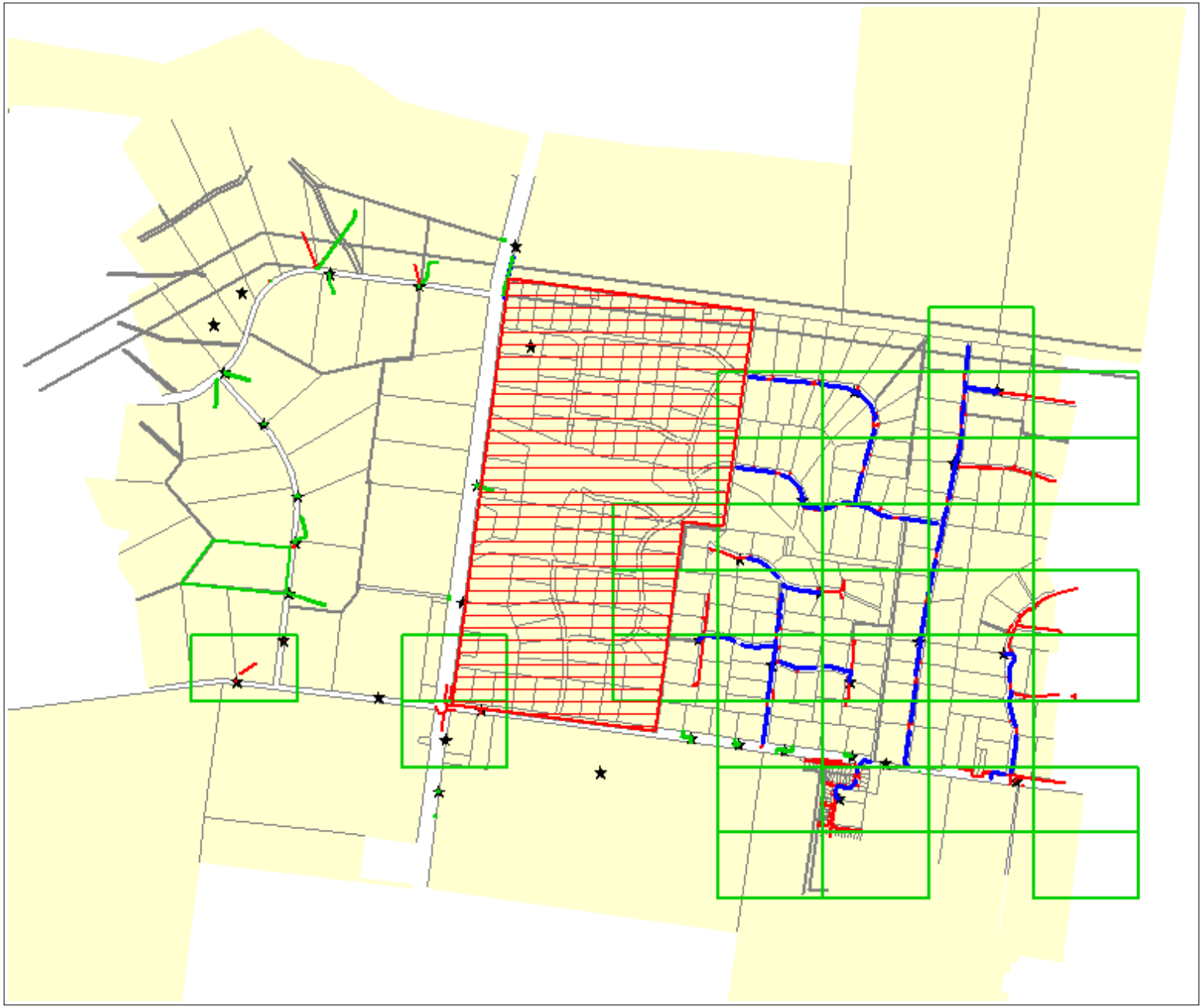
Heavy Machinery Operating over Cable(s)
Where heavy "Crawler" or "Vibration" type machinery is operated over the top of cable(s), a minimum cover of 1000mm to the cable protective cover must be maintained whilst the machinery is in operation.

Boring
Where it is required to bore across the line of the cable(s), the actual location of the cable(s) shall be first proven by hand digging.
A trench shall be dug one metre from the side of the cable(s) which the auger will approach, to ensure a minimum clearance of 150mm can be maintained.

Explosives
The use of explosives within 3.0 metres of a cable(s) is not allowed.

Regulations
All work must be undertaken in accordance with the Electricity Safety (Network Assets) Regulations 1999.

Alteration of Levels
If it is desired to increase or decrease ground levels above our cables, please contact our office before the project commences to seek our approval.



High Voltage Cable

Low Voltage Cable

Fibre Optic Cable

Conduit

Pole

Supply Pit

Underground Plan Extents Reference

Underground Plan Number ZG28

Asset Number A000001

Street Name King William

Street Address 34

Property Title

Road Reserve King William

Point that represents the digsite.

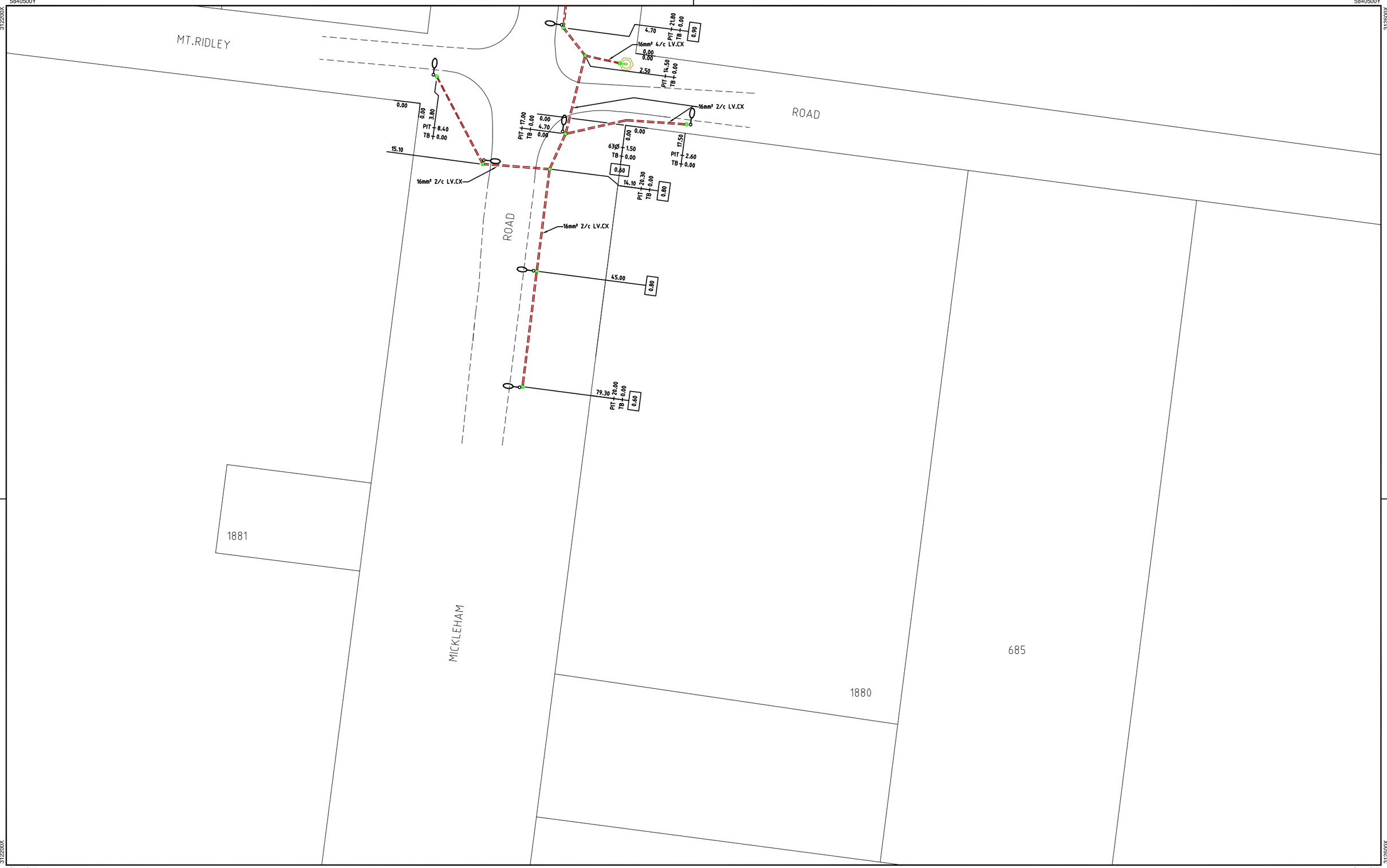
Line that represents the digsite. ie Trench, Underroad Bore.

Area that represents the digsite.

Assets Affected
Sequence Number: 27884169
Location: 2040 Mickleham Rd
If this response does not display your intended dig site please inquire again

Scale: 1:20000
Printed On: 07/02/2013

UNDERGROUND CABLE PLAN



LEGEND

- HV 22kV U/G CABLE 185 3/c 22.0.X.H.H 0.30
- LV MAINS U/G CABLE 185 4/c LV.S.X 0.30
- LV SERVICE U/G CABLE 16 4/c LV.C.X 0.25
- PUBLIC LIGHTING CABLE 6mm² 0.25
- SUPERVISORY CABLE 0.25
- HV MAINS STRAIGHT JOINT
- LV MAINS STRAIGHT JOINT
- LV SERVICE TEE JOINT
- LV MAIN TEE JOINT
- INSULATED END
- SEALED END
- U/G CABLE CUT END
- ELECTRICAL DUCT & SIZE
- ELECTRICAL DUCT 610mm Dia UNLESS SHOWN
- PIPE (OTHER AUTHORITIES)
- METER BOX
- SERVICE PIT
- VIC ROADS PIT
- PARALLELING PILLAR
- DEPTH OF EARTH COVER TO TOP OF CABLE
- DEPTH TO TOP OF OTHER SERVICES/OBSTRUCTIONS
- 80W HV, MOUNTED AT 5.5m
- 100W HPS, MOUNTED AT 5.5m
- 150W HPS, MOUNTED AT 10m
- 250W HPS, MOUNTED AT 12.5m
- 400W HPS, MOUNTED AT 15m
- PUBLIC LIGHT (AS SPECIFIED)
- 2x14W T5 FLOURO
- 2x24W T5 FLOURO
- 32W COMPACT FLOURO
- 42W COMPACT FLOURO
- COMMUNICATIONS PIT
- BOUNDARY OR BUILDING LINE
- KERB LINE
- CABLE HEAD POLE- HV/LV
- SUBTRANSMISSION POLE
- HV/LV POLE
- SINGLE POLE SUBSTATION
- HV POLE
- LV POLE
- NEW
- EXISTING
- HIGH VOLTAGE CABLE
- LOW VOLTAGE CABLE
- TITLE BOUNDARY
- BACK OF KERB
- TURNING OR TANGENT POINT
- INTERSECTION POINT
- DUCT END
- OUT OF COMMISSION
- CHP CABLE HEAD POLE
- AC ASBESTOS CEMENT
- EW EARTHERWARE
- GI GALVANIZED IRON
- PVC POLYVINYL CHLORIDE
- RC REINFORCED CONCRETE
- P/L PUBLIC LIGHTING
- FH FIRE HYDRANT
- SWD STORMWATER DRAIN
- PROJ PROJECTION
- ℄ CENTRELINE
- P & W F POST AND WIRE MESH FENCE
- C W M CHAIN WIRE MESH
- SJ STRAIGHT JOINT (HV / LV / H — MAINS / S — SERVICE)
- TJ TEE JOINT
- 10/65 HOUSE No / LOT No

800 X 574mm

Jemena Electricity Networks (Vic) Ltd (JEN) L
ABN 82 064 651 083
321 Ferntree Gully Road
Mt Waverley, VIC, 3149
GPO Box 2982
Melbourne VIC 3001
www.jemena.com.au

IMPORTANT
USERS OF THIS PLAN PLEASE NOTE

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HOWEVER, THE INFORMATION CANNOT BE GUARANTEED FOR CORRECTNESS OR COMPLETENESS.

WHERE WORK IN CLOSE PROXIMITY TO THE CABLES IS PROPOSED THE POSITION OF THE CABLES MUST FIRST BE CONFIRMED BY CAREFUL HAND EXCAVATION.

JCZ139	JDA139	JDB139
JCZ138	JDA138	JDB138
JCZ137	JDA137	JDB137

REVISION				
03-01-10	A	ADDED PART SAP6008826:01	HL	SH

DRAWN : H. Lewis
DATE : 03-01-10
CHECKED :
DATE :
SIGNED : S. Harker
Asset Manager AAE Network

LENGTHS ARE IN METRES
ORIGINAL SCALE: 1:500

MELWAY REF : 365 H:11

DRG. No. JDA138

REV A

UNDERGROUND CABLE PLAN MICKLEHAM

JDA138

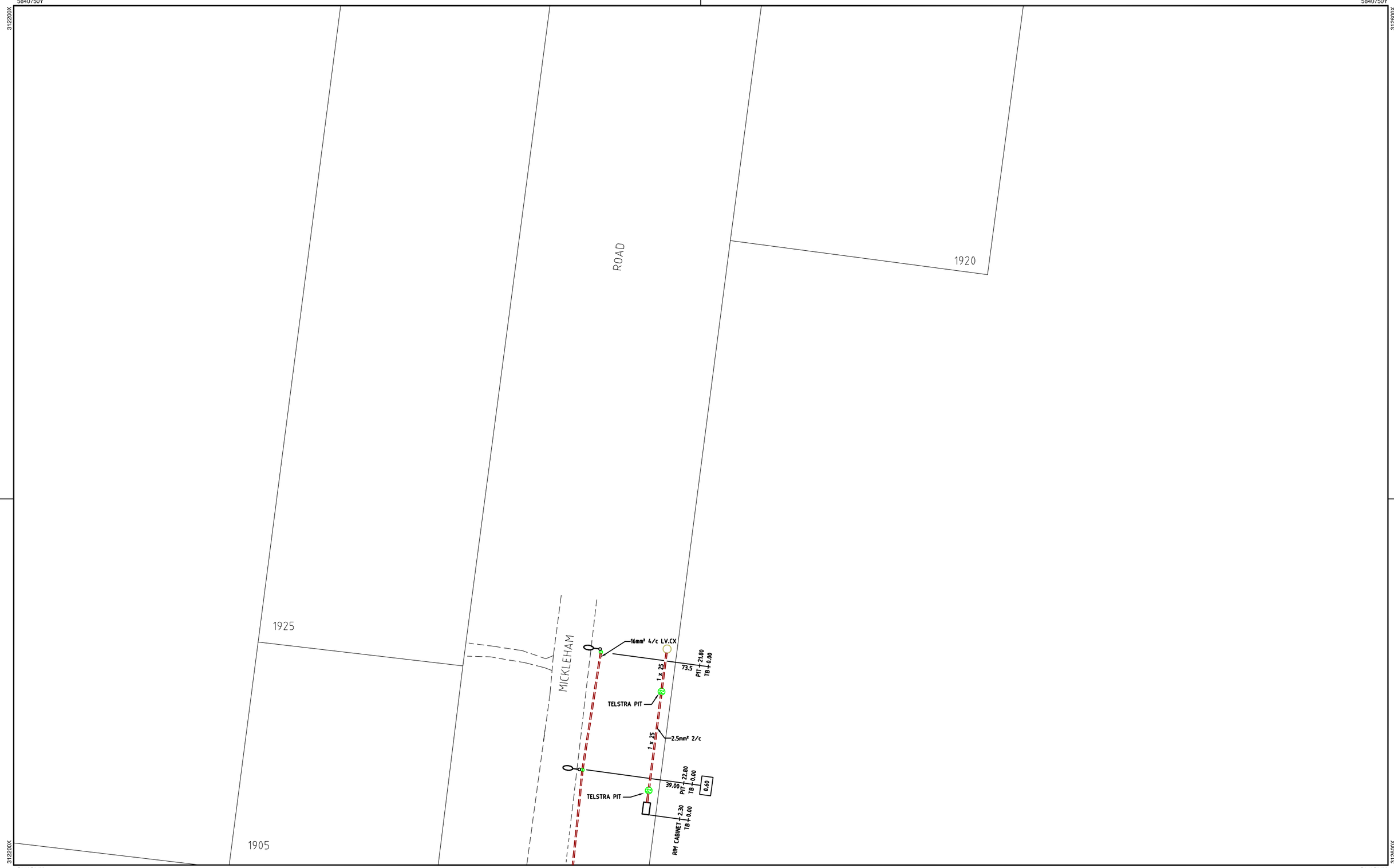
AutoCAD A1

JDA138.dwg Jan 07, 2010 - 9:04am - hlewis

TST-EN-0000X 00-0A

A1

UNDERGROUND CABLE PLAN



LEGEND

- HV 22kV U/G CABLE 185 3/c 22.0.X.HE.H (0.3)
- LV MAINS U/G CABLE 185 4/c LV.S.X (0.25)
- LV SERVICE U/G CABLE 16 4/c LV.C.X (0.25)
- PUBLIC LIGHTING CABLE 6mm² (0.25)
- SUPERVISORY CABLE (0.25)
- HV MAINS STRAIGHT JOINT
- LV MAINS STRAIGHT JOINT
- LV SERVICE TEE JOINT
- LV MAIN TEE JOINT
- INSULATED END
- SEALED END
- U/G CABLE CUT END
- ELECTRICAL DUCT & SIZE
- ELECTRICAL DUCT 610mm 12m UNLESS SHOWN
- PIPE (OTHER AUTHORITIES)
- METER BOX
- SERVICE PIT
- VIC ROADS PIT
- PARALLELING PILLAR
- DEPTH OF EARTH COVER TO TOP OF CABLE
- DEPTH TO TOP OF OTHER SERVICES/OBSTRUCTIONS
- 66kV HV, MOUNTED AT 5.5m
- 100W HPS, MOUNTED AT 5.5m
- 150W HPS, MOUNTED AT 10m
- 250W HPS, MOUNTED AT 12.5m
- 400W HPS, MOUNTED AT 15m
- PUBLIC LIGHT (AS SPECIFIED)
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- SUBTRANSMISSION POLE
- HV/LV POLE
- SINGLE POLE SUBSTATION
- HV POLE
- LV POLE
- NEW
- EXISTING
- HIGH VOLTAGE CABLE
- LOW VOLTAGE CABLE
- TITLE BOUNDARY
- BACK OF KERB
- TURNING OR TANGENT POINT
- INTERSECTION POINT
- DUCT END
- OUT OF COMMISSION
- CHP CABLE HEAD POLE
- AC ASBESTOS CEMENT
- EW EARTHERWARE
- GI GALVANIZED IRON
- PVC POLYVINYL CHLORIDE
- RC REINFORCED CONCRETE
- P/L PUBLIC LIGHTING
- FH FIRE HYDRANT
- SWD STORMWATER DRAIN
- PROJ PROJECTION
- ℄ CENTRELINE
- P & W F POST AND WIRE MESH FENCE
- C W M CHAIN WIRE MESH
- SJ STRAIGHT JOINT (HV, LV, S — MAINS, S — SERVICE)
- TJ TEE JOINT
- 10/65 HOUSE No / LOT No

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JCZ140	JDA140	JDB140
JCZ139	JDA139	JDB139
JCZ138	JDA138	JDB138

REVISION				
03-01-10	A	ADDED PART SAP6008826:01, YJ68	HL	SH

DRAWN : H. Lewis
DATE : 03-01-10
CHECKED :
DATE :
SIGNED : S. Harker
Asset Manager AAE Network

LENGTHS ARE IN METRES
ORIGINAL SCALE: 1:500

MELWAY REF : 365 H:11

DRG. No. JDA139

REV A

UNDERGROUND CABLE PLAN MICKLEHAM

JDA139

AutoCAD A1

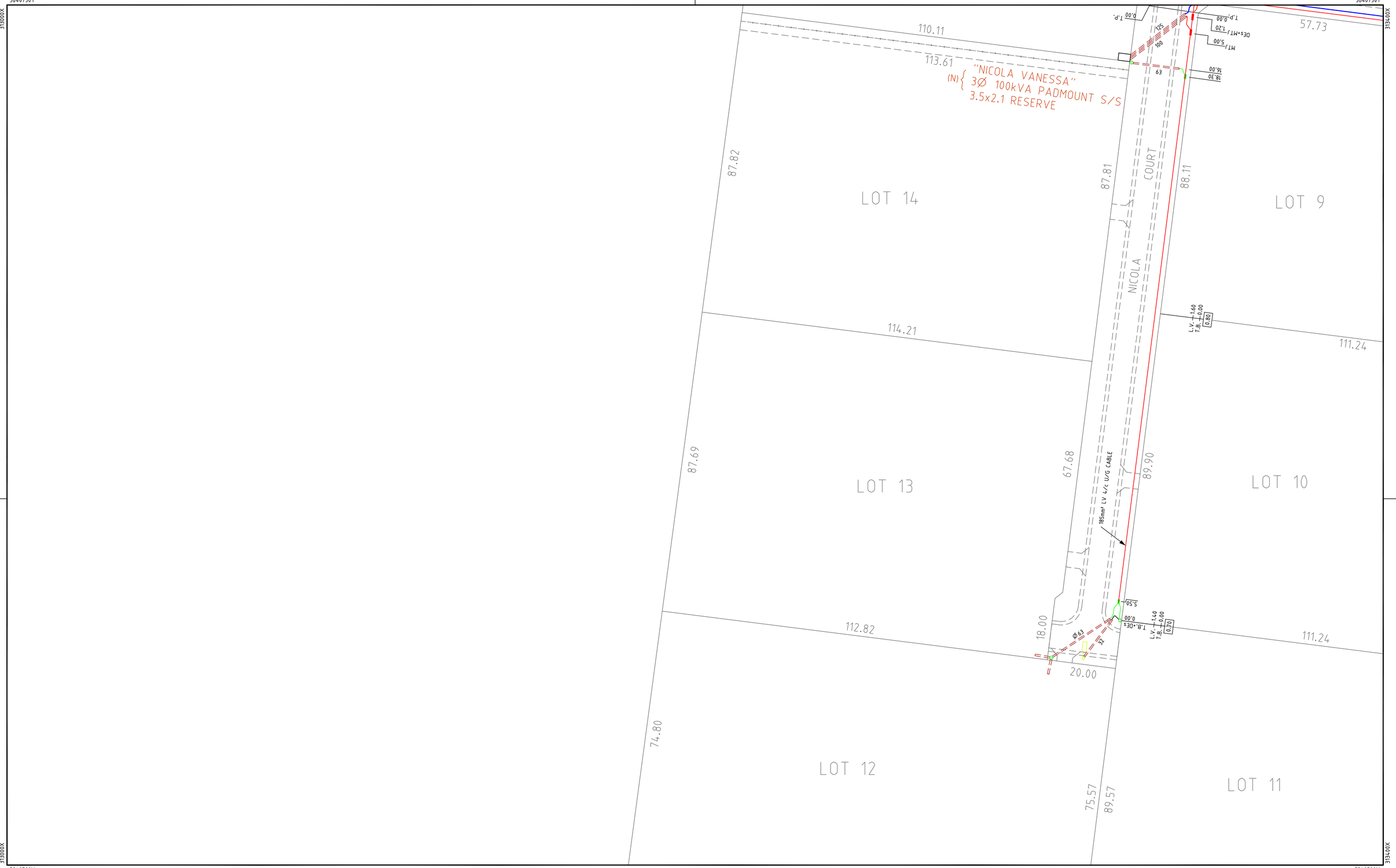
800 X 574mm

JDA139.dwg Jan 07, 2010 - 9:08am - hlewis

TST-EN-0000X 00-0A

A1

UNDERGROUND CABLE PLAN



LEGEND

- HV 22KV U/G CABLE 185 3c 22A,X,HC,H (0.5)
- LV MAINS U/G CABLE 185 4c L.V.S.A.X (0.35)
- LV SERVICE U/G CABLE 16 4c L.V.C.X (0.25)
- PUBLIC LIGHTING CABLE 6mmÊ (0.25)
- SUPERVISORY CABLE (0.25)
- HV MAINS STRAIGHT JOINT
- LV MAINS STRAIGHT JOINT
- LV SERVICE TEE JOINT
- LV MAIN TEE JOINT
- INSULATED END
- SEALED END
- U/G CABLE CUT END
- ELECTRICAL DUCT & SIZE
- ELECTRICAL DUCT (63mm OUTSIDE Dia UNLESS SHOWN)
- PIPE (OTHER AUTHORITIES)
- METER BOX
- DEPTH OF EARTH COVER TO TOP OF CABLE
- DEPTH TO TOP OF OTHER SERVICES/OBSTRUCTIONS
- 80W MV, MOUNTED AT 5.5m
- 100W HPS, MOUNTED AT 5.5m
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- PUBLIC LIGHT (AS SPECIFIED)
- SERVICE PIT
- COMMUNICATIONS PIT
- VIC ROADS PIT
- BOUNDARY OR BUILDING LINE
- KERB LINE
- PARALLELLING PILLAR
- HOUSE No.
- LOT No
- CABLE HEAD POLE = HV/LV
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- HV/LV POLE
- SINGLE POLE SUBSTATION
- HV POLE
- LV POLE
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- EXISTING
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AGL - AutoCAD A1

800 X 574mm

AGL

AGILTY
ASSET PERFORMANCE
34 KING WILLIAM ST
BROADMEADOWS

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JDB140	JDC140	JDD140
JDB139	**JDC139**	JDD139
JDB138	JDC138	JDD138

REVISION

26/5/05	B	CHANGED COLOUR OF CONDUITS	JH	BW
13/06/03	A	ADDED PART SAP6003140-01	DMS	BW

DRAWN : D.SFRATTA
DATE : 13/6/2003
CHECKED :
DATE :
SIGNED : H.DEMAN
FOR MANAGER

AGL

MELWAY REF :

LENGTHS ARE IN METRES
ORIGINAL SCALE: 1:500

DRG. No. JDC139

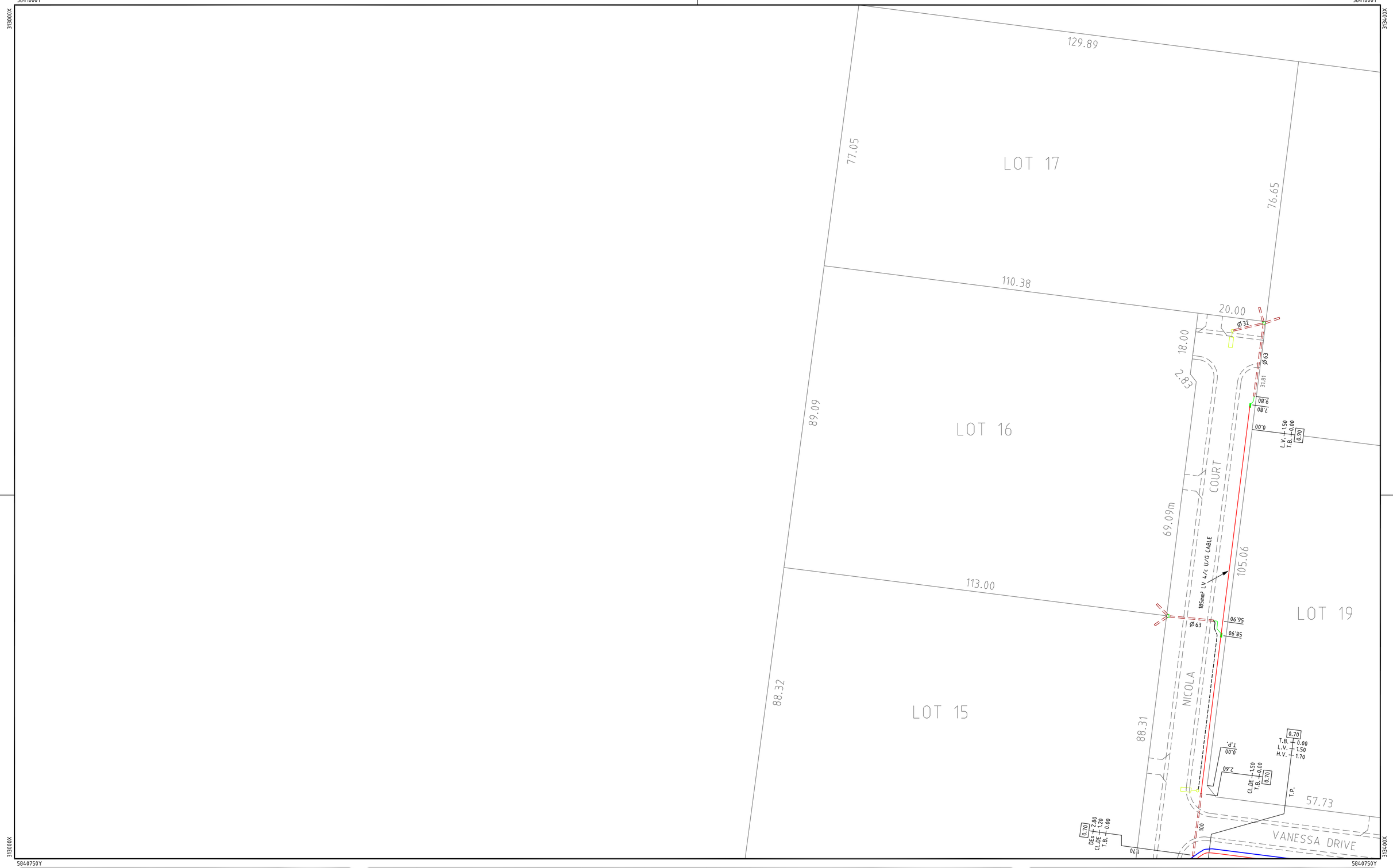
REV B

UNDERGROUND CABLE PLAN
MICKLEHAM

JDC139

A1

UNDERGROUND CABLE PLAN



LEGEND

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- KERB LINE
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- HOUSE No.
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CABLE HEAD POLE = HV/LV	CHP	CABLE HEAD POLE	
SUBTRANSMISSION POLE	AC	ASBESTOS CEMENT	
HV/LV POLE	EW	EARTHENWARE	
SINGLE POLE SUBSTATION	GI	GALVANIZED IRON	
HV POLE	PVC	POLYVINYL CHLORIDE	
LV POLE	RC	REINFORCED CONCRETE	
NEW	P/L	PUBLIC LIGHTING	
EXISTING	FH	FIRE HYDRANT	
HIGH VOLTAGE CABLE	SWD	STORMWATER DRAIN	
LOW VOLTAGE CABLE	PROJ	PROJECTION	
TITLE BOUNDARY	–	CENTRELINE	
BACK OF KERB	P & W F	POST AND WIRE MESH FENCE	
TURNING OR TANGENT POINT	C W M	CHAIN WIRE MESH	
INTERSECTION POINT	SJ	STRAIGHT JOINT	HV / LV / M — MAINS / S — SERVICE
DUCT END	TJ	TEE JOINT	
OUT OF COMMISSION			

800 X 574mm

AGL - AutoCAD A1

AGL

AGILTY
ASSET PERFORMANCE
34 KING WILLIAM ST
BROADMEADOWS

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JDB141	JDC141	JDD141
JDB140	JDC140	JDD140
JDB139	JDC139	JDD139

REVISION

26/5/05	B	CHANGED COLOUR OF CONDUITS	JH	BW
13/06/03	A	ADDED PART SAP6003140-01	DMS	BW

DRAWN : D.SFRATTA
DATE : 13/6/2003
CHECKED :
DATE :
SIGNED : H.DEMAN
FOR MANAGER

AGL

MELWAY REF :

LENGTHS ARE IN METRES
ORIGINAL SCALE: 1:500

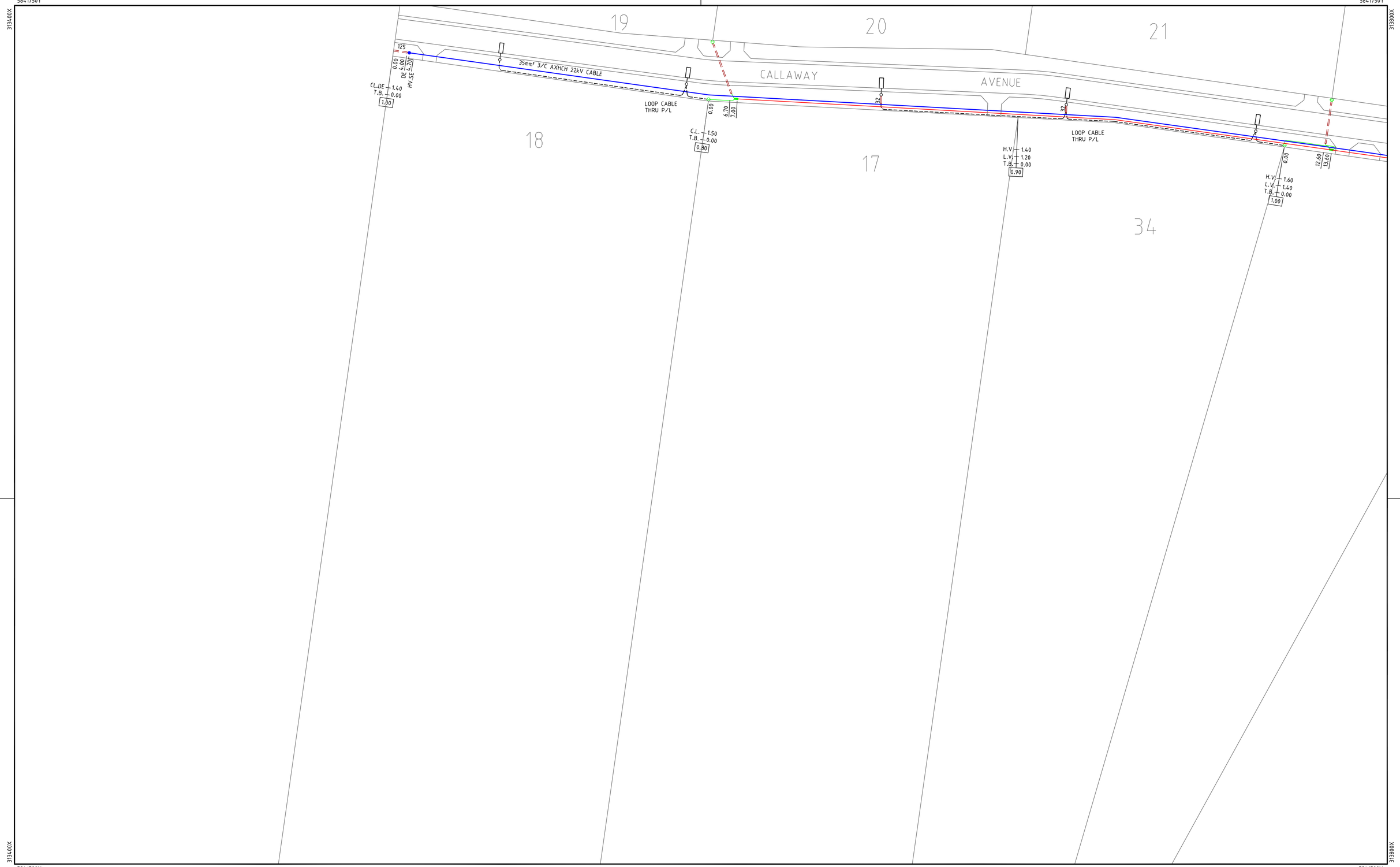
DRG. No. JDC140 REV B

UNDERGROUND CABLE PLAN
MICKLEHAM

JDC140

A1

UNDERGROUND CABLE PLAN



LEGEND

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- ELECTRICAL DUCT (63mm OUTSIDE Dia UNLESS SHOWN)
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- BOUNDARY OR BUILDING LINE
- KERB LINE
- PARALLELING PILLAR
- HOUSE No
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CABLE HEAD POLE - HV/LV	CHP	CABLE HEAD POLE	
SUBTRANSMISSION POLE	AC	ASBESTOS CEMENT	
HV/LV POLE	EW	EARTHENWARE	
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HIGH VOLTAGE CABLE	SWD	STORMWATER DRAIN	
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DUCT END	TJ	TEE JOINT	M — MAINS / S — SERVICE
OUT OF COMMISSION			

AGL - AutoCAD A1

800 X 574mm

AGL

AGILTY
ASSET PERFORMANCE
34 KING WILLIAM ST
BROADMEADOWS

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JDC144	JDD144	JDE144
JDC143	JDD143	JDE143
JDC142	JDD142	JDE142

REVISION				
		/		
		/		
		/		
		/		
		/		
		/		
		/		
		/		
26/5/05	B	CHANGED COLOUR OF CONDUITS	JH	BW
15-11-02	A	ADDED SAP6002401-01	SV	JD

DRAWN : S.VINCI
DATE : 15-11-02
CHECKED :
DATE :
SIGNED : J. DOWDLE
FOR MANAGER

AGL

LENGTHS ARE IN METRES
ORIGINAL SCALE: 1:500

MELWAY REF : 386:01

DRG. No. JDD143

REV B

UNDERGROUND CABLE PLAN
MICKLEHAM

JDD143

A1

UNDERGROUND CABLE PLAN

5841500Y 313400X 313800X

5841250Y

LEGEND

- HV 22kV U/G CABLE 185 3c 22,A,X,HC,H (0.5)
- LV MAINS U/G CABLE 185 4c LV,S&,X (0.35)
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- CABLE HEAD POLE:- HV/LV
- SUBTRANSMISSION POLE
- HV/LV POLE
- SINGLE POLE SUBSTATION
- HV POLE
- LV POLE
- NEW
- EXISTING
- HV HIGH VOLTAGE CABLE
- LV LOW VOLTAGE CABLE
- TB TITLE BOUNDARY
- BOK BACK OF KERB
- TP TURNING OR TANGENT POINT
- IP INTERSECTION POINT
- D/E DUCT END
- OOC OUT OF COMMISSION
- CHP CABLE HEAD POLE
- AC ASBESTOS CEMENT
- EW EARTHENWARE
- GI GALVANIZED IRON
- PVC POLYVINYL CHLORIDE
- RC REINFORCED CONCRETE
- P/L PUBLIC LIGHTING
- FH FIRE HYDRANT
- SWD STORMWATER DRAIN
- PROJ PROJECTION
- CENTRELINE
- P & W F POST AND WIRE MESH FENCE
- C W M CHAIN WIRE MESH
- SJ STRAIGHT JOINT (HV, LV, M — MAINS, S — SERVICE)
- TJ TEE JOINT

AGL - AutoCAD A1

800 X 574mm

AGL

AGILTY
ASSET PERFORMANCE
34 KING WILLIAM ST
BROADMEADOWS

IMPORTANT
USERS OF THIS PLAN PLEASE NOTE

ALL REASONABLE CARE HAS BEEN TAKEN TO ENSURE THAT THE UNDERGROUND CABLE LOCATION INFORMATION IS CORRECTLY SHOWN ON THIS PLAN.

HOWEVER, THE INFORMATION CANNOT BE GUARANTEED FOR CORRECTNESS OR COMPLETENESS.

WHERE WORK IN CLOSE PROXIMITY TO THE CABLES IS PROPOSED THE POSITION OF THE CABLES MUST FIRST BE CONFIRMED BY CAREFUL HAND EXCAVATION.

JDC143	JDD143	JDE143
JDC142	JDD142	JDE142
JDC141	JDD141	JDE141

REVISION

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	/			
26/5/05	B	CHANGED COLOUR OF CONDUITS	JH	BW
10-07-02	A	ADDED SAP6001723:01, SAP6001723:02	SV	JD

DRAWN : S.VINCI
DATE : 10-07-02
CHECKED :
DATE :
SIGNED : J. DOWDLE
FOR MANAGER

AGL

MELWAY REF : 384 A:1

5 0 5 10 15 20 25
LENGTHS ARE IN METRES
ORIGINAL SCALE: 1:500

DRG. No. JDD142 REV B

UNDERGROUND CABLE PLAN
MICKLEHAM

JDD142

A1

UNDERGROUND CABLE PLAN

5841250Y 313000X 5841250Y 313400X

313000X 313400X

5841000Y 5841000Y

LEGEND

HV, 22kV U/G CABLE 185 3c 22,A,X,HC,H	(0.5)	DEPTH OF EARTH COVER TO TOP OF CABLE		CABLE HEAD POLE> HV/LV	CHP	CABLE HEAD POLE
LV MAINS U/G CABLE 185 4c LV,S.A.X	(0.35)			SUBTRANSMISSION POLE	AC	ASBESTOS CEMENT
LV SERVICE U/G CABLE 16 4c LV,C.X	(0.25)	DEPTH TO TOP OF OTHER SERVICES/OBSTRUCTIONS		HV/LV POLE	EW	EARTHENWARE
PUBLIC LIGHTING CABLE 6mmÊ	(0.25)			SINGLE POLE SUBSTATION	GI	GALVANIZED IRON
SUPERVISORY CABLE	(0.25)	80W MV, MOUNTED AT 5,5m		HV POLE	PVC	POLYVINYL CHLORIDE
HV MAINS STRAIGHT JOINT		100W HPS, MOUNTED AT 5,5m			RC	REINFORCED CONCRETE
LV MAINS STRAIGHT JOINT		150W HPS, MOUNTED AT 10m		LV POLE	P.L	PUBLIC LIGHTING
LV SERVICE TEE JOINT		250W HPS, MOUNTED AT 12,5m		NEW	FH	FIRE HYDRANT
LV MAIN TEE JOINT		400W HPS, MOUNTED AT 15m		EXISTING	SWD	STORMWATER DRAIN
INSULATED END		PUBLIC LIGHT (AS SPECIFIED)	HV	HIGH VOLTAGE CABLE	PROJ	PROJECTION
SEALED END		SERVICE PIT	LV	LOW VOLTAGE CABLE	–	CENTRELINE
U/G CABLE CUT END			TB	TITLE BOUNDARY	P & W F	POST AND WIRE MESH FENCE
ELECTRICAL DUCT & SIZE		COMMUNICATIONS PIT	BOK	BACK OF KERB	C W M	CHAIN WIRE MESH
ELECTRICAL DUCT (63mm OUTSIDE Dia UNLESS SHOWN)		VIC ROADS PIT	TP	TURNING OR TANGENT POINT	SJ	STRAIGHT JOINT { HV, LV, M — MAINS, S — SERVICE
PIPE (OTHER AUTHORITIES)		BOUNDARY OR BUILDING LINE	IP	INTERSECTION POINT		
METER BOX		KERB LINE	D/E	DUCT END	TJ	TEE JOINT
		PARALLELING PILLAR	OOC	OUT OF COMMISSION		
		HOUSE No / LOT No				

800 X 574mm

AGL - AutoCAD A1

AGL

AGILITY
ASSET PERFORMANCE
34 KING WILLIAM ST
BROADMEADOWS

IMPORTANT
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JDB142	JDC142	JDD142
JDB141	JDC141	JDD141
JDB140	JDC140	JDD140

REVISION

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	/			
03-05-06	A	ADDED PART SAP6005623:02	LP	BW

DRAWN : LP
DATE : 03-05-06
CHECKED :
DATE :
SIGNED : B.Wilson
FOR MANAGER

AGL

5 0 5 10 15 20 25
LENGTHS ARE IN METRES
ORIGINAL SCALE: 1:500

N

MELWAY REF :

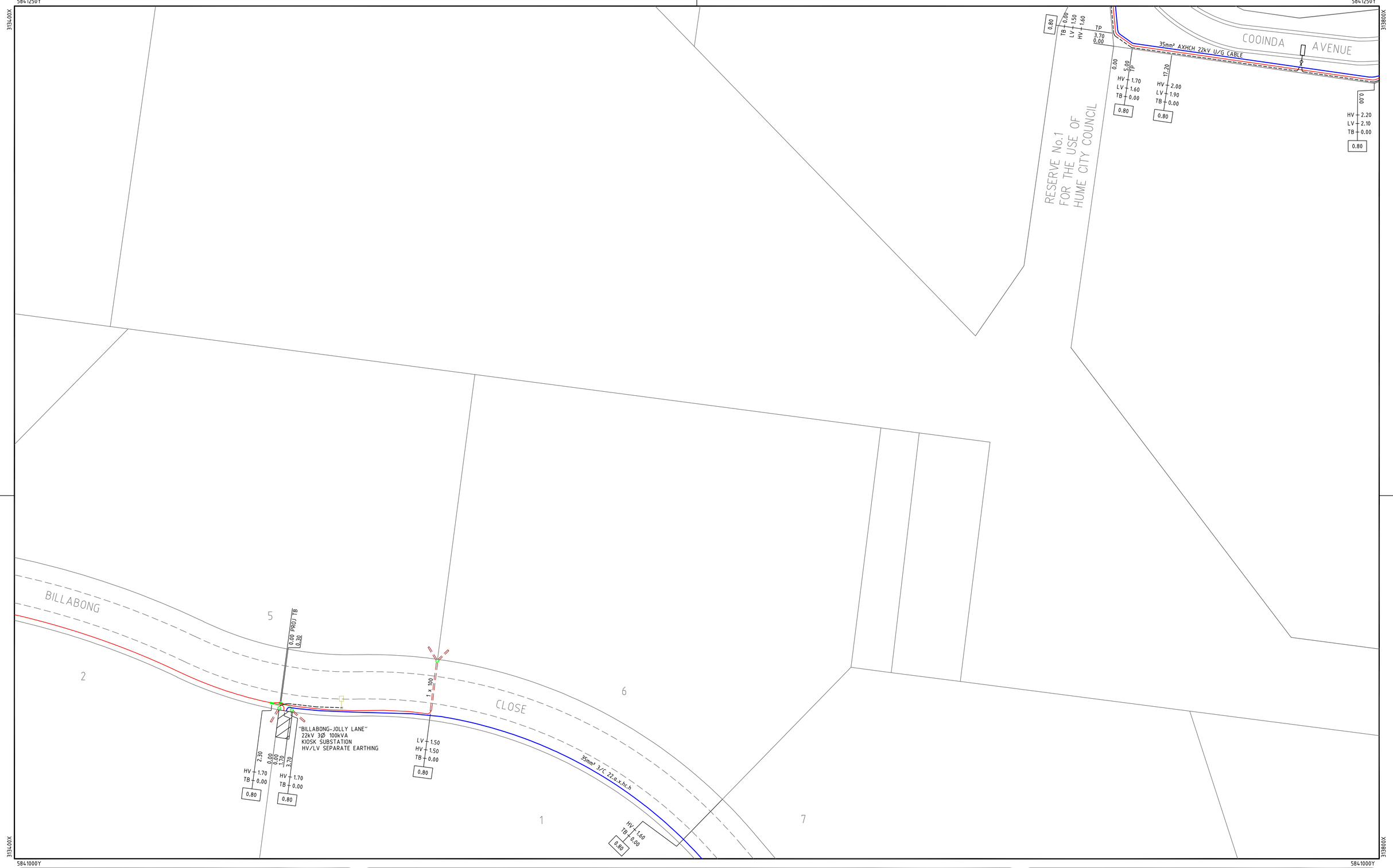
DRG. No.JDC141 REV A

UNDERGROUND CABLE PLAN MICKLEHAM

JDC141

TST-EN-0000X 00-0A A1

UNDERGROUND CABLE PLAN



LEGEND

HV 22KV U/G CABLE 185 3c 22.A.X.HC.H (0.5)	DEPTH OF EARTH COVER TO TOP OF CABLE	CABLE HEAD POLE:- HV/LV	CHP — CABLE HEAD POLE
LV MAINS U/G CABLE 185 4c LV.S.A.X (0.35)	DEPTH TO TOP OF OTHER SERVICES/OBSTRUCTIONS	SUBTRANSMISSION POLE	AC — ASBESTOS CEMENT
LV SERVICE U/G CABLE 16 4c LV.C.X (0.25)	80W MV, MOUNTED AT 5,5m	HV/LV POLE	EW — EARTHENWARE
PUBLIC LIGHTING CABLE 6mmÊ (0.25)	100W HPS, MOUNTED AT 5,5m	SINGLE POLE SUBSTATION	GI — GALVANIZED IRON
SUPERVISORY CABLE (0.25)	150W HPS, MOUNTED AT 10m	HV POLE	PVC — POLYVINYL CHLORIDE
HV MAINS STRAIGHT JOINT	250W HPS, MOUNTED AT 12,5m	LV POLE	RC — REINFORCED CONCRETE
LV MAINS STRAIGHT JOINT	400W HPS, MOUNTED AT 15m	NEW	P/L — PUBLIC LIGHTING
LV SERVICE TEE JOINT	PUBLIC LIGHT (AS SPECIFIED)	EXISTING	FH — FIRE HYDRANT
LV MAIN TEE JOINT	SERVICE PIT	HIGH VOLTAGE CABLE	SWD — STORMWATER DRAIN
INSULATED END	COMMUNICATIONS PIT	LOW VOLTAGE CABLE	PROJ — PROJECTION
SEALED END	VIC ROADS PIT	TITLE BOUNDARY	– — CENTRELINE
U/G CABLE CUT END	BOUNDARY OR BUILDING LINE	BACK OF KERB	P & W F — POST AND WIRE MESH FENCE
ELECTRICAL DUCT & SIZE (63mm OUTSIDE Dia UNLESS SHOWN)	KERB LINE	TURNING OR TANGENT POINT	C W M — CHAIN WIRE MESH
ELECTRICAL DUCT PIPE (OTHER AUTHORITIES)	PARALLELING PILLAR	INTERSECTION POINT	SJ — STRAIGHT JOINT [HV, LV, M — MAINS, S — SERVICE]
METER BOX	HOUSE No. / LOT No.	DUCT END	TJ — TEE JOINT
		OUT OF COMMISSION	

AGL - AutoCAD A1

800 X 574mm

AGL

AGILITY
ASSET PERFORMANCE
34 KING WILLIAM ST
BROADMEADOWS

IMPORTANT
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JDC142	JDD142	JDE142
JDC141	JDD141	JDE141
JDC140	JDD140	JDE140

REVISION

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03/05/06	B	ADDED PART SAP5005623/02	LP	BW
10-07-02	A	ADDED SAP6001723:01, SAP6001723:02	SV	JD

DRAWN : S.VINCI
DATE : 10-07-02
CHECKED :
DATE :
SIGNED : J. DOWDLE
FOR MANAGER

AGL

LENGTHS ARE IN METRES
ORIGINAL SCALE: 1:500

MELWAY REF : 384 A:1

DRG. No. JDD141

REV B

UNDERGROUND CABLE PLAN
MICKLEHAM

JDD141

A1

SEC

RECORD OF INSTALLATION OF UNDERGROUND SERVICE CABLE

(19)

This form shall be completed and handed to the Commission's Responsible Officer at the time of inspection

Address of Installation LOT 1 MICKLEHAM ROAD MICKLEHAM

Melway (if applicable) Edition No. Ref

Conductor Area 16 mm² No of Conductors 3 Type of Cable PVC BUILDING WIRE.

Mechanical Protection (Enter ✓ in appropriate square)

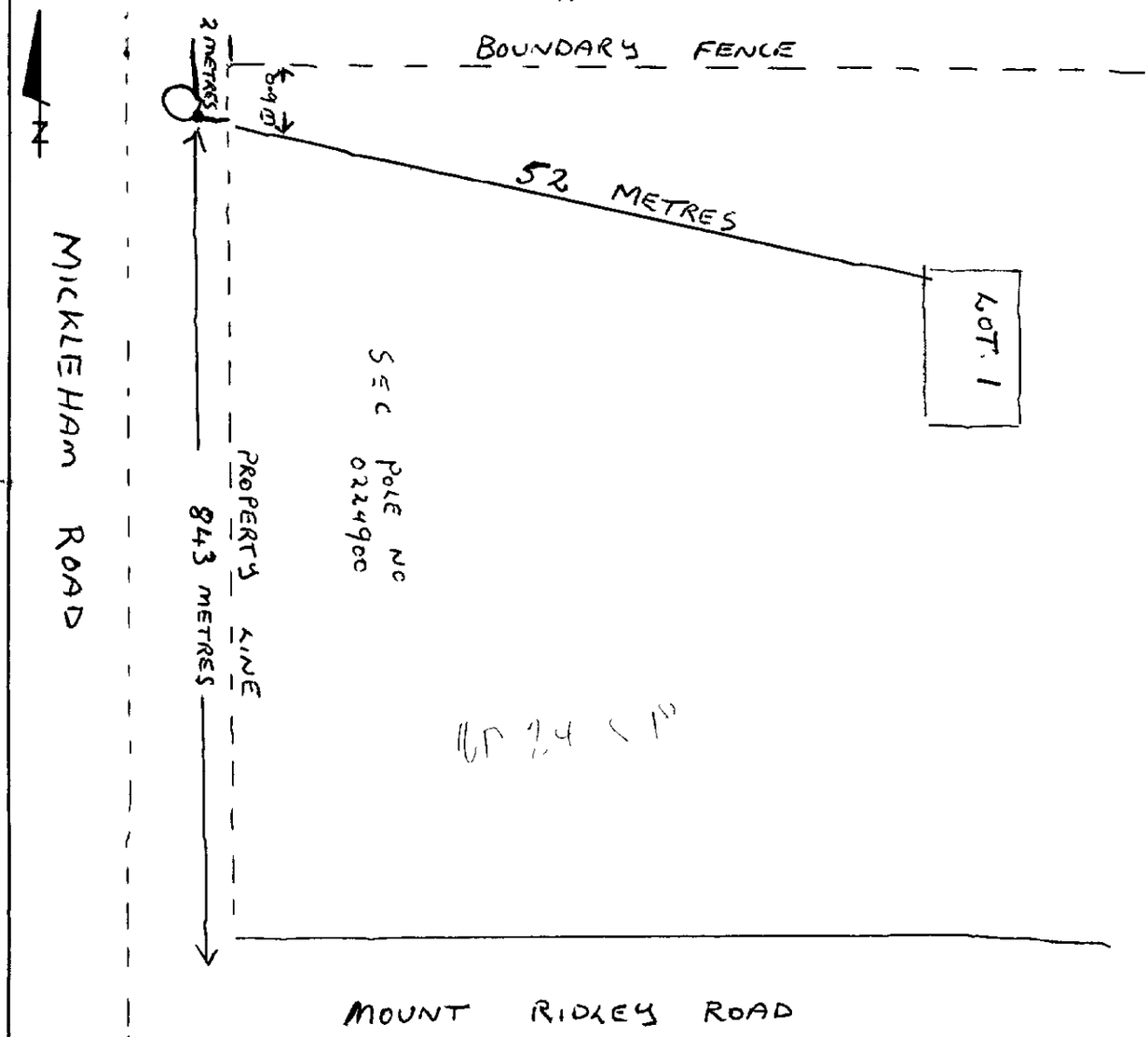
- [✓] Heavy Duty Electrical Conduit
- [ ] Galvanised Steel Pipe
- [ ] Concrete Cover Slab
- [ ]

Name and Address of R E C C+J BRYANT DORSTON PARK OAKLANDS JUNCTION

Signature of L E M in charge [signature] Date of Installation 5-6-85

SKETCH PLAN OF INSTALLATION FROM RETICULATION TO PROPERTY BOUNDARY

N *All distances shall be measured in metres and not stepped out*



PLAN TO SHOW RIGHT ANGLED OFFSETS FROM BUILDING LINE STREET KERBS OR ROAD FORMATION DEPTH OF CABLE ALL OBSTRUCTIONS (WATER GAS ETC) AND DISTANCE FROM NEAREST INTERSECTING STREET

FOR SEC OFFICE USE ONLY

Signature of Officer Inspecting Installation [signature]

District/Area BROMSGROVE

Date 13-6-85

Melway Ed No. 15 Ref 253 K12

Key/Base 16 D18

F B/DRG 151 E 19

[redacted] D.O 1/8/85

519 1770 (OP) R2

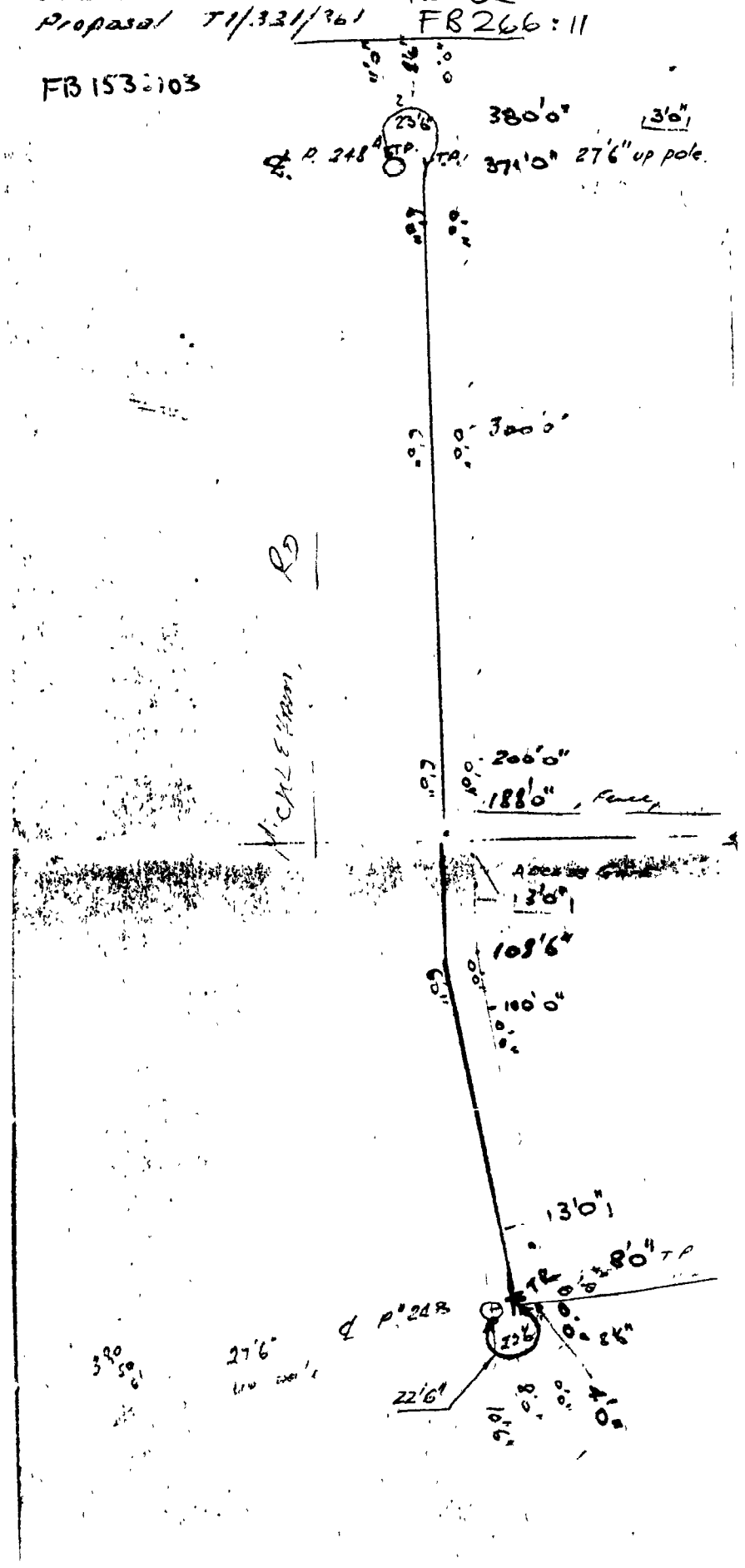
MICKLEHAM.

START
USED 481'
BALANCE 269'
Proposal T1/321/361

D.C.O.A. No 4B25
F.B. EM413/23

REFER TO
FB266:11

FB153:103



PAGE 23

FB 153:103

Network Operations– Asset Analysis
Unit 9, 677 Springvale Road
Mulgrave, Victoria, 3178

Date:	07/02/2013
To:	Mr Samuel O'Connor
Company:	
Address:	Level 15 28 Freshwater Southbank, VIC 3006

ENQUIRY DETAILS

Location:	2040 Mickleham Rd, Mickleham, VIC 3064
Sequence No.:	27884171
DBYD Reference:	6089487

In relation to your enquiry of the above address, Optus advises as follows:

The records of Optus disclose that there ARE underground Optus FIBRE OPTIC TELECOMMUNICATIONS cables in the vicinity of the above enquiry as per the attached plan(s).
PLEASE NOTE THAT THE CABLES POTENTIALLY IMPACTED ARE OF NATIONAL SIGNIFICANCE with the potential to significantly disrupt communications in Australia if damaged.

This reply is valid for a period of 30 days from the date above.

IMPORTANT INFORMATION
Drawings and Plans provided by Optus are reference diagrams which were correct at the time the asset was built. Exact ground cover and alignments cannot be provided with any certainty as these may alter over time. Depths of Telecommunications plant vary considerably as do alignments. It is essential to uncover the asset and positively identify the assets exact location.
Optus plans are provided as a guide only and the completeness of the information cannot be guaranteed.

"DUTY OF CARE"
When working in the vicinity of Telecommunications plant you have a legal "Duty of Care" that must be observed.

It is the responsibility of the owner and any consultant engaged by the owner, including an architect, consulting engineer, developer and head contractor to design for minimal impact to Optus plant. Optus will provide assistance at this design stage through the provision of plans and sketches or consultation.

It is the owner's (or constructor's) responsibility to:-

a) Request plans of Optus plant for a particular location at a reasonable time before construction begins. If you have doubts about the presence of Optus assets we strongly recommend that you engage an Optus Accredited plant locator.

b) Visually locate Optus plant by hand digging or using non-destructive water jet method where construction activities may damage or interfere with Optus plant

c) Contact Optus Network Operations – Asset Analyst (details below) if Optus plant is wholly or partly located near construction activities

CRIMINAL CODE ACT 1995

The following is an extract from the Criminal Code Act 1995 and is applicable to Optus plant

Chapter 10 National infrastructure

Part 10.6 Telecommunications Services

Division 474 Telecommunications offences

Sect 474.6 Interference with facilities

1) A person is guilty of an offence if the person tampers with, or interferes with, a facility owned or operated by:
   (a) a carrier; or
   (b) a carriage service provider; or
   (c) a nominated carrier.

Penalty: Imprisonment for 1 year.

2) For the purposes of an offence against subsection (1), absolute liability applies to the physical element of circumstance of the offence, that the facility is owned or operated by a carrier, a carriage service provider or a nominated carrier.

3) A person is guilty of an offence if:
   (a) the person tampers with, or interferes with, a facility owned or operated by:
      i. a carrier; or
      ii. a carriage service provider; or
      iii. a nominated carrier; and
   (b) this conduct results in hindering the normal operation of a carriage service supplied by a carriage service provider.

Penalty: Imprisonment for 2 years.

4) For the purposes of an offence against subsection (3), absolute liability applies to the following physical elements of circumstance of the offence:
   (a) that the facility is owned or operated by a carrier, a carriage service provider or a nominated carrier;
   (b) that the carriage service is supplied by a carriage service provider.

5) A person is guilty of an offence if:
   (a) the person uses or operates any apparatus or device (whether or not it is comprised in, connected to or used in connection with a telecommunications network); and
   (b) this conduct results in hindering the normal operation of a carriage service supplied by a carriage service provider.

Penalty: Imprisonment for 2 years.

DAMAGE

ANY DAMAGE TO OPTUS NETWORK MUST BE REPORTED TO 1800 500 253 IMMEDIATELY

The owner is responsible for all plant damage when works commence prior to obtaining Optus Drawings, or failure to follow instructions.

Optus reserves the right to recover compensation for loss or damage to its cable network and other property including consequential loss

ASSET RELOCATIONS

You are not permitted to relocate or alter any Optus assets or network under any circumstance.

For all enquiries relating to the relocation of Optus assets please email Fibre.Locations@optus.net.au

ESSENTIAL PRECAUTIONS AND APPROACH DISTANCES

Note: If the following clearances cannot be maintained, please contact Optus Network Operations Asset Analysis Team for advice on how to resolve the situation.

1. On receipt of plans and before commencing excavation work or similar activities near Optus plant, carefully locate the plant first to avoid damage. Engage an Optus accredited locator to undertake exposure of the Optus plant when working within the following approach distances.

Where Optus plant is in an area where road and footpaths are well defined by kerbs or other features a minimum clear distance of 1.0m must be maintained from where it could be reasonably presumed that plant would reside.

In non established or unformed reserves this distance must be at least 3 metres.

In country or rural areas which may have wider variations in reasonably presumed plant presence, the following minimum approach distance applies:

a) Parallel to plant: 5 metres

Note: **Indicated depths may vary significantly and pot-holing needs to be undertaken within extreme care**, **commonsense and using techniques least likely to damage cables. Potholing is only to be undertaken by an Optus accredited plant location contractor.**

If construction work is parallel to Optus plant, then carful hand digging or using non destructive water jet method (pot holing) at least every 5m is required to establish the location of the plant, confirming the location of the plant prior to work commencing.

Under no circumstances is crossing of Optus plant to be performed without first exposing the Optus plant and having an Optus representative present onsite.

2. Maintain the following minimum clearance between construction activity and the actual location of Optus plant.

Jackhammers / Pneumatic Breakers	Not within 1.0m of actual location
Vibrating Plate or Wacker Packer Compactor	Not within 0.5m of actual location 300mm compact clearance before compactor can be used across Optus ducts 750mm compact clearance cover before compactor can be used across Optus *Direct Buried* cable
Boring Equipment **(in-line, horizontal and vertical)**	Not within 5.0m of actual location without Optus representative onsite Constructor to hand dig or non-destructive water jet method (pot holing) and expose the Optus plant Not to cross the Optus plant without first exposing the plant at the crossing point and without Optus representative onsite
Heavy vehicle Traffic (over 3 tonnes)	Not to be driven across Optus ducts or plant with less than 600mm of cover Depth to be verified via hand digging
Mechanical Excavators, Farm ploughing, Boring, Tree removal, fencing	Not within 1.0m of actual location Constructor to hand dig or use non-destructive water jet method (pot holing) and expose plant

All Optus pits and manholes should be a minimum of 1.0m in from the back of kerb or within 15m of street intersection after the completion of your work.

All Optus conduit should have the following minimum depth of cover **after the completion of your work**:-

- **Footway 600mm**
- **Roadway 1000mm at drain invert and at road centre crown**

In cases where it is considered that these clearances cannot be maintained at the completion of works advice is to be sought form the Optus Damages and Relocations Team

FURTHER ASSISTANCE

Assistance can be obtained by contacting Optus Network Operations Asset Analysis on **1800 505 777**

Where an on-site location is provided, the owner is responsible for all costs associated with hand digging or use of non-destructive water jet method (pot holing) to visually locate and expose Optus plant.

If plant location drawings or visual location of Optus plant by digging reveals that the location of Optus plant is situated wholly or partly where the owner plans to work, then Optus Damages and Relocates Team must be contacted through Optus Network Operations Asset Locations to discuss possible engineering solutions.

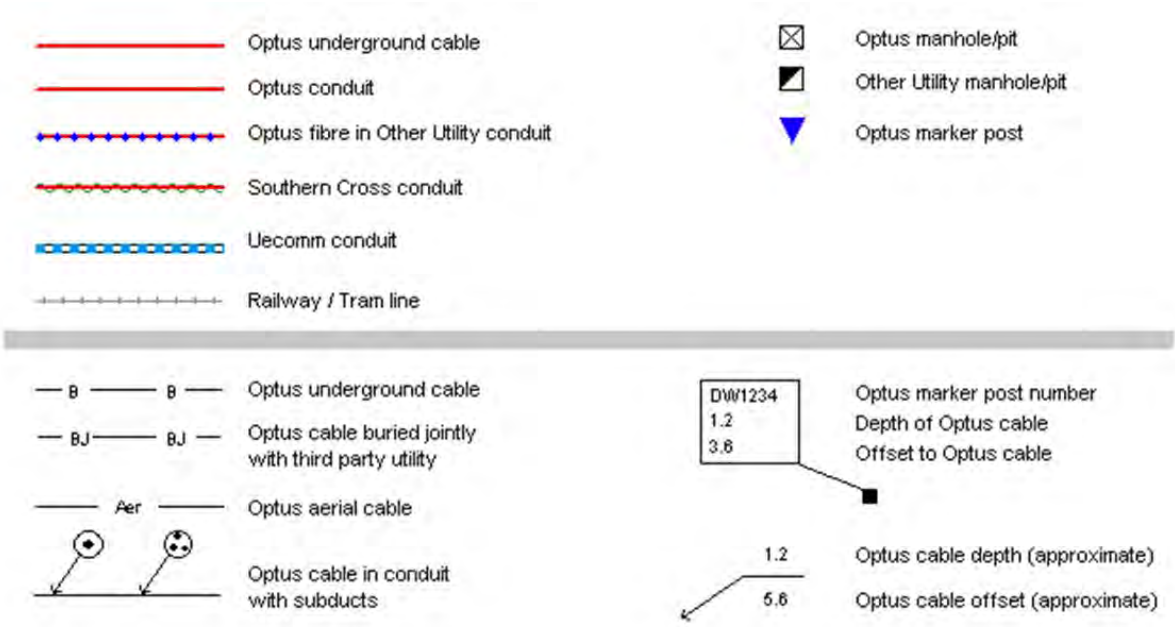
PRIVATE RESIDENTIAL LANDOWNERS and RURAL LANDOWNERS

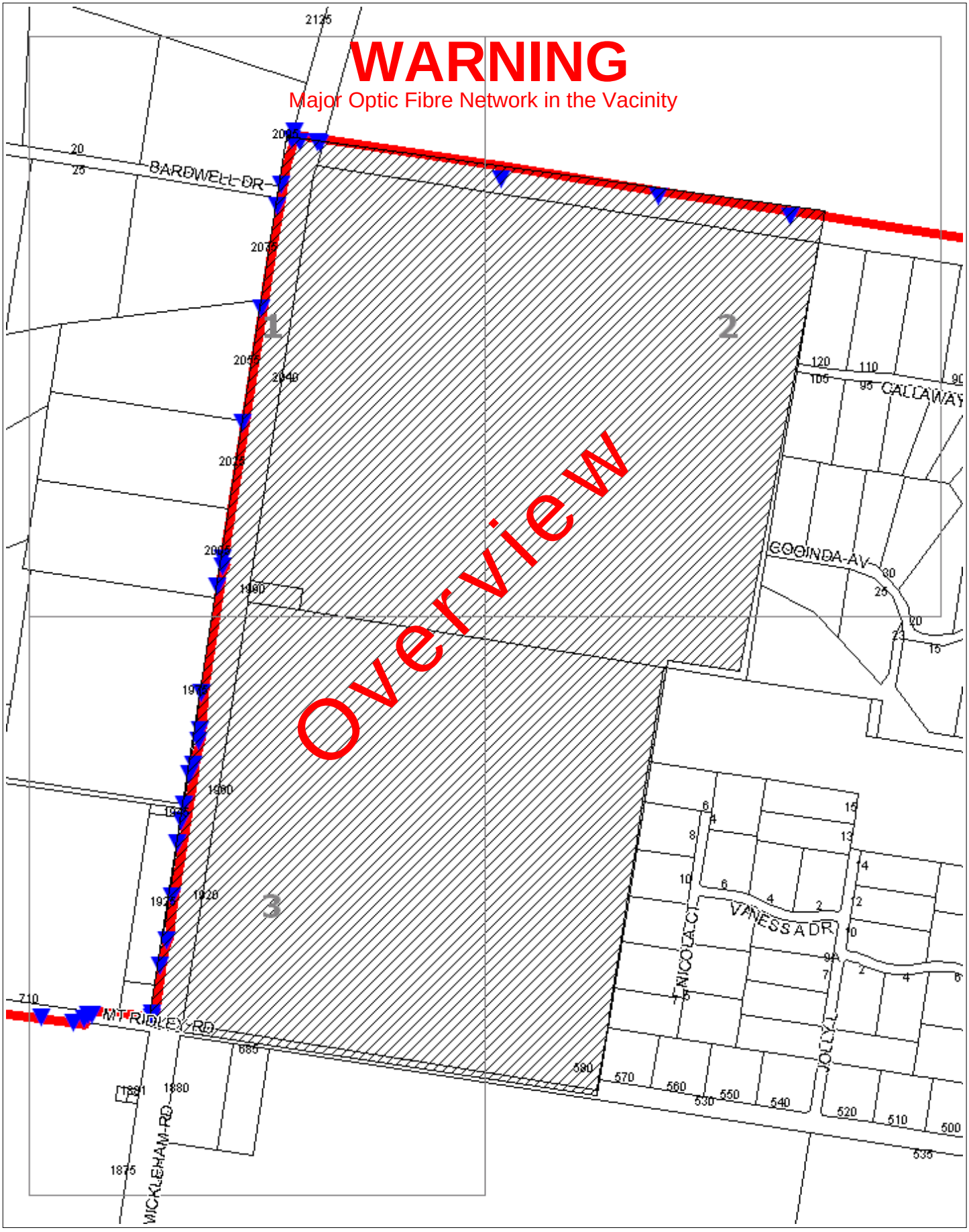
Where Optus owned cable crosses private residential property or agricultural land, Optus may provide a once off free onsite electronic cable location. Optus Network Operations Asset Analyst will provide assistance in determining whether a free on-site location is required.

Please note:

- The exact location, including depth of cables can only be verified by pot holing which is not covered under this service
- This service is only available to assist private residential land owners and rural land owners
- The service covers one hour onsite only. Additional time will be charged at the current nominal rate.

OPTUS ENGINEERING DRAWING SYMBOLS





Sequence Number: 27884171 Date Generated: 07/02/2013

'yes' OPTUS
For all Optus DBYD plan enquiries –
Email: Fibre.Locations@optus.net.au
For urgent onsite assistance contact 1800 505 777
Optus Limited ACN 052 833 208

Sequence Number: 27884171

Date Generated: 07/02/2013

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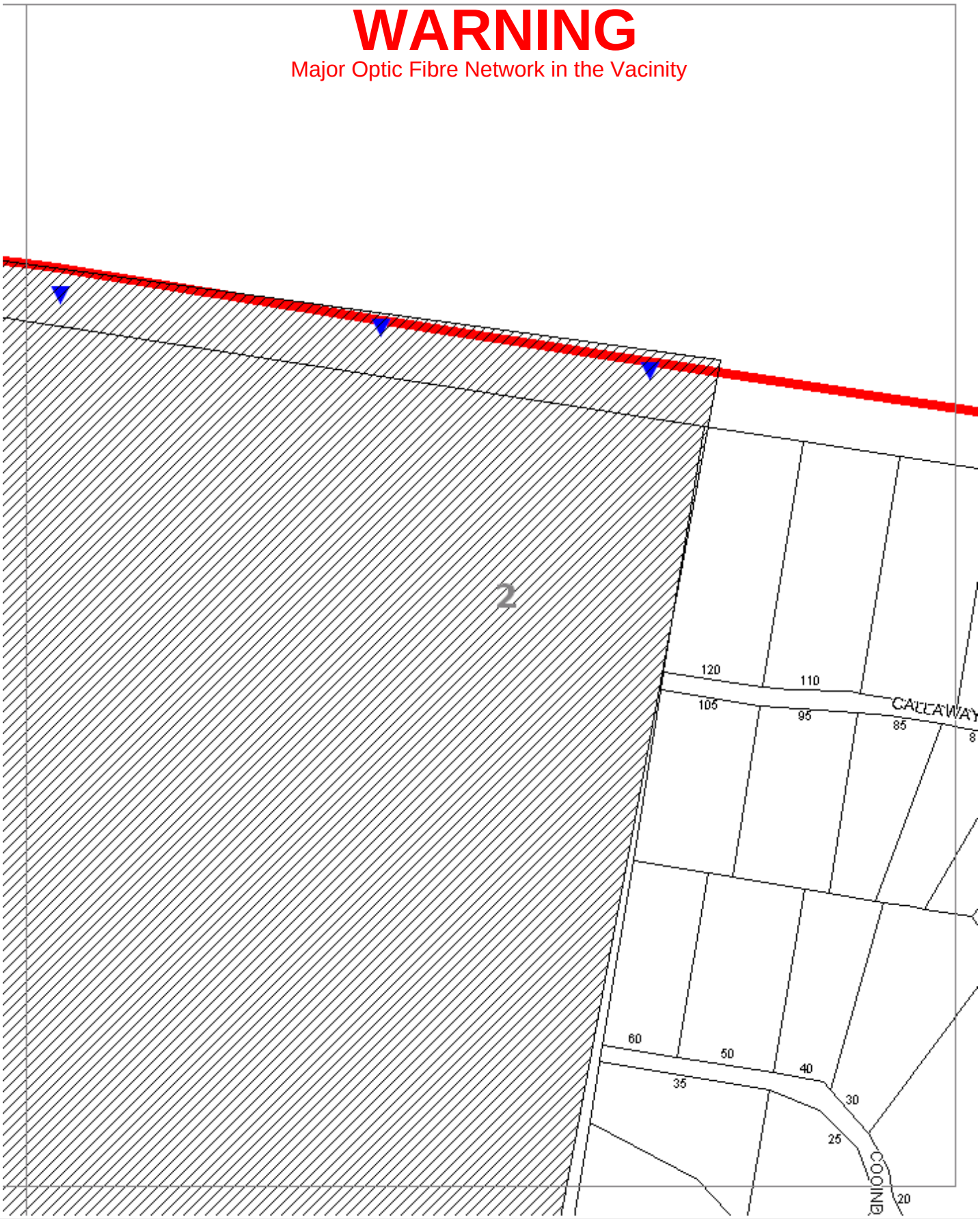
For urgent onsite assistance contact 1800 505 777
Optus Limited ACN 052 833 208

WARNING

Major Optic Fibre Network in the Vacinity



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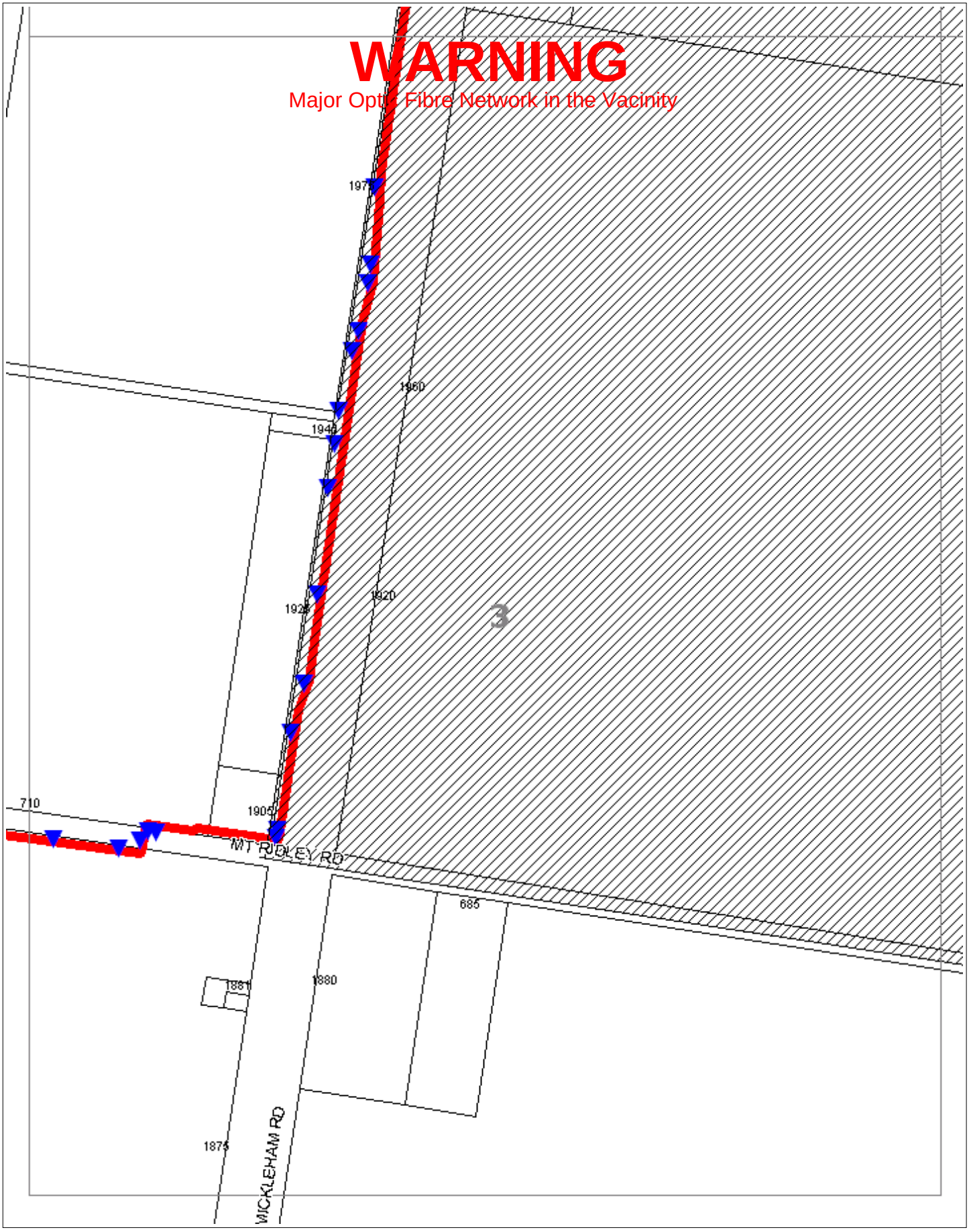

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For all Optus DBYD plan enquiries –
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For urgent onsite assistance contact 1800 505 777
Optus Limited ACN 052 833 208

DIAL BEFORE YOU DIG www.1100.com.au

Telstra Corporation Limited

DUTY OF CARE

IMPORTANT:

Please read and understand all the information and disclaimers provided below. Sketches and Plans provided by Telstra are circuit diagrams only and indicate the presence of telecommunications plant in the general vicinity of the geographical area shown; exact ground cover and alignments cannot be given with any certainty and cover may alter over time. Telecommunications plant seldom follow straight lines and careful on site investigation is essential to uncover and reveal its exact position.
Due to the nature of Telstra plant and the age of some cables and records, it is impossible to ascertain the location of all Telstra plant. The accuracy and/or completeness of the information can not be guaranteed and, accordingly Telstra plans are intended to be indicative only.

"DUTY OF CARE"

When working in the vicinity of telecommunications plant you have a legal "Duty of Care" that must be observed.

It is the responsibility of the owner and any consultant engaged by the owner, including an architect, consulting engineer, developer, and head contractor to design for minimal impact and protection of Telstra plant. Telstra will provide plans and sketches showing the presence of its network to assist at this design stage.

It is the owner's (or constructor's) responsibility to:-

a) request plans of Telstra plant for a particular location at a reasonable time before construction begins. If you have any doubts as to the exact location of Telstra Plant, we strongly recommend that you engage an Accredited plant Locator in your area;

b) visually locate Telstra plant by hand digging or using non destructive water jet method (pot holing) where construction activities may damage or interfere with Telstra plant (see "Essential Precautions and Approach Distances" section for more information); and

c) contact Telstra's **Plan Services** (see below for details) if Telstra plant is wholly or partly located near planned construction activities.

DAMAGE:

ANY DAMAGE TO TELSTRA'S NETWORK MUST BE REPORTED TO 132203 IMMEDIATELY.

The owner is responsible for all plant damage when works commence prior to obtaining Telstra plans, or failure to follow agreed instructions.

Telstra reserves all rights to recover compensation for loss or damage to its cable network or other property including consequential losses.

EMERGENCY SITUATIONS

Emergency situations are unplanned and include (amongst other things):

- damaged or faulty underground or aerial power cables / poles
- burst/leaking water mains
- burst/leaking sewer mains.
- burst/leaking gas pipes
- any other emergency situation that may impact Telstra network.

NOTE: failure to lodge requests in time for normal maintenance work is not deemed as an emergency.

During working hours - in emergency situations, urgent requests for plans or information relating to the location of Telstra network are to be made direct to the Dial Before You Dig Service.
Note that a fast response can be provided if a request is made on line with a supplied return email address between 5am-10pm AEST 7days a week.

Outside Normal Business hours or outside hours of automated responses - in emergency situations , urgent requests for plans or information relating to the location of Telstra network are to be made direct to Telstra on phone **1800 801 801**

NATURAL DISASTERS

Natural Disasters include (amongst other things):

Earthquakes
Cyclones
Floods; and
Tsunami

In the case of such events, urgent requests for plans or information relating to the location of Telstra network can be made directly to Telstra Network Integrity Team Managers as follows:

NSW - Joe Palucci 0419 496 015

QLD – Shaun Walliss 0419 638 150

VIC/TAS - David Povazan 0417 300 947

SA/NT/WA - Dave Ballard 0419 807 901

PLAN SERVICES

For all Telstra DBYD (Dial Before You Dig) map enquiries please contact Telstra Plan Services

email - **Telstra.Plans@team.telstra.com**

fax - **(02) 4961 3714**

phone - **1800 653 935**

Please note - to make an enquiry the plans must be current (within 60 days of issue). If your plans have expired you will need to submit a new request via DBYD.

ASSET RELOCATIONS

You are not permitted to relocate or alter any Telstra assets or network under any circumstance.

For all enquiries relating to the relocation of Telstra assets please phone **1800 810 443** or email **F1102490@team.telstra.com**

CONCERNING TELSTRA PLANS:

Please note the following:

- For plans of Telstra locations contact **Dial Before You Dig** at least 2 business days prior to digging. (**www.1100.com.au** or phone **1100**)
- Fast response can be provided by Telstra if an email address is supplied. (if posted, this may take up to one week or longer to receive plans)
- Telstra plans and information provided are **valid for 60 days** from the date of issue.
- Telstra owns and retains the copyright in all plans and details provided in conjunction with the applicant's request. The applicant is authorised to use the plans and details only for the purpose indicated in the applicant's request. The applicant must not use the plans or details for any other

purpose. The plans and details should be disposed of by shredding or any other secure disposal method after use.

- Telstra plans or other details are provided only for the use of the applicant, its servants, or agents. **The applicant may not give the plans or details to other parties, and may not generate profit from commercialising the plans or details.**
- Please contact Telstra **Plan Services** (see above for details) immediately should you locate Telstra assets not indicated on these plans.
- Telstra, its servants or agents shall not be liable for any loss or damage caused or occasioned by the use of plans and or details so supplied to the applicant, its servants and agents, and the applicant agrees to indemnify Telstra against any claim or demand for any such loss or damage.
- Please ensure Telstra plans and information provided remains on-site at all times throughout your construction phase.

ESSENTIAL PRECAUTIONS and APPROACH DISTANCES:

NOTE: If the following clearances cannot be maintained, please contact Telstra Plan Services (see above for details) for advice on how best to resolve this situation.

1. On receipt of plans and sketches and before commencing excavation work or similar activities near Telstra's plant, **carefully locate this plant first** to avoid damage. Undertake prior manual exposure such as potholing when intending to excavate or work **closer** to Telstra plant than the following approach distances.

Where Telstra's plant is in an area where road and footpaths are well defined by kerbs or other features a minimum clear distance of 600mm must be maintained from where it could be reasonably presumed that plant would reside.

In non established or unformed reserves and terrain, this approach distance must be at least 1.5 metres.

In country/rural areas which may have wider variations in reasonably presumed plant presence, the following minimum approach distances apply:

a) Parallel to major plant: 10 metres (for IEN, optic fibre and copper cable over 300 pairs)

b) Parallel to other plant: 5 metres

NOTE: Even manual pot-holing needs to be undertaken with extreme care, commonsense and employing techniques least likely to damage cables. For example, orientate shovel blades and trowels parallel to the cable rather than digging across the cable.

If construction work is parallel to Telstra plant, then careful hand digging or using non destructive water jet method (pot-holing) at least every 5m is required to establish

the location of all plant, hence confirming nominal locations before work can commence.

2. Maintain the following minimum clearance between construction activity and **actual location** of Telstra Plant.

Jackhammers/Pneumatic Breakers	*Not within 1.0m of **actual location.***
Vibrating Plate or Wacker Packer Compactor	*Not within 0.5m of Telstra ducts.* *300mm compact clearance cover before compactor can be used across Telstra ducts.*
Boring Equipment (in-line, horizontal and vertical)	*Not within 2.0m of **actual location**.* *Constructor to hand dig or use non-destructive water jet method (pot-hole) and expose plant.*
Heavy Vehicle Traffic (over 3 tonnes)	*Not to be driven across Telstra ducts (or plant)* *with less than 600mm cover.* *Constructor to check depth via hand digging.*
Mechanical Excavators, Farm ploughing and Tree Removal	*Not within 1.0m of **actual location.*** *Constructor to hand dig or use non-destructive water jet method (pot-hole) and expose plant.*

All Telstra pits and manholes should be a minimum of 1.2m in from the back of kerb after the completion of your work.

All Telstra conduit should have the following minimum depth of cover **after the completion of your work**:-

Footway 450mm

Roadway 450mm at drain invert and 600mm at road centre crown

For clearance distances relating to Telstra pillars, cabinets and RIMs/RCMs please contact Telstra Plan Services (see above for details).

FURTHER ASSISTANCE:

Assistance can be obtained by contacting Telstra **Plan Services**

Where on-site location is provided, the owner is responsible for all hand digging or use non-destructive water jet method (pot-holing) to visually locate and expose Telstra plant.

If plant location plans or visual location of Telstra plant by digging reveals that the location of Telstra plant is situated wholly or partly where the owner plans to work, then **Telstra's Network Integrity Group** must be contacted through Telstra **Plan Services** to discuss possible engineering solutions.

NOTE:

If Telstra relocation or protection works are part of the agreed solution, then payment to Telstra for the cost of this work shall be the responsibility of the principal developer or constructor. The principal developer or constructor will be required to provide Telstra with the details of their proposed work showing how Telstra's plant is to be accommodated and these details must be approved by the Regional Network Integrity Manager prior to the commencement of site works.

RURAL LANDOWNERS - IMPORTANT INFORMATION

Where Telstra owned cable crosses agricultural land, Telstra may provide a once off free on-site electronic cable location. The Telstra Plan Services operator will provide assistance in determining whether a free on-site location is required.

Please note:

- The exact location, including depth of cables can only be verified by pot holing, which is not covered by this service.
- This service is only available to assist private rural land owners.
- This service covers one hour on-site only. Additional time can be purchased directly from the Accredited Plant Locator.

For further information including terms and conditions, please contact Telstra Plan Services on phone **1800 653 935**.

PRIVACY NOTE

Your information has been provided to Telstra by DBYD to enable Telstra to respond to your DBYD request. Telstra keeps your information in accordance with its privacy statement entitled "Protecting Your Privacy" which can be obtained from Telstra either by calling 1800 039 059 or visiting our website at www.telstra.com.au/privacy

A GUIDE TO READING Telstra PLANS

Telstra Corporation Limited
ABN 33 051 775 556

Exchange
(major cable present)

Footway access chamber
(can vary from 1-lid to 12-lid)

Roadway access chamber

or **Pillar/cabinet**
(above the ground / free standing)

Above ground complex equipment housing (eg RIM)

Please Note: This equipment is powered by 240V electricity.

PT Public telephone

Please Note: This equipment is powered by 240V electricity.

Direct buried cable

Cable jointing pit
(number indicating pit type)

Buried cable jointing pit
(number indicating pit type)

Elevated cable joint
(above ground joint on buried cable)

Cable loop (direct buried)

Telstra Plant in shared utility trench

Aerial Cable
(above ground)

Aerial cable
(attached to joint use pole e.g. power)

SMOF **Optical fibre cable direct buried**

or or or P100 **Single to multiple round conduit**
Configurations 1, 2, 4, 9 respectively
(Attached text denotes conduit type and size)

or or E85 **Multiple square conduit**
Configurations 2, 4, 6 respectively
(Attached text denotes conduit type and size)

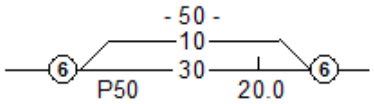
Some examples of conduit type and size:

A - Asbestos cement, P - PVC / plastic, C - Concrete, GI - Galvanised iron, E - Earthenware.

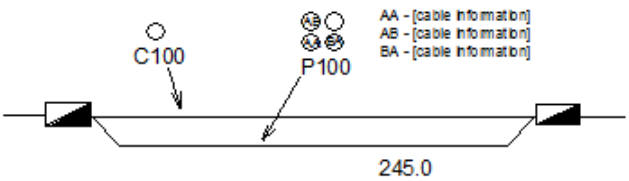
Conduit sizes *nominally* range from 20mm to 100mm.

P50	50mm PVC conduit
P100	100mm PVC conduit
A100	100mm asbestos cement conduit
E 85	85mm square earthenware conduit

Some examples of how to read Telstra plans:



One 50mm PVC conduit (P50) containing a 50-pair and a 10-pair cable between two 6-pits, 20.0m apart, with a direct buried 30-pair cable along the same route.



Two separate conduit runs between two footway access chambers (manholes) 245m apart. A nest of four 100mm PVC conduits (P100) containing assorted cables in three ducts (one being empty) and one empty 100mm concrete duct (C100) along the same route.

WARNING: Telstra's plans show only the presence of cables and plant. They only show their position relative to road boundaries, property fences etc. at the time of installation and Telstra does not warrant or hold out that such plans are accurate thereafter due to changes that may occur over time.
DO NOT ASSUME DEPTH OR ALIGNMENT of cables or plant as these vary significantly.
The customer has a DUTY OF CARE when excavating near Telstra cables and plant. Before using machine excavators TELSTRA PLANT MUST FIRST BE PHYSICALLY EXPOSED BY SOFT DIG (potholing) to identify its location.
Telstra will seek compensation for damages caused to its property and losses caused to Telstra and its customers.

Electronic plans - PDF and DWF maps

If you have received Telstra maps via email you will have received the maps as either a PDF file (for smaller areas) or DWF file (for larger area requests). If you are unable to launch any one of the softcopy files for viewing and printing, you may need to download and install one or more of the free viewing and printing products such as Adobe Acrobat Reader (for PDF files) or Autodesk Design Review (for DWF files) available from the internet.

PDF files

PDF is the default softcopy format for all requests that range in size from 0 metres (eg point requests) to requests up to approx *500m in length. (*depends on geographic location of request). The PDF file is formatted to A3 portrait sheet however it can be printed on any size sheet including from A4 to AO, either as the full sheet or selected areas to suit needs and legibility. (to print a selected area zoom up and print "current view"). If there are multiple layers of Telstra network you may receive up to 2 sheets in the single PDF file attachment supplied. There are three types or layers of network normally recorded - local network, mains cables or a combined layer of local and mains (usually displayed in rural or semi rural areas). If mains cable network is present in addition to local cables (ie as separate layer in a particular area), the mains will be shown on a separate sheet. The mains cable information should be read in conjunction with the local cable information.

DWF files

This is the default softcopy format for all requests that are over 500m in length. Maximum length for a DWF automated response is approx 2500m - depending on geographic location of request (non automated longer). The DWF files differ from PDF in that DWF are vector files made up of layers that can be turned on or off and are not formatted to a specific sheet size. This makes them ideal for larger areas and for transmitting over email etc.

How to view Telstra DWF files -

Telstra DWF files come with all layers turned on. You may need to turn individual layers on or off for viewing and printing clarity. Individual layer names are CC (main cable/conduit), DA (distribution or local area network) and sometimes a combined layer - CAC. Layer details can be viewed by either picking off the side menu or by selecting 'window' then 'layers' off the top menu bar. Use 'layers' to turn individual layers off or on. (double click or right click on layer icon.)

How to print Telstra DWF files -

DWF files can be printed on any size sheet. They can be printed in their entirety or by selected areas of interest. Some DWF coverage areas are large and are not suited to printing legibly on a single A4 sheet - you may need several prints if you only have an A4 printer. Alternately an A3, A1 or larger printer should be used. To print, zoom in or out and then by changing the 'print range' settings you can print what is displayed on your screen to suit your paper size. If you only have a small printer eg A4 you may need to zoom until the text legible on your

screen for it to be legible on the print. (which is why you may need several prints). To print what is displayed on your screen the 'view' setting should be changed from 'full page' to 'current view'. The 'current sheet' setting should also be selected. You may need to print layers separately for clarity and legibility. (details above on how to turn layers on or off)

How to change the background colour from white to black (when viewing) Telstra DWF files -

If using Autodesk Design Review the background colour can be changed by selecting "Tools" then "options" then "sheet". Tick the box "override published paper colors" and select the colour required using the tab provided.

Further information

If you require further assistance with supplied PDF or DWF plans eg with legibility or you believe there maybe missing information please contact Telstra Plan Services. (contact details above - you will need to supply the Telstra sequence number of the plan request.)

Telstra's Automated Mapping System

Telstra provides a very fast automated plan response for the majority of DBYD requests received. Requestors must supply a current email address on their request to DBYD and must also be able to accept a standard format ie PDF or DWF. An automated response can be provided a lot faster than the alternative which is a mailed hardcopy. This can avoid unnecessary delays in waiting for plans to arrive. Being softcopy it can easily be sent directly to a worksite and can be available 7 days a week. The automated system can be configured for individual requestors to receive either PDF/DWF (where small requests are PDF and larger requests are DWF) or alternately all in DWF (both small and large requests). Please contact Plan Services for further details or to be configured. Please note all requests over *400m (approx) in size can only be supplied in DWF format and there are size limits on what can be provided. (* actual size depends on geographic location of requested area)

Data Extraction Fees

In some instances a data extraction fee may be applicable for the supply of Telstra information. Typically a data extraction fee may apply to - large projects, requests to be supplied in non standard formats, excessive hardcopy printing or requests for non digging purposes. Further details can be obtained by contacting Telstra Plan Services.

ACCREDITED PLANT LOCATORS (For your area)

On-site assistance should be sought from an **Accredited Plant Locator** if the telecommunications plant cannot be located within 2.5 metres of the locations indicated on the drawings provided.

On-site advice should be obtained from a Telstra accredited Asset Plant Locator who is highly skilled in locating Telstra plant. In the case where Telstra plant is outside a recognised road reserve Telstra recommends that Telstra Plan Services are contacted for assistance prior to engaging an accredited Asset Plant Locator.

Telstra does not permit external parties (non-Telstra) to conduct work on our network. Only Telstra staff or Telstra contractors are allowed to enter our manholes, open our pits, ducts, etc.

Please note it is a criminal offence under the *Criminal Code Act 1995*(Cth) to tamper or interfere with communication facilities owned by a carrier. Heavy penalties may apply for breach of this prohibition, and any damages suffered, or costs incurred by Telstra as a result of any such unauthorised works may be claimed against you.

Should your projects require cable location, you MUST engage an accredited Asset Plant Locator (a list of which is provided with the Dial Before You Dig plans). Alternatively you may seek your own accreditation through our registered training partner Coates Hire Training which is the only approved training provider for Asset Plant Location accreditation for Telstra's network. You may contact Coates Hire Training on

1300 657 867or visit ***www.coateshire.com.au***

For the assistance of customers an accredited Asset Plant Locator can perform any of the following activities if requested to do so by the owner:

- review Telstra's plans to assess the approximate location of Telstra plant;
- advise owners of the approximate location of Telstra plant according to the plans;
- advise owners of the best method for locating Telstra plant;
- advise owners of the hazards of unqualified persons attempting to find the exact location of Telstra plant and working in the vicinity of Telstra plant without first locating its exact position; and
- perform trial hole explorations by hand digging (pot-holing) to expose Telstra plant with a high degree of skill, competence and efficiency and utilising all necessary safety equipment.

A list of Accredited Plant Locators operating in your area is attached. Accredited Plant Locators are certified by Telstra to perform the tasks listed above. Owners may engage Accredited Plant Locators to perform these services, however Telstra does not give any warranty in relation to these services that Accredited Plant Locators are competent or experienced to perform any other services.

The attached list provides the names and contact details for Accredited Plant Locators who service your area and can provide you with assistance in locating Telstra plant on site. These organisations have been able to satisfy Telstra that they have a sound knowledge of telecommunications plant and its sensitivity to disturbance; appropriate equipment for locating telecommunications plant and competent personnel who are able to interpret telecommunications plans and

sketches and understand safety issues relevant to working around telecommunications plant. They are also able to advise you on the actions which should be taken if the work you propose will/could result in a relocation of the telecommunications plant and/or its means of support.

We recommend that you engage the assistance of one of these Accredited Plant Locators as a step towards discharging your Duty of Care obligations when seeking the location of Telstra's telecommunications plant.

Please Note:

- Each Accredited Plant Locator is NOT permitted to provide depth of communications plant unless physically exposed by hand digging.
- The details of any contract, agreement or retainer for site assistance to locate telecommunications plant shall be for you to decide and agree with the organisation engaged. Telstra is not a party to any contract entered into between an owner and an Accredited Plant Locator. The Accredited Plant Locators are able to provide guidance concerning the extent of site investigations required.
- Payment for the site assistance will be your responsibility and payment details should be agreed before the engagement is confirmed.
- Telstra does not accept any liability or responsibility for the performance of or advice given by an Accredited Plant Locator. Accreditation is an initiative taken by Telstra towards the establishment and maintenance of competency standards. However, performance and the advice given will always depend on the nature of the individual engagement.
- Each Accredited Plant Locator has been issued with a certificate which confirms the Accreditation. Every 2 years Telstra will reassess the accreditation and where appropriate will issue a letter confirming the accreditation for the next 2 years. You have the right to request the organisation you engage to show evidence of their ID card.
- Neither the Accredited Plant Locator nor any of its employees are an employee or agent for Telstra and Telstra is not liable for any damage or loss caused by the Accredited Plant Locator or its employees.
- The attached list contains the current names and contact details of Accredited Plant Locators who service your area, however, these details are subject to change.

IDEA FOR CONSIDERATION:

Telstra offer free Cable Awareness Presentations & Advanced Cable Reading Presentations, if you believe you or your company would benefit from this offer please contact Network Integrity on 1800 810 443 or **F1102490@team.telstra.com**

Telstra Accredited Plant Locators - Victoria / Tasmania

If a physical location is required please contact a Telstra accredited locator from the lists below (fees apply).

Tasmania

Name & areas covered	Contact details
Aardvark Utilities Exposure - *Langwarrin* *Melbourne Metro, Mornington Peninsula, Gippsland, Latrobe Valley*	(03) 9785 6608 or 0413 996 907 Fax: (03) 9785 9296
AJ Water & Leak Detection - *Newstead* *Tas - North, North East & North West*	0457 710 684
Archer's Underground Services Locations *All of Tasmania Except Launceston and Devonport*	0418 737 299 Fax (03) 6245 1299
Archer's Underground Services Locations *Launceston and Devonport*	0417 551 851
Australian Underground Survey Solutions Pty Ltd - *Narre Warren* *All Areas*	(03) 9700 2311 or 0419 488 883 Fax: (03) 9314 1568
Cable Locators Northern Tasmania *0363 Area Code*	0418 321 311 (03) 6394 3994
Corrosion Mitigation Pty Ltd - *Kensington* *All areas*	(03) 9376 4216 or 0418 367 295
Environmental Locations Systems - *Fountain Gate* *All areas*	(03) 9314 5335 or 0414 352 472
Jacksons Utility Location Service - *Pakenham*	0417 511 114
LOC84U (MD Smith) - *St Marys* *North East Coast, Swansea North, Fingel Valley to Avoca*	0408 059 521
Mytrax - *Legana* *Launceston, North East Tasmania*	0418 607 145 Fax: (03) 6330 2723 mytrax@bigpond.com
Nigel Mawby Enterprises - *Devonport* *All of Tasmania*	0408 635 357 Email: nigelamawby@bigpond.com
North West Locations Pty Ltd	0419 512 796 Fax (03) 6442 1292
Pipeline Technology Services	(08) 8351 7000 or 0419 878 220 Fax:(08) 8159 7537
Radiotech Geo-Structural Surveys - *Greensborough*	(03) 9444 9183 Fax: (03) 9434 4694
Riverina Horizontal Boring Pty Ltd - *Wodonga*	(02) 6059 1788 or 0419 149 153 Fax: (02) 6059 5090
Rock Drilling Australia Pty Ltd - *Upper Coomera*	(07) 5573 1578 or 0407 319 997 Fax: (07) 5665 7233

Victoria

Name & areas covered	Contact details
Aardvark Utilities Exposure - *Langwarrin* *Melbourne Metro, Mornington Peninsula, Gippsland, Latrobe Valley*	(03) 9785 6608 or 0413 996 907 Fax: (03) 9785 9296
Able Pipe Cable & Leak Location Services *Melbourne Metro & Mornington Peninsula*	0418 318 186 Fax (03) 9584 0137
Advanced Pty Limited - *Lancefield* *Melbourne Metro, Geelong, Bendigo, Lancefield*	(03) 5429 1739 or 0402 883 536
All Areas Asset Locating - *Macleod*	0409 234 121
All Melbourne Cable & Pipe Locating *Eastern Suburbs, Yarra Valley, Melbourne and Greater Metropolitan Area.*	0417 202 000 Fax (03) 9876 5716
All States Contracting P/L - *Shepparton* *Central, North Central, Goulburn Valley, Shepparton, Seymour, Cobram, Euroa*	0408 216 653 (03) 5821 6653
Asset Detection Services Pty Ltd - *Newport* *All of VIC*	0413 949 400 Fax: (03) 9391 6204 Email: info@assetdetection.com.au
Australian Underground Survey Solutions Pty Ltd - *Narre Warren*	(03) 9700 2311 or 0419 488 883 Fax: (03) 9314 1568
Barry Bros Specialised Services *Yarra*	(03) 9574 9888 or 0407 319 930
Barry Johnstone Locations and Communications - *Mt Gambier.* *South East Of South Australia (Limestone Coast), South West Victoria*	0418 834 804
Bartletts Waste Management Pty Ltd - *Geelong* *All of VIC*	(03) 5248 7955 or 0427 684 726 Fax: (03) 5248 7677 Email: info@bartlettsenvironmental.com.au
Below Ground Services Pty Ltd (GC Cooper Plumbing) - *Vermont South* *Metro, Southern and Eastern Suburbs, Mornington Peninsula and Surrounding Areas*	0418 314 049 Fax: (03) 9803 7147
Bendigo District Cable and Pipe Locations T/A Becley Pty Ltd)	(03) 5447 1148 or 0413 035 386 (03) 5447 1804
Billy Charnock Electrical - *Swan Hill* *Swan Hill and Surrounding Districts*	(03) 5032 1866 Fax: (03) 5033 1866
Bishops Underground Services Locations *(Ballarat & Warrnambool based)* *All of VIC*	(03) 5342 0440 or 0408 508 453 Fax: (03) 5342 0440 Email: bishops@bigpond.com
C & L Cable Locators - *Strathfieldsaye*	(03) 5439 3405 or 0407 393 405 Fax: (03) 5439 3405
Cablenet Industries Pty Ltd - *Sunshine*	(03) 9311 6605 Fax: (03) 9311 6610
Capogreco Excavations Pty Ltd - *Mildura South* *Mildura, Wentworth, Gol Gol, Dareton, Ouyen, Robinvale, Merbein*	(03) 5022 2070 or 0428 356 269 Fax (03) 5022 7003

Name & areas covered	Contact details
Cardno Australian Underground Services *All Areas*	1300 224 664 or (03) 9553 7236
Cavan Constructions - Warrnambool *Western District of Victoria*	(03) 5568 7240 or 0404 241 679 Fax: (03) 5568 7240
Clean It Industrial Services - *Sale*	0417 517 391
Cobram Electrical and Data Pty Ltd - *Cobram* *North East Victoria and NSW*	(03) 5871 2807 or 0447 777 566 Fax: (03) 5871 2907
Corrosion Mitigation Pty Ltd - *Kensington* *All areas*	(03) 9376 4216 or 0418 367 295
D & B Electrical Pty Ltd - *Horsham* *Melbourne East and Surrounds*	(03) 5382 1514 or 0438 824 557 Fax: (03) 5381 1985
deCastella Walsh Consulting Pty Ltd - *Yarra Glen*	0417 327 570 Fax: 03 9730 2683
DJ & JM Mitchell *Victoria "Wimmera Mallee"*	Ph/Fax (03) 5399 0508 0417334453
Down Under Pipeline Surveys Pty Ltd - *Orangeville*	(02) 4653 1286 or 0418 675 374 Fax (02) 4653 1747
Dunlop & Pitson Earthmoving - *Bendigo* *Bendigo Region*	(03) 5441 1809 or 0419 761 427 Fax: (03) 5441 5571 email: tim@dpearth.com.au
Echuca and District Cable Locations - *Echuca* *Northern VIC, Southern NSW*	0419 001 843
Eiicon Locations - *Wodonga* *Wodonga, Albury, Wagga Wagga, Wangaratta, Touong Shire, Alpine Shire, Indigo Shire*	0419 568 331
EJ Russell Plant Hire - *Colac*	(03) 5231 2630 or 0428 874 832 Fax: (03) 5232 2848
Elite Locating Services - *Seabrook* *Melbourne Metropoliton, All areas in Australia*	0413 743 618
Environmental Locations Systems - *Fountain Gate* *All areas*	(03) 9314 5335 or 0414 352 472
Fletcher Plumbing *Southern NSW and North East Victoria*	(02) 6043 3188 or 0404 030 305 Fax: (02) 6043 3199
Geelong Cable Locations - *Geelong* *All areas*	0418 108 543 Fax (03) 5248 3344
Geelong Underground Services - *Grovedale* *All areas*	0413 958 918
Georadar - *Moorooka*	(07) 3103 9464 or 0411 725 724 Fax: (07) 3848 7610
GeoScan Utility Location Service *Victoria Statewide*	0417 309 710 Fax (03) 5261 9619
Gippsland Pipe & Cable Locations - *Wy Yung* *Gippsland*	(03) 5152 4417 or 0409 386 817 Fax: (03) 5152 4480
Gippslocate - *Traralgon* *Gippsland*	(03) 5174 9831 or 0418 349 391 Fax (03) 5176 6796
Green Triangle Electronics *South East of South Australia and Western Victoria*	(08) 8724 2222 Fax: (08) 8723 0249

Name & areas covered	Contact details
Groundscope - *Healesville* *Yarra Valley/Eastern Suburbs*	0400 603 333
JG Keast Excavations - *Bushfield* *South West Victoria*	0417 380 322 Fax: (03) 5562 8574
Jacksons Utility Location Service - *Pakenham*	0417 511 114
Larsen Electrics - *Red Cliffs* *Mildura & Districts, NSW South, SA*	(03) 5024 1733 or 0428 385 610 Fax (03) 5024 1170
Locaters *All areas*	0418 262 025 Fax (02) 8324 6391
Mark Brehaut - *Ballarat* *Ballarat*	0402 411 843 Fax: 03 9011 9750
Mia Pipe & Cable Layers Pty Ltd - *Griffith*	(02) 6964 0083 or 0418 501 050 Fax: (02) 6964 7877
National Civil & Civic Services - *Thebarton* *South Eastern SA*	0422 768 660 nathan.smith@natciv.com.au
Onley Consulting Pty Ltd - *Shepparton*	(03) 5821 7171 or 0447 395 088 Fax: (03) 5821 2725 mail@onleys.com.au
Optic Energi Australia - *Ashburton*	(03) 9886 9642 or 0412 355 078 Fax: (03) 9886 9641
Paul Larkin Technical Services - *Albury* *Albury NSW, Wodonga VIC*	0412 116 524
Pipe & Cable *Metro & Country*	0418 378 935
Pipeline Technology Services	(08) 8351 7000 or 0419 878 220 Fax:(08) 8159 7537
Precision Locations *Geelong and Surfcoast*	0418 524 156 Fax (03) 5266 1075
Qest Environments	1300 308 172 After Hours: 0417 478 732 Fax: 1300 456 863
Radiotech Geo-Structural Surveys- *Greensborough*	(03) 9444 9183 Fax: (03) 9434 4694
Riverina Horizontal Boring Pty Ltd - *Wodonga*	(02) 6059 1788 or 0419 149 153 Fax: (02) 6059 5090
Rock Drilling Australia Pty Ltd - *Upper Coomera*	(07) 5573 1578 or 0407 319 997 Fax: (07) 5665 7233
SADB Directional Boring - *Newton*	(08) 8168 7200 Fax: (08) 8168 7299
Somerset Communications *North East Victoria (Wangaratta, Bright, Yarrawonga, Mansfield, Benalla), Kiewa Valley, Corowa, Rutherglen*	0407 228 280
Spot on Group *Central & North-East Vic, Southern NSW*	1300 531 431 or 0407 505 226 Fax: (03) 5032 1173
Symes Contracting Services - *Wangaratta* *North East Victoria*	0427 215 600 Email: wsymes1@bigpond.com
Ted Finchett Pty Ltd *South West Vic*	(03) 5572 3388

Name & areas covered	Contact details
Tekace Communications - *Mildura* *Mildura and District*	(03) 5021 8600 or 0418 147 343 Fax: (03) 5021 8699
Towong Shire Council - *Tallangatta* *Towong Shire - North East Victoria*	(02) 6071 5100 or 0417 400 871 Fax: (02) 6071 5100
Underground Locating Services - *Devon Meadows* *Gippsland, Mornington Peninsula*	0414 409 619
Underground Pipe & Cable Location - *Pakenham* *Pakenham, SE Melbourne and Gippsland*	(03) 5941 4299 or 0418 368 591 Fax: (03) 5941 4291
Underground Services Detection Pty Ltd - *Taylors Lakes*	0401 268 915 Fax (03) 8390 9574
Underground Service Detectives - *Hawthorn East* *Melbourne and Greater Metropolitan Area*	0418 995 975
Vac-U-Digga Pty Ltd - *Ormeau*	1300 822 834 Mob: 0409 468 711 Fax: 07 3807 5599
Watters Electrical Pty Ltd - *Shepparton*	(03) 5821 3944 Fax: (03) 5831 1101
Westvic Cable Locators - *Colac* *All areas Southwest Victoria*	0428 874 832 Fax: (03) 5232 2848


FOR THE USER
DO NOT INSTALL TELSTRA PIPE
SIGN SERVICES ON TELSTRA CABLE
ALL TELSTRA SERVICE LINE TO BE
INSTALLED ON TELSTRA CABLE

7 February 2013

UNDERGROUND GAS ASSET LOCATION DETAILS

Tenix **Dial Before You Dig Seq No. 27884172**

Do not rely solely on DBYD plans for underground asset location. You must follow a safe system of work for identification of underground assets.

Tenix Networks Pty Ltd
ABN 17 092 750 091

Unit 3/50 Cyanamid Street
Laverton North VIC 3026
Australia

Locked Bag 4500
Sunshine VIC 3020

Tel: +61 3 9931 2000
Fax: +61 3 9931 2065
www.tenix.com

To: Mr Samuel O'Connor
Parsons Brinckerhoff
Level 15 28 Freshwater
Southbank VIC 3006

Telephone:	0398612366	**Enquiry Date:**	7/02/2013
Mobile:	0420430229	**Fax:**	Not Supplied
Email:	soconnor@pb.com.au		

Mr Samuel O'Connor,
Thank you for your Dial Before You Dig request. Please note that there are **No SP AusNet Gas Mains** in the area you have indicated. All information supplied is valid only for 28 days from the date of issue.

IMPORTANT: In case of an emergency, gas escapes, hit or damaged gas pipeline call **136707**
Supplied plans do not indicate service lines from the gas mains to consumer premises
and do not show gas assets of authorities other than SP AusNet, which may exist on site.

If you require assistance to locate gas services please contact Tenix Networks at the following locations:

Metro area:	(03) 9931 2076	Ballarat:	(03) 5342 6400	Warrnambool:	(03) 5561 9614
Geelong:	(03) 5223 9400	Bendigo:	(03) 5442 4855		

Location Details:

Address: 2040 Mickleham Rd
Mickleham 3064

Map Reference: Melways
365H10,365H11,365H9,365J10,365J11,365J7,365J8,365J9,365K10,365K11,365K7,365K8,365K9,366A10,366A7

Activity: Mechanical Excavation

AMG X/Y Coord: Zone 55, 312386.1450 / 5840489.2583 ...

Message: 33 Small excavations to 1.5mbgs for soil test pits

Locality indication plan

Disclaimer: Do not rely solely on Dial Before You Dig plans for underground asset location. The exact location of existing underground assets should be established on site prior to commencement of work.

Should you wish to reply or advise Tenix Networks of any data discrepancy, please reply email to dbyd.tms@tenix.com, queries regarding this letter may be directed to (03) 9931 2044 or (03) 9931 2046.

Dial Before You Dig

Yarra Valley Water Plan Request

WARNING!

The location of assets must be verified on site prior to the commencement of work.
For assistance to locate assets, please phone Yarra Valley Water on 131695.

Recipient: Mr Samuel O'Connor

Date: 08/02/2013

Sequence No: 27884174

Job No: 6089487

Email: soconnor@pb.com.au

Fax: Not Supplied

Address: 2040 Mickleham Rd, Mickleham VIC 3064

NOTE:

Yarra Valley Water records indicate that there are **NO** recorded underground assets within 50 meters of your DBYD enquiry; however this must be proven on site prior to the commencement of any works.

IMPORTANT: Abandoned pipes may contain asbestos cement and/or fibro cement. Special work and handling procedures to deal with these potentially hazardous materials are required.

Metallic water mains and associated fittings may pose an electrocution hazard if electrical earth wires have been connected to the property service or water main. The contractor shall ensure that adequate electrical testing is carried out prior to working on these mains. If a positive reading is recorded the contractor shall cease all works and notify the relevant power distributor, the customer and Yarra Valley Water.

Disclaimer - The plans accompanying this letter are issued solely for asset identification purposes and should not be used for any other purpose. Yarra Valley Water provides the information it has on Sewer, Water and Recycled Water assets but does not guarantee the accuracy of information and therefore the location of all assets must be proven on site prior to the commencement of any works.

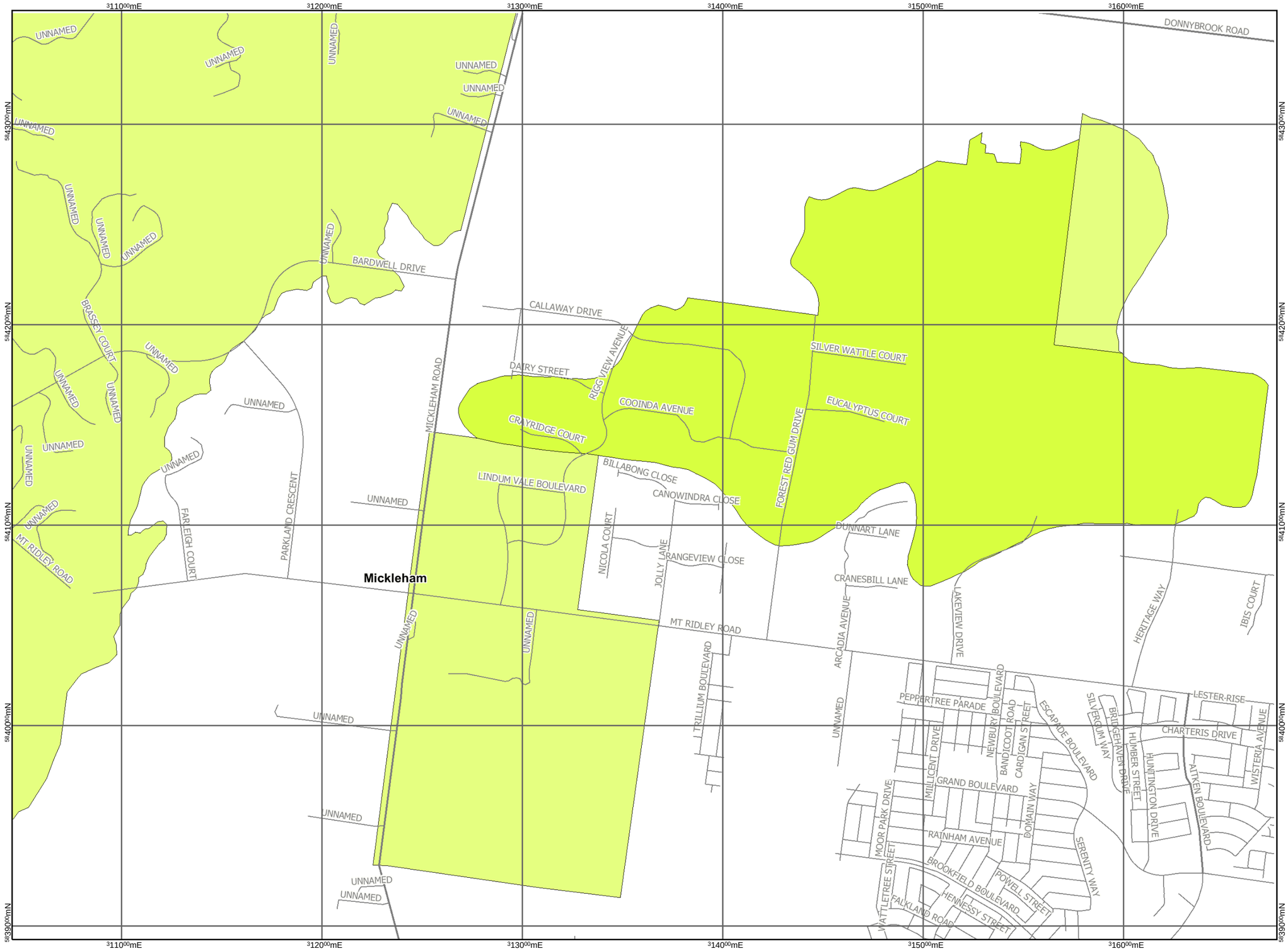
Yarra Valley Water will not accept responsibility for or claims associated with any incorrect or incomplete information being contained on the plan. Due to ongoing potential asset changes this plan should not be reused at a later date, a new plan should be obtained.

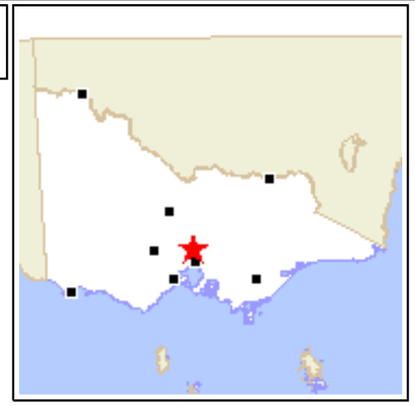
Appendix F

Groundwater database search and planning overlays

Department of Primary Industries

Map created Thu Feb 28 12:50:27 EST 2013





Legend

- Towns (25K)
- Roads (vmtrans)
  - Freeway
  - Highway
  - Main Road
  - Other
- Planning Overlay - Environmental and Landscape
  - Environmental Significance Overlay
  - Vegetation Protection Overlay
  - Significant Landscape Overlay

GN

MN

Map Server: P00403

Map Service: erd_geovic_v2_7

Generated at http://mapshare2.dse.vic.gov.au/MapShare2EXT/ from GeoVic

Produced on Thu Feb 28 12:50:45 EST 2013

Map Scale 1:19,317

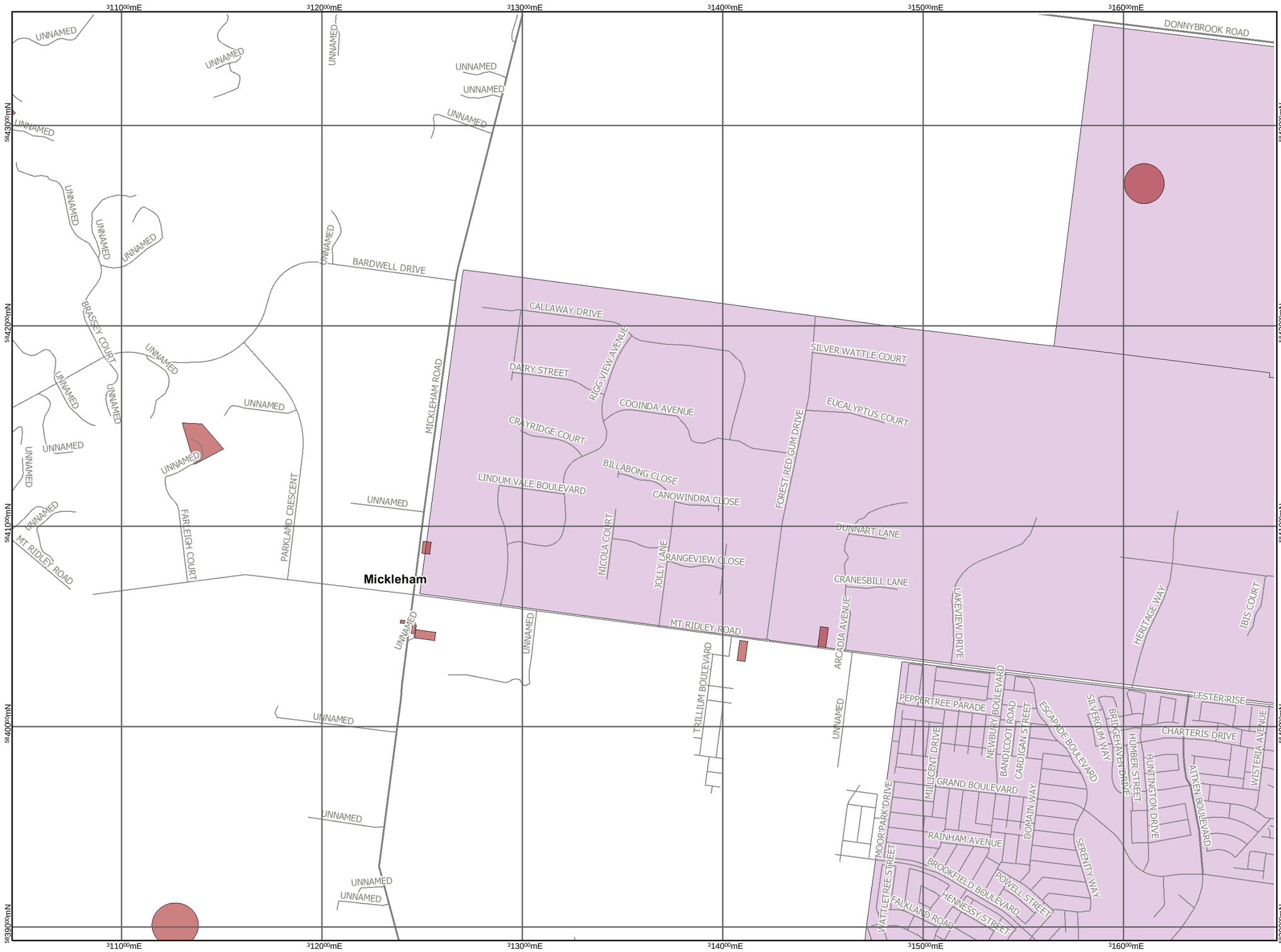
Projection: MGA_55

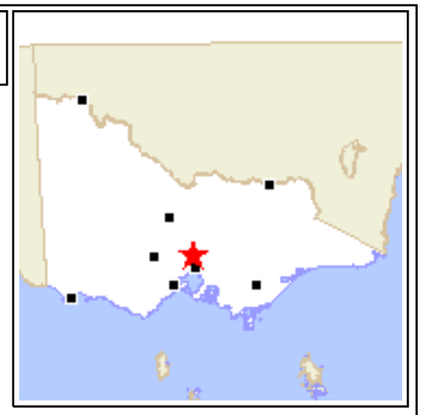
GDA

State Government Victoria

Department of Primary Industries

Map created Thu Feb 28 12:50:27 EST 2013





Legend

- Towns (25K)
- Roads (vmtrans)
  - Freeway
  - Highway
  - Main Road
  - Other
- Planning Overlay - Heritage and Built
  - Heritage Overlay
  - Design and Development Overlay
  - DDOPT
  - Incorporated Plan Overlay
  - Development Plan Overlay
  - Neighborhood Character Overlay

GN

MN

Map Server: P00403

Map Service: erd_geovic_v2_7

Generated at http://mapshare2.dse.vic.gov.au/MapShare2EXT/ from GeoVic

Produced on Thu Feb 28 12:51:50 EST 2013

Map Scale 1:19,317

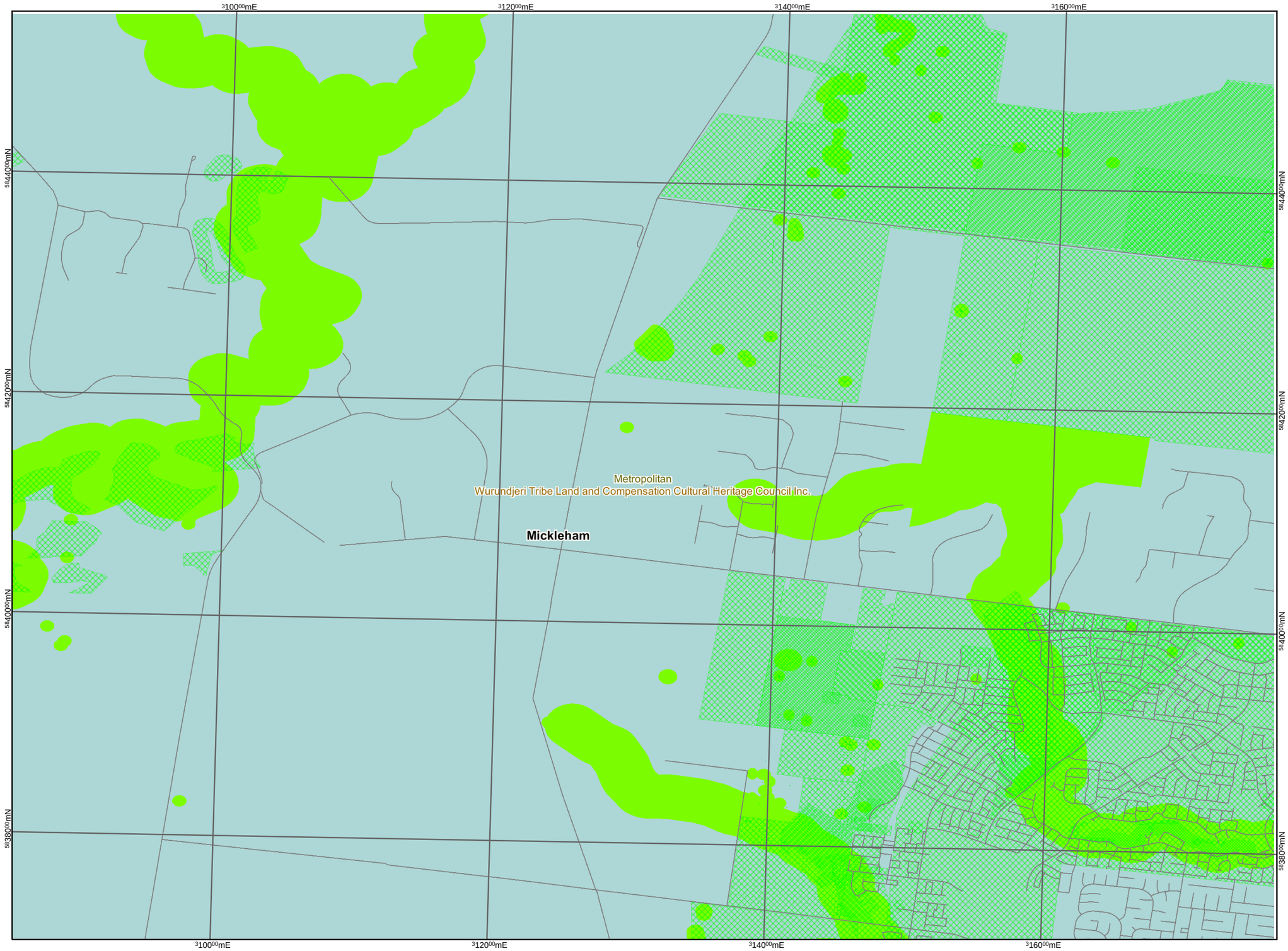
Projection: MGA_55

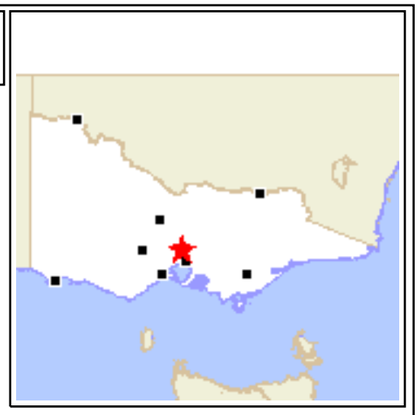
GDA

State Government Victoria

Department of Primary Industries

Map created Thu Jan 10 14:56:23 EST 2013





Legend

- Towns (25K)
- Roads (vmsimple)
  - Freeway
  - Highway
  - Main Road
  - Other
- Aboriginal Cultural Heritage Place Surveys
- Cultural Heritage Sensitivity
- Aboriginal Affairs Victoria Regions
  - Gippsland
  - Metropolitan
  - Hume
  - Loddon Mallee
  - Barwon South West/Grampians
- Registered Aboriginal Parties Areas

GN

MN

Map Server: P00403

Map Service: erd_geovic_v2_7

Generated at http://mapshare2.dse.vic.gov.au/MapShare2EXT/ from GeoVic

Produced on Thu Jan 10 15:19:45 EST 2013

Map Scale 1:35,214

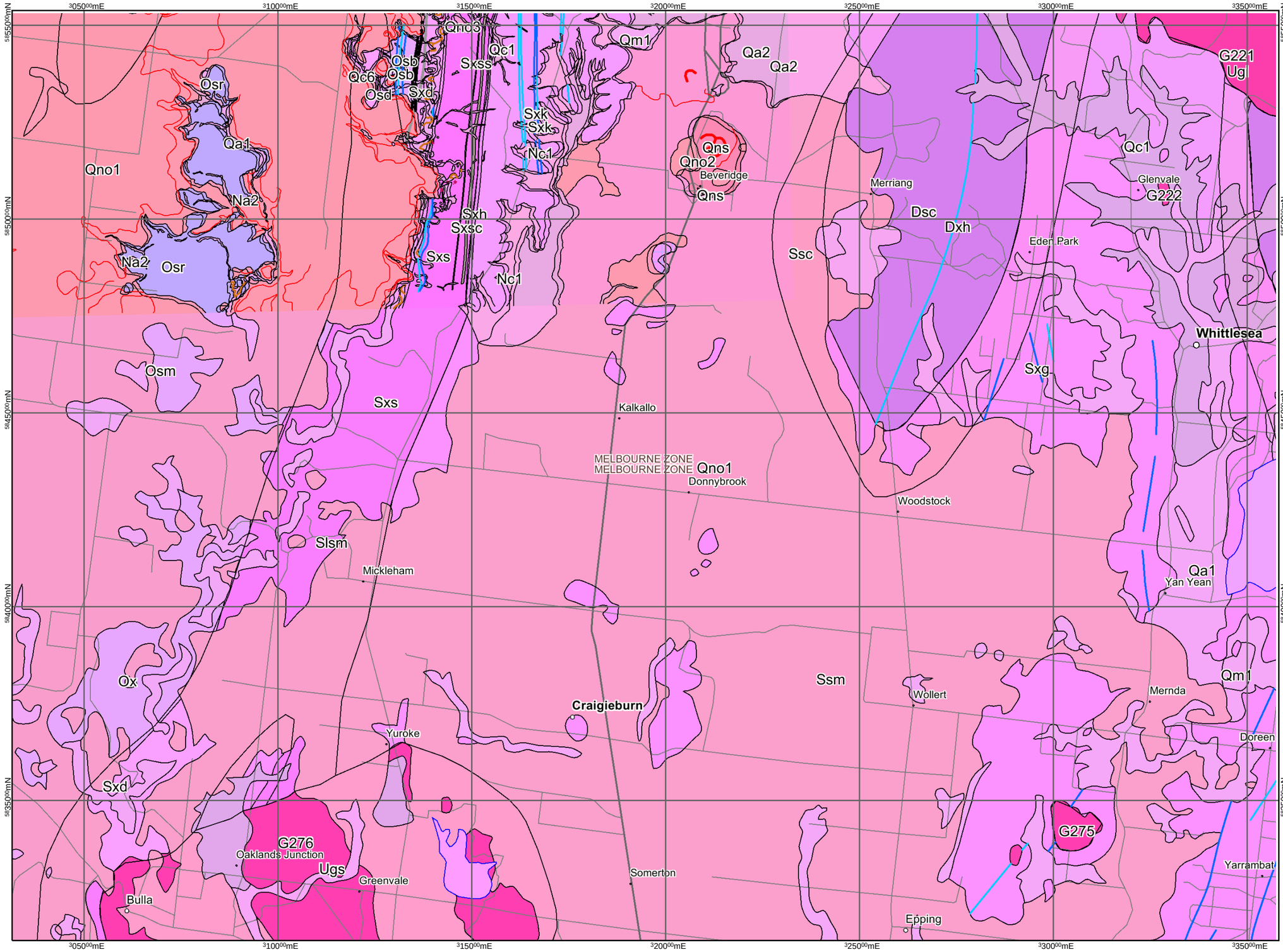
Projection: Geographic GDA94

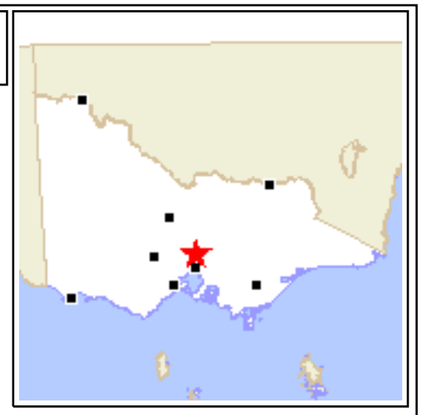
GDA

State Government Victoria

Department of Primary Industries

Map created Mon Mar 04 12:58:23 EST 2013





Legend

* Refer to page 2 for legend details

GN

MN

Map Server: P00403

Map Service: erd_geovic_v2_7

Generated at http://mapshare2.dse.vic.gov.au/MapShare2EXT/ from GeoVic

Produced on Mon Mar 04 13:04:33 EST 2013

Map Scale 1:100,000

Projection: MGA_55

GDA

State Government Victoria

Towns (100K)
- Large Town
- Town
- Locality
- Structural Zones (boundaries)

Miscellaneous Lines 100K
- Prior stream
- Type section
- Contact Metamorphism Lines 100K

Geological Structure 100K
- Monocline, mapped
- Monocline, inferred.
- Monocline, concealed.
- Anticline, mapped.
- Anticline, inferred.
- Anticline, concealed.

(cont)
- Antiform.
- Syncline, mapped.
- Syncline, inferred.
- Syncline, concealed.
- Synform.
- Form surface.
- Lineament.
- Trend.

Geological Lines 100K
- Geological boundary, mapped.
- Fault, mapped.

Miscellaneous Lines 250K
- Prior stream
- Contact Metamorphism Lines 250K

Geological Structure 250K
- Monocline, mapped

(cont)
- Monocline, inferred.
- Monocline, concealed.
- Anticline, mapped.
- Anticline, inferred.
- Anticline, concealed.
- Antiform.
- Syncline, mapped.
- Syncline, inferred.
- Syncline, concealed.
- Synform.

Geological Lines 250K
- Geological boundary, mapped.
- Fault, mapped.

Pre-Permian Lines 1M
- Fault, interpreted.
- Geological boundary, interpreted.

Roads (250K)
- Major Roads

(cont)
- Other Roads

Structural Zones (filled)
- GLENELG ZONE
- GRAMPIANS STAVELY ZONE
- STAWELL ZONE
- BENDIGO ZONE
- SELWYN BLOCK
- MELBOURNE ZONE
- BASS ZONE
- TABBERABBERA ZONE
- OMEO ZONE
- DEDDICK ZONE
- KUARK ZONE
- MALLACOOTA ZONE
- Contact Metamorphism Zones 100K

Geological Polygons 100K
- Qm1 Unnamed swamp and lake deposits

(cont)
- Qa2 Unnamed alluvium
- Qa1 Unnamed alluvium
- Qc6 Unnamed basalt-derived slump deposits
- Qc1 Unnamed colluvium
- Nc1 Unnamed incised colluvium
- Qno3 Unnamed valley-filling basalt
- Qno2 Unnamed stony rises basalt
- Qns Unnamed scoria deposits
- Qno1 Unnamed sheetflow basalt
- Na2 Unnamed alluvial deposits
- Sxk Kilmore Siltstone
- Sxh Chintin Formation
- Sxs Springfield Sandstone
- Sxsc Calton Hill Sandstone Member
- Sxss Stockdale Conglomerate Member
- Sxd Deep Creek Siltstone
- Osd Darraweit Guim Siltstone
- Osb Bolinda Shale

(cont)
- Osr Riddell Sandstone
- Contact Metamorphism Zones 250K

Geological Polygons 250K
- Qm1 Unnamed swamp and lake deposits
- Qa2 Unnamed alluvium
- Nc1 Unnamed incised colluvium
- Qc1 Unnamed colluvium
- Qa1 Unnamed alluvium
- Qns Unnamed scoria deposits
- Qno1 Unnamed sheetflow basalt
- Na2 Unnamed
- G221 Mount Disappointment Granodiorite
- G222 Glenvale Granodiorite
- G275 Morang Granodiorite
- G276 Bulla Granodiorite
- Dxh Humevale Siltstone

(cont)
- Sxg Dargile Formation
- Sxk Kilmore Siltstone
- Sxd Deep Creek Siltstone
- Sxs Springfield Sandstone
- Osb Bolinda Shale
- Osr Riddell Sandstone
- Ox Undifferentiated Ordovician/Silurian sedimentary rocks

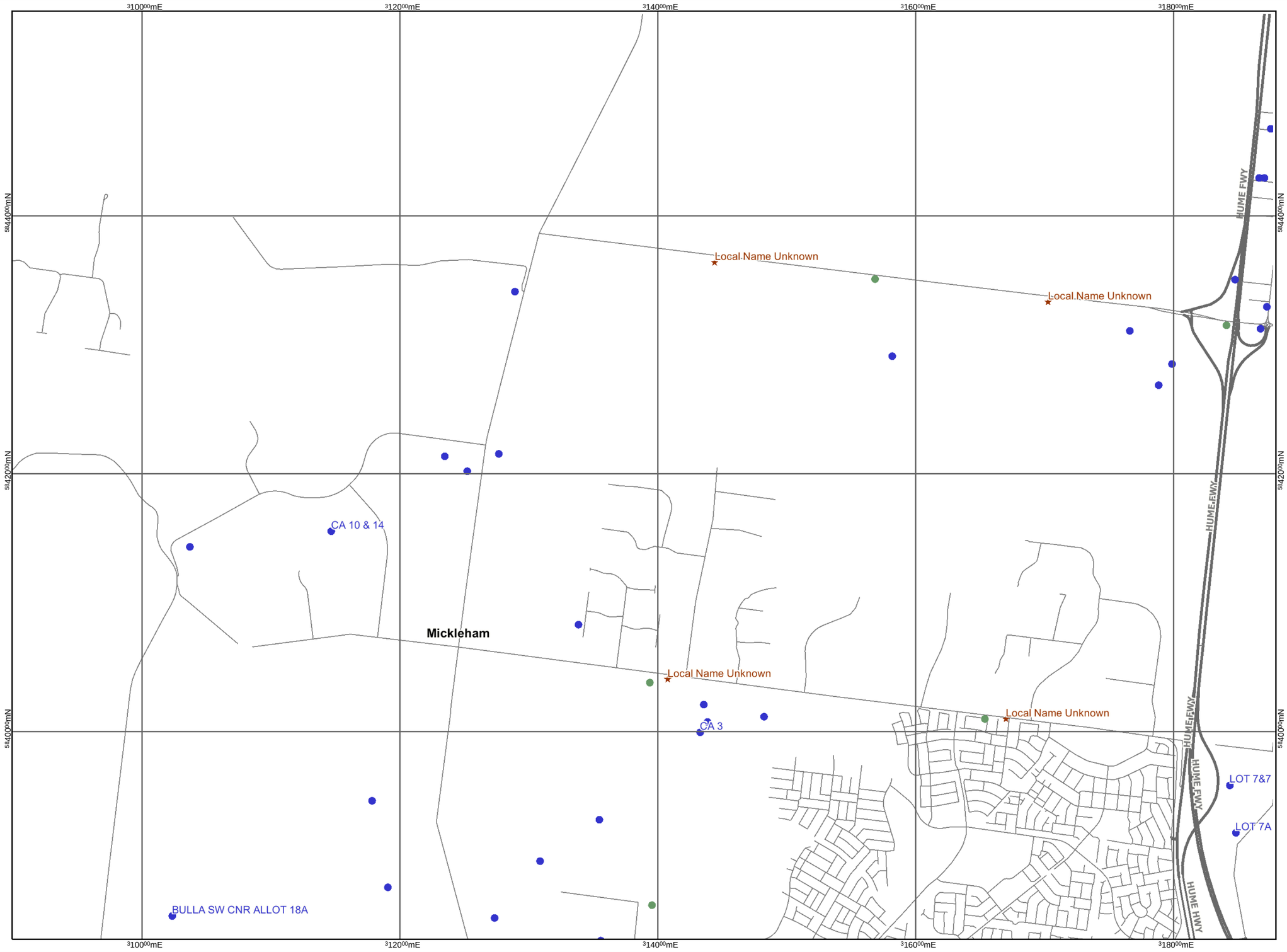
Pre-Permian Regional Metamorphic Polygons 1M
- CAMBRIAN ABOVE CHLORITE GRADE
- CAMBRIAN MIGMATITE
- SILURIAN ABOVE CHLORITE GRADE
- SILURIAN MIGMATITE

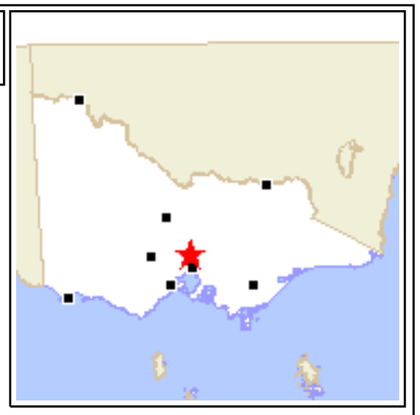
Pre-Permian Polygons 1M
- Dsc
- Osm

(cont)
- Slsm
- Ssc
- Ssm
- Ugi
- Ugs

Department of Primary Industries

Map created Mon Mar 04 12:58:23 EST 2013





Legend

* Refer to page 2 for legend details

GN

MN

Map Server: P00403

Map Service: erd_geovic_v2_7

Generated at http://mapshare2.dse.vic.gov.au/MapShare2EXT/ from GeoVic

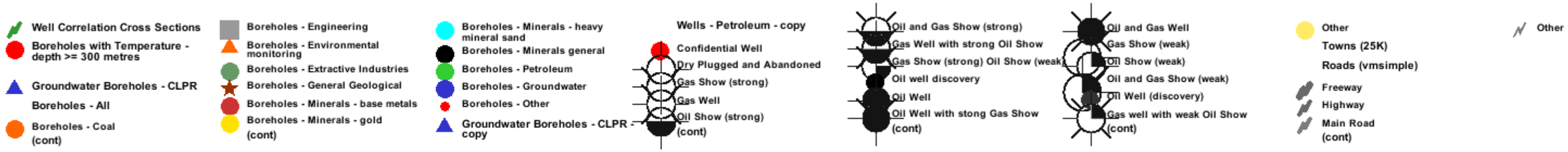
Produced on Mon Mar 04 13:14:19 EST 2013

Map Scale 1:30,000

Projection: MGA_55

GDA

State Government Victoria



Property Report from **www.land.vic.gov.au** on 10 January 2013 11:13 AM

Address: 1960 MICKLEHAM ROAD MICKLEHAM 3064
Lot and Plan Number: Lot 1 TP947278
Standard Parcel Identifier (SPI): 1\TP947278
Local Government (Council): HUME **Council Property Number:** 302755
Directory Reference: Melway 365 H10

This land is in an area added to the Urban Growth Boundary after 2005.
It may be subject to the Growth Area Infrastructure Contribution.

For more information about this contribution go to the **Growth Areas Authority** website.

This property is in a designated bushfire prone area.
Special bushfire construction requirements apply. Planning provisions may apply.

Further information about the building control system and building in bushfire prone areas can be found on the Building Commission website www.buildingcommission.com.au

State Electorates

Legislative Council: WESTERN METROPOLITAN (2005)
Legislative Assembly: YUROKE (2001)

Utilities

Rural Water Business: Southern Rural Water
Metro Water Business: Yarra Valley Water Ltd
Melbourne Water: inside drainage boundary
Power Distributor: JEMENA (Information about choosing an electricity retailer)

Planning Zone Summary

Planning Zone: FARMING ZONE (FZ)
Planning Overlays: DEVELOPMENT PLAN OVERLAY (DPO)
DEVELOPMENT PLAN OVERLAY - SCHEDULE 8 (DPO8)
ENVIRONMENTAL SIGNIFICANCE OVERLAY (ESO)
ENVIRONMENTAL SIGNIFICANCE OVERLAY - SCHEDULE 11 (ESO11)
ENVIRONMENTAL SIGNIFICANCE OVERLAY - SCHEDULE 5 (ESO5)
PUBLIC ACQUISITION OVERLAY (PAO)
PUBLIC ACQUISITION OVERLAY 2 SCHEDULE (PAO2)

Planning scheme data last updated on 10 January 2013.

A **planning scheme** sets out policies and requirements for the use, development and protection of land. This report provides information about the zone and overlay provisions that apply to the selected land. Information about the State, local, particular and general provisions of the local planning scheme that may affect the use of this land can be obtained by contacting the local council or by visiting Planning Schemes Online

This report is NOT a **Planning Certificate** issued pursuant to Section 199 of the Planning & Environment Act 1987. It does not include information about exhibited planning scheme amendments, or zonings that may abut the land. To obtain a Planning Certificate go to Titles and Property Certificates

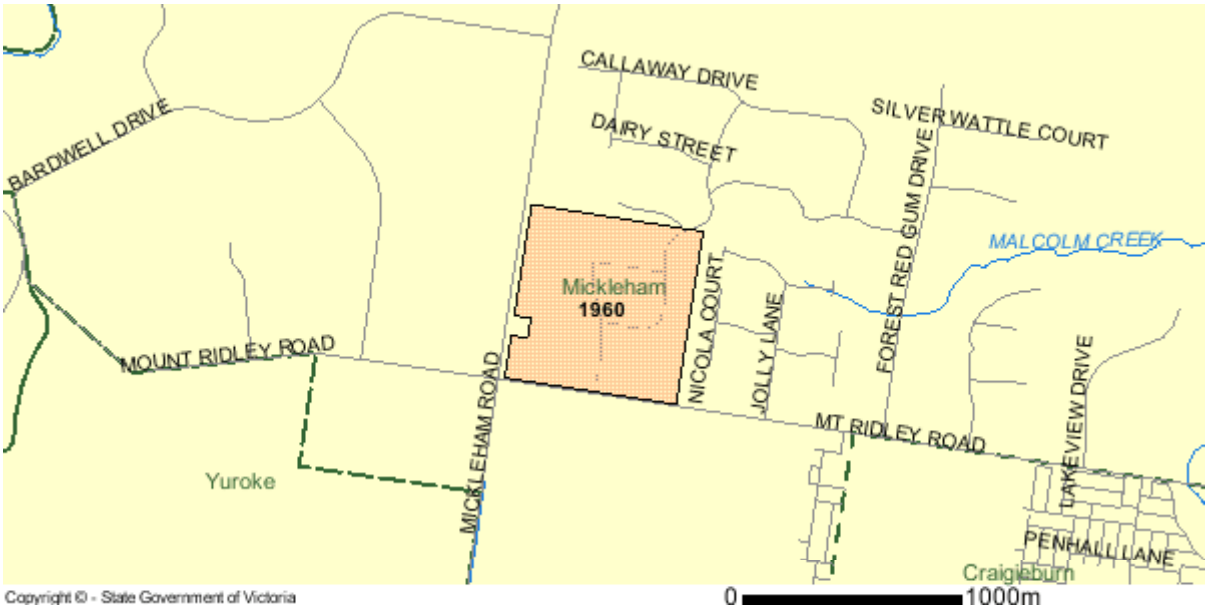
The Planning Property Report includes separate maps of zones and overlays

For details of surrounding properties, use this service to get the Reports for properties of interest

To view planning zones, overlay and heritage information in an interactive format visit Planning Maps Online

For other information about planning in Victoria visit www.dpcd.vic.gov.au/planning

Area Map



Department of
Planning and
Community Development

Planning Property Report

From **www.dpcd.vic.gov.au/planning** on 10 January 2013 11:14 AM

Address: 1960 MICKLEHAM ROAD MICKLEHAM 3064
Lot and Plan Number: Lot 1 TP947278
Local Government (Council): HUME **Council Property Number:** 302755
Directory Reference: Melway 365 H10

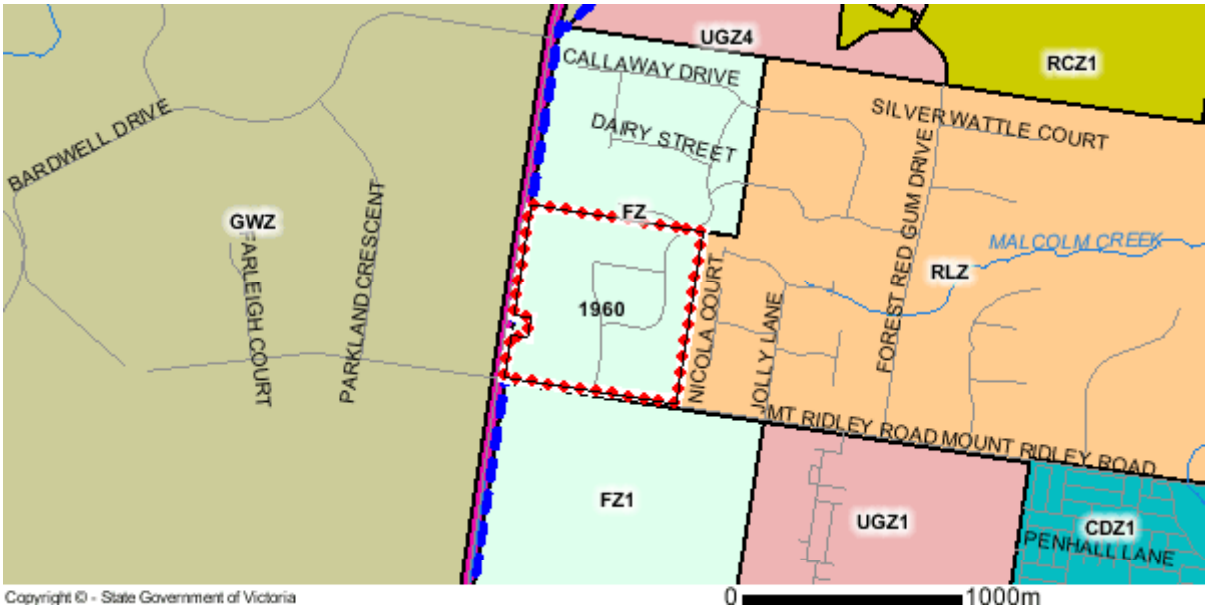
This land is in an area added to the Urban Growth Boundary after 2005.
It may be subject to the Growth Area Infrastructure Contribution.

For more information about this contribution go to the **Growth Areas Authority** website.

See next page for planning information

Planning Zone

FARMING ZONE (FZ)



Note: labels for zones may appear outside the actual zone - please compare the labels with the legend.

Zones Legend

- ACZ - Activity Centre
- B1Z - Business 1
- B2Z - Business 2
- B3Z - Business 3
- B4Z - Business 4
- B5Z - Business 5
- CA - Commonwealth Land
- CCZ - Capital City
- CDZ - Comprehensive Development
- DZ - Dockland
- ERZ - Environmental Rural
- FZ - Farming
- GWAZ - Green Wedge A
- GWZ - Green Wedge
- IN1Z - Industrial 1
- IN2Z - Industrial 2
- IN3Z - Industrial 3
- LDRZ - Low Density Residential
- MUZ - Mixed Use
- PCRZ - Public Conservation & Resource
- PDZ - Priority Development
- PPRZ - Public Park & Recreation
- PUZ1 - Public Use - Service & Utility
- PUZ2 - Public Use - Education
- PUZ3 - Public Use - Health Community
- PUZ4 - Public Use - Transport
- PUZ5 - Public Use - Cemetery/Crematorium
- PUZ6 - Public Use - Local Government
- PUZ7 - Public Use - Other Public Use
- R1Z - Residential 1
- R2Z - Residential 2
- R3Z - Residential 3
- RAZ - Rural Activity
- RCZ - Rural Conservation
- RDZ1 - Road - Category 1
- RDZ2 - Road - Category 2
- RLZ - Rural Living
- RUZ - Rural
- SUZ - Special Use
- TZ - Township
- UFZ - Urban Floodway
- UGZ - Urban Growth
- Urban Growth Boundary

Planning Overlays

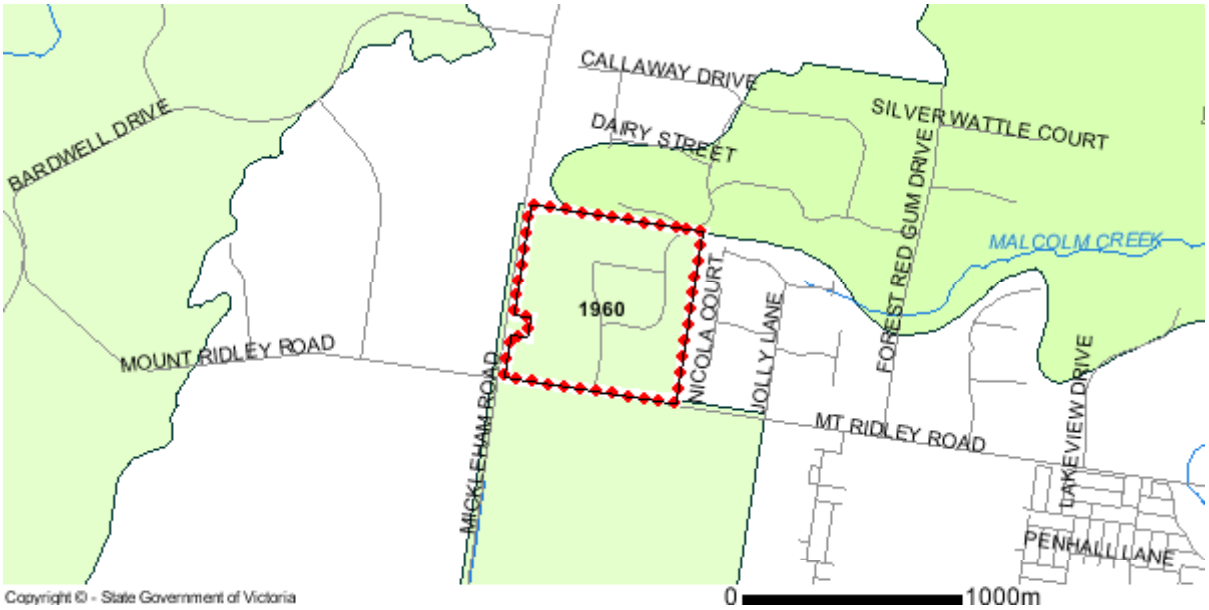
DEVELOPMENT PLAN OVERLAY (DPO)

DEVELOPMENT PLAN OVERLAY - SCHEDULE 8 (DPO8)

ENVIRONMENTAL SIGNIFICANCE OVERLAY (ESO)

ENVIRONMENTAL SIGNIFICANCE OVERLAY - SCHEDULE 11 (ESO11)

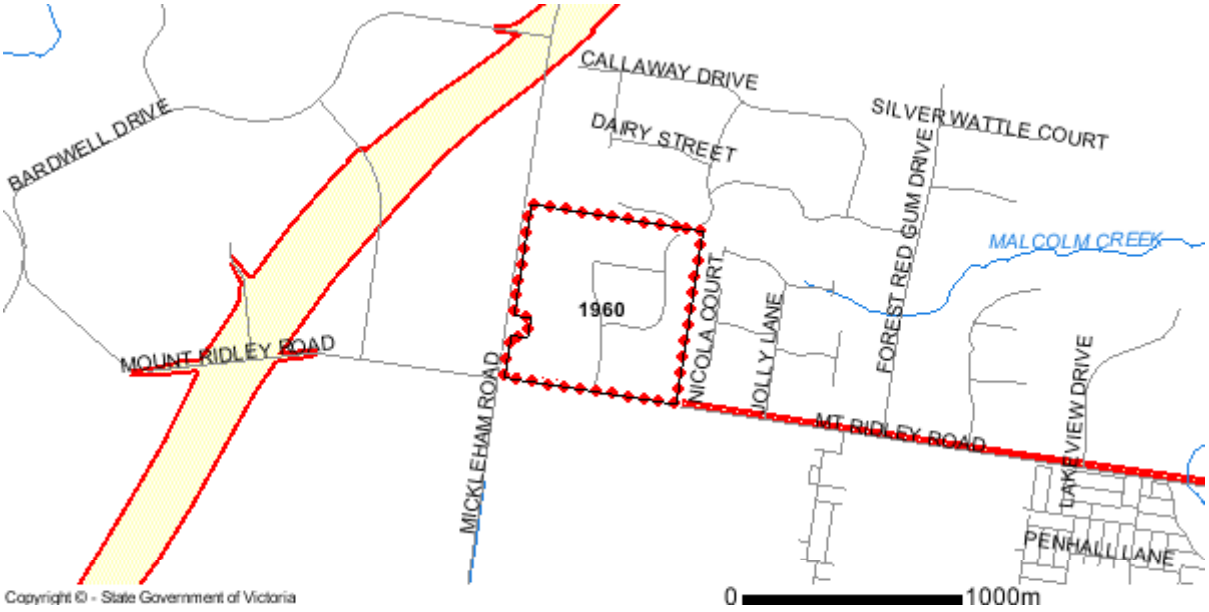
ENVIRONMENTAL SIGNIFICANCE OVERLAY - SCHEDULE 5 (ESO5)



Planning Overlays

PUBLIC ACQUISITION OVERLAY (PAO)

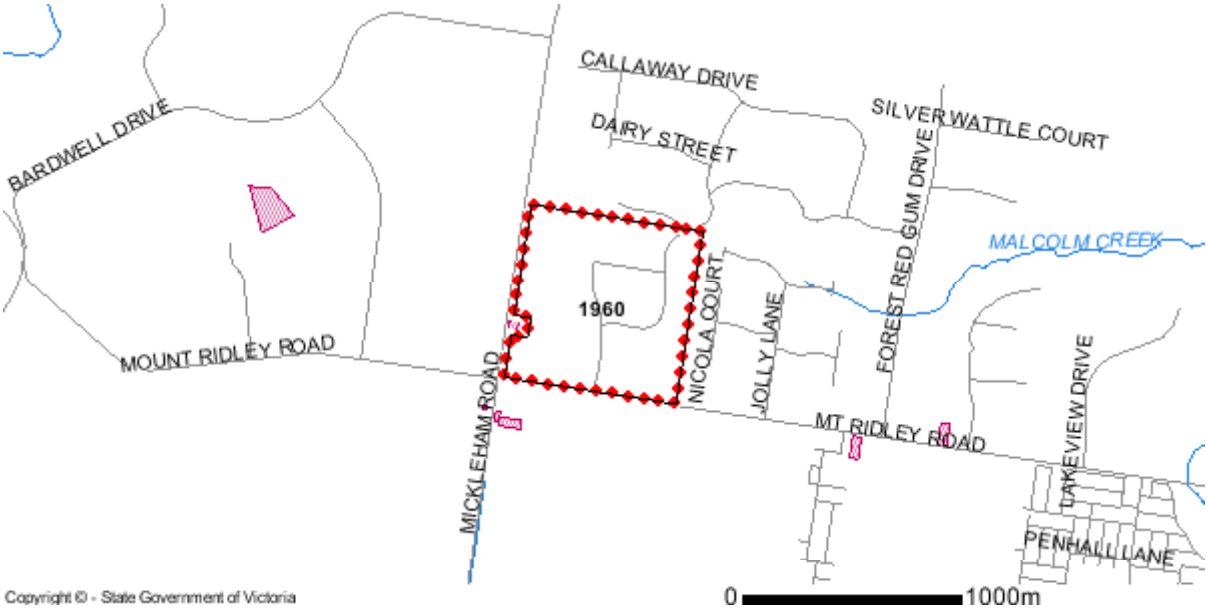
PUBLIC ACQUISITION OVERLAY 2 SCHEDULE (PAO2)



OTHER OVERLAYS

Other overlays in the vicinity not directly affecting this land

HERITAGE OVERLAY (HO)



Planning Overlays Legend

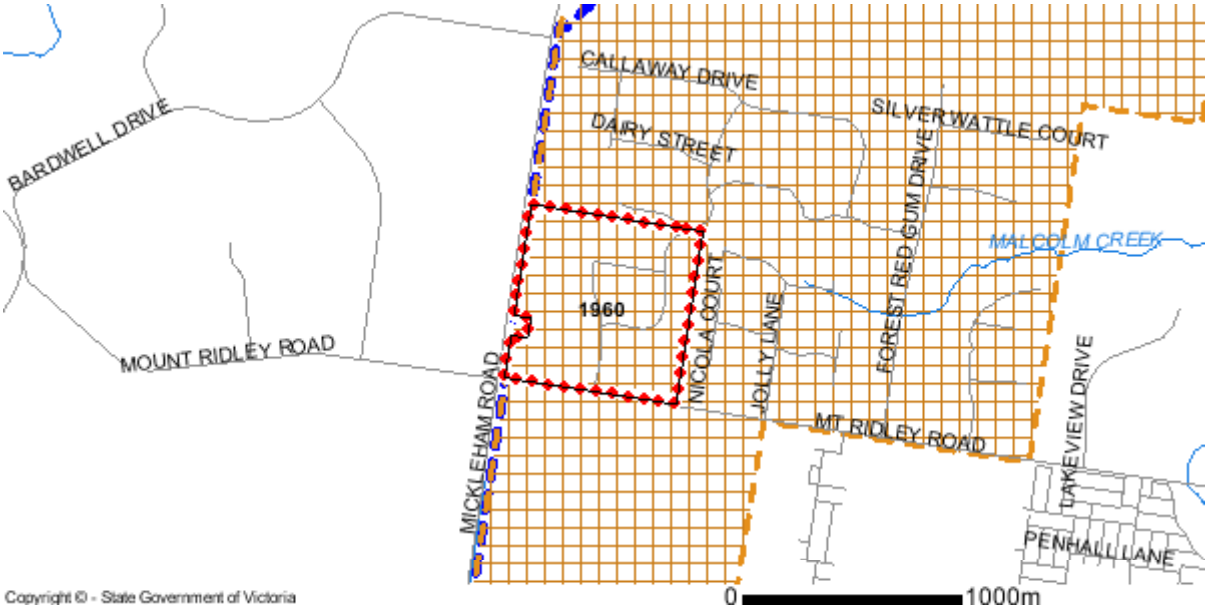
Overlays Legend

- Airport Environs
- City Link Project
- Development Contributions Plan
- Design & Development
- Design & Development Part
- Development Plan
- Environmental Audit
- Erosion Management
- Environmental Significance
- Floodway
- Heritage
- Incorporated Plan
- Land Subject to Inundation & Floodway
- Melbourne Airport Environs 1
- Melbourne Airport Environs 2
- Neighbourhood Character
- Public Acquisition
- Restructure
- Road Closure
- Special Building
- Significant Landscape
- Salinity Management
- State Resource
- Vegetation Protection
- Bushfire Management - Wildfire Management

Note: due to overlaps some colours on the maps may not match those in the legend.

Investigation Area

This land was included in an Investigation Area designated in 'Melbourne 2030: a planning update Melbourne @ 5 million'. For more information about this project go to **Melbourne @ 5 million** at the DPCD website.

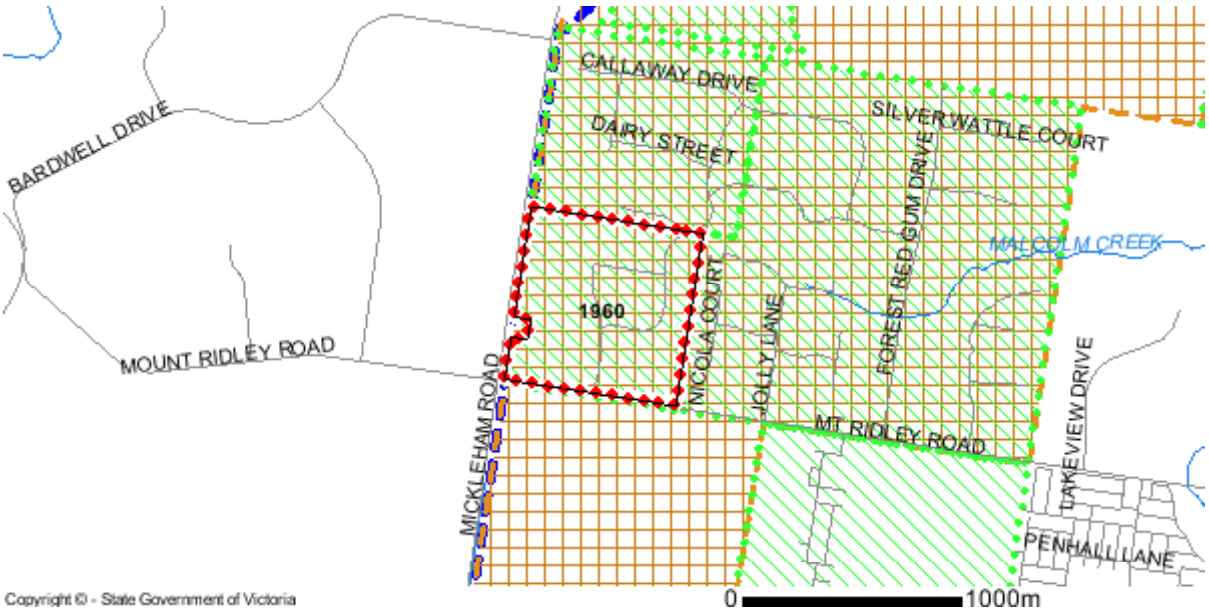


Investigation Area Legend — Urban Growth Boundary — Investigation Area — Selected Land

Growth Area Infrastructure Contribution

This land is in an area added to the Urban Growth Boundary after 2005.
It may be subject to the Growth Area Infrastructure Contribution.

For more information about this contribution go to the **Growth Areas Authority** website.



Further Planning Information

Planning scheme data last updated on 10 January 2013.

A **planning scheme** sets out policies and requirements for the use, development and protection of land.
This report provides information about the zone and overlay provisions that apply to the selected land.
Information about the State, local, particular and general provisions of the local planning scheme that may affect the use of this land can be obtained by contacting the local council or by visiting Planning Schemes Online

This report is NOT a **Planning Certificate** issued pursuant to Section 199 of the Planning & Environment Act 1987.
It does not include information about exhibited planning scheme amendments, or zonings that may abut the land.
To obtain a Planning Certificate go to Titles and Property Certificates

For details of surrounding properties, use this service to get the Reports for properties of interest

To view planning zones, overlay and heritage information in an interactive format visit Planning Maps Online

For other information about planning in Victoria visit www.dpcd.vic.gov.au/planning

Property Report from **www.land.vic.gov.au** on 04 March 2013 12:51 PM

Address: 1990 MICKLEHAM ROAD MICKLEHAM 3064
Lot and Plan Number: Lot 1 LP144228
Standard Parcel Identifier (SPI): 1\LP144228
Local Government (Council): HUME **Council Property Number:** 302756
Directory Reference: Melway 365 H9

This land is in an area added to the Urban Growth Boundary after 2005.
It may be subject to the Growth Area Infrastructure Contribution.

For more information about this contribution go to the **Growth Areas Authority** website.

This property is in a designated bushfire prone area.
Special bushfire construction requirements apply. Planning provisions may apply.

Further information about the building control system and building in bushfire prone areas can be found on the Building Commission website www.buildingcommission.com.au

State Electorates

Legislative Council: WESTERN METROPOLITAN (2005)
Legislative Assembly: YUROKE (2001)

Utilities

Rural Water Business: Southern Rural Water
Metro Water Business: Yarra Valley Water Ltd
Melbourne Water: inside drainage boundary
Power Distributor: JEMENA (Information about choosing an electricity retailer)

Planning Zone Summary

Planning Zone: FARMING ZONE (FZ)
Planning Overlay: DEVELOPMENT PLAN OVERLAY (DPO)
DEVELOPMENT PLAN OVERLAY - SCHEDULE 8 (DPO8)

Planning scheme data last updated on 21 February 2013.

A **planning scheme** sets out policies and requirements for the use, development and protection of land. This report provides information about the zone and overlay provisions that apply to the selected land. Information about the State, local, particular and general provisions of the local planning scheme that may affect the use of this land can be obtained by contacting the local council or by visiting Planning Schemes Online

This report is NOT a **Planning Certificate** issued pursuant to Section 199 of the Planning & Environment Act 1987. It does not include information about exhibited planning scheme amendments, or zonings that may abut the land. To obtain a Planning Certificate go to Titles and Property Certificates

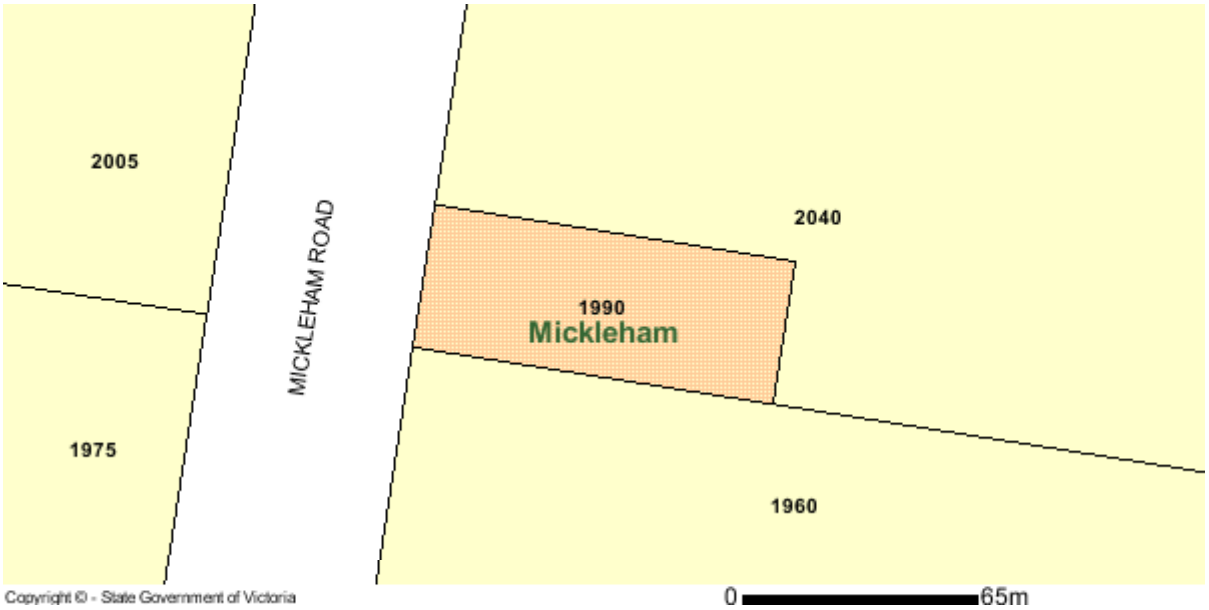
The Planning Property Report includes separate maps of zones and overlays

For details of surrounding properties, use this service to get the Reports for properties of interest

To view planning zones, overlay and heritage information in an interactive format visit Planning Maps Online

For other information about planning in Victoria visit www.dpcd.vic.gov.au/planning

Area Map



Department of
Planning and
Community Development

Planning Property Report

From **www.dpcd.vic.gov.au/planning** on 04 March 2013 01:07 PM

Address: 1990 MICKLEHAM ROAD MICKLEHAM 3064
Lot and Plan Number: Lot 1 LP144228
Local Government (Council): HUME **Council Property Number:** 302756
Directory Reference: Melway 365 H9

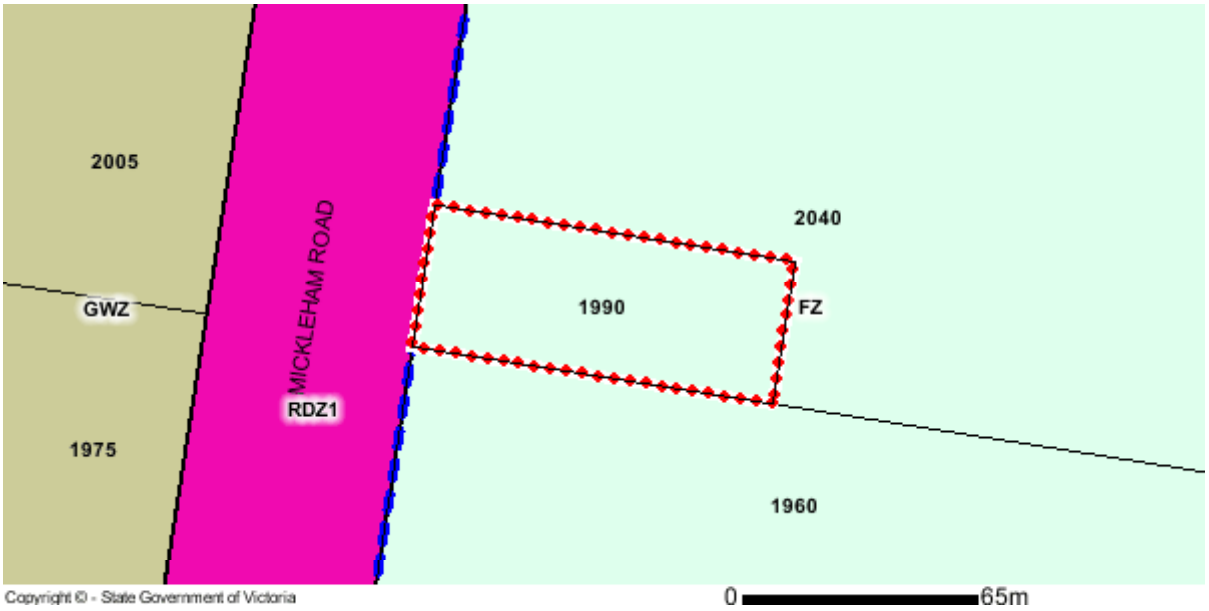
This land is in an area added to the Urban Growth Boundary after 2005.
It may be subject to the Growth Area Infrastructure Contribution.

For more information about this contribution go to the **Growth Areas Authority** website.

See next page for planning information

Planning Zone

FARMING ZONE (FZ)



Note: labels for zones may appear outside the actual zone - please compare the labels with the legend.

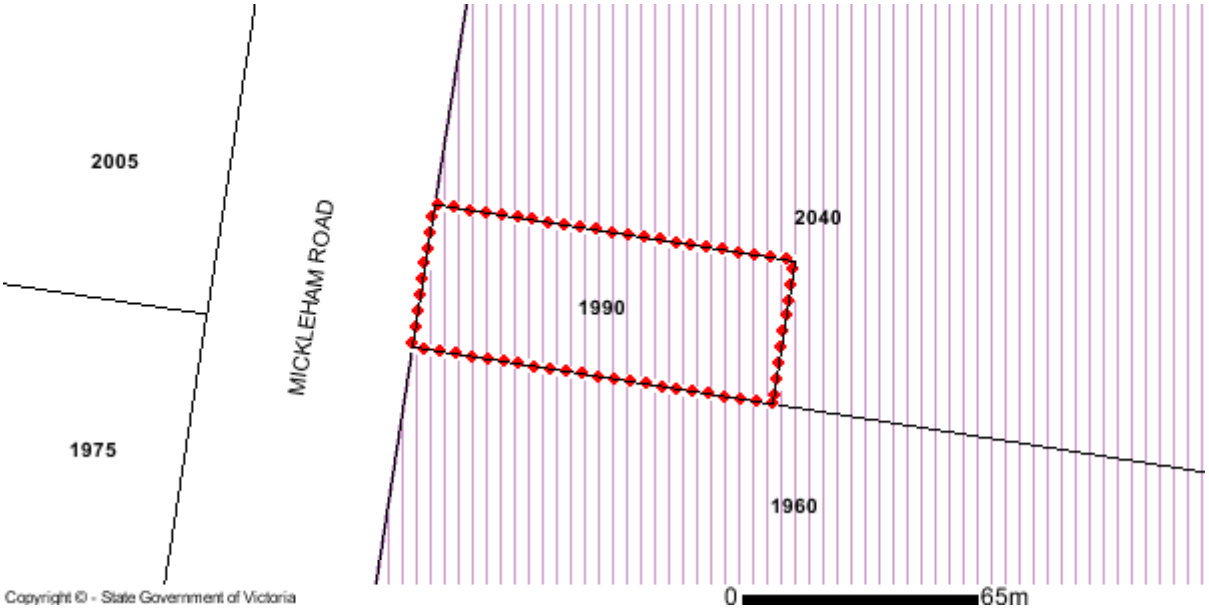
Zones Legend

- ACZ - Activity Centre
- B1Z - Business 1
- B2Z - Business 2
- B3Z - Business 3
- B4Z - Business 4
- B5Z - Business 5
- CA - Commonwealth Land
- CCZ - Capital City
- CDZ - Comprehensive Development
- DZ - Dockland
- ERZ - Environmental Rural
- FZ - Farming
- GWAZ - Green Wedge A
- GWZ - Green Wedge
- IN1Z - Industrial 1
- IN2Z - Industrial 2
- IN3Z - Industrial 3
- LDRZ - Low Density Residential
- MUZ - Mixed Use
- PCRZ - Public Conservation & Resource
- PDZ - Priority Development
- PPRZ - Public Park & Recreation
- PUZ1 - Public Use - Service & Utility
- PUZ2 - Public Use - Education
- PUZ3 - Public Use - Health Community
- PUZ4 - Public Use - Transport
- PUZ5 - Public Use - Cemetery/Crematorium
- PUZ6 - Public Use - Local Government
- PUZ7 - Public Use - Other Public Use
- R1Z - Residential 1
- R2Z - Residential 2
- R3Z - Residential 3
- RAZ - Rural Activity
- RCZ - Rural Conservation
- RDZ1 - Road - Category 1
- RDZ2 - Road - Category 2
- RLZ - Rural Living
- RUZ - Rural
- SUZ - Special Use
- TZ - Township
- UFZ - Urban Floodway
- UGZ - Urban Growth
- Urban Growth Boundary

Planning Overlay

DEVELOPMENT PLAN OVERLAY (DPO)

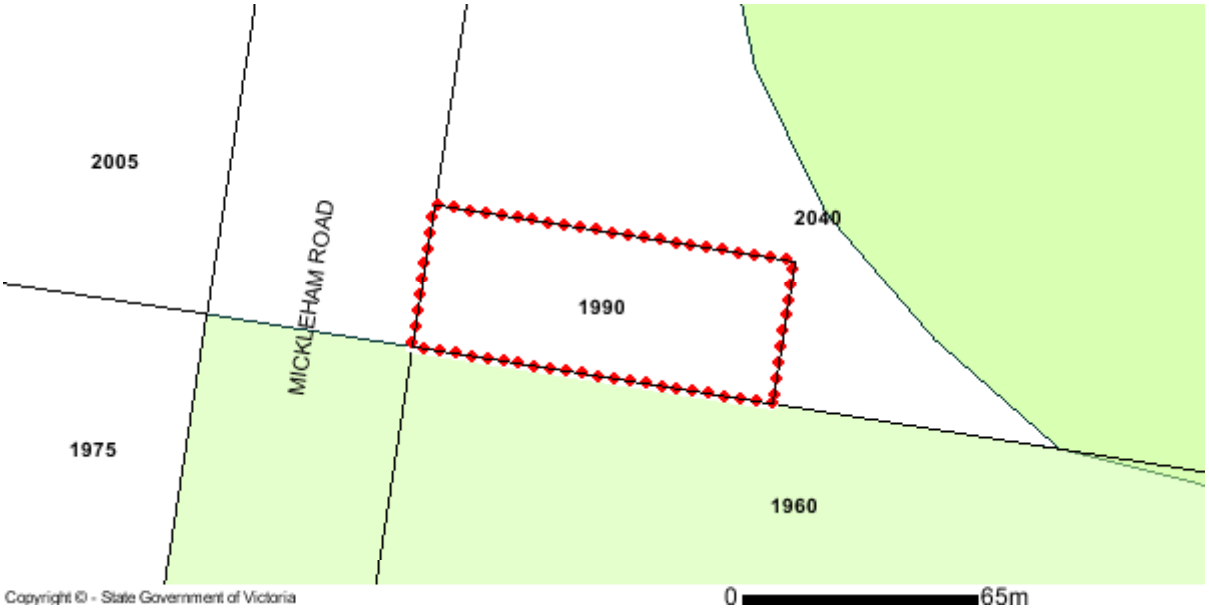
DEVELOPMENT PLAN OVERLAY - SCHEDULE 8 (DPO8)



OTHER OVERLAYS

Other overlays in the vicinity not directly affecting this land

ENVIRONMENTAL SIGNIFICANCE OVERLAY (ESO)



Planning Overlays Legend

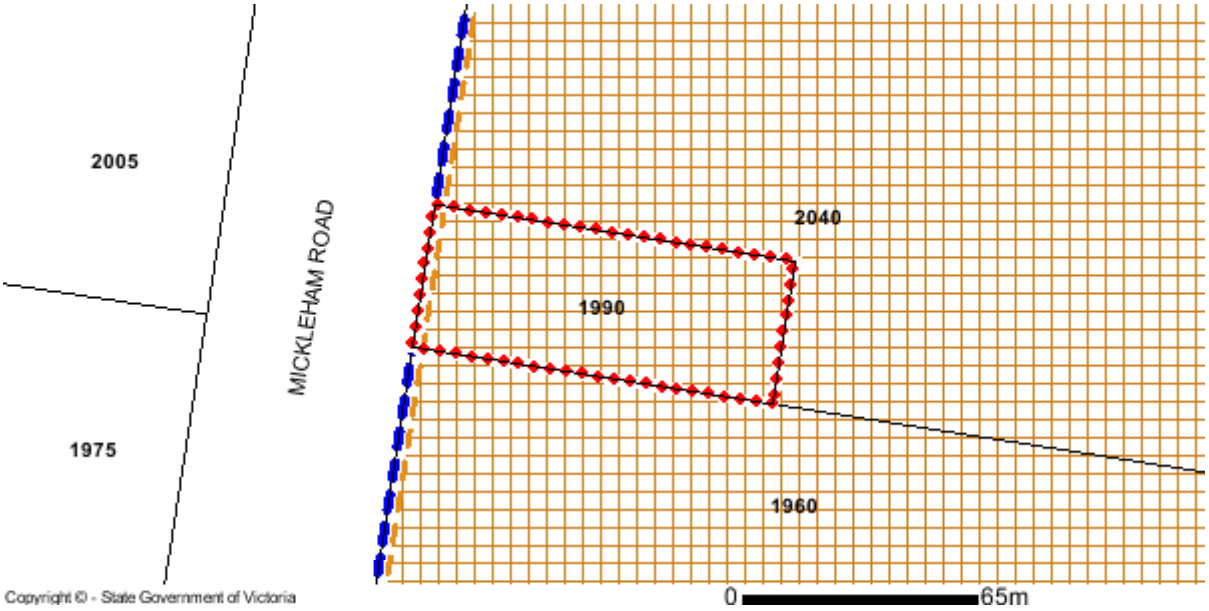
Overlays Legend

- Airport Environs
- City Link Project
- Development Contributions Plan
- Design & Development
- Design & Development Part
- Development Plan
- Environmental Audit
- Erosion Management
- Environmental Significance
- Floodway
- Heritage
- Incorporated Plan
- Land Subject to Inundation & Floodway
- Melbourne Airport Environs 1
- Melbourne Airport Environs 2
- Neighbourhood Character
- Public Acquisition
- Restructure
- Road Closure
- Special Building
- Significant Landscape
- Salinity Management
- State Resource
- Vegetation Protection
- Bushfire Management - Wildfire Management

Note: due to overlaps some colours on the maps may not match those in the legend.

Investigation Area

This land was included in an Investigation Area designated in 'Melbourne 2030: a planning update Melbourne @ 5 million'. For more information about this project go to **Melbourne @ 5 million** at the DPCD website.

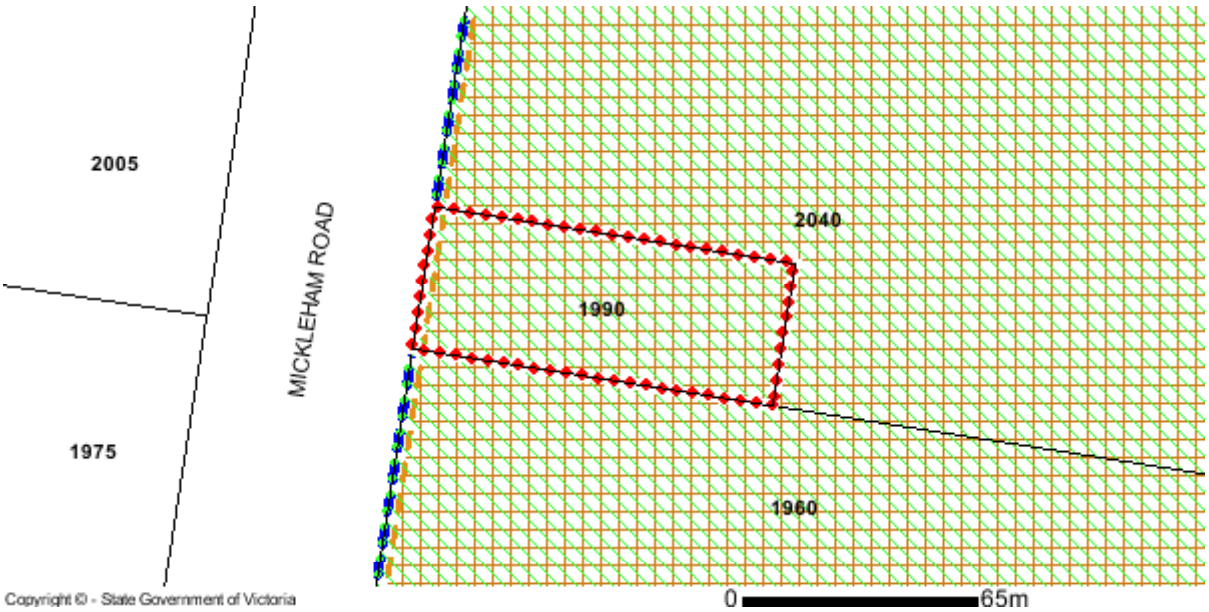


Investigation Area Legend — Urban Growth Boundary — Investigation Area — Selected Land

Growth Area Infrastructure Contribution

This land is in an area added to the Urban Growth Boundary after 2005.
It may be subject to the Growth Area Infrastructure Contribution.

For more information about this contribution go to the **Growth Areas Authority** website.



Growth Area Infrastructure Contribution Legend

- Urban Growth Boundary
- Land added to UGB since 2005
- Investigation Area
- Selected land

Further Planning Information

Planning scheme data last updated on 21 February 2013.

A **planning scheme** sets out policies and requirements for the use, development and protection of land.
This report provides information about the zone and overlay provisions that apply to the selected land.
Information about the State, local, particular and general provisions of the local planning scheme that may affect the use of this land can be obtained by contacting the local council or by visiting Planning Schemes Online

This report is NOT a **Planning Certificate** issued pursuant to Section 199 of the Planning & Environment Act 1987.
It does not include information about exhibited planning scheme amendments, or zonings that may abut the land.
To obtain a Planning Certificate go to Titles and Property Certificates

For details of surrounding properties, use this service to get the Reports for properties of interest

To view planning zones, overlay and heritage information in an interactive format visit Planning Maps Online

For other information about planning in Victoria visit www.dpcd.vic.gov.au/planning

Property Report from **www.land.vic.gov.au** on 10 January 2013 11:04 AM

Address: 2040 MICKLEHAM ROAD MICKLEHAM 3064
Lot and Plan Number: Lot 1 TP947284
Standard Parcel Identifier (SPI): 1\TP947284
Local Government (Council): HUME **Council Property Number:** 302757
Directory Reference: Melway 365 J8

This land is in an area added to the Urban Growth Boundary after 2005.
It may be subject to the Growth Area Infrastructure Contribution.

For more information about this contribution go to the **Growth Areas Authority** website.

This property is in a designated bushfire prone area.
Special bushfire construction requirements apply. Planning provisions may apply.

Further information about the building control system and building in bushfire prone areas can be found on the Building Commission website www.buildingcommission.com.au

State Electorates

Legislative Council: WESTERN METROPOLITAN (2005)
Legislative Assembly: YUROKE (2001)

Utilities

Rural Water Business: Southern Rural Water
Metro Water Business: Yarra Valley Water Ltd
Melbourne Water: inside drainage boundary
Power Distributor: JEMENA (Information about choosing an electricity retailer)

Planning Zone Summary

Planning Zone: FARMING ZONE (FZ)
Planning Overlays: DEVELOPMENT PLAN OVERLAY (DPO)
DEVELOPMENT PLAN OVERLAY - SCHEDULE 8 (DPO8)
ENVIRONMENTAL SIGNIFICANCE OVERLAY (ESO)
ENVIRONMENTAL SIGNIFICANCE OVERLAY - SCHEDULE 11 (ESO11)
ENVIRONMENTAL SIGNIFICANCE OVERLAY - SCHEDULE 5 (ESO5)
PUBLIC ACQUISITION OVERLAY (PAO)
PUBLIC ACQUISITION OVERLAY 3 SCHEDULE (PAO3)

Areas of Aboriginal Cultural Heritage Sensitivity:
This property is within, or affected by, one or more areas of cultural heritage sensitivity

Planning scheme data last updated on 10 January 2013.

A **planning scheme** sets out policies and requirements for the use, development and protection of land. This report provides information about the zone and overlay provisions that apply to the selected land. Information about the State, local, particular and general provisions of the local planning scheme that may affect the use of this land can be obtained by contacting the local council or by visiting Planning Schemes Online

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The Planning Property Report includes separate maps of zones and overlays

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Areas of Aboriginal Cultural Heritage Sensitivity

The data provides indicative information about the location and extent of areas of Aboriginal cultural heritage sensitivity and is provided to assist with the decisions about the potential need to prepare a Cultural Heritage Management Plan in relation to proposed activities on this property.

For further information about whether a Cultural Heritage Management Plan is required go to Aboriginal Heritage Planning Tool

To find out if your property has any recorded Aboriginal cultural heritage places, such as scarred trees, occupation sites or places of burial, you can request information from the Victorian Aboriginal Heritage Register.

Find out more about the Victorian Aboriginal Heritage Register

Area Map

Department of
Planning and
Community Development

Planning Property Report

From **www.dpcd.vic.gov.au/planning** on 10 January 2013 11:05 AM

Address: 2040 MICKLEHAM ROAD MICKLEHAM 3064
Lot and Plan Number: Lot 1 TP947284
Local Government (Council): HUME **Council Property Number:** 302757
Directory Reference: Melway 365 J8

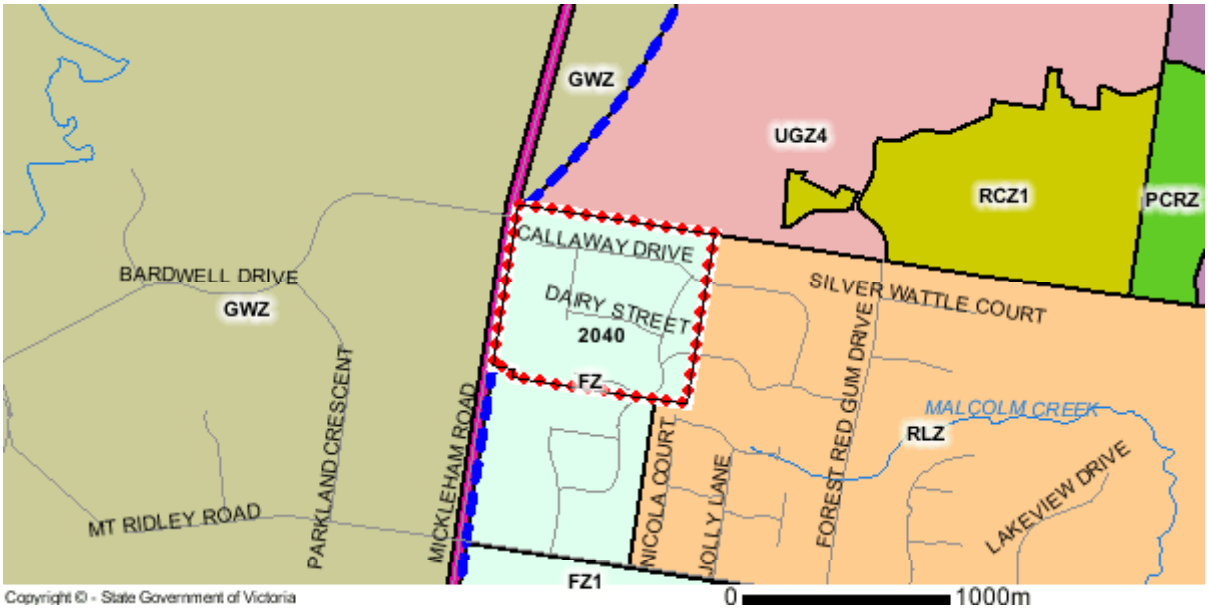
This land is in an area added to the Urban Growth Boundary after 2005.
It may be subject to the Growth Area Infrastructure Contribution.

For more information about this contribution go to the **Growth Areas Authority** website.

See next page for planning information

Planning Zone

FARMING ZONE (FZ)



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- PUZ1 - Public Use - Service & Utility
- PUZ2 - Public Use - Education
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- PUZ5 - Public Use - Cemetery/Crematorium
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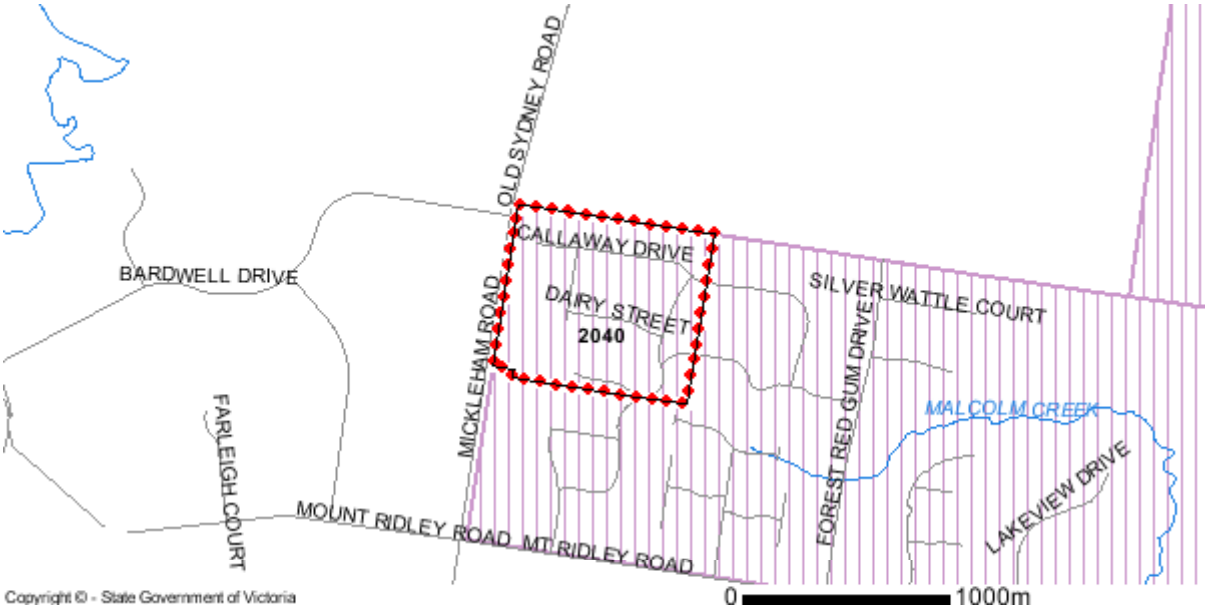
- RDZ1 - Road - Category 1
- RDZ2 - Road - Category 2
- RLZ - Rural Living
- RUZ - Rural
- SUZ - Special Use
- TZ - Township
- UFZ - Urban Floodway
- UGZ - Urban Growth
- Urban Growth Boundary

Planning Overlays

DEVELOPMENT PLAN OVERLAY (DPO)

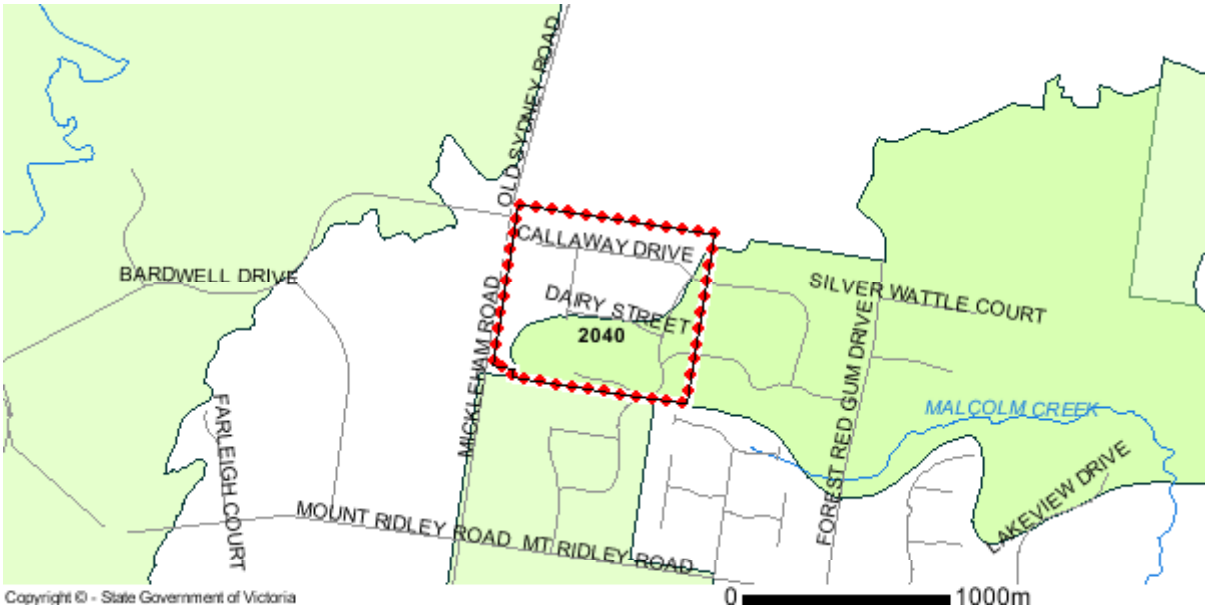
DEVELOPMENT PLAN OVERLAY - SCHEDULE 8 (DPO8)



ENVIRONMENTAL SIGNIFICANCE OVERLAY (ESO)

ENVIRONMENTAL SIGNIFICANCE OVERLAY - SCHEDULE 11 (ESO11)

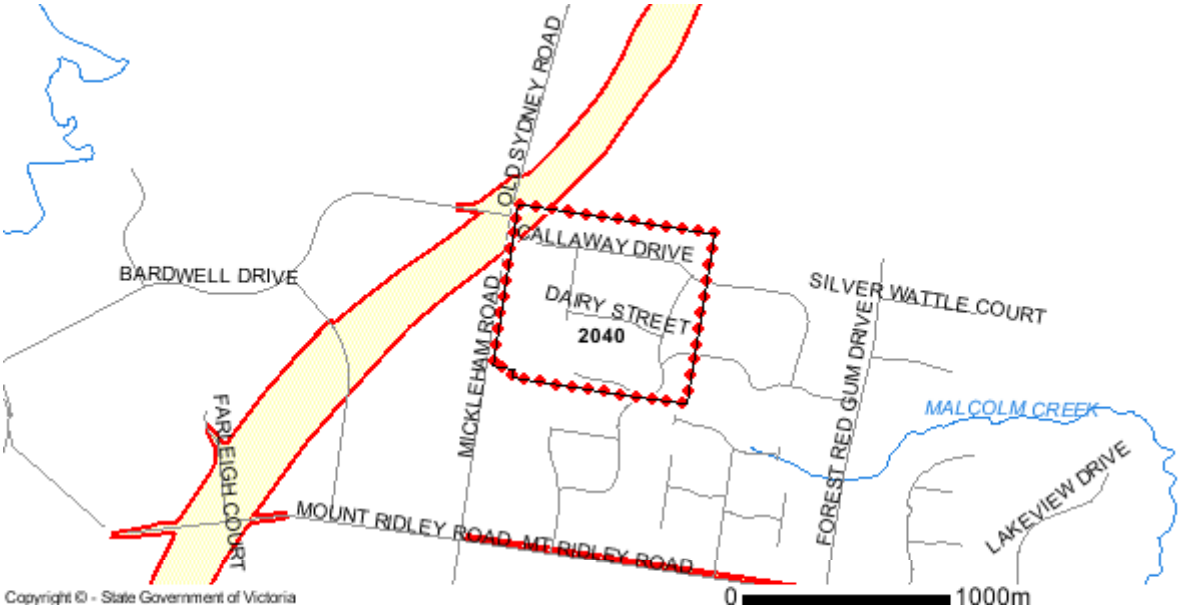
ENVIRONMENTAL SIGNIFICANCE OVERLAY - SCHEDULE 5 (ESO5)



Planning Overlays

PUBLIC ACQUISITION OVERLAY (PAO)

PUBLIC ACQUISITION OVERLAY 3 SCHEDULE (PAO3)



OTHER OVERLAYS

Other overlays in the vicinity not directly affecting this land

DEVELOPMENT CONTRIBUTIONS PLAN OVERLAY (DCPO)

Planning Overlays Legend

Overlays Legend

- Airport Environs
- City Link Project
- Development Contributions Plan
- Design & Development
- Design & Development Part
- Development Plan
- Environmental Audit
- Erosion Management
- Environmental Significance
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Investigation Area

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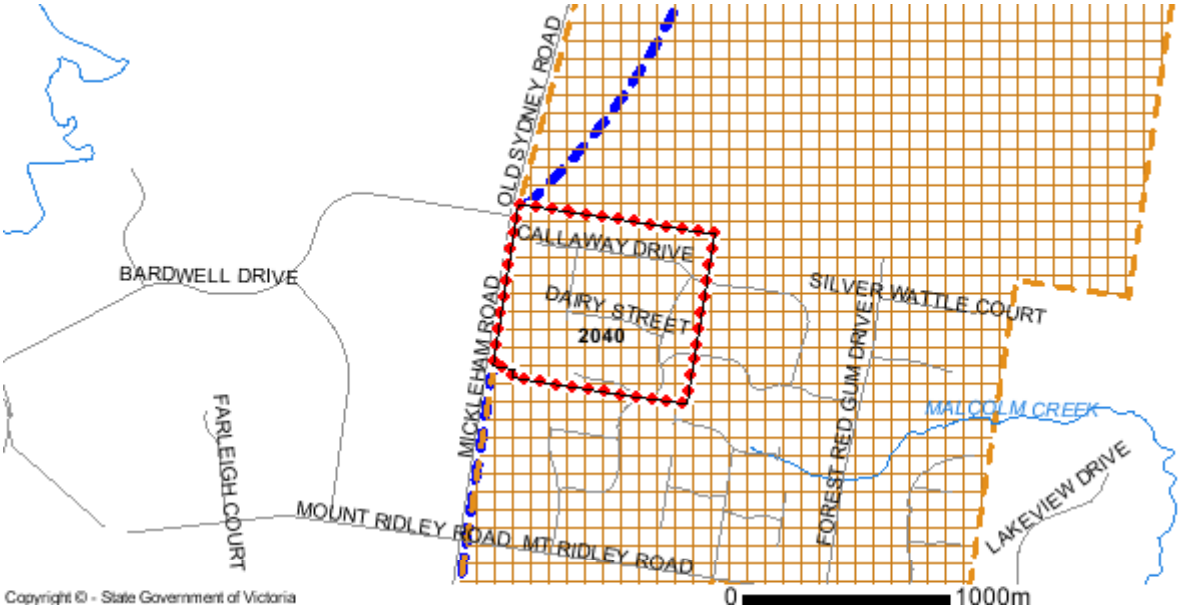

Investigation Area Legend — Urban Growth Boundary — Investigation Area — Selected Land

Growth Area Infrastructure Contribution

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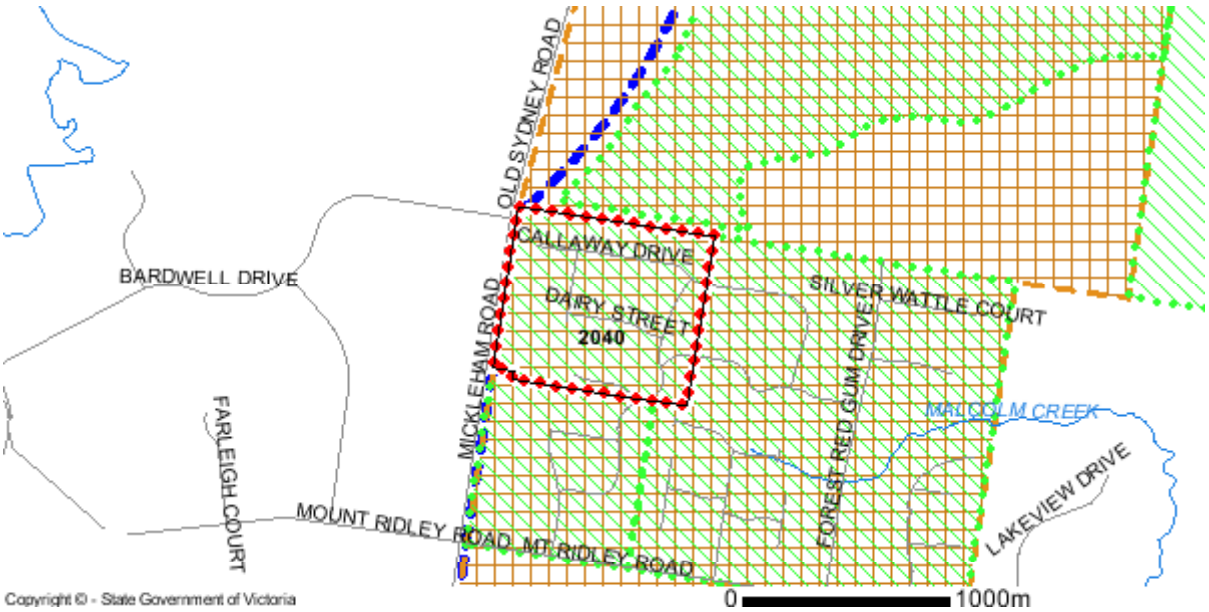

Growth Area Infrastructure Contribution Legend

- Urban Growth Boundary
- Land added to UGB since 2005
- Investigation Area
- Selected land

Areas of Aboriginal Cultural Heritage Sensitivity

This property is within, or is affected by, one or more areas of cultural heritage sensitivity as described in the Aboriginal Heritage Regulations 2007.

The data provides indicative information about the location and extent of areas of Aboriginal cultural heritage sensitivity and is provided to assist with the decisions about the potential need to prepare a Cultural Heritage Management Plan in relation to proposed activities on this property.

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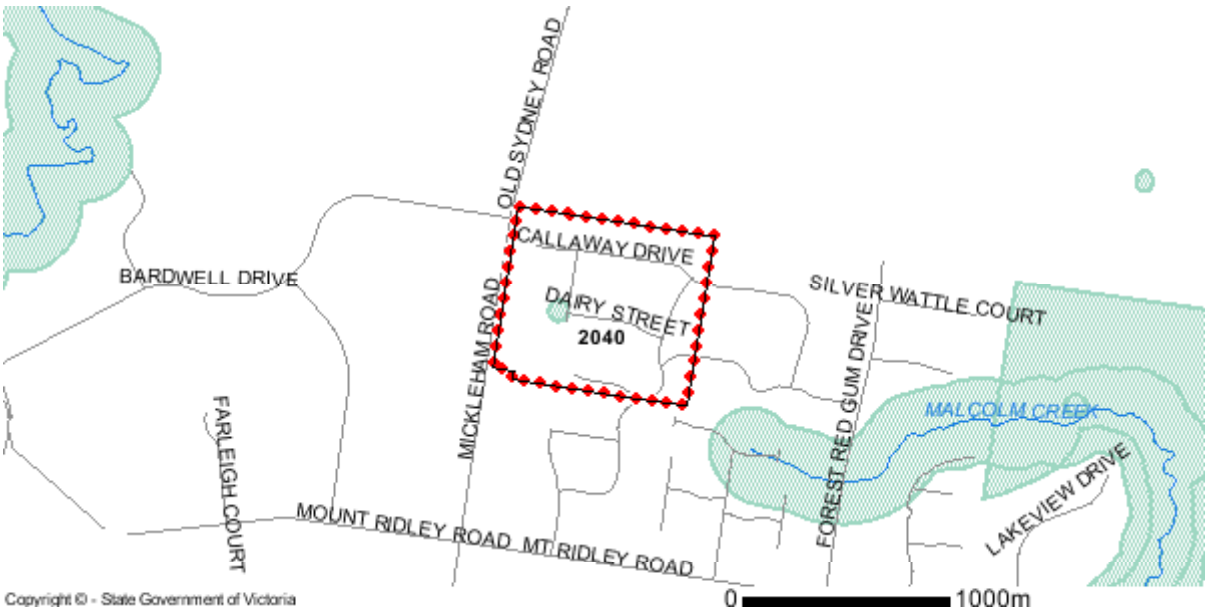

Aboriginal Cultural Heritage Sensitivity Aboriginal Cultural Heritage Sensitivity Selected Land

Further Planning Information

Planning scheme data last updated on 10 January 2013.

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For other information about planning in Victoria visit www.dpcd.vic.gov.au/planning

Scale = 1 : 14K | 144.89676, -37.55222 | EPSG:900913

Bore ID	Parish	Parish No	Longitude (GDA94)	Latitude (GDA94)	Easting (MGA)	Northing (MGA)	Map zone	Elevation (digitised)	Constructed date	Constructed depth	Bore type	Use 1	Use 2	Monitoring Status	Driller	Drilling Method	Headworks height (m)
116348	MICKLEHAM	3100	144.877	-37.556	312463.185	5841374.204	55	269.62	31/08/1993	106	Groundwater	Domestic		N	BRENNAN GRAHAM J	Down-Hole Hammer Percussion	0
120765	MICKLEHAM	3100	144.876	-37.56	312413.184	5840884.204	55	274.21	19/12/1993	118	Groundwater	Domestic	Stock	N	BRENNAN GRAHAM J	Down-Hole Hammer Percussion	0
319779	MICKLEHAM	3100	144.895	-37.565	314085.186	5840413.202	55	254.91	31/12/1965	48.31	Groundwater	Non Groundwater		N	NOT KNOWN		0
319781	MICKLEHAM	3100	144.893	-37.565	313945.186	5840389.202	55	255.48	23/04/1970	48.76	Groundwater	Non Groundwater		N	FISHER J		0
79253	MICKLEHAM	3100	144.853	-37.555	310376.182	5841442.206	55	182.08	8/10/1974	38.1	Groundwater	Domestic	Stock	N	BUTTERWORTH J	Cable Tool, Percussion	0
79254	MICKLEHAM	3100	144.873	-37.551	312071.185	5841897.205	55	267.69	1/12/1975	57	Groundwater	Domestic	Stock	N	O'KEEFE THOMAS RICHARD	Cable Tool, Percussion	0
79256	MICKLEHAM	3100	144.898	-37.566	314363.186	5840219.201	55	251.57	2/07/1982	97	Groundwater			N	D'ALOISIO P	Down-Hole Hammer Percussion	0
79257	MICKLEHAM	3100	144.882	-37.56	312894.185	5840868.203	55	266.87	14/09/1980	84	Groundwater	Domestic	Stock	N	SAMMASSIMO F	Down-Hole Hammer Percussion	0
79258	MICKLEHAM	3100	144.881	-37.549	312773.186	5842164.205	55	268.34	23/10/1982	58	Groundwater	Stock		N	SAMMASSIMO F	Down-Hole Hammer Percussion	0
79259	MICKLEHAM	3100	144.866	-37.554	311473.184	5841564.205	55	273.26	24/02/1983	119	Groundwater	Domestic	Stock	N	SAMMASSIMO F	Down-Hole Hammer Percussion	0
79263	MICKLEHAM	3100	144.876	-37.549	312353.185	5842144.205	55	266.62	6/08/1982	74.67	Groundwater	Domestic	Stock	N	D'ALOISIO P	Down-Hole Hammer Percussion	0
79264	MICKLEHAM	3100	144.896	-37.556	314173.187	5841414.203	55	256.07	4/03/1987	24	Groundwater	Stock		N	TANNER R L	Down-Hole Hammer Percussion	0
79265	MICKLEHAM	3100	144.855	-37.554	310510.182	5841555.206	55	192.42	10/05/1976	42.67	Groundwater	Domestic	Stock	N	BUTTERWORTH J	Cable Tool, Percussion	0
79266	MICKLEHAM	3100	144.869	-37.554	311723.184	5841494.205	55	275.87	8/12/1988	93	Groundwater	Domestic	Stock	N	BRENNAN GRAHAM J	Down-Hole Hammer Percussion	0
79268	MICKLEHAM	3100	144.878	-37.561	312603.184	5840824.203	55	271.05	5/04/1990	96	Groundwater	Domestic	Stock	N	BRENNAN GRAHAM J	Down-Hole Hammer Percussion	0
S61141/1	MICKLEHAM	3100	144.866	-37.552	311529.184	5841791.205	55	263.36	25/04/2003	87	Groundwater	Domestic and Stock		N	BRENNAN GRAHAM J	Down-Hole Hammer Percussion	0
S62133/1	MICKLEHAM	3100	144.892	-37.552	313777.187	5841855.204	55	259.67	14/08/2003	81	Not Known	Domestic and Stock		N	BRENNAN GRAHAM J	Down-Hole Hammer Percussion	0
S9018810/1			144.884	-37.557	313113.185	5841184.203	55	264.74		100	Groundwater			N	NOT KNOWN		0
S9019085/1	MICKLEHAM	3100	144.904	-37.551	314832.188	5841888.203	55	249.34	10/02/2004	80	Groundwater	Domestic and Stock		N	HANSON JAMES A	Rotary Air	0
S9019492/1	MICKLEHAM	3100	144.889	-37.56	313513.186	5840884.203	55	260.56		100	Groundwater			N	NOT KNOWN		0
S9020778/1	MICKLEHAM	3100	144.892	-37.551	313823.187	5841904.204	55	258.49	20/09/2004	90.5	Groundwater	Domestic and Stock		N	HANSON JAMES A	Rotary Air	0
S9021063/1	MICKLEHAM	3100	144.906	-37.562	315043.188	5840724.201	55	249.39	1/06/2005	93	Groundwater	Domestic and Stock		N	MURRAY G	Rotary Air	0
S9028185/1	MICKLEHAM	3100	144.904	-37.564	314857	5840490	55	251.99	16/02/2007	80	Groundwater	Domestic and Stock		N	HANSON JAMES A	Rotary Air	0
S9028861/1	MICKLEHAM	3100	144.886	-37.562	313330	5840636	55	261.38		100	Groundwater			N	NOT KNOWN		0
S9029549/1	MICKLEHAM	3100	144.899	-37.564	314419	5840516	55	253.57	17/02/2007	68	Groundwater	Domestic and Stock		N	HANSON JAMES A	Not Known	0
S9033761/1	MICKLEHAM	3100	144.873	-37.555	312086	5841389	55	274.39	21/02/2008	90	Groundwater	Domestic and Stock		N	NOT KNOWN	Down-Hole Hammer Percussion	0
S9038128/1	WARINA	3741	144.861	-37.554	311036	5841558	55	230.75	4/06/2009	76	Groundwater	Domestic and Stock		N	HANSON JAMES A	Rotary Air	0

Bores located within 300m of site boundary

Bores located within site area

Bore ID	Casing run	Depth from (m)	Depth to (m)	Material	Diameter (mm)	Comments	Data source
116348	1	-0.2	100	P09	100		GMS import
120765	1	0	82	P09	100		GMS import
120765	2	0	118	NKN			GMS import
79254	1	0	47	GIR	127		GMS import
79254	2	55	57	GIR	127		GMS import
79256	1	0	61	STL	152		GMS import
79257	1	0	78	P09	129		GMS import
79258	1	0	56	STL	152		GMS import
79259	1	0	114	PVC	125		GMS import
79263	1	0	27	MST	127		GMS import
79264	1	0	18	PVC	125		GMS import
79265	1	0	42.67	PVC	140		GMS import
79266	1	0	66	PVC	100		GMS import
79268	1	0	87	PVC	100		GMS import
S61141/1	1	0	69	PVC	125		GMS import
S62133/1	1	0	63	PVC	145		GMS import
S9019085/1	1	0.5	66	PVC	125		GMS import
S9020778/1	1	-0.5	70	PVC	125		GMS import
S9021063/1	1	1.3	70	PVC	125		GMS import
S9028185/1	1	0.5	66	PVC	125		GMS import
S9029549/1	1	0.5	57				GMS import
S9038128/1	1	0.5	63	PVC	125		GMS import

Bores located within 300m of site boundary

Bores located within site area

Bore ID	Screen no.	From (m)	To (m)	Material	Diameter (mm)	Aperture (mm)	Lithology	Filter pack	Filter from (m)	Filter to (m)	Source
116348	0			FILTER				Filter Gravel	80	106	GMS import
116348	1	100	106	P09	100	3					GMS import
120765	0			FILTER				Filter Gravel	50	112	GMS import
120765	1	82	94	P09		3					GMS import
79254	1	47	55	GIR		7	SAND				GMS import
79256	1	61	97	STL			SLAT				GMS import
79257	1	78	84	P09		4	BASA				GMS import
79258	1	56	58	STL		4	SAST				GMS import
79259	1	114	119	PVC		4	MUST				GMS import
79263	1	27	74.67	MST		2	BASA				GMS import
79264	1	18	24	PVC			BASA				GMS import
79265	1	32	42.67	PVC		2.38	NOT				GMS import
79266	1	66	93	PVC		4	SAST				GMS import
79268	1	87	93	PVC		3	SIST				GMS import
S9019085/1	1	66	80	PVC	125	2					GMS import
S9020778/1	1	70	90.5	PVC	125	2					GMS import

Bores located within 300m of site boundary
Bores located within site area

Bore ID	Lithology code	Pumping test date	Pump type	Pumping time (hh:mm)	Drawdown (m)	Recovery time (hh:mm)	Yield (L/s)	Pumping rate (L/s)
116348		1993-08-31 00:00:00	AIR				0.379	
116348	SAST	1993-08-31 00:00:00	AIR		0			0.379
120765		1993-12-19 00:00:00	AIR	600	95		0.379	
79254		1975-12-01 00:00:00	BAL	120	18		0.25	
79254	SAND	1975-12-01 00:00:00	BAL		18			0.25
79256		1982-07-02 00:00:00	BAL				0.113	
79256	CLAY	1982-07-02 00:00:00	BAL		0			0.113
79257		1980-09-14 00:00:00	AIR		25		1.3	
79257	BASA	1980-09-14 00:00:00	AIR		25			1.3
79258		1982-10-23 00:00:00	AIR		12		0.758	
79258	SAST	1982-10-23 00:00:00	AIR		12			0.758
79259		1983-02-24 00:00:00	AIR		57		0.9	
79259	MUST	1983-02-24 00:00:00	AIR		57			0.9
79263		1982-08-06 00:00:00	AIR				1.9	
79263	BASA	1982-08-06 00:00:00	AIR		0			1.9
79264		1987-03-04 00:00:00	AIR				0.632	
79264	BASA	1987-03-04 00:00:00	AIR		0			0.632
79265		1976-05-10 00:00:00					0.063	
79265	CLAY	1976-05-10 00:00:00	BAL		0			0.063
79266		1988-12-08 00:00:00	AIR				0.505	
79266	SAST	1988-12-08 00:00:00	AIR		0			0.505
79268	SIST	1990-04-05 00:00:00	AIR		0			0
S9019085/1		2004-02-10 00:00:00	AIR	10		20	0.4	
S9020778/1		2004-09-20 00:00:00	AIR	30		10	0.5	
S9021063/1	BASA	2005-06-01 00:00:00	AIR				0.732	
S9033761/1	BASA	2008-02-21 03:00:00	AIR					

Bores located within 300m of site boundary

Bores located within site area

Bore ID	From (m)	To (m)	Lithology	Log type
116348	0	1.5	SOIL & CLAY	D
116348	1.5	15	BASALT	D
116348	15	20	SOFT RED VESICULAR BASALT	D
116348	20	30	BASALT	D
116348	30	35	REDDISH; ORANGE CLAY HARD; DRY	D
116348	35	106	SILLRIAN MUDSTONE; SANDSTONE	D

Bore ID	From (m)	To (m)	Lithology	Log type
79253	0	0.3	TOPSOIL	D
79253	0.3	1.83	CLAY	D
79253	1.83	29.87	BASALT	D
79253	29.87	38.1	SILURIAN CLAY	D

Bore ID	From (m)	To (m)	Lithology	Log type
79256	0	1	TOP SOIL AND CLAY	D
79256	1	8.7	BASALT	D
79256	8.7	10	RED VOLCANIC CLAY	D
79256	10	13	HONEYCOMB BASALT	D
79256	13	20.7	BASALT	D
79256	20.7	48	SILURIAN CLAYS	D
79256	48	60.8	GREY CLAYEY SHALE	D
79256	60.8	97	SLATE	D

Bore ID	From (m)	To (m)	Lithology	Log type
79258	0	2	CLAY	D
79258	2	6	BASALT	D
79258	6	17	HONEYCOMB BASALT	D
79258	17	24	BASALT	D
79258	24	27	WEATHERED BASALT	D
79258	27	31	RED CLAY	D
79258	31	58	SANDSTONE	D

Bore ID	From (m)	To (m)	Lithology	Log type
S9020778/1	0	2	BROWN CLAY	D
S9020778/1	2	7.3	WEATHERED BASALT	D
S9020778/1	7.3	28.5	BASALT	D
S9020778/1	28.5	33	WEATHERED BASALT	D
S9020778/1	33	45	BROWN CLAY	D
S9020778/1	45	52	GREY CLAY	D
S9020778/1	52	60.5	SOFT BROWN MUDSTONE	D
S9020778/1	60.5	67.5	BROWN MUDSTONE	D
S9020778/1	67.5	70	BLUE MUDSTONE	D
S9020778/1	70	81	FRACTURED BLUE MUDSTONE	D
S9020778/1	81	90.5	BASALT	D

Bore ID	From (m)	To (m)	Lithology	Log type
S9038128/1	0	3	brown clay	D
S9038128/1	3	38	mudstone	D
S9038128/1	38	60	sandstone	D
S9038128/1	60	76	shale	D

Bores located within 300m of site boundary
Bores located within site area

Bore ID	From (m)	To (m)	Lithology	Log type
120765	0	0.3	SOIL	D
120765	0.3	54	BASALT	D
120765	54	57	RED CLAY	D
120765	57	63	YELLOW CLAY	D
120765	63	80	MUDSTONE	D
120765	80	112	GREY SILTSTONE	D
120765	112	118	BACKFILLED	D

Bore ID	From (m)	To (m)	Lithology	Log type
79254	0	0.03	TOP SOIL	D
79254	0.03	0.91	SUB SOIL	D
79254	0.91	10.3	ROCK	D
79254	10.3	11	SAND STONE (SOFT)	D
79254	11	20.9	CLAY	D
79254	20.9	33.4	SAND STONE (SOFT)	D
79254	33.4	48.6	SAND STONE WITH S/CLAY	D
79254	48.6	55	SOFT SAND STONE	D
79254	55	57	CLAY	D

Bore ID	From (m)	To (m)	Lithology	Log type
79257	0	18	WEATHERED BASALT	D
79257	18	18.2	CLAY	D
79257	18.2	43	WEATHERED BASALT	D
79257	43	51	HARD BASALT	D
79257	51	67	RED CLAYEE DECOMPOSED BASALT	D
79257	67	69	BASALT	D
79257	69	73	BLACK CLAY	D
79257	73	84	WEATHERED BASALT	D

Bore ID	From (m)	To (m)	Lithology	Log type
79259	0	12	BASALT	D
79259	12	81	MUDSTONE	D
79259	81	119	GREY MUDSTONE	D

Bore ID	From (m)	To (m)	Lithology	Log type
S62133/1	0	0.5	SOIL & CLAY	D
S62133/1	0.5	30	BASALT	D
S62133/1	30	40	BASLATIC CLAY	D
S62133/1	40	53	SILURIAN CLAY	D
S62133/1	53	81	SILTSTONE & SANDSTONE	D

Bore ID	From (m)	To (m)	Lithology	Log type
S9033761/1	0	1	TOP SOIL	D
S9033761/1	1	5	BASALT	D
S9033761/1	5	15	SCORIA	D
S9033761/1	15	25	BASALT	D
S9033761/1	25	40	SCORIA	D
S9033761/1	40	48	CLAY	D
S9033761/1	48	90	BASALT	D

Bore ID	From (m)	To (m)	Lithology	Log type
79263	0	0.2	TOP SOIL	D
79263	0.2	6	MOTTLED CLAY	D
79263	6	74.67	BASALT	D

Bore ID	From (m)	To (m)	Lithology	Log type
79265	0	0.61	TOP SOIL	D
79265	0.61	2.13	BROWN CLAY	D
79265	2.13	33.53	BASALT	D
79265	33.53	42.67	SILURIAN CLAYS	D

Bore ID	From (m)	To (m)	Lithology	Log type
79266	0	1	SOIL AND CLAY	D
79266	1	10.5	BASALT	D
79266	10.5	12	CAVITY IN BASALT	D
79266	12	27	BASALT	D
79266	27	33	MOTTLED CLAY	D
79266	33	93	SANDSTONE	D

Bore ID	From (m)	To (m)	Lithology	Log type
79268	0	0.6	SOIL	D
79268	0.6	50	BASALT	D
79268	50	55	RED BASALTIC CLAY	D
79268	55	60	GREY CLAY	D
79268	60	70	MOTTLED CLAY	D
79268	70	80	MUDSTONE	D
79268	80	96	GREY SILTSTONE	D

Bore ID	From (m)	To (m)	Lithology	Log type
S61141/1	0	2.5	SOIL & CLAY	D
S61141/1	2.5	65	BROWN MUDSTONE & SANDSTONE	D
S61141/1	65	80	FRACTURED SANDSTONE	D
S61141/1	80	87	DARK GREY SILTSTONE	D

Bore ID	From (m)	To (m)	Lithology	Log type
S9019085/1	0	1	OVERBURDEN	D
S9019085/1	1	3	GREY CLAY	D
S9019085/1	3	9	BASALT	D
S9019085/1	9	10.5	RED CLAY	D
S9019085/1	10.5	36	BROWN MUDSTONE	D
S9019085/1	36	51	BLUE MUDSTONE	D
S9019085/1	51	66	BASALT	D
S9019085/1	66	75	FRACTURED BASALT	D
S9019085/1	75	80	BASALT	D

Bore ID	From (m)	To (m)	Lithology	Log type
S9021063/1	0	3	TOP SOIL & SUB SOIL	D
S9021063/1	3	21	BLUESTONE	D
S9021063/1	21	49	MUDSTONE	D
S9021063/1	49	93	BEDROCK	D

bore_code	sampdate	Alkalinity	Magnesium	Calcium Ions	EC	Chloride Ions	pH	Potassium Ions	Total Soluble Salts	Sodium Ions	Sulphate Ions	Bicarbonate Ions	Carbonate Ions	Iron	Nitrate Ions	TDS
116348	1993-09-01 00:00:00	510	190	28	4.9	1300	8.3	30	3130	740	220					
116348	1993-09-01 01:00:00	510	190	28	4.9	1300	8.3	30	3130	740	220					
120765	1993-12-20 00:00:00		90	23	2.9		8.6			450						
79256	1980-03-14 00:00:00		335	38	8.35	2420			5189	1319	343	655	47	2	0.451	
79257	1980-10-20 00:00:00		202	18	4.24	1051	8	17	2835	603	71	833		1	1.354	
79257	1980-08-24 00:00:00		165	36	4.34	1074	8.3	22	27		238	542	26	2	0.451	
79259	1983-02-26 00:00:00	360	300	70	9.2	2700	8	22		1600		439.024		1.73		5132.086
79264	1987-03-04 00:00:00	180	280	67	6.3	2000	8	9.4		860	100			12		3436.665
79265	1976-05-29 00:00:00		421	30	10.7	3100	7.63	38	7052	1796	138	1479		3		
79266	0000-00-00 00:00:00		340	54	8.9	2600	8.4	21	5498	1400	290			29		
79268	1990-04-05 00:00:00	510	200	48	4.8	1200	8.5	16		720	260	621.951				2806.2

Bores located within 300m of site boundary
Bores located within site area

Appendix G

Test pit logs

PARSONS BRINCKERHOFF

FORM FM-CLM 3.2-1
GROUNDWATER FIELD PARAMETERS

JOB NUMBER: 2189202A	**WELL NUMBER:** SL2
Client: MAB Corporation	**Purging Date:** 21/2/13
Site Location: 2040 Mickleham Rd Mickleham	**Sampling Date:** 21/2/13
Casing Diameter (mm): /	Depth to Floating Product (mBTOC): /
Casing Height Above Ground Level (mAGL): /	Depth to Groundwater (mBTOC): 0.26
Bore Locked / Covered?: /	Product Thickness (mm): /
Cap Type: /	Well Depth from TOC (m): 1.24
Well condition: Open hole in concrete ≈ 50mm diameter	Depth to be Purged (m):

PURGING INFORMATION

Purge 5 casing volumes or until 'dry':

1 casing volume = 2 L/m for 50 mm ID wells. *1 casing volume = 8 L/m for 100 mm ID wells.*

Method/Pump Type: Bailer ☑ Waterra ☐ Whaler ☐ Micro-Purge ☐	Planned Purge Volume: Litres (5 well vols)
Material: Teflon ☐ S/Steel ☐ HDPE ☑ PVC ☐ Other: _____	Actual Purge Volume: ≈1.5 Litres
Start Time (2400 hr): 16:00	Did well purge 'dry'? No ☑ Yes ☐ At?: Litre

FIELD RESULTS WHILE PURGING

# Purge Volume	Time	SWL	pH	EC (µS/cm)	Redox (mV)	DO units % ☑ ppm ☐	Turbidity	Temp. °C	
1	16:00		7.39	309	146	37.7	LOW	19.9	1L
2	16:02		7.43	289	145	35.7	LOW	18.6	Next 0.5
3									
4									
5									
Additional Volume:									
Acceptable Variation:	n/a	+/- 0.05m	+/- 0.05	+/- 3%	+/- 10%	+/- 10%	n/a	+/- 10%	

Are the field results acceptable?:

SAMPLING DETAILS	ANALYSIS DETAILS			
Method/Pump Type: Bailer ☑ Waterra ☐ Whaler ☐ Micro-Purge ☐	TPH	☐	VOCs	☐
Material: Teflon ☐ S/Steel ☐ HDPE ☑ PVC ☐ Other: _____	BTEX	☐	SVOCs	☐
Equipment: Dedicated ☑ Decontaminated ☐ Other: _____	PAHs	☐	_____	☐
Is there a hydrocarbon sheen?: Yes ☐ No ☑	Metals	☐	_____	☐

Colour: YELLOW	Odour: STRONG HC	Sample ID: SL2/210213/LW	Duplicate ID: DUPA1/210213/LWB
Turbidity: Low ☑ Medium ☐ High ☐		Rinse Blank After: Yes / No	Triplicate ID: SL2/210213/LWC

WEATHER CONDITIONS

Cold - Cool - Mild - Warm - Hot	Clear - Medium - Cloudy	Dry - Medium - Humid - Rain	Still - Breeze - Windy	Dusty

Other comments and observations: Lots of suspended solid grey + fluffy looking organic material

Sampler's Name: S. O'CONNOR	Sampler' signature:

TEST PIT ENGINEERING LOG

TEST PIT NO.

TP01

SHEET 1 OF 1

Client:	**MAB Corporation**	Date Commenced:	**19/2/13**
Project:	**Lindum Vale PSP**	Date Completed:	**19/2/13**
Test Pit Location:	**1960, 1990 and 2040 Mickleham Rd, Mickleham -**	Recorded By:	**ON**
Job Number:	**2189092A**	Log Checked By:	**CLH**

Surface Dimensions:		Surface RL:	
Method:	**Excavator -**	Co-ords:	**E 312634 N 5841878**

Details			Sampling		Field Material Description						
WATER	RL(m)	DEPTH(m)	SAMPLE TYPE	Sample ID PID	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION	MOISTURE	RELATIVE DENSITY /CONSISTENCY (VS S F ST VST H / FB VL L MD D VD)	HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS
			J	TP1/190213/0.1 PID=0.0 ppm			**FILL:** Topsoil, silty clay, grey-brown, dry with organic material, no odour or staining.				
			J	TP1A/190213/0.1							
							Silty Clay, grey-brown, medium plasticity, moist, no odour or staining.				
			J	TP1/190213/0.5 PID=0.0 ppm			as above, yellow-brown mottles, high plasticity, stiff, no odour or staining.				
		1	J	TP1/190213/1.0 PID=0.0 ppm							
N F G W E			J	TP1/190213/1.5 PID=0.0 ppm			END OF TEST PIT AT 1.50 m				

This test pit log should be read in conjunction with the accompanying standard notes.

TEST PIT ENGINEERING LOG

TEST PIT NO.

TP02

SHEET 1 OF 1

Client:	**MAB Corporation**	Date Commenced:	**20/2/13**
Project:	**Lindum Vale PSP**	Date Completed:	**20/2/13**
Test Pit Location:	**1960, 1990 and 2040 Mickleham Rd, Mickleham -**	Recorded By:	**SO**
Job Number:	**2189092A**	Log Checked By:	**CLH**

Surface Dimensions:		Surface RL:	
Method:	**Excavator -**	Co-ords:	**E 312675 N 5841869**

Details			Sampling		Field Material Description							
WATER	RL(m)	DEPTH(m)	SAMPLE TYPE	Sample ID PID	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION	MOISTURE	RELATIVE DENSITY /CONSISTENCY (VS S F ST VST H / FB VL L MD D VD)	HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS
			J	TP02/200213/0.1 PID=1.8 ppm			**FILL:** Non-descript Crushed Rock, fine to coarse grained sub-angular gravel to boulders, silt, clay, grey-brown, dry, no odour or staining.				
			J	TP02A/200213/0.1							
			J	TP02/200213/0.5 PID=0.3 ppm			Silty Clay, grey-brown, medium to high plasticity, moist, no odour or staining.				
		1	J	TP02/200213/1.0 PID=0.3 ppm							
N F G W E			J	TP02/200213/1.5 PID=0.2 ppm			END OF TEST PIT AT 1.50 m				

This test pit log should be read in conjunction with the accompanying standard notes.

TEST PIT ENGINEERING LOG

TEST PIT NO.

TP03

SHEET 1 OF 1

Client:	**MAB Corporation**	Date Commenced:	**20/2/13**
Project:	**Lindum Vale PSP**	Date Completed:	**20/2/13**
Test Pit Location:	**1960, 1990 and 2040 Mickleham Rd, Mickleham -**	Recorded By:	**SO**
Job Number:	**2189092A**	Log Checked By:	**CLH**

Surface Dimensions:		Surface RL:	
Method:	**Excavator -**	Co-ords:	**E 312671 N 5841880**

Details			Sampling		Field Material Description							
WATER	RL(m)	DEPTH(m)	SAMPLE TYPE	Sample ID PID	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION	MOISTURE	RELATIVE DENSITY /CONSISTENCY (VS S F ST VST H / FB VL L MD D VD)	HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS
			J	TP03/200213/0.1 PID=0.3 ppm			**FILL:** Topsoil, Clayey Silt to Silty Clay, grey-brown, dry, no odour or staining.				
			J	TP03A/200213/0.1							
			J	TP03/200213/0.5 PID=0.5 ppm			Silty Clay, low to medium plasticity, moist, no odour or staining.				
		1	J	TP03/200213/1.0 PID=0.3 ppm			Silty Clay, medium to high plasticity, moist, no odour or staining.				
N F G W E			J	TP03/200213/1.5 PID=0.2 ppm			END OF TEST PIT AT 1.50 m				

This test pit log should be read in conjunction with the accompanying standard notes.

TEST PIT ENGINEERING LOG

TEST PIT NO.

TP04

SHEET 1 OF 1

Client:	**MAB Corporation**	Date Commenced:	**19/2/13**
Project:	**Lindum Vale PSP**	Date Completed:	**19/2/13**
Test Pit Location:	**1960, 1990 and 2040 Mickleham Rd, Mickleham -**	Recorded By:	**ON**
Job Number:	**2189092A**	Log Checked By:	**CLH**

Surface Dimensions:		Surface RL:	
Method:	**Excavator -**	Co-ords:	**E 312610 N 5841918**

Details			Sampling		Field Material Description							
WATER	RL(m)	DEPTH(m)	SAMPLE TYPE	Sample ID PID	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION	MOISTURE	RELATIVE DENSITY /CONSISTENCY (VS S F ST VST H / FB VL L MD D VD)	HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS
			J	TP04/190213/0.1 PID=0.1 ppm			**FILL:** Topsoil, silty clay, grey-brown, low plasticity, dry, some rootlets, no odour or staining.				
			J	TP04/190213/0.5 PID=0.5 ppm			Silty Clay, brown, low plasticity, dry, some yellow-brown mottles, organic matter, no odour or staining.				
		1	J	TP04/190213/1.0 PID=1.0 ppm			Silty Clay, brown, medium plasticity, moist, some yellow-brown mottles, no odour or staining.				
N F G W E			J	TP04/190213/1.2 PID=1.2 ppm			Refusal on basalt END OF TEST PIT AT 1.20 m				

This test pit log should be read in conjunction with the accompanying standard notes.

TEST PIT ENGINEERING LOG

TEST PIT NO.

TP05

SHEET 1 OF 1

Client:	**MAB Corporation**	Date Commenced:	**19/2/13**
Project:	**Lindum Vale PSP**	Date Completed:	**19/2/13**
Test Pit Location:	**1960, 1990 and 2040 Mickleham Rd, Mickleham -**	Recorded By:	**ON/SO**
Job Number:	**2189092A**	Log Checked By:	**CLH**

Surface Dimensions:		Surface RL:	
Method:	**Excavator -**	Co-ords:	**E 312826 N 5442028**

Details			Sampling		Field Material Description							
WATER	RL(m)	DEPTH(m)	SAMPLE TYPE	Sample ID PID	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION	MOISTURE	RELATIVE DENSITY /CONSISTENCY (VS S F ST VST H / FB VL L MD D VD)	HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS
			J	TP05/190213/0.1 PID=0.5 ppm			**FILL:** Topsoil, silty clay, grey-brown, low plasticity, dry, rootlets, no odour or staining.				
			J	TP05/190213/0.5 PID=0.0 ppm			Silty Clay, brown with yellow-brown mottles, low to medium plasticity, moist, some rootlets at shallow depth, no odour or staining.				
		1	J	TP05/190213/1.0 PID=0.0 ppm			as above, grey-brown, calcite inclusions.				
N F G W E			J	TP05/190213/1.5 PID=0.6 ppm			END OF TEST PIT AT 1.50 m				

This test pit log should be read in conjunction with the accompanying standard notes.

TEST PIT ENGINEERING LOG

TEST PIT NO.

TP06

SHEET 1 OF 1

Client:	**MAB Corporation**	Date Commenced:	**19/2/13**
Project:	**Lindum Vale PSP**	Date Completed:	**19/2/13**
Test Pit Location:	**1960, 1990 and 2040 Mickleham Rd, Mickleham -**	Recorded By:	**ON**
Job Number:	**2189092A**	Log Checked By:	**CLH**

Surface Dimensions:		Surface RL:	
Method:	**Excavator -**	Co-ords:	**E 312995 N 5841873**

Details			Sampling		Field Material Description							
WATER	RL(m)	DEPTH(m)	SAMPLE TYPE	Sample ID PID	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION	MOISTURE	RELATIVE DENSITY /CONSISTENCY (VS S F ST VST H / FB VL L MD D VD)	HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS
			J	TP06/190213/0.1 PID=0.3 ppm			**FILL:** Topsoil, silty clay, grey-brown, low plasticity, dry, rootlets, no odour or staining.				
			J	DUPAA/190213/0.1B							
			J	TP06/190213/0.1C							
							Silty Clay, grey-brown, medium plasticity, moist, no odour or staining.				
			J	TP06/190213/0.5 PID=0.1 ppm			as above, brown with yellow-brown mottles.				
		1	J	TP06/190213/1.0 PID=0.3 ppm							
N F G W E			J	TP06/190213/1.5 PID=0.0 ppm			END OF TEST PIT AT 1.50 m				

This test pit log should be read in conjunction with the accompanying standard notes.

TEST PIT ENGINEERING LOG

TEST PIT NO.

TP07

SHEET 1 OF 1

Client:	**MAB Corporation**	Date Commenced:	**19/2/13**
Project:	**Lindum Vale PSP**	Date Completed:	**19/2/13**
Test Pit Location:	**1960, 1990 and 2040 Mickleham Rd, Mickleham -**	Recorded By:	**ON**
Job Number:	**2189092A**	Log Checked By:	**CLH**

Surface Dimensions:		Surface RL:	
Method:	**Excavator -**	Co-ords:	**E 313107 N 5841999**

Details			Sampling		Field Material Description						
WATER	RL(m)	DEPTH(m)	SAMPLE TYPE	Sample ID PID	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION	MOISTURE	RELATIVE DENSITY /CONSISTENCY (VS S F ST VST H / FB VL L MD D VD)	HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS
			J	TP07/190213/0.1 PID=0.1 ppm			**FILL:** Topsoil, silty clay, grey-brown, low plasticity, dry, rootlets, no odour or staining.				
							Silty Clay, grey-brown, medium plasticity, moist, no odour or staining.				
			J	TP07/190213/0.5 PID=0.0 ppm			as above, brown with yellow-brown mottles.				
		1	J	TP07/190213/1.0 PID=0.5 ppm							
N F G W E			J	TP07/190213/1.5 PID=0.6 ppm			END OF TEST PIT AT 1.50 m				

This test pit log should be read in conjunction with the accompanying standard notes.

TEST PIT ENGINEERING LOG

TEST PIT NO.

TP08

SHEET 1 OF 1

Client:	**MAB Corporation**	Date Commenced:	**19/2/13**
Project:	**Lindum Vale PSP**	Date Completed:	**19/2/13**
Test Pit Location:	**1960, 1990 and 2040 Mickleham Rd, Mickleham -**	Recorded By:	**ON**
Job Number:	**2189092A**	Log Checked By:	**CLH**

Surface Dimensions:		Surface RL:	
Method:	**Excavator -**	Co-ords:	**E 313212 N 5841837**

Details			Sampling		Field Material Description							
WATER	RL(m)	DEPTH(m)	SAMPLE TYPE	Sample ID PID	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION	MOISTURE	RELATIVE DENSITY /CONSISTENCY (VS S F ST VST H / FB VL L MD D VD)	HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS
			J	TP08/190213/0.1 PID=0.8 ppm			**FILL:** Topsoil, silty clay, grey-brown, low plasticity, dry, no odour or staining.				
			J	TP08/190213/0.5 PID=0.0 ppm			Silty Clay, grey-brown, medium plasticity, dry to moist at increasing depth.				Large basalt rock at 0.3 to 0.5 m
		1	J	TP08/190213/1.0 PID=0.0 ppm			as above, moist, yellow-brown mottles.				
N F G W E			J	TP08/190213/1.5 PID=0.0 ppm			Refusal on basalt END OF TEST PIT AT 1.50 m				

This test pit log should be read in conjunction with the accompanying standard notes.

TEST PIT ENGINEERING LOG

TEST PIT NO.

TP09

SHEET 1 OF 1

Client:	**MAB Corporation**	Date Commenced:	**19/2/13**
Project:	**Lindum Vale PSP**	Date Completed:	**19/2/13**
Test Pit Location:	**1960, 1990 and 2040 Mickleham Rd, Mickleham -**	Recorded By:	**ON**
Job Number:	**2189092A**	Log Checked By:	**CLH**

Surface Dimensions:		Surface RL:	
Method:	**Excavator -**	Co-ords:	**E 313446 N 5841951**

Details			Sampling		Field Material Description							
WATER	RL(m)	DEPTH(m)	SAMPLE TYPE	Sample ID PID	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION	MOISTURE	RELATIVE DENSITY /CONSISTENCY (VS S F ST VST H / FB VL L MD D VD)	HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS
			J	TP09/190213/0.1 PID=0.0 ppm			**FILL:** Topsoil, silty clay, grey-brown, low plasticity, dry, rootlets, no odour or staining.				
			J	TP09A/190213/0.1							
			J	TP09/190213/0.5 PID=0.0 ppm			Silty Clay, grey-brown, low plasticity, stiff, dry, no odour or staining.				
		1	J	TP09/190213/1.0 PID=0.0 ppm			as above with yellow-brown mottles, high plasticity, becoming very stiff with increasing depth.				
N F G W E			J	TP09/190213/1.5 PID=0.0 ppm			END OF TEST PIT AT 1.50 m				

This test pit log should be read in conjunction with the accompanying standard notes.

TEST PIT ENGINEERING LOG

TEST PIT NO.

TP10

SHEET 1 OF 1

Client:	**MAB Corporation**	Date Commenced:	**20/2/13**
Project:	**Lindum Vale PSP**	Date Completed:	**20/2/13**
Test Pit Location:	**1960, 1990 and 2040 Mickleham Rd, Mickleham -**	Recorded By:	**SO**
Job Number:	**2189092A**	Log Checked By:	**CLH**

Surface Dimensions:		Surface RL:	
Method:	**Excavator -**	Co-ords:	**E 313377 N 5841733**

Details			Sampling		Field Material Description							
WATER	RL(m)	DEPTH(m)	SAMPLE TYPE	Sample ID PID	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION	MOISTURE	RELATIVE DENSITY /CONSISTENCY (VS S F ST VST H / FB VL L MD D VD)	HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS
			J	TP10/200213/0.1 PID=0.4 ppm			**FILL:** Topsoil, silty clay, brown to grey-brown, dry, organic material, no odour or staining.				
			J	TP10/200213/0.5 PID=0.6 ppm			Silty Clay, grey-brown with some yellow-green and orange mottles, medium to high plasticity, stiff, dry, no odour or staining.				
		1	J	TP10/200213/1.0 PID=0.4 ppm			as above, high plasticity, moist.				
			J	TP10/200213/1.5 PID=0.7 ppm			END OF TEST PIT AT 1.50 m				

This test pit log should be read in conjunction with the accompanying standard notes.

TEST PIT ENGINEERING LOG

TEST PIT NO.

TP11

SHEET 1 OF 1

Client:	**MAB Corporation**	Date Commenced:	**20/2/13**
Project:	**Lindum Vale PSP**	Date Completed:	**20/2/13**
Test Pit Location:	**1960, 1990 and 2040 Mickleham Rd, Mickleham -**	Recorded By:	**SO**
Job Number:	**2189092A**	Log Checked By:	**CLH**

Surface Dimensions:		Surface RL:	
Method:	**Excavator -**	Co-ords:	

Details			Sampling		Field Material Description							
WATER	RL(m)	DEPTH(m)	SAMPLE TYPE	Sample ID PID	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION	MOISTURE	RELATIVE DENSITY /CONSISTENCY (VS S F ST VST H / FB VL L MD D VD)	HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS
			J	TP11/200213/0.1 PID=0.3 ppm			**FILL:** Topsoil, silty clay, brown to grey-brown, dry, organic material, no odour or staining.				
			J	TP11/200213/0.5 PID=0.4 ppm			Silty Clay, grey-brown with some yellow and orange mottles, medium to high plasticity, firm, dry, some fine to medium grained sub-rounded to sub-angular basalt gravel to cobbles, no odour or staining.				
		1	J	TP11/200213/1.0 PID=0.4 ppm			as above, moist, some fine grained calcitic sands.				
			J	TP11/200213/1.5 PID=0.8 ppm			END OF TEST PIT AT 1.50 m				

This test pit log should be read in conjunction with the accompanying standard notes.

TEST PIT ENGINEERING LOG

TEST PIT NO.

TP12

Client:	**MAB Corporation**	Date Commenced:	**20/2/13**
Project:	**Lindum Vale PSP**	Date Completed:	**20/2/13**
Test Pit Location:	**1960, 1990 and 2040 Mickleham Rd, Mickleham -**	Recorded By:	**SO**
Job Number:	**2189092A**	Log Checked By:	**CLH**

Surface Dimensions:		Surface RL:	
Method:	**Excavator -**	Co-ords:	**E 312939 N 5841788**

Details			Sampling		Field Material Description							
WATER	RL(m)	DEPTH(m)	SAMPLE TYPE	Sample ID PID	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION	MOISTURE	RELATIVE DENSITY /CONSISTENCY (VS S F ST VST H / FB VL L MD D VD)	HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS
			J	TP12/200213/0.1 PID=0.5 ppm			**FILL:** Topsoil, clayey silt to silty clay, brown to grey-brown, dry, organic material, no odour or staining.				
			J	DUPAA/200213/0.1B							
			J	TP12/200213/0.1C							
			J	TP12/200213/0.5 PID=0.6 ppm			Silty Clay, brown with some yellow-brown and orange mottles, medium plasticity, dry, some calcitic inclusions, medium to coarse grained basalt gravel and cobbles, no odour or staining.				
		1	J	TP12/200213/1.0 PID=0.6 ppm			Clay, with some silt, brown with slight red hue, yellow to red mottles, moist, weathered basalt cobbles and boulders.				
			J	TP12/200213/1.3 PID=0.6 ppm			Refusal on basalt END OF TEST PIT AT 1.30 m				

This test pit log should be read in conjunction with the accompanying standard notes.

TEST PIT ENGINEERING LOG

TEST PIT NO.

TP13

SHEET 1 OF 1

Client:	**MAB Corporation**	Date Commenced:	**20/2/13**
Project:	**Lindum Vale PSP**	Date Completed:	**20/2/13**
Test Pit Location:	**1960, 1990 and 2040 Mickleham Rd, Mickleham -**	Recorded By:	**SO**
Job Number:	**2189092A**	Log Checked By:	**CLH**

Surface Dimensions:		Surface RL:	
Method:	**Excavator -**	Co-ords:	**E 313041 N 5841493**

Details			Sampling		Field Material Description							
WATER	RL(m)	DEPTH(m)	SAMPLE TYPE	Sample ID PID	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION	MOISTURE	RELATIVE DENSITY /CONSISTENCY (VS S F ST VST H / FB VL L MD D VD)	HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS
			J	TP13/200213/0.1 PID=0.3 ppm			**FILL:** Topsoil, clayey silt to silty clay at increasing depth, brown, dry, roots, no odour or staining.				
			J	TP13/200213/0.5 PID=0.6 ppm			Silty Clay, brown to grey-brown, medium to high plasticity, very stiff, no odour or staining.				
		1	J	TP13/200213/1.0 PID=0.3 ppm			as above, high plasticity.				
N F G W E			J	TP13/200213/1.5 PID=0.8 ppm			END OF TEST PIT AT 1.50 m				

This test pit log should be read in conjunction with the accompanying standard notes.

TEST PIT ENGINEERING LOG

TEST PIT NO.

TP14

SHEET 1 OF 1

Client:	**MAB Corporation**	Date Commenced:	**20/2/13**
Project:	**Lindum Vale PSP**	Date Completed:	**20/2/13**
Test Pit Location:	**1960, 1990 and 2040 Mickleham Rd, Mickleham -**	Recorded By:	**SO**
Job Number:	**2189092A**	Log Checked By:	**CLH**

Surface Dimensions:		Surface RL:	
Method:	**Excavator -**	Co-ords:	**E 312765 N 5841795**

Details			Sampling		Field Material Description							
WATER	RL(m)	DEPTH(m)	SAMPLE TYPE	Sample ID PID	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION	MOISTURE	RELATIVE DENSITY /CONSISTENCY (VS S F ST VST H / FB VL L MD D VD)	HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS
			J	TP14/200213/0.1 PID=0.3 ppm			**FILL:** Topsoil, clayey silt to silty clay, brown, dry, no odour or staining.				
			J	TP14/200213/0.5 PID=0.6 ppm			Silty Clay, grey-brown with some yellow-brown mottles, low to medium plasticity, dry, no odour or staining.				
			J	TP14/200213/1.0 PID=0.5 ppm			as above, medium plasticity, moist.				
		1	J	TP14/200213/1.4 PID=0.5 ppm							
N F G W E			J				Refusal on basalt END OF TEST PIT AT 1.40 m				

This test pit log should be read in conjunction with the accompanying standard notes.

TEST PIT ENGINEERING LOG

TEST PIT NO.

TP15

SHEET 1 OF 1

Client:	**MAB Corporation**	Date Commenced:	**20/2/13**
Project:	**Lindum Vale PSP**	Date Completed:	**20/2/13**
Test Pit Location:	**1960, 1990 and 2040 Mickleham Rd, Mickleham -**	Recorded By:	**SO**
Job Number:	**2189092A**	Log Checked By:	**CLH**

Surface Dimensions:		Surface RL:	
Method:	**Excavator -**	Co-ords:	**E 312572 N 5841552**

Details			Sampling		Field Material Description							
WATER	RL(m)	DEPTH(m)	SAMPLE TYPE	Sample ID PID	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION	MOISTURE	RELATIVE DENSITY /CONSISTENCY (VS S F ST VST H / FB VL L MD D VD)	HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS
			J	TP15/200213/0.1 PID=0.5 ppm			**FILL:** Topsoil, clayey silt to silty clay, brown, dry, roots, organic material, no odour or staining.				
			J	TP15/200213/0.5 PID=0.3 ppm			Silty Clay, grey-brown with some yellow-brown mottles, low to medium plasticity, dry, no odour or staining.				
			J	TP15/200213/1.0 PID=0.3 ppm			as above, clay content and plasticity increasing with depth.				
		1	J	TP15/200213/1.5 PID=0.4 ppm			Clay, some silt, grey-brown to greenish yellow-brown, some yellow-orange mottles, high plasticity, stiff, no odour or staining.				
N F G W E			J				END OF TEST PIT AT 1.50 m				

This test pit log should be read in conjunction with the accompanying standard notes.

TEST PIT ENGINEERING LOG

TEST PIT NO.

TP16

SHEET 1 OF 1

Client:	**MAB Corporation**	Date Commenced:	**20/2/13**
Project:	**Lindum Vale PSP**	Date Completed:	**20/2/13**
Test Pit Location:	**1960, 1990 and 2040 Mickleham Rd, Mickleham -**	Recorded By:	**SO**
Job Number:	**2189092A**	Log Checked By:	**CLH**

Surface Dimensions:		Surface RL:	
Method:	**Excavator -**	Co-ords:	**E 312823 N 5841304**

Details			Sampling		Field Material Description							
WATER	RL(m)	DEPTH(m)	SAMPLE TYPE	Sample ID PID	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION	MOISTURE	RELATIVE DENSITY /CONSISTENCY (VS S F ST VST H / FB VL L MD D VD)	HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS
			J	TP16/200213/0.1 PID=0.5 ppm			**FILL:** Topsoil, silty clay, brown, dry, roots, no odour or staining.				
			J	TP16/200213/0.5 PID=0.4 ppm			Silty Clay, brown, low to medium plasticity, stiff, dry, tree roots, some fine grained calcitic sands, no odour or staining.				
N F G W E		1	J	TP16/200213/1.0 PID=0.3 ppm			Refusal on basalt END OF TEST PIT AT 1.00 m				

This test pit log should be read in conjunction with the accompanying standard notes.

TEST PIT ENGINEERING LOG

TEST PIT NO.

TP17

SHEET 1 OF 1

Client:	**MAB Corporation**	Date Commenced:	**20/2/13**
Project:	**Lindum Vale PSP**	Date Completed:	**20/2/13**
Test Pit Location:	**1960, 1990 and 2040 Mickleham Rd, Mickleham -**	Recorded By:	**SO**
Job Number:	**2189092A**	Log Checked By:	**CLH**

Surface Dimensions:		Surface RL:	
Method:	**Excavator -**	Co-ords:	**E 313149 N 5841310**

Details			Sampling		Field Material Description							
WATER	RL(m)	DEPTH(m)	SAMPLE TYPE	Sample ID PID	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION	MOISTURE	RELATIVE DENSITY /CONSISTENCY (VS S F ST VST H / FB VL L MD D VD)	HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS
			J	TP17/200213/0.1 PID=0.7 ppm			**FILL:** Topsoil, silty clay, brown, dry, roots, no odour or staining.				
							as above with fine to coarse grained basalt gravels.				
N F G			J	TP17/200213/0.5 PID=0.6 ppm			Silty Clay, brown, low to medium plasticity, very stiff, dry, some fine to coarse grained basalt sub-angular to sub-rounded gravel to small boulders, no odour or staining.				
W E		1					Refusal on basalt END OF TEST PIT AT 0.80 m				

This test pit log should be read in conjunction with the accompanying standard notes.

TEST PIT ENGINEERING LOG

TEST PIT NO.

TP18

SHEET 1 OF 1

Client:	**MAB Corporation**	Date Commenced:	**21/2/13**
Project:	**Lindum Vale PSP**	Date Completed:	**21/2/13**
Test Pit Location:	**1960, 1990 and 2040 Mickleham Rd, Mickleham -**	Recorded By:	**SO**
Job Number:	**2189092A**	Log Checked By:	**CLH**

Surface Dimensions:		Surface RL:	
Method:	**Excavator -**	Co-ords:	**E 312624 N 5841414**

Details			Sampling		Field Material Description							
WATER	RL(m)	DEPTH(m)	SAMPLE TYPE	Sample ID PID	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION	MOISTURE	RELATIVE DENSITY /CONSISTENCY (VS S F ST VST H / FB VL L MD D VD)	HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS
			J	TP18/210213/0.1			**FILL:** Topsoil, clayey silt to silty clay, brown, very dry, roots, organic material, no odour or staining.				
							Silty Clay, brown, low to medium plasticity, firm to stiff, dry, organic material, no odour or staining.				
			J	TP18/210213/0.5			Clay, some silt, grey-brown with orange mottles, low to medium plasticity, stiff, organic material, no odour or staining.				
		1	J	TP18/210213/1.0			as above, moist, little organic material.				
N F G W E			J	TP18/210213/1.5			END OF TEST PIT AT 1.50 m				

This test pit log should be read in conjunction with the accompanying standard notes.

TEST PIT ENGINEERING LOG

TEST PIT NO.

TP19

SHEET 1 OF 1

Client:	**MAB Corporation**	Date Commenced:	**21/2/13**
Project:	**Lindum Vale PSP**	Date Completed:	**21/2/13**
Test Pit Location:	**1960, 1990 and 2040 Mickleham Rd, Mickleham -**	Recorded By:	**SO**
Job Number:	**2189092A**	Log Checked By:	**CLH**
Surface Dimensions:		Surface RL:	
Method:	**Excavator -**	Co-ords:	**E 313014 N 5841202**

Details			Sampling		Field Material Description							
WATER	RL(m)	DEPTH(m)	SAMPLE TYPE	Sample ID PID	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION	MOISTURE	RELATIVE DENSITY /CONSISTENCY (VS S F ST VST H / FB VL L MD D VD)	HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS
			J	TP19/210213/0.1 PID=0.4 ppm			**FILL:** Topsoil, clayey silt to silty clay, brown, very dry, roots, organic material, no odour or staining.				
			J	TP19/210213/0.5 PID=0.4 ppm			Silty Clay, brown, low to medium plasticity, dry, roots, organic material, no odour or staining.				
		1	J	TP19/210213/1.0 PID=0.6 ppm			Silty Clay, brown to grey-brown with some orange and yellow-green mottles, medium plasticity, stiff, no odour or staining.				
N F G W E			J	TP19/210213/1.5 PID=0.6 ppm			Silty Clay, brown to grey-brown with some orange and yellow-green mottles, medium to high plasticity, stiff, moist, fine to medium grained sub-angular to sub-rounded basalt gravel to cobbles, no odour or staining.				
							END OF TEST PIT AT 1.50 m				

This test pit log should be read in conjunction with the accompanying standard notes.

TEST PIT ENGINEERING LOG

TEST PIT NO.

TP20

SHEET 1 OF 1

Client:	**MAB Corporation**	Date Commenced:	**21/2/13**
Project:	**Lindum Vale PSP**	Date Completed:	**21/2/13**
Test Pit Location:	**1960, 1990 and 2040 Mickleham Rd, Mickleham -**	Recorded By:	**SO**
Job Number:	**2189092A**	Log Checked By:	**CLH**

Surface Dimensions:		Surface RL:	
Method:	**Excavator -**	Co-ords:	**E 312824 N 5841215**

Details			Sampling		Field Material Description							
WATER	RL(m)	DEPTH(m)	SAMPLE TYPE	Sample ID PID	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION	MOISTURE	RELATIVE DENSITY /CONSISTENCY (VS S F ST VST H / FB VL L MD D VD)	HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS
			J	TP20/210213/0.1 PID=0.5 ppm			**FILL:** Topsoil, clayey silt to silty clay, brown, very dry, roots, organic material, no odour or staining.				
			J	TP20A/210213/0.1							
							Silty Clay, brown, low plasticity, dry, no odour or staining.				
			J	TP20/210213/0.5 PID=0.3 ppm			Silty Clay, brown to grey-brown with some orange mottles, medium to high plasticity, stiff, dry, fine to medium grained sub-angular to sub-rounded basalt gravel, no odour or staining.				
		1	J	TP20/210213/1.0 PID=0.7 ppm			as above, moisture increasing with depth, some sub-angular to sub-rounded fine grained basalt gravel to small boulders.				
N F G W E			J	TP20/210213/1.3 PID=0.6 ppm			Refusal on basalt END OF TEST PIT AT 1.30 m				

This test pit log should be read in conjunction with the accompanying standard notes.

TEST PIT ENGINEERING LOG

TEST PIT NO.

TP21

SHEET 1 OF 1

Client:	**MAB Corporation**	Date Commenced:	**20/2/13**
Project:	**Lindum Vale PSP**	Date Completed:	**20/2/13**
Test Pit Location:	**1960, 1990 and 2040 Mickleham Rd, Mickleham -**	Recorded By:	**SO**
Job Number:	**2189092A**	Log Checked By:	**CLH**

Surface Dimensions:		Surface RL:	
Method:	**Excavator -**	Co-ords:	**E 312584 N 5841283**

Details			Sampling		Field Material Description							
WATER	RL(m)	DEPTH(m)	SAMPLE TYPE	Sample ID PID	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION	MOISTURE	RELATIVE DENSITY /CONSISTENCY (VS S F ST VST H / FB VL L MD D VD)	HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS
			J	TP21/200213/0.1 PID=0.5 ppm			**FILL:** Topsoil, clayey silt to silty clay, brown, very dry, roots, organic material, no odour or staining.				
			J	TP21/200213/0.5 PID=0.5 ppm			Silty Clay, brown with some orange mottles, low to medium plasticity, dry, some calcite inclusions, no odour or staining.				
		1	J	TP21/200213/1.0 PID=0.2 ppm			as above, medium to high plasticity.				
N F G W E			J	TP21/200213/1.2 PID=0.2 ppm			Refusal on basalt END OF TEST PIT AT 1.20 m				

This test pit log should be read in conjunction with the accompanying standard notes.

TEST PIT ENGINEERING LOG

TEST PIT NO.

TP22

Client:	**MAB Corporation**	Date Commenced:	**20/2/13**
Project:	**Lindum Vale PSP**	Date Completed:	**20/2/13**
Test Pit Location:	**1960, 1990 and 2040 Mickleham Rd, Mickleham -**	Recorded By:	**SO**
Job Number:	**2189092A**	Log Checked By:	**CLH**

Surface Dimensions:		Surface RL:	
Method:	**Excavator -**	Co-ords:	**E 312535 N 5841213**

Details			Sampling		Field Material Description						
WATER	RL(m)	DEPTH(m)	SAMPLE TYPE	Sample ID PID	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION	MOISTURE	RELATIVE DENSITY /CONSISTENCY (VS S F ST VST H / FB VL L MD D VD)	HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS
			J	TP22/200213/0.1 PID=0.4 ppm			**FILL:** Topsoil, silty clay, brown, dry, roots, organic material, no odour or staining.				
			J	DUPAA/200213/0.1B							
			J	TP22/200213/0.1C							
			J	TP22A/200213/0.1							
			J	TP22/200213/0.5 PID=0.5 ppm			Silty Clay, brown to grey-brown with some orange and yellow-green mottles, medium to high plasticity, stiff, dry, no odour or staining.				
			J	TP22/200213/1.0 PID=0.6 ppm			as above, moist, some fine to coarse grained sub-angular to sub-rounded basalt gravel. to small boulders				
NFGWE		1	J				Refusal on basalt END OF TEST PIT AT 1.00 m				

This test pit log should be read in conjunction with the accompanying standard notes.

TEST PIT ENGINEERING LOG

TEST PIT NO.

TP23

SHEET 1 OF 1

Client:	**MAB Corporation**	Date Commenced:	**20/2/13**
Project:	**Lindum Vale PSP**	Date Completed:	**20/2/13**
Test Pit Location:	**1960, 1990 and 2040 Mickleham Rd, Mickleham -**	Recorded By:	**SO**
Job Number:	**2189092A**	Log Checked By:	**CLH**

Surface Dimensions:		Surface RL:	
Method:	**Excavator -**	Co-ords:	**E 312721 N 5841052**

Details			Sampling		Field Material Description							
WATER	RL(m)	DEPTH(m)	SAMPLE TYPE	Sample ID PID	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION	MOISTURE	RELATIVE DENSITY /CONSISTENCY (VS S F ST VST H / FB VL L MD D VD)	HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS
			J	TP23/200213/0.1 PID=0.4 ppm			**FILL:** Topsoil, silty clay, brown, dry, roots, organic material, no odour or staining.				
			J	TP23/200213/0.5 PID=0.7 ppm			Silty Clay, brown, low to medium plasticity, dry, no odour or staining.				
		1	J	TP23/200213/1.0 PID=0.7 ppm			as above, brown to greenish yellow-brown, some orange and yellow-brown mottles.				
N F G W E			J	TP23/200213/1.5 PID=0.4 ppm			Clay, some silt, brown to greenish yellow-brown with some yellow and orange mottles, medium to high plasticity, dry, some sub-angular to sub-rounded fine grained basalt gravel to cobbles.				
							END OF TEST PIT AT 1.50 m				

This test pit log should be read in conjunction with the accompanying standard notes.

TEST PIT ENGINEERING LOG

TEST PIT NO.

TP24

SHEET 1 OF 1

Client:	**MAB Corporation**	Date Commenced:	**21/2/13**
Project:	**Lindum Vale PSP**	Date Completed:	**21/2/13**
Test Pit Location:	**1960, 1990 and 2040 Mickleham Rd, Mickleham -**	Recorded By:	**SO**
Job Number:	**2189092A**	Log Checked By:	**CLH**

Surface Dimensions:		Surface RL:	
Method:	**Excavator -**	Co-ords:	**E 312955 N 5841029**

Details			Sampling		Field Material Description							
WATER	RL(m)	DEPTH(m)	SAMPLE TYPE	Sample ID PID	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION	MOISTURE	RELATIVE DENSITY /CONSISTENCY (VS S F ST VST H / FB VL L MD D VD)	HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS
			J	TP24/210213/0.1 PID=0.5 ppm			**FILL:** Topsoil, clayey silt to silty clay, brown, dry, roots, organic material, no odour or staining.				
			J	TP24/210213/0.5 PID=0.7 ppm			Silty Clay, brown, medium plasticity, moist, roots, organic material, no odour or staining.				
		1					as above with little organic material.				
N F G W E			J	TP24/210213/1.2 PID=0.7 ppm			Refusal on basalt END OF TEST PIT AT 1.20 m				

This test pit log should be read in conjunction with the accompanying standard notes.

TEST PIT ENGINEERING LOG

TEST PIT NO.

TP25

Client:	**MAB Corporation**	Date Commenced:	**21/2/13**
Project:	**Lindum Vale PSP**	Date Completed:	**21/2/13**
Test Pit Location:	**1960, 1990 and 2040 Mickleham Rd, Mickleham -**	Recorded By:	**SO**
Job Number:	**2189092A**	Log Checked By:	**CLH**

Surface Dimensions:		Surface RL:	
Method:	**Excavator -**	Co-ords:	**E 312602 N 5840859**

Details			Sampling		Field Material Description							
WATER	RL(m)	DEPTH(m)	SAMPLE TYPE	Sample ID PID	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION	MOISTURE	RELATIVE DENSITY /CONSISTENCY (VS S F ST VST H / FB VL L MD D VD)	HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS
			J	TP25/210213/0.1 PID=1.0 ppm			**FILL:** Topsoil, silty clay, brown, very dry, roots, organic material, no odour or staining.				
			J	TP25/210213/0.5 PID=1.1 ppm			Silty Clay, brown, low to medium plasticity, stiff, dry, tree roots, no odour or staining.				
		1	J	TP25/210213/1.0 PID=1.2 ppm			Clay, some silt, grey-brown to greenish yellow-brown, high plasticity, stiff, tree roots, some fine to coarse grained sub-angular to sub-rounded basalt gravel, no odour or staining.				
N F G W E			J	TP25/210213/1.5 PID=0.8 ppm			END OF TEST PIT AT 1.50 m				

This test pit log should be read in conjunction with the accompanying standard notes.

TEST PIT ENGINEERING LOG

TEST PIT NO.

TP26

Client:	**MAB Corporation**	Date Commenced:	**21/2/13**
Project:	**Lindum Vale PSP**	Date Completed:	**21/2/13**
Test Pit Location:	**1960, 1990 and 2040 Mickleham Rd, Mickleham -**	Recorded By:	**SO**
Job Number:	**2189092A**	Log Checked By:	**CLH**
Surface Dimensions:		Surface RL:	
Method:	**Excavator -**	Co-ords:	**E 312659 N 5840665**

Details			Sampling		Field Material Description							
WATER	RL(m)	DEPTH(m)	SAMPLE TYPE	Sample ID PID	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION	MOISTURE	RELATIVE DENSITY /CONSISTENCY (VS S F ST VST H / FB VL L MD D VD)	HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS
			J	TP26/210213/0.1 PID=1.4 ppm			**FILL:** Topsoil, clayey silt to silty clay, brown, very dry, rootlets, organic material, no odour or staining.				
							Silty Clay, brown, low to medium plasticity, stiff, dry, no odour or staining.				
			J	TP26/210213/0.5 PID=2.1 ppm			Silty Clay, brown with some orange, yellow and red mottles, medium to high plasticity, stiff, dry, wood pieces, some sub-angular to sub-rounded fine grained basalt gravel to cobbles, no odour or staining.				
		1	J	TP26/210213/1.0 PID=2.8 ppm							
N F G W E			J	TP26/210213/1.2 PID=4.6 ppm			Refusal on basalt END OF TEST PIT AT 1.20 m				

This test pit log should be read in conjunction with the accompanying standard notes.

TEST PIT ENGINEERING LOG

TEST PIT NO.

TP27

SHEET 1 OF 1

Client:	**MAB Corporation**	Date Commenced:	**21/2/13**
Project:	**Lindum Vale PSP**	Date Completed:	**21/2/13**
Test Pit Location:	**1960, 1990 and 2040 Mickleham Rd, Mickleham -**	Recorded By:	**SO**
Job Number:	**2189092A**	Log Checked By:	**CLH**

Surface Dimensions:		Surface RL:	
Method:	**Excavator -**	Co-ords:	**E 312770 N 5840840**

Details			Sampling		Field Material Description							
WATER	RL(m)	DEPTH(m)	SAMPLE TYPE	Sample ID PID	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION	MOISTURE	RELATIVE DENSITY /CONSISTENCY (VS S F ST VST H / FB VL L MD D VD)	HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS
			J	TP27/210213/0.1 PID=0.4 ppm			**FILL:** Topsoil, clayey silt to silty clay, brown, very dry, roots, organic material, no odour or staining.				
			J	TP27/210213/0.5 PID=0.6 ppm			Silty Clay, brown, stiff, dry, fine to coarse grained sub-angular to sub-rounded basalt gravel, no odour or staining.				
			J	TP27/210213/1.0 PID=0.9 ppm			Silty Clay, grey-brown to greenish yellow-brown, medium to high plasticity, stiff, dry, becoming moist at increasing depth, no odour or staining.				
		1	J	TP27/210213/1.4 PID=0.9 ppm			as above with some orange, yellow and red mottles, some sub-angular to sub-rounded fine grained basalt gravel to cobbles.				Basalt boulder at 1.0 m.
N F G W E			J				Refusal on basalt END OF TEST PIT AT 1.40 m				

This test pit log should be read in conjunction with the accompanying standard notes.

TEST PIT ENGINEERING LOG

TEST PIT NO.

TP28

Client:	**MAB Corporation**	Date Commenced:	**21/2/13**
Project:	**Lindum Vale PSP**	Date Completed:	**21/2/13**
Test Pit Location:	**1960, 1990 and 2040 Mickleham Rd, Mickleham -**	Recorded By:	**SO**
Job Number:	**2189092A**	Log Checked By:	**CLH**

Surface Dimensions:		Surface RL:	
Method:	**Excavator -**	Co-ords:	**E 312433 N 5840878**

Details			Sampling		Field Material Description						
WATER	RL(m)	DEPTH(m)	SAMPLE TYPE	Sample ID PID	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION	MOISTURE	RELATIVE DENSITY /CONSISTENCY (VS S F ST VST H / FB VL L MD D VD)	HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS
			J	TP28/210213/0.1 PID=1.1 ppm			**FILL:** Topsoil, silty clay, brown, dry, roots, organic material, no odour or staining.				
			J	DUPAA/210213/0.1B							
			J	TP28/210213/0.1C							
							Silty Clay, brown, low plasticity, stiff, dry, roots, organic material, no odour or staining.				
			J	TP28/210213/0.5 PID=0.9 ppm			Silty Clay, brown to grey-brown with some orange and grey mottles, medium plasticity, stiff, dry, no odour or staining.				
		1	J	TP28/210213/1.0 PID=0.7 ppm							
N F G W E			J	TP28/210213/1.5 PID=0.8 ppm			Refusal on basalt END OF TEST PIT AT 1.50 m				

This test pit log should be read in conjunction with the accompanying standard notes.

TEST PIT ENGINEERING LOG

TEST PIT NO.

TP29

Client:	**MAB Corporation**	Date Commenced:	**21/2/13**
Project:	**Lindum Vale PSP**	Date Completed:	**21/2/13**
Test Pit Location:	**1960, 1990 and 2040 Mickleham Rd, Mickleham -**	Recorded By:	**SO**
Job Number:	**2189092A**	Log Checked By:	**CLH**

Surface Dimensions:		Surface RL:	
Method:	**Excavator -**	Co-ords:	**E 312825 N 5840643**

Details			Sampling		Field Material Description							
WATER	RL(m)	DEPTH(m)	SAMPLE TYPE	Sample ID PID	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION	MOISTURE	RELATIVE DENSITY /CONSISTENCY (VS S F ST VST H / FB VL L MD D VD)	HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS
			J	TP29/210213/0.1 PID=0.6 ppm			**FILL:** Topsoil, silty clay, brown, dry, roots, organic material, no odour or staining.				
			J	TP29/210213/0.5 PID=0.8 ppm			Silty Clay, brown, low to medium plasticity, moist, roots, organic material, no odour or staining.				
		1	J	TP29/210213/1.0 PID=1.0 ppm			Clay, some silt, grey-brown, high plasticity, moist, no odour or staining.				
N F G W E			J	TP29/210213/1.5 PID=1.1 ppm			Clay, brown to grey-brown with some orange, yellow and dark grey mottles, high plasticity, moist, some coarse grained sand to fine grained gravel, no odour or staining.				
							END OF TEST PIT AT 1.50 m				

This test pit log should be read in conjunction with the accompanying standard notes.

TEST PIT ENGINEERING LOG

TEST PIT NO.

TP30

SHEET 1 OF 1

Client:	**MAB Corporation**	Date Commenced:	**21/2/13**
Project:	**Lindum Vale PSP**	Date Completed:	**21/2/13**
Test Pit Location:	**1960, 1990 and 2040 Mickleham Rd, Mickleham -**	Recorded By:	**SO**
Job Number:	**2189092A**	Log Checked By:	**CLH**

Surface Dimensions:		Surface RL:	
Method:	**Excavator -**	Co-ords:	**E 313155 N 5840380**

Details			Sampling		Field Material Description						
WATER	RL(m)	DEPTH(m)	SAMPLE TYPE	Sample ID PID	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION	MOISTURE	RELATIVE DENSITY /CONSISTENCY (VS S F ST VST H / FB VL L MD D VD)	HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS
			J	TP30/210213/0.1			**FILL:** Topsoil, clayey silt to silty clay, brown, very dry, roots, organic material, no odour or staining.				
							Silty clay, brown, low plasticity, dry, roots, organic material, no odour or staining.				
			J	TP30/210213/0.5			Silty Clay, brown to grey-brown, low to medium plasticity, stiff, dry, no odour or staining.				
		1	J	TP30/210213/1.0			Silty Clay, brown to grey-brown, medium plasticity, stiff, some sub-angular to sub-rounded fine grained basalt gravel to cobbles, no odour or staining.				
N F G W E			J	TP30/210213/1.5			END OF TEST PIT AT 1.50 m				

This test pit log should be read in conjunction with the accompanying standard notes.

TEST PIT ENGINEERING LOG

TEST PIT NO.

TP31

Client:	**MAB Corporation**	Date Commenced:	**21/2/13**
Project:	**Lindum Vale PSP**	Date Completed:	**21/2/13**
Test Pit Location:	**1960, 1990 and 2040 Mickleham Rd, Mickleham -**	Recorded By:	**SO**
Job Number:	**2189092A**	Log Checked By:	**CLH**

Surface Dimensions:		Surface RL:	
Method:	**Excavator -**	Co-ords:	**E 312750 N 5840436**

Details			Sampling		Field Material Description						
WATER	RL(m)	DEPTH(m)	SAMPLE TYPE	Sample ID PID	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION	MOISTURE	RELATIVE DENSITY /CONSISTENCY (VS S F ST VST H / FB VL L MD D VD)	HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS
			J	TP31/210213/0.1 PID=0.4 ppm			**FILL:** Topsoil, silty clay, brown, dry, roots, organic material, no odour or staining.				
			J	TP31/210213/0.5 PID=0.5 ppm			Silty Clay, brown with some yellow, orange and red mottles, clay increasing with depth, low to medium plasticity, moist, some fine to coarse grained sub-angular to sub-rounded basalt gravel, no odour or staining.				
N F G W E			J	TP31/210213/0.7 PID=0.8 ppm			Refusal on basalt END OF TEST PIT AT 0.70 m				
		1									

This test pit log should be read in conjunction with the accompanying standard notes.

TEST PIT ENGINEERING LOG

TEST PIT NO.

TP32

Client:	**MAB Corporation**	Date Commenced:	**21/2/13**
Project:	**Lindum Vale PSP**	Date Completed:	**21/2/13**
Test Pit Location:	**1960, 1990 and 2040 Mickleham Rd, Mickleham -**	Recorded By:	**SO**
Job Number:	**2189092A**	Log Checked By:	**CLH**

Surface Dimensions:		Surface RL:	
Method:	**Excavator -**	Co-ords:	**E 312399 N 5840512**

Details			Sampling		Field Material Description							
WATER	RL(m)	DEPTH(m)	SAMPLE TYPE	Sample ID PID	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL FIELD DESCRIPTION	MOISTURE	RELATIVE DENSITY /CONSISTENCY (VS S F ST VST H / FB VL L MD D VD)	HAND PENETROMETER (kPa)	STRUCTURE AND ADDITIONAL OBSERVATIONS
			J	TP32/210213/0.1 PID=1.0 ppm			**FILL:** Topsoil, silty clay, dark brown, dry, roots and organic material, no odour or staining.				
			J	TP32A/210213/0.1			as above with medium grained sub-angular to sub-rounded basalt gravel to cobbles.				
N F G W E			J	TP32/210213/0.5 PID=1.2 ppm			Clayey Silt, dark brown, moist, organic material, some sub-angular to sub-rounded medium grained basalt gravel to cobbles, no odour or staining.				
		1					Refusal on basalt END OF TEST PIT AT 0.50 m				

This test pit log should be read in conjunction with the accompanying standard notes.

Appendix H

Soil Laboratory Data Summary
(ESDAT) and RPD

						Field_ID	TP01/190213/0.1	TP01/190213/0.5	TP01/190213/1.0	TP01/190213/1.5	TP02/200213/0.1	TP02/200213/0.5	TP02/200213/1.0	TP02/200213/1.5	TP03/200213/0.1	TP03/200213/0.5	TP03/200213/1.0	TP03/200213/1.5	TP04/190213/0.1	TP04/190213/0.5
						SDG	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875
Chem_Group	**ChemName**	**output unit**	**EQL**	**NEPM 1999 EIL**	**NEPM 1999 HIL A**	**NEPM 1999 HIL F**														
	Scheduled Chemicals (NSW, 1999)	mg/kg					<0.85	-	-	-	<0.85	-	-	-	<0.85	-	-	-	<0.85	-
	Scheduled chemicals (NSW Waste 2008)	mg/kg					<0.85	-	-	-	<0.85	-	-	-	<0.85	-	-	-	<0.85	-
PAH/Phenols	Polycylic aromatic hydrocarbons EPA448	mg/kg	0.5				<0.5	-	-	-	<0.5	-	-	-	<0.5	-	-	-	<0.5	-
IWRG Combined Compounds	Monocylic aromatic hydrocarbons IWRG621	mg/kg					<2.2	-	-	-	<2.2	-	-	-	<2.2	-	-	-	<2.2	-
	Organochlorine pesticides IWRG621	mg/kg					<1.25	-	-	-	<1.25	-	-	-	<1.25	-	-	-	<1.25	-
	Other organochlorine pesticides IWRG621	mg/kg					<0.85	-	-	-	<0.85	-	-	-	<0.85	-	-	-	<0.85	-
	Polycylic aromatic hydrocarbons IWRG621	mg/kg					<8	-	-	-	<8	-	-	-	<8	-	-	-	<8	-
TPH	C6 - C9 Fraction	mg/kg	10				<10	-	-	-	<10	-	-	-	<10	-	-	-	<10	-
	C10 - C16 Fraction	mg/kg	50				<50	-	-	-	<50	-	-	-	<50	-	-	-	<50	-
	C10 - C14 Fraction	mg/kg	50				<50	-	-	-	<50	-	-	-	<50	-	-	-	<50	-
	C15 - C28 Fraction	mg/kg	100				<100	-	-	-	<100	-	-	-	<100	-	-	-	<100	-
	C16 - C34 Fraction	mg/kg	100				<100	-	-	-	<100	-	-	-	140	-	-	-	<100	-
	C34 - C40 Fraction	mg/kg	100				<100	-	-	-	<100	-	-	-	<100	-	-	-	<100	-
	C10 - C40 Fraction (Sum)	mg/kg	50				<50	-	-	-	<50	-	-	-	140	-	-	-	<50	-
	C6 - C10 Fraction minus BTEX (F1)	mg/kg	10				<10	-	-	-	<10	-	-	-	<10	-	-	-	<10	-
	C29-C36 Fraction	mg/kg	100				<100	-	-	-	<100	-	-	-	110	-	-	-	<100	-
	TPH+C10 - C36 (Sum of total)	mg/kg					<150	-	-	-	<150	-	-	-	<150	-	-	-	<150	-
	TPH C10-36 (Total)	mg/kg	50				<50	-	-	-	<50	-	-	-	110	-	-	-	<50	-
	TPH C6-C10	mg/kg	10				<10	-	-	-	<10	-	-	-	<10	-	-	-	<10	-
BTEX	Benzene	mg/kg	0.2				<0.2	-	-	-	<0.2	-	-	-	<0.2	-	-	-	<0.2	-
	Toluene	mg/kg	0.5				<0.5	-	-	-	<0.5	-	-	-	<0.5	-	-	-	<0.5	-
	Ethylbenzene	mg/kg	0.5				<0.5	-	-	-	<0.5	-	-	-	<0.5	-	-	-	<0.5	-
	Xylene (m & p)	mg/kg	0.5				<0.5	-	-	-	<0.5	-	-	-	<0.5	-	-	-	<0.5	-
	Xylene (o)	mg/kg	0.5				<0.5	-	-	-	<0.5	-	-	-	<0.5	-	-	-	<0.5	-
	Xylene Total	mg/kg	0.5				<0.5	-	-	-	<0.5	-	-	-	<0.5	-	-	-	<0.5	-
	Sum of BTEX	mg/kg	0.2				<0.2	-	-	-	<0.2	-	-	-	<0.2	-	-	-	<0.2	-
Inorganics	Moisture	%	1				8.7	13.1	18.9	15.4	6.3	12.8	19	18.4	7.1	11.7	17.1	17.1	5.3	14.8
	pH (Lab)	pH_Units	0.1				7.3	8.2	8	7.9	7.8	6	7.5	7.7	7.1	8.7	8.7	8.5	5.6	7.5
Metals	Arsenic	mg/kg	5	20	100	500	6	<5	<5	<5	38	<5	<5	<5	<5	<5	<5	<5	14	31
	Cadmium	mg/kg	1	3	20	100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Chromium	mg/kg	2				24	32	32	30	27	31	41	36	14	25	38	30	38	84
	Copper	mg/kg	5	100	1000	5000	14	6	<5	<5	26	6	7	<5	19	<5	5	<5	6	7
	Lead	mg/kg	5	600	300	1500	27	9	10	10	35	13	13	15	56	10	14	12	16	34
	Mercury	mg/kg	0.1	1	15	75	<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
	Nickel	mg/kg	2	60	600	3000	12	10	14	10	29	9	21	19	11	9	32	14	6	20
	Zinc	mg/kg	5	200	7000	35000	226	14	10	6	178	12	13	7	485	8	10	8	14	9
OCP	4,4-DDE	mg/kg	0.05				<0.05	-	-	-	<0.05	-	-	-	<0.05	-	-	-	<0.05	-
	a-BHC	mg/kg	0.05				<0.05	-	-	-	<0.05	-	-	-	<0.05	-	-	-	<0.05	-
	Aldrin	mg/kg	0.05				<0.05	-	-	-	<0.05	-	-	-	<0.05	-	-	-	<0.05	-
	Aldrin + Dieldrin	mg/kg	0.05		10	50	<0.05	-	-	-	<0.05	-	-	-	<0.05	-	-	-	<0.05	-
	b-BHC	mg/kg	0.05				<0.05	-	-	-	<0.05	-	-	-	<0.05	-	-	-	<0.05	-
	chlordane	mg/kg	0.05		50	250	<0.05	-	-	-	<0.05	-	-	-	<0.05	-	-	-	<0.05	-
	Chlordane (cis)	mg/kg	0.05				<0.05	-	-	-	<0.05	-	-	-	<0.05	-	-	-	<0.05	-
	Chlordane (trans)	mg/kg	0.05				<0.05	-	-	-	<0.05	-	-	-	<0.05	-	-	-	<0.05	-
	d-BHC	mg/kg	0.05				<0.05	-	-	-	<0.05	-	-	-	<0.05	-	-	-	<0.05	-
	DDD	mg/kg	0.05				<0.05	-	-	-	<0.05	-	-	-	<0.05	-	-	-	<0.05	-
	DDT	mg/kg	0.2				<0.2	-	-	-	<0.2	-	-	-	<0.2	-	-	-	<0.2	-
	DDT+DDE+DDD	mg/kg	0.05		200	1000	<0.05	-	-	-	<0.05	-	-	-	<0.05	-	-	-	<0.05	-
	Dieldrin	mg/kg	0.05				<0.05	-	-	-	<0.05	-	-	-	<0.05	-	-	-	<0.05	-
	Endosulfan I	mg/kg	0.05				<0.05	-	-	-	<0.05	-	-	-	<0.05	-	-	-	<0.05	-
	Endosulfan II	mg/kg	0.05				<0.05	-	-	-	<0.05	-	-	-	<0.05	-	-	-	<0.05	-
	Endosulfan sulphate	mg/kg	0.05				<0.05	-	-	-	<0.05	-	-	-	<0.05	-	-	-	<0.05	-
	Endrin	mg/kg	0.05				<0.05	-	-	-	<0.05	-	-	-	<0.05	-	-	-	<0.05	-
	Endrin aldehyde	mg/kg	0.05				<0.05	-	-	-	<0.05	-	-	-	<0.05	-	-	-	<0.05	-
	Endrin ketone	mg/kg	0.05				<0.05	-	-	-	<0.05	-	-	-	<0.05	-	-	-	<0.05	-
	g-BHC (Lindane)	mg/kg	0.05				<0.05	-	-	-	<0.05	-	-	-	<0.05	-	-	-	<0.05	-
	Heptachlor	mg/kg	0.05		10	50	<0.05	-	-	-	<0.05	-	-	-	<0.05	-	-	-	<0.05	-
	Heptachlor (including its epoxide)	mg/kg					<0.1	-	-	-	<0.1	-	-	-	<0.1	-	-	-	<0.1	-
	Heptachlor epoxide	mg/kg	0.05				<0.05	-	-	-	<0.05	-	-	-	<0.05	-	-	-	<0.05	-
	Hexachlorobenzene	mg/kg	0.05				<0.05	-	-	-	<0.05	-	-	-	<0.05	-	-	-	<0.05	-
	Methoxychlor	mg/kg	0.2				<0.2	-	-	-	<0.2	-	-	-	<0.2	-	-	-	<0.2	-
OPP	Azinophos methyl	mg/kg	0.05				<0.05	-	-	-	<0.05	-	-	-	<0.05	-	-	-	<0.05	-
	Bromophos-ethyl	mg/kg	0.05				<0.05	-	-	-	<0.05	-	-	-	<0.05	-	-	-	<0.05	-
	Carbophenothion	mg/kg	0.05				<0.05	-	-	-	<0.05	-	-	-	<0.05	-	-	-	<0.05	-
	Chlorpyrifos	mg/kg	0.05				<0.05	-	-	-	<0.05	-	-	-	<0.05	-	-	-	<0.05	-
	Chlorpyrifos-methyl	mg/kg	0.05				<0.05	-	-	-	<0.05	-	-	-	<0.05	-	-	-	<0.05	-
	Demeton-S-methyl	mg/kg	0.05				<0.05	-	-	-	<0.05	-	-	-	<0.05	-	-	-	<0.05	-
	Diazinon	mg/kg	0.05				<0.05	-	-	-	<0.05	-	-	-	<0.05	-	-	-	<0.05	-
	Dichlorvos	mg/kg	0.05				<0.05	-	-	-	<0.05	-	-	-	<0.05	-	-	-	<0.05	-
	Dimethoate	mg/kg	0.05				<0.05	-	-	-	<0.05	-	-	-	<0.05	-	-	-	<0.05	-
	Ethion	mg/kg	0.05				<0.05	-	-	-	<0.05	-	-	-	<0.05	-	-	-	<0.05	-
	Fenamiphos	mg/kg	0.05				<0.05	-	-	-	<0.05	-	-	-	<0.05	-	-	-	<0.05	-
	Fenthion	mg/kg	0.05				<0.05	-	-	-	<0.05	-	-	-	<0.05	-	-	-	<0.05	-
	Malathion	mg/kg	0.05				<0.05	-	-	-	<0.05	-	-	-	<0.05	-	-	-	<0.05	-
	Methyl parathion	mg/kg	0.2				<0.2	-	-	-	<0.2	-	-	-	<0.2	-	-	-	<0.2	-
	Monocrotophos	mg/kg	0.2				<0.2	-	-	-	<0.2	-	-	-	<0.2	-	-	-	<0.2	-
	Parathion	mg/kg	0.2				<0.2	-	-	-	<0.2	-	-	-	<0.2	-	-	-	<0.2	-
	Pirimphos-ethyl	mg/kg	0.05				<0.05	-	-	-	<0.05	-	-	-	<0.05	-	-	-	<0.05	-
	Prothiofos	mg/kg	0.05				<0.05	-	-	-	<0.05	-	-	-	<0.05	-	-	-	<0.05	-
PAH	Acenaphthene	mg/kg	0.5				<0.5	-	-	-	<0.5	-	-	-	<0.5	-	-	-	<0.5	-
	Acenaphthylene	mg/kg	0.5				<0.5	-	-	-	<0.5	-	-	-	<0.5	-	-	-	<0.5	-
	Anthracene	mg/kg	0.5				<0.5	-	-	-	<0.5	-	-	-	<0.5	-	-	-	<0.5	-
	Benz(a)anthracene	mg/kg	0.5				<0.5	-	-	-	<0.5	-	-	-	<0.5	-	-	-	<0.5	-
	Benzo(a) pyrene	mg/kg	0.5		1	5	<0.5	-	-	-	<0.5	-	-	-	<0.5	-	-	-	<0.5	-
	Benzo(b)fluoranthene	mg/kg	0.5				<0.5	-	-	-	<0.5	-	-	-	<0.5	-	-	-	<0.5	-
	Benzo(g,h,i)perylene	mg/kg	0.5				<0.5	-	-	-	<0.5	-	-	-	<0.5	-	-	-	<0.5	-
	Benzo(k)fluoranthene	mg/kg	0.5				<0.5	-	-	-	<0.5	-	-	-	<0.5	-	-	-	<0.5	-
	Benzoapyrene TEQ	mg/kg	0.5				<0.5	-	-	-	<0.5	-	-	-	<0.5	-	-	-	<0.5	-
	Chrysene	mg/kg	0.5				<0.5	-	-	-	<0.5	-	-	-	<0.5	-	-	-	<0.5	-
	Dibenz(a,h)anthracene	mg/kg	0.5				<0.5	-	-	-	<0.5	-	-	-	<0.5	-	-	-	<0.5	-
	Fluoranthene	mg/kg	0.5				<0.5	-	-	-	<0.5	-	-	-	<0.5	-	-	-	<0.5	-
	Fluorene	mg/kg	0.5				<0.5	-	-	-	<0.5	-	-	-	<0.5	-	-	-	<0.5	-
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.5				<0.5	-	-	-	<0.5	-	-	-	<0.5	-	-	-	<0.5	-
	Naphthalene	mg/kg	0.5				<0.5	-	-	-	<0.5	-	-	-	<0.5	-	-	-	<0.5	-
	PAHs (Sum of total)	mg/kg			20	100	<8	-	-	-	<8	-	-	-	<8	-	-	-	<8	-
	Phenanthrene	mg/kg	0.5				<0.5	-	-	-	<0.5	-	-	-	<0.5	-	-	-	<0.5	-
	Pyrene	mg/kg	0.5				<0.5	-	-	-	<0.5	-	-	-	<0.5	-	-	-	<0.5	-
PCB	PCBs (Sum of total)	mg/kg	0.1		10	50	<0.1	-	-	-	<0.1	-	-	-	<0.1	-	-	-	<0.1	-

						Field_ID	TP05/190213/0.1	TP05/190213/1.0	TP06/190213/0.1	TP06/190213/0.5	TP07/190213/0.1	TP07/190213/0.5	TP07/190213/1.5	TP08/190213/0.1	TP08/190213/1.0	TP09/190213/0.1	TP09/190213/0.5	TP10/200213/0.1	TP10/200213/0.5	TP11/200213/0.1
						SDG	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875
Chem_Group	ChemName	output unit	EQL	NEPM 1999 EIL	NEPM 1999 HIL A	NEPM 1999 HIL F														
	Scheduled Chemicals (NSW, 1999)	mg/kg					<0.85	-	<0.85	-	<0.85	-	-	<0.85	-	<0.85	-	<0.85	-	<0.85
	Scheduled chemicals (NSW Waste 2008)	mg/kg					<0.85	-	<0.85	-	<0.85	-	-	<0.85	-	<0.85	-	<0.85	-	<0.85
PAH/Phenols	Polycylic aromatic hydrocarbons EPA448	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	-	<0.5	-	<0.5	-	<0.5	-	<0.5
IWRG Combined Compounds	Monocylic aromatic hydrocarbons IWRG621	mg/kg					<2.2	-	<2.2	-	<2.2	-	-	<2.2	-	<2.2	-	<2.2	-	<2.2
	Organochlorine pesticides IWRG621	mg/kg					<1.25	-	<1.25	-	<1.25	-	-	<1.25	-	<1.25	-	<1.25	-	<1.25
	Other organochlorine pesticides IWRG621	mg/kg					<0.85	-	<0.85	-	<0.85	-	-	<0.85	-	<0.85	-	<0.85	-	<0.85
	Polycylic aromatic hydrocarbons IWRG621	mg/kg					<8	-	<8	-	<8	-	-	<8	-	<8	-	<8	-	<8
TPH	C6 - C9 Fraction	mg/kg	10				<10	-	<10	-	<10	-	-	<10	-	<10	-	<10	-	<10
	C10 - C16 Fraction	mg/kg	50				<50	-	<50	-	<50	-	-	<50	-	<50	-	<50	-	<50
	C10 - C14 Fraction	mg/kg	50				<50	-	<50	-	<50	-	-	<50	-	<50	-	<50	-	<50
	C15 - C28 Fraction	mg/kg	100				<100	-	<100	-	<100	-	-	<100	-	<100	-	<100	-	<100
	C16 - C34 Fraction	mg/kg	100				<100	-	<100	-	<100	-	-	<100	-	<100	-	<100	-	<100
	C34 - C40 Fraction	mg/kg	100				<100	-	<100	-	<100	-	-	<100	-	<100	-	<100	-	<100
	C10 - C40 Fraction (Sum)	mg/kg	50				<50	-	<50	-	<50	-	-	<50	-	<50	-	<50	-	<50
	C6 - C10 Fraction minus BTEX (F1)	mg/kg	10				<10	-	<10	-	<10	-	-	<10	-	<10	-	<10	-	<10
	C29-C36 Fraction	mg/kg	100				<100	-	<100	-	<100	-	-	<100	-	<100	-	<100	-	<100
	TPH+C10 - C36 (Sum of total)	mg/kg					<150	-	<150	-	<150	-	-	<150	-	<150	-	<150	-	<150
	TPH C10-36 (Total)	mg/kg	50				<50	-	<50	-	<50	-	-	<50	-	<50	-	<50	-	<50
	TPH C6-C10	mg/kg	10				<10	-	<10	-	<10	-	-	<10	-	<10	-	<10	-	<10
BTEX	Benzene	mg/kg	0.2				<0.2	-	<0.2	-	<0.2	-	-	<0.2	-	<0.2	-	<0.2	-	<0.2
	Toluene	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	-	<0.5	-	<0.5	-	<0.5	-	<0.5
	Ethylbenzene	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	-	<0.5	-	<0.5	-	<0.5	-	<0.5
	Xylene (m & p)	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	-	<0.5	-	<0.5	-	<0.5	-	<0.5
	Xylene (o)	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	-	<0.5	-	<0.5	-	<0.5	-	<0.5
	Xylene Total	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	-	<0.5	-	<0.5	-	<0.5	-	<0.5
	Sum of BTEX	mg/kg	0.2				<0.2	-	<0.2	-	<0.2	-	-	<0.2	-	<0.2	-	<0.2	-	<0.2
Inorganics	Moisture	%	1				4.7	14.4	10.4	17.3	6.7	19.6	14.2	5.9	13.6	7.1	10.8	9.5	18.5	12.3
	pH (Lab)	pH_Units	0.1				5.5	7.5	5.9	7.7	5.4	7.9	8.9	5.7	8.1	5.6	6.1	6.1	7	5.7
Metals	Arsenic	mg/kg	5	20	100	500	<5	<5	6	6	<5	<5	<5	<5	<5	<5	<5	<5	<5	27
	Cadmium	mg/kg	1	3	20	100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Chromium	mg/kg	2				18	25	46	64	24	54	40	20	31	20	26	20	45	44
	Copper	mg/kg	5	100	1000	5000	<5	<5	7	10	<5	8	<5	<5	<5	<5	<5	<5	8	6
	Lead	mg/kg	5	600	300	1500	12	12	16	12	9	12	9	12	10	11	11	10	12	17
	Mercury	mg/kg	0.1	1	15	75	<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
	Nickel	mg/kg	2	60	600	3000	5	14	12	25	6	19	19	6	12	4	5	6	25	10
	Zinc	mg/kg	5	200	7000	35000	18	7	13	11	10	13	10	9	6	7	7	7	14	10
OCP	4,4-DDE	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	-	<0.05	-	<0.05	-	<0.05	-	<0.05
	a-BHC	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	-	<0.05	-	<0.05	-	<0.05	-	<0.05
	Aldrin	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	-	<0.05	-	<0.05	-	<0.05	-	<0.05
	Aldrin + Dieldrin	mg/kg	0.05		10	50	<0.05	-	<0.05	-	<0.05	-	-	<0.05	-	<0.05	-	<0.05	-	<0.05
	b-BHC	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	-	<0.05	-	<0.05	-	<0.05	-	<0.05
	chlordane	mg/kg	0.05		50	250	<0.05	-	<0.05	-	<0.05	-	-	<0.05	-	<0.05	-	<0.05	-	<0.05
	Chlordane (cis)	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	-	<0.05	-	<0.05	-	<0.05	-	<0.05
	Chlordane (trans)	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	-	<0.05	-	<0.05	-	<0.05	-	<0.05
	d-BHC	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	-	<0.05	-	<0.05	-	<0.05	-	<0.05
	DDD	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	-	<0.05	-	<0.05	-	<0.05	-	<0.05
	DDT	mg/kg	0.2				<0.2	-	<0.2	-	<0.2	-	-	<0.2	-	<0.2	-	<0.2	-	<0.2
	DDT+DDE+DDD	mg/kg	0.05		200	1000	<0.05	-	<0.05	-	<0.05	-	-	<0.05	-	<0.05	-	<0.05	-	<0.05
	Dieldrin	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	-	<0.05	-	<0.05	-	<0.05	-	<0.05
	Endosulfan I	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	-	<0.05	-	<0.05	-	<0.05	-	<0.05
	Endosulfan II	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	-	<0.05	-	<0.05	-	<0.05	-	<0.05
	Endosulfan sulphate	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	-	<0.05	-	<0.05	-	<0.05	-	<0.05
	Endrin	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	-	<0.05	-	<0.05	-	<0.05	-	<0.05
	Endrin aldehyde	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	-	<0.05	-	<0.05	-	<0.05	-	<0.05
	Endrin ketone	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	-	<0.05	-	<0.05	-	<0.05	-	<0.05
	g-BHC (Lindane)	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	-	<0.05	-	<0.05	-	<0.05	-	<0.05
	Heptachlor	mg/kg	0.05		10	50	<0.05	-	<0.05	-	<0.05	-	-	<0.05	-	<0.05	-	<0.05	-	<0.05
	Heptachlor (including its epoxide)	mg/kg					<0.1	-	<0.1	-	<0.1	-	-	<0.1	-	<0.1	-	<0.1	-	<0.1
	Heptachlor epoxide	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	-	<0.05	-	<0.05	-	<0.05	-	<0.05
	Hexachlorobenzene	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	-	<0.05	-	<0.05	-	<0.05	-	<0.05
	Methoxychlor	mg/kg	0.2				<0.2	-	<0.2	-	<0.2	-	-	<0.2	-	<0.2	-	<0.2	-	<0.2
OPP	Azinophos methyl	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	-	<0.05	-	<0.05	-	<0.05	-	<0.05
	Bromophos-ethyl	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	-	<0.05	-	<0.05	-	<0.05	-	<0.05
	Carbophenothion	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	-	<0.05	-	<0.05	-	<0.05	-	<0.05
	Chlorpyrifos	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	-	<0.05	-	<0.05	-	<0.05	-	<0.05
	Chlorpyrifos-methyl	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	-	<0.05	-	<0.05	-	<0.05	-	<0.05
	Demeton-S-methyl	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	-	<0.05	-	<0.05	-	<0.05	-	<0.05
	Diazinon	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	-	<0.05	-	<0.05	-	<0.05	-	<0.05
	Dichlorvos	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	-	<0.05	-	<0.05	-	<0.05	-	<0.05
	Dimethoate	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	-	<0.05	-	<0.05	-	<0.05	-	<0.05
	Ethion	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	-	<0.05	-	<0.05	-	<0.05	-	<0.05
	Fenamiphos	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	-	<0.05	-	<0.05	-	<0.05	-	<0.05
	Fenthion	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	-	<0.05	-	<0.05	-	<0.05	-	<0.05
	Malathion	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	-	<0.05	-	<0.05	-	<0.05	-	<0.05
	Methyl parathion	mg/kg	0.2				<0.2	-	<0.2	-	<0.2	-	-	<0.2	-	<0.2	-	<0.2	-	<0.2
	Monocrotophos	mg/kg	0.2				<0.2	-	<0.2	-	<0.2	-	-	<0.2	-	<0.2	-	<0.2	-	<0.2
	Parathion	mg/kg	0.2				<0.2	-	<0.2	-	<0.2	-	-	<0.2	-	<0.2	-	<0.2	-	<0.2
	Pirimphos-ethyl	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	-	<0.05	-	<0.05	-	<0.05	-	<0.05
	Prothiofos	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	-	<0.05	-	<0.05	-	<0.05	-	<0.05
PAH	Acenaphthene	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	-	<0.5	-	<0.5	-	<0.5	-	<0.5
	Acenaphthylene	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	-	<0.5	-	<0.5	-	<0.5	-	<0.5
	Anthracene	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	-	<0.5	-	<0.5	-	<0.5	-	<0.5
	Benz(a)anthracene	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	-	<0.5	-	<0.5	-	<0.5	-	<0.5
	Benzo(a) pyrene	mg/kg	0.5		1	5	<0.5	-	<0.5	-	<0.5	-	-	<0.5	-	<0.5	-	<0.5	-	<0.5
	Benzo(b)fluoranthene	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	-	<0.5	-	<0.5	-	<0.5	-	<0.5
	Benzo(g,h,i)perylene	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	-	<0.5	-	<0.5	-	<0.5	-	<0.5
	Benzo(k)fluoranthene	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	-	<0.5	-	<0.5	-	<0.5	-	<0.5
	Benzoapyrene TEQ	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	-	<0.5	-	<0.5	-	<0.5	-	<0.5
	Chrysene	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	-	<0.5	-	<0.5	-	<0.5	-	<0.5
	Dibenz(a,h)anthracene	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	-	<0.5	-	<0.5	-	<0.5	-	<0.5
	Fluoranthene	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	-	<0.5	-	<0.5	-	<0.5	-	<0.5
	Fluorene	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	-	<0.5	-	<0.5	-	<0.5	-	<0.5
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	-	<0.5	-	<0.5	-	<0.5	-	<0.5
	Naphthalene	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	-	<0.5	-	<0.5	-	<0.5	-	<0.5
	PAHs (Sum of total)	mg/kg			20	100	<8	-	<8	-	<8	-	-	<8	-	<8	-	<8	-	<8
	Phenanthrene	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	-	<0.5	-	<0.5	-	<0.5	-	<0.5
	Pyrene	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	-	<0.5	-	<0.5	-	<0.5	-	<0.5
PCB	PCBs (Sum of total)	mg/kg	0.1		10	50	<0.1	-	<0.1	-	<0.1	-	-	<0.1	-	<0.1	-	<0.1	-	<0.1

						Field_ID	TP11/200213/1.0	TP11/200213/1.5	TP12/200213/0.1	TP12/200213/1.3	TP13/200213/0.1	TP13/200213/1.0	TP14/200213/0.1	TP14/200213/0.5	TP15/200213/0.1	TP15/200213/1.5	TP16/200213/0.1	TP16/200213/1.0	TP17/200213/0.1	TP17/200213/0.5
						SDG	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875
Chem_Group	**ChemName**	**output unit**	**EQL**	**NEPM 1999 EIL**	**NEPM 1999 HIL A**	**NEPM 1999 HIL F**														
	Scheduled Chemicals (NSW, 1999)	mg/kg					-	-	<0.85	-	<0.85	-	<0.85	-	<0.85	-	<0.85	-	<0.85	-
	Scheduled chemicals (NSW Waste 2008)	mg/kg					-	-	<0.85	-	<0.85	-	<0.85	-	<0.85	-	<0.85	-	<0.85	-
PAH/Phenols	Polycylic aromatic hydrocarbons EPA448	mg/kg	0.5				-	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-
IWRG Combined Compounds	Monocylic aromatic hydrocarbons IWRG621	mg/kg					-	-	<2.2	-	<2.2	-	<2.2	-	<2.2	-	<2.2	-	<2.2	-
	Organochlorine pesticides IWRG621	mg/kg					-	-	<1.25	-	<1.25	-	<1.25	-	<1.25	-	<1.25	-	<1.25	-
	Other organochlorine pesticides IWRG621	mg/kg					-	-	<0.85	-	<0.85	-	<0.85	-	<0.85	-	<0.85	-	<0.85	-
	Polycylic aromatic hydrocarbons IWRG621	mg/kg					-	-	<8	-	<8	-	<8	-	<8	-	<8	-	<8	-
TPH	C6 - C9 Fraction	mg/kg	10				-	-	<10	-	<10	-	<10	-	<10	-	<10	-	<10	-
	C10 - C16 Fraction	mg/kg	50				-	-	<50	-	<50	-	<50	-	<50	-	<50	-	<50	-
	C10 - C14 Fraction	mg/kg	50				-	-	<50	-	<50	-	<50	-	<50	-	<50	-	<50	-
	C15 - C28 Fraction	mg/kg	100				-	-	<100	-	<100	-	<100	-	<100	-	<100	-	<100	-
	C16 - C34 Fraction	mg/kg	100				-	-	<100	-	<100	-	160	-	110	-	<100	-	<100	-
	C34 - C40 Fraction	mg/kg	100				-	-	<100	-	<100	-	<100	-	<100	-	<100	-	<100	-
	C10 - C40 Fraction (Sum)	mg/kg	50				-	-	<50	-	<50	-	160	-	110	-	<50	-	<50	-
	C6 - C10 Fraction minus BTEX (F1)	mg/kg	10				-	-	<10	-	<10	-	<10	-	<10	-	<10	-	<10	-
	C29-C36 Fraction	mg/kg	100				-	-	<100	-	<100	-	120	-	<100	-	<100	-	<100	-
	TPH+C10 - C36 (Sum of total)	mg/kg					-	-	<150	-	<150	-	<150	-	<150	-	<150	-	<150	-
	TPH C10-36 (Total)	mg/kg	50				-	-	<50	-	<50	-	120	-	<50	-	<50	-	<50	-
	TPH C6-C10	mg/kg	10				-	-	<10	-	<10	-	<10	-	<10	-	<10	-	<10	-
BTEX	Benzene	mg/kg	0.2				-	-	<0.2	-	<0.2	-	<0.2	-	<0.2	-	<0.2	-	<0.2	-
	Toluene	mg/kg	0.5				-	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-
	Ethylbenzene	mg/kg	0.5				-	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-
	Xylene (m & p)	mg/kg	0.5				-	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-
	Xylene (o)	mg/kg	0.5				-	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-
	Xylene Total	mg/kg	0.5				-	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-
	Sum of BTEX	mg/kg	0.2				-	-	<0.2	-	<0.2	-	<0.2	-	<0.2	-	<0.2	-	<0.2	-
Inorganics	Moisture	%	1				17.3	14.3	7.3	21.3	7.2	14.4	7.4	12.3	10.5	19.8	6.5	13.3	11	15.5
	pH (Lab)	pH_Units	0.1				7.4	7.4	7.1	8.5	5.8	7.8	5.2	6.8	5.7	5	6	8	5.9	6.6
Metals	Arsenic	mg/kg	5	20	100	500	<5	<5	8	<5	7	<5	<5	<5	<5	<5	11	<5	5	<5
	Cadmium	mg/kg	1	3	20	100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Chromium	mg/kg	2				41	22	50	58	42	44	26	50	27	28	44	44	38	36
	Copper	mg/kg	5	100	1000	5000	6	<5	12	7	6	8	11	8	7	<5	7	7	6	7
	Lead	mg/kg	5	600	300	1500	12	8	14	13	15	11	16	10	15	12	16	8	15	9
	Mercury	mg/kg	0.1	1	15	75	<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
	Nickel	mg/kg	2	60	600	3000	16	10	22	23	8	16	10	17	11	8	10	21	13	23
	Zinc	mg/kg	5	200	7000	35000	10	<5	35	8	11	12	29	14	22	5	13	12	11	10
OCP	4,4-DDE	mg/kg	0.05				-	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	a-BHC	mg/kg	0.05				-	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Aldrin	mg/kg	0.05				-	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Aldrin + Dieldrin	mg/kg	0.05		10	50	-	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	b-BHC	mg/kg	0.05				-	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	chlordane	mg/kg	0.05		50	250	-	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Chlordane (cis)	mg/kg	0.05				-	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Chlordane (trans)	mg/kg	0.05				-	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	d-BHC	mg/kg	0.05				-	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	DDD	mg/kg	0.05				-	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	DDT	mg/kg	0.2				-	-	<0.2	-	<0.2	-	<0.2	-	<0.2	-	<0.2	-	<0.2	-
	DDT+DDE+DDD	mg/kg	0.05		200	1000	-	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Dieldrin	mg/kg	0.05				-	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Endosulfan I	mg/kg	0.05				-	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Endosulfan II	mg/kg	0.05				-	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Endosulfan sulphate	mg/kg	0.05				-	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Endrin	mg/kg	0.05				-	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Endrin aldehyde	mg/kg	0.05				-	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Endrin ketone	mg/kg	0.05				-	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	g-BHC (Lindane)	mg/kg	0.05				-	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Heptachlor	mg/kg	0.05		10	50	-	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Heptachlor (including its epoxide)	mg/kg					-	-	<0.1	-	<0.1	-	<0.1	-	<0.1	-	<0.1	-	<0.1	-
	Heptachlor epoxide	mg/kg	0.05				-	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Hexachlorobenzene	mg/kg	0.05				-	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Methoxychlor	mg/kg	0.2				-	-	<0.2	-	<0.2	-	<0.2	-	<0.2	-	<0.2	-	<0.2	-
OPP	Azinophos methyl	mg/kg	0.05				-	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Bromophos-ethyl	mg/kg	0.05				-	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Carbophenothion	mg/kg	0.05				-	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Chlorpyrifos	mg/kg	0.05				-	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Chlorpyrifos-methyl	mg/kg	0.05				-	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Demeton-S-methyl	mg/kg	0.05				-	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Diazinon	mg/kg	0.05				-	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Dichlorvos	mg/kg	0.05				-	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Dimethoate	mg/kg	0.05				-	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Ethion	mg/kg	0.05				-	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Fenamiphos	mg/kg	0.05				-	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Fenthion	mg/kg	0.05				-	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Malathion	mg/kg	0.05				-	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Methyl parathion	mg/kg	0.2				-	-	<0.2	-	<0.2	-	<0.2	-	<0.2	-	<0.2	-	<0.2	-
	Monocrotophos	mg/kg	0.2				-	-	<0.2	-	<0.2	-	<0.2	-	<0.2	-	<0.2	-	<0.2	-
	Parathion	mg/kg	0.2				-	-	<0.2	-	<0.2	-	<0.2	-	<0.2	-	<0.2	-	<0.2	-
	Pirimphos-ethyl	mg/kg	0.05				-	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Prothiofos	mg/kg	0.05				-	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
PAH	Acenaphthene	mg/kg	0.5				-	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-
	Acenaphthylene	mg/kg	0.5				-	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-
	Anthracene	mg/kg	0.5				-	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-
	Benz(a)anthracene	mg/kg	0.5				-	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-
	Benzo(a) pyrene	mg/kg	0.5		1	5	-	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-
	Benzo(b)fluoranthene	mg/kg	0.5				-	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-
	Benzo(g,h,i)perylene	mg/kg	0.5				-	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-
	Benzo(k)fluoranthene	mg/kg	0.5				-	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-
	Benzoapyrene TEQ	mg/kg	0.5				-	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-
	Chrysene	mg/kg	0.5				-	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-
	Dibenz(a,h)anthracene	mg/kg	0.5				-	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-
	Fluoranthene	mg/kg	0.5				-	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-
	Fluorene	mg/kg	0.5				-	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.5				-	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-
	Naphthalene	mg/kg	0.5				-	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-
	PAHs (Sum of total)	mg/kg			20	100	-	-	<8	-	<8	-	<8	-	<8	-	<8	-	<8	-
	Phenanthrene	mg/kg	0.5				-	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-
	Pyrene	mg/kg	0.5				-	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-
PCB	PCBs (Sum of total)	mg/kg	0.1		10	50	-	-	<0.1	-	<0.1	-	<0.1	-	<0.1	-	<0.1	-	<0.1	-

						Field_ID	TP18/210213/0.1	TP18/210213/1.0	TP19/210213/0.1	TP19/210213/0.5	TP20/210213/0.1	TP20/210213/1.0	TP21/200213/0.1	TP21/200213/0.5	TP21/200213/1.0	TP21/200213/1.2	TP22/200213/0.1	TP22/200213/1.0	TP23/200213/0.1	TP23/200213/0.5
						SDG	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875
Chem_Group	**ChemName**	**output unit**	**EQL**	**NEPM 1999 EIL**	**NEPM 1999 HIL A**	**NEPM 1999 HIL F**														
	Scheduled Chemicals (NSW, 1999)	mg/kg					<0.85	-	<0.85	-	<0.85	-	<0.85	-	-	-	<0.85	-	<0.85	-
	Scheduled chemicals (NSW Waste 2008)	mg/kg					<0.85	-	<0.85	-	<0.85	-	<0.85	-	-	-	<0.85	-	<0.85	-
PAH/Phenols	Polycylic aromatic hydrocarbons EPA448	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	-	<0.5	-
IWRG Combined Compounds	Monocylic aromatic hydrocarbons IWRG621	mg/kg					<2.2	-	<2.2	-	<2.2	-	<2.2	-	-	-	<2.2	-	<2.2	-
	Organochlorine pesticides IWRG621	mg/kg					<1.25	-	<1.25	-	<1.25	-	<1.25	-	-	-	<1.25	-	<1.25	-
	Other organochlorine pesticides IWRG621	mg/kg					<0.85	-	<0.85	-	<0.85	-	<0.85	-	-	-	<0.85	-	<0.85	-
	Polycylic aromatic hydrocarbons IWRG621	mg/kg					<8	-	<8	-	<8	-	<8	-	-	-	<8	-	<8	-
TPH	C6 - C9 Fraction	mg/kg	10				<10	-	<10	-	<10	-	<10	-	-	-	<10	-	<10	-
	C10 - C16 Fraction	mg/kg	50				<50	-	<50	-	<50	-	<50	-	-	-	<50	-	<50	-
	C10 - C14 Fraction	mg/kg	50				<50	-	<50	-	<50	-	<50	-	-	-	<50	-	<50	-
	C15 - C28 Fraction	mg/kg	100				<100	-	<100	-	<100	-	<100	-	-	-	<100	-	<100	-
	C16 - C34 Fraction	mg/kg	100				<100	-	<100	-	<100	-	<100	-	-	-	<100	-	<100	-
	C34 - C40 Fraction	mg/kg	100				<100	-	<100	-	<100	-	<100	-	-	-	<100	-	<100	-
	C10 - C40 Fraction (Sum)	mg/kg	50				<50	-	<50	-	<50	-	<50	-	-	-	<50	-	<50	-
	C6 - C10 Fraction minus BTEX (F1)	mg/kg	10				<10	-	<10	-	<10	-	<10	-	-	-	<10	-	<10	-
	C29-C36 Fraction	mg/kg	100				<100	-	<100	-	<100	-	<100	-	-	-	<100	-	<100	-
	TPH+C10 - C36 (Sum of total)	mg/kg					<150	-	<150	-	<150	-	<150	-	-	-	<150	-	<150	-
	TPH C10-36 (Total)	mg/kg	50				<50	-	<50	-	<50	-	<50	-	-	-	<50	-	<50	-
	TPH C6-C10	mg/kg	10				<10	-	<10	-	<10	-	<10	-	-	-	<10	-	<10	-
BTEX	Benzene	mg/kg	0.2				<0.2	-	<0.2	-	<0.2	-	<0.2	-	-	-	<0.2	-	<0.2	-
	Toluene	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	-	<0.5	-
	Ethylbenzene	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	-	<0.5	-
	Xylene (m & p)	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	-	<0.5	-
	Xylene (o)	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	-	<0.5	-
	Xylene Total	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	-	<0.5	-
	Sum of BTEX	mg/kg	0.2				<0.2	-	<0.2	-	<0.2	-	<0.2	-	-	-	<0.2	-	<0.2	-
Inorganics	Moisture	%	1				10.9	20.1	7.5	11.8	6.2	12.1	6.3	12	15.6	15.4	6.5	12	6.7	14.6
	pH (Lab)	pH_Units	0.1				5.8	6.9	5.8	6.1	5.7	8.5	6.2	7.7	8.3	8.2	6.2	8.8	5.4	6.4
Metals	Arsenic	mg/kg	5	20	100	500	<5	<5	<5	6	<5	<5	15	<5	<5	<5	16	<5	<5	<5
	Cadmium	mg/kg	1	3	20	100	<1	<1	<1	<1	<1	<1	2	<1	<1	<1	<1	<1	<1	<1
	Chromium	mg/kg	2				28	25	19	58	28	47	106	48	35	46	72	45	25	42
	Copper	mg/kg	5	100	1000	5000	6	6	<5	7	<5	<5	8	8	6	7	<5	<5	6	7
	Lead	mg/kg	5	600	300	1500	10	8	8	13	9	9	18	8	7	8	15	8	11	7
	Mercury	mg/kg	0.1	1	15	75	<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
	Nickel	mg/kg	2	60	600	3000	8	16	5	13	6	16	16	16	13	15	7	25	6	12
	Zinc	mg/kg	5	200	7000	35000	10	5	5	7	6	6	22	8	7	9	<5	7	8	9
OCP	4,4-DDE	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	-	-	<0.05	-	<0.05	-
	a-BHC	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	-	-	<0.05	-	<0.05	-
	Aldrin	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	-	-	<0.05	-	<0.05	-
	Aldrin + Dieldrin	mg/kg	0.05		10	50	<0.05	-	<0.05	-	<0.05	-	<0.05	-	-	-	<0.05	-	<0.05	-
	b-BHC	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	-	-	<0.05	-	<0.05	-
	chlordane	mg/kg	0.05		50	250	<0.05	-	<0.05	-	<0.05	-	<0.05	-	-	-	<0.05	-	<0.05	-
	Chlordane (cis)	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	-	-	<0.05	-	<0.05	-
	Chlordane (trans)	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	-	-	<0.05	-	<0.05	-
	d-BHC	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	-	-	<0.05	-	<0.05	-
	DDD	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	-	-	<0.05	-	<0.05	-
	DDT	mg/kg	0.2				<0.2	-	<0.2	-	<0.2	-	<0.2	-	-	-	<0.2	-	<0.2	-
	DDT+DDE+DDD	mg/kg	0.05		200	1000	<0.05	-	<0.05	-	<0.05	-	<0.05	-	-	-	<0.05	-	<0.05	-
	Dieldrin	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	-	-	<0.05	-	<0.05	-
	Endosulfan I	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	-	-	<0.05	-	<0.05	-
	Endosulfan II	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	-	-	<0.05	-	<0.05	-
	Endosulfan sulphate	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	-	-	<0.05	-	<0.05	-
	Endrin	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	-	-	<0.05	-	<0.05	-
	Endrin aldehyde	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	-	-	<0.05	-	<0.05	-
	Endrin ketone	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	-	-	<0.05	-	<0.05	-
	g-BHC (Lindane)	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	-	-	<0.05	-	<0.05	-
	Heptachlor	mg/kg	0.05		10	50	<0.05	-	<0.05	-	<0.05	-	<0.05	-	-	-	<0.05	-	<0.05	-
	Heptachlor (including its epoxide)	mg/kg					<0.1	-	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	-	<0.1	-
	Heptachlor epoxide	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	-	-	<0.05	-	<0.05	-
	Hexachlorobenzene	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	-	-	<0.05	-	<0.05	-
	Methoxychlor	mg/kg	0.2				<0.2	-	<0.2	-	<0.2	-	<0.2	-	-	-	<0.2	-	<0.2	-
OPP	Azinophos methyl	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	-	-	<0.05	-	<0.05	-
	Bromophos-ethyl	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	-	-	<0.05	-	<0.05	-
	Carbophenothion	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	-	-	<0.05	-	<0.05	-
	Chlorpyrifos	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	-	-	<0.05	-	<0.05	-
	Chlorpyrifos-methyl	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	-	-	<0.05	-	<0.05	-
	Demeton-S-methyl	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	-	-	<0.05	-	<0.05	-
	Diazinon	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	-	-	<0.05	-	<0.05	-
	Dichlorvos	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	-	-	<0.05	-	<0.05	-
	Dimethoate	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	-	-	<0.05	-	<0.05	-
	Ethion	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	-	-	<0.05	-	<0.05	-
	Fenamiphos	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	-	-	<0.05	-	<0.05	-
	Fenthion	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	-	-	<0.05	-	<0.05	-
	Malathion	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	-	-	<0.05	-	<0.05	-
	Methyl parathion	mg/kg	0.2				<0.2	-	<0.2	-	<0.2	-	<0.2	-	-	-	<0.2	-	<0.2	-
	Monocrotophos	mg/kg	0.2				<0.2	-	<0.2	-	<0.2	-	<0.2	-	-	-	<0.2	-	<0.2	-
	Parathion	mg/kg	0.2				<0.2	-	<0.2	-	<0.2	-	<0.2	-	-	-	<0.2	-	<0.2	-
	Pirimphos-ethyl	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	-	-	<0.05	-	<0.05	-
	Prothiofos	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	-	-	<0.05	-	<0.05	-
PAH	Acenaphthene	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	-	<0.5	-
	Acenaphthylene	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	-	<0.5	-
	Anthracene	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	-	<0.5	-
	Benz(a)anthracene	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	-	<0.5	-
	Benzo(a) pyrene	mg/kg	0.5		1	5	<0.5	-	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	-	<0.5	-
	Benzo(b)fluoranthene	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	-	<0.5	-
	Benzo(g,h,i)perylene	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	-	<0.5	-
	Benzo(k)fluoranthene	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	-	<0.5	-
	Benzoapyrene TEQ	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	-	<0.5	-
	Chrysene	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	-	<0.5	-
	Dibenz(a,h)anthracene	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	-	<0.5	-
	Fluoranthene	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	-	<0.5	-
	Fluorene	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	-	<0.5	-
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	-	<0.5	-
	Naphthalene	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	-	<0.5	-
	PAHs (Sum of total)	mg/kg			20	100	<8	-	<8	-	<8	-	<8	-	-	-	<8	-	<8	-
	Phenanthrene	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	-	<0.5	-
	Pyrene	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	<0.5	-	-	-	<0.5	-	<0.5	-
PCB	PCBs (Sum of total)	mg/kg	0.1		10	50	<0.1	-	<0.1	-	<0.1	-	<0.1	-	-	-	<0.1	-	<0.1	-

						Field_ID	TP24/210213/0.1	TP24/210213/1.2	TP25/210213/0.1	TP25/210213/0.5	TP26/210213/0.1	TP26/210213/1.0	TP27/210213/0.1	TP27/210213/1.4	TP28/210213/0.1	TP28/210213/1.5	TP29/210213/0.1	TP29/210213/0.5	TP30/210213/0.1	TP30/210213/0.5
						SDG	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875
Chem_Group	**ChemName**	**output unit**	**EQL**	**NEPM 1999 EIL**	**NEPM 1999 HIL A**	**NEPM 1999 HIL F**														
	Scheduled Chemicals (NSW, 1999)	mg/kg					<0.85	-	<0.85	-	<0.85	-	<0.85	-	<0.85	-	<0.85	-	<0.85	-
	Scheduled chemicals (NSW Waste 2008)	mg/kg					<0.85	-	<0.85	-	<0.85	-	<0.85	-	<0.85	-	<0.85	-	<0.85	-
PAH/Phenols	Polycylic aromatic hydrocarbons EPA448	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-
IWRG Combined Compounds	Monocylic aromatic hydrocarbons IWRG621	mg/kg					<2.2	-	<2.2	-	<2.2	-	<2.2	-	<2.2	-	<2.2	-	<2.2	-
	Organochlorine pesticides IWRG621	mg/kg					<1.25	-	<1.25	-	<1.25	-	<1.25	-	<1.25	-	<1.25	-	<1.25	-
	Other organochlorine pesticides IWRG621	mg/kg					<0.85	-	<0.85	-	<0.85	-	<0.85	-	<0.85	-	<0.85	-	<0.85	-
	Polycylic aromatic hydrocarbons IWRG621	mg/kg					<8	-	<8	-	<8	-	<8	-	<8	-	<8	-	<8	-
TPH	C6 - C9 Fraction	mg/kg	10				<10	-	<10	-	<10	-	<10	-	<10	-	<10	-	<10	-
	C10 - C16 Fraction	mg/kg	50				<50	-	<50	-	<50	-	<50	-	<50	-	<50	-	<50	-
	C10 - C14 Fraction	mg/kg	50				<50	-	<50	-	<50	-	<50	-	<50	-	<50	-	<50	-
	C15 - C28 Fraction	mg/kg	100				<100	-	<100	-	<100	-	<100	-	<100	-	<100	-	<100	-
	C16 - C34 Fraction	mg/kg	100				<100	-	<100	-	<100	-	<100	-	<100	-	<100	-	<100	-
	C34 - C40 Fraction	mg/kg	100				<100	-	<100	-	<100	-	<100	-	<100	-	<100	-	<100	-
	C10 - C40 Fraction (Sum)	mg/kg	50				<50	-	<50	-	<50	-	<50	-	<50	-	<50	-	<50	-
	C6 - C10 Fraction minus BTEX (F1)	mg/kg	10				<10	-	<10	-	<10	-	<10	-	<10	-	<10	-	<10	-
	C29-C36 Fraction	mg/kg	100				<100	-	<100	-	<100	-	<100	-	<100	-	<100	-	<100	-
	TPH+C10 - C36 (Sum of total)	mg/kg					<150	-	<150	-	<150	-	<150	-	<150	-	<150	-	<150	-
	TPH C10-36 (Total)	mg/kg	50				<50	-	<50	-	<50	-	<50	-	<50	-	<50	-	<50	-
	TPH C6-C10	mg/kg	10				<10	-	<10	-	<10	-	<10	-	<10	-	<10	-	<10	-
BTEX	Benzene	mg/kg	0.2				<0.2	-	<0.2	-	<0.2	-	<0.2	-	<0.2	-	<0.2	-	<0.2	-
	Toluene	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-
	Ethylbenzene	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-
	Xylene (m & p)	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-
	Xylene (o)	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-
	Xylene Total	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-
	Sum of BTEX	mg/kg	0.2				<0.2	-	<0.2	-	<0.2	-	<0.2	-	<0.2	-	<0.2	-	<0.2	-
Inorganics	Moisture	%	1				5.9	13.2	7.4	14.1	13.9	13.2	10.2	14.5	5.3	12.6	8.8	14.7	6.3	12.2
	pH (Lab)	pH_Units	0.1				5.8	6.9	5.5	6.7	5.8	8.4	5.3	8.1	5.7	8.5	6.2	6.3	5.8	5.9
Metals	Arsenic	mg/kg	5	20	100	500	<5	<5	<5	<5	<5	<5	<5	<5	6	<5	<5	<5	<5	<5
	Cadmium	mg/kg	1	3	20	100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Chromium	mg/kg	2				21	38	29	40	42	38	24	35	52	41	22	40	29	63
	Copper	mg/kg	5	100	1000	5000	<5	6	6	7	7	5	7	5	6	<5	<5	7	<5	7
	Lead	mg/kg	5	600	300	1500	10	8	17	8	12	8	10	8	14	9	8	9	10	9
	Mercury	mg/kg	0.1	1	15	75	<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
	Nickel	mg/kg	2	60	600	3000	6	12	7	18	11	13	7	13	8	16	6	13	4	12
	Zinc	mg/kg	5	200	7000	35000	7	9	9	10	9	7	11	7	11	<5	7	10	<5	9
OCP	4,4-DDE	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	a-BHC	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Aldrin	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Aldrin + Dieldrin	mg/kg	0.05		10	50	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	b-BHC	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	chlordane	mg/kg	0.05		50	250	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Chlordane (cis)	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Chlordane (trans)	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	d-BHC	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	DDD	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	DDT	mg/kg	0.2				<0.2	-	<0.2	-	<0.2	-	<0.2	-	<0.2	-	<0.2	-	<0.2	-
	DDT+DDE+DDD	mg/kg	0.05		200	1000	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Dieldrin	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Endosulfan I	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Endosulfan II	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Endosulfan sulphate	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Endrin	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Endrin aldehyde	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Endrin ketone	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	g-BHC (Lindane)	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Heptachlor	mg/kg	0.05		10	50	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Heptachlor (including its epoxide)	mg/kg					<0.1	-	<0.1	-	<0.1	-	<0.1	-	<0.1	-	<0.1	-	<0.1	-
	Heptachlor epoxide	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Hexachlorobenzene	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Methoxychlor	mg/kg	0.2				<0.2	-	<0.2	-	<0.2	-	<0.2	-	<0.2	-	<0.2	-	<0.2	-
OPP	Azinophos methyl	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Bromophos-ethyl	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Carbophenothion	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Chlorpyrifos	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Chlorpyrifos-methyl	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Demeton-S-methyl	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Diazinon	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Dichlorvos	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Dimethoate	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Ethion	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Fenamiphos	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Fenthion	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Malathion	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Methyl parathion	mg/kg	0.2				<0.2	-	<0.2	-	<0.2	-	<0.2	-	<0.2	-	<0.2	-	<0.2	-
	Monocrotophos	mg/kg	0.2				<0.2	-	<0.2	-	<0.2	-	<0.2	-	<0.2	-	<0.2	-	<0.2	-
	Parathion	mg/kg	0.2				<0.2	-	<0.2	-	<0.2	-	<0.2	-	<0.2	-	<0.2	-	<0.2	-
	Pirimphos-ethyl	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
	Prothiofos	mg/kg	0.05				<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-
PAH	Acenaphthene	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-
	Acenaphthylene	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-
	Anthracene	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-
	Benz(a)anthracene	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-
	Benzo(a) pyrene	mg/kg	0.5		1	5	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-
	Benzo(b)fluoranthene	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-
	Benzo(g,h,i)perylene	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-
	Benzo(k)fluoranthene	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-
	Benzoapyrene TEQ	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-
	Chrysene	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-
	Dibenz(a,h)anthracene	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-
	Fluoranthene	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-
	Fluorene	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-
	Naphthalene	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-
	PAHs (Sum of total)	mg/kg			20	100	<8	-	<8	-	<8	-	<8	-	<8	-	<8	-	<8	-
	Phenanthrene	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-
	Pyrene	mg/kg	0.5				<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-
PCB	PCBs (Sum of total)	mg/kg	0.1		10	50	<0.1	-	<0.1	-	<0.1	-	<0.1	-	<0.1	-	<0.1	-	<0.1	-

						Field_ID	TP31/210213/0.1	TP31/210213/0.7	TP32/210213/0.1	TP32/210213/0.5
						SDG	EM1301875	EM1301875	EM1301875	EM1301875
Chem_Group	**ChemName**	**output unit**	**EQL**	**NEPM 1999 EIL**	**NEPM 1999 HIL A**	**NEPM 1999 HIL F**				
	Scheduled Chemicals (NSW, 1999)	mg/kg					<0.85	-	<0.85	-
	Scheduled chemicals (NSW Waste 2008)	mg/kg					<0.85	-	<0.85	-
PAH/Phenols	Polycylic aromatic hydrocarbons EPA448	mg/kg	0.5				<0.5	-	<0.5	-
IWRG Combined Compounds	Monocylic aromatic hydrocarbons IWRG621	mg/kg					<2.2	-	<2.2	-
	Organochlorine pesticides IWRG621	mg/kg					<1.25	-	<1.25	-
	Other organochlorine pesticides IWRG621	mg/kg					<0.85	-	<0.85	-
	Polycylic aromatic hydrocarbons IWRG621	mg/kg					<8	-	<8	-
TPH	C6 - C9 Fraction	mg/kg	10				<10	-	<10	-
	C10 - C16 Fraction	mg/kg	50				<50	-	<50	-
	C10 - C14 Fraction	mg/kg	50				<50	-	<50	-
	C15 - C28 Fraction	mg/kg	100				<100	-	<100	-
	C16 - C34 Fraction	mg/kg	100				<100	-	<100	-
	C34 - C40 Fraction	mg/kg	100				<100	-	<100	-
	C10 - C40 Fraction (Sum)	mg/kg	50				<50	-	<50	-
	C6 - C10 Fraction minus BTEX (F1)	mg/kg	10				<10	-	<10	-
	C29-C36 Fraction	mg/kg	100				<100	-	<100	-
	TPH+C10 - C36 (Sum of total)	mg/kg					<150	-	<150	-
	TPH C10-36 (Total)	mg/kg	50				<50	-	<50	-
	TPH C6-C10	mg/kg	10				<10	-	<10	-
BTEX	Benzene	mg/kg	0.2				<0.2	-	<0.2	-
	Toluene	mg/kg	0.5				<0.5	-	<0.5	-
	Ethylbenzene	mg/kg	0.5				<0.5	-	<0.5	-
	Xylene (m & p)	mg/kg	0.5				<0.5	-	<0.5	-
	Xylene (o)	mg/kg	0.5				<0.5	-	<0.5	-
	Xylene Total	mg/kg	0.5				<0.5	-	<0.5	-
	Sum of BTEX	mg/kg	0.2				<0.2	-	<0.2	-
Inorganics	Moisture	%	1				12.1	14.9	13.9	9.9
	pH (Lab)	pH_Units	0.1				6	8.1	6.4	6.6
Metals	Arsenic	mg/kg	5	20	100	500	<5	<5	<5	<5
	Cadmium	mg/kg	1	3	20	100	<1	<1	<1	<1
	Chromium	mg/kg	2				23	43	70	65
	Copper	mg/kg	5	100	1000	5000	7	7	16	15
	Lead	mg/kg	5	600	300	1500	11	8	42	23
	Mercury	mg/kg	0.1	1	15	75	<0.1	<0.1	0.2	<0.1
	Nickel	mg/kg	2	60	600	3000	8	14	16	30
	Zinc	mg/kg	5	200	7000	35000	18	8	24	18
OCP	4,4-DDE	mg/kg	0.05				<0.05	-	<0.05	-
	a-BHC	mg/kg	0.05				<0.05	-	<0.05	-
	Aldrin	mg/kg	0.05				<0.05	-	<0.05	-
	Aldrin + Dieldrin	mg/kg	0.05		10	50	<0.05	-	<0.05	-
	b-BHC	mg/kg	0.05				<0.05	-	<0.05	-
	chlordane	mg/kg	0.05		50	250	<0.05	-	<0.05	-
	Chlordane (cis)	mg/kg	0.05				<0.05	-	<0.05	-
	Chlordane (trans)	mg/kg	0.05				<0.05	-	<0.05	-
	d-BHC	mg/kg	0.05				<0.05	-	<0.05	-
	DDD	mg/kg	0.05				<0.05	-	<0.05	-
	DDT	mg/kg	0.2				<0.2	-	<0.2	-
	DDT+DDE+DDD	mg/kg	0.05		200	1000	<0.05	-	<0.05	-
	Dieldrin	mg/kg	0.05				<0.05	-	<0.05	-
	Endosulfan I	mg/kg	0.05				<0.05	-	<0.05	-
	Endosulfan II	mg/kg	0.05				<0.05	-	<0.05	-
	Endosulfan sulphate	mg/kg	0.05				<0.05	-	<0.05	-
	Endrin	mg/kg	0.05				<0.05	-	<0.05	-
	Endrin aldehyde	mg/kg	0.05				<0.05	-	<0.05	-
	Endrin ketone	mg/kg	0.05				<0.05	-	<0.05	-
	g-BHC (Lindane)	mg/kg	0.05				<0.05	-	<0.05	-
	Heptachlor	mg/kg	0.05		10	50	<0.05	-	<0.05	-
	Heptachlor (including its epoxide)	mg/kg					<0.1	-	<0.1	-
	Heptachlor epoxide	mg/kg	0.05				<0.05	-	<0.05	-
	Hexachlorobenzene	mg/kg	0.05				<0.05	-	<0.05	-
	Methoxychlor	mg/kg	0.2				<0.2	-	<0.2	-
OPP	Azinophos methyl	mg/kg	0.05				<0.05	-	<0.05	-
	Bromophos-ethyl	mg/kg	0.05				<0.05	-	<0.05	-
	Carbophenothion	mg/kg	0.05				<0.05	-	<0.05	-
	Chlorpyrifos	mg/kg	0.05				<0.05	-	<0.05	-
	Chlorpyrifos-methyl	mg/kg	0.05				<0.05	-	<0.05	-
	Demeton-S-methyl	mg/kg	0.05				<0.05	-	<0.05	-
	Diazinon	mg/kg	0.05				<0.05	-	<0.05	-
	Dichlorvos	mg/kg	0.05				<0.05	-	<0.05	-
	Dimethoate	mg/kg	0.05				<0.05	-	<0.05	-
	Ethion	mg/kg	0.05				<0.05	-	<0.05	-
	Fenamiphos	mg/kg	0.05				<0.05	-	<0.05	-
	Fenthion	mg/kg	0.05				<0.05	-	<0.05	-
	Malathion	mg/kg	0.05				<0.05	-	<0.05	-
	Methyl parathion	mg/kg	0.2				<0.2	-	<0.2	-
	Monocrotophos	mg/kg	0.2				<0.2	-	<0.2	-
	Parathion	mg/kg	0.2				<0.2	-	<0.2	-
	Pirimphos-ethyl	mg/kg	0.05				<0.05	-	<0.05	-
	Prothiofos	mg/kg	0.05				<0.05	-	<0.05	-
PAH	Acenaphthene	mg/kg	0.5				<0.5	-	<0.5	-
	Acenaphthylene	mg/kg	0.5				<0.5	-	<0.5	-
	Anthracene	mg/kg	0.5				<0.5	-	<0.5	-
	Benz(a)anthracene	mg/kg	0.5				<0.5	-	<0.5	-
	Benzo(a) pyrene	mg/kg	0.5		1	5	<0.5	-	<0.5	-
	Benzo(b)fluoranthene	mg/kg	0.5				<0.5	-	<0.5	-
	Benzo(g,h,i)perylene	mg/kg	0.5				<0.5	-	<0.5	-
	Benzo(k)fluoranthene	mg/kg	0.5				<0.5	-	<0.5	-
	Benzoapyrene TEQ	mg/kg	0.5				<0.5	-	<0.5	-
	Chrysene	mg/kg	0.5				<0.5	-	<0.5	-
	Dibenz(a,h)anthracene	mg/kg	0.5				<0.5	-	<0.5	-
	Fluoranthene	mg/kg	0.5				<0.5	-	<0.5	-
	Fluorene	mg/kg	0.5				<0.5	-	<0.5	-
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.5				<0.5	-	<0.5	-
	Naphthalene	mg/kg	0.5				<0.5	-	<0.5	-
	PAHs (Sum of total)	mg/kg			20	100	<8	-	<8	-
	Phenanthrene	mg/kg	0.5				<0.5	-	<0.5	-
	Pyrene	mg/kg	0.5				<0.5	-	<0.5	-
PCB	PCBs (Sum of total)	mg/kg	0.1		10	50	<0.1	-	<0.1	-

Field_ID	SL2/210213/1W
SDG	EM1301875

Chem_Group	ChemName	output unit	EQL	
	Scheduled Chemicals (NSW, 1999)	µg/L		<42.5
	Scheduled chemicals (NSW Waste 2008)	µg/L		<42.5
IWRG Combined Compounds	Monocylic aromatic hydrocarbons IWRG621	ug/L		<9
	Organochlorine pesticides IWRG621	ug/L		<62.5
	Other organochlorine pesticides IWRG621	ug/L		<42.5
	Polycylic aromatic hydrocarbons IWRG621	ug/L		<5
TPH	C6 - C9 Fraction	µg/L	20	<20
	C10 - C16 Fraction	µg/L	100	200
	C10 - C14 Fraction	µg/L	50	100
	C15 - C28 Fraction	µg/L	100	54,700
	C16 - C34 Fraction	µg/L	100	122,000
	C34 - C40 Fraction	µg/L	100	40,900
	C10 - C40 Fraction (Sum)	µg/L	100	163,000
	C6 - C10 Fraction minus BTEX (F1)	µg/L	20	<20
	C29-C36 Fraction	µg/L	50	87,900
	TPH+C10 - C36 (Sum of total)	µg/L		54,800
	TPH C10-36 (Total)	µg/L	50	143,000
	TPH C6-C10	µg/L	20	<20
BTEX	Benzene	µg/L	1	<1
	Toluene	µg/L	2	<2
	Ethylbenzene	µg/L	2	<2
	Xylene (m & p)	µg/L	2	<2
	Xylene (o)	µg/L	2	<2
	Xylene Total	µg/L	2	<2
	Sum of BTEX	µg/L	1	<1
Inorganics	Nitrate (as N)	mg/L	0.01	0.77
	Nitrite (as N)	mg/L	0.01	<0.01
	pH (Lab)	pH_Units	0.01	7.17
	Nitrite + Nitrate as N	mg/L	0.01	0.77
	TDS	mg/L	10	304
Ammonia	Ammonia as N	mg/L	0.01	1.96
OCP	4,4-DDE	µg/L	0.5	<2.5
	a-BHC	µg/L	0.5	<2.5
	Aldrin	µg/L	0.5	<2.5
	Aldrin + Dieldrin	µg/L	0.5	<2.5
	b-BHC	µg/L	0.5	<2.5
	chlordane	µg/L	0.5	<2.5
	Chlordane (cis)	µg/L	0.5	<2.5
	Chlordane (trans)	µg/L	0.5	<2.5
	d-BHC	µg/L	0.5	<2.5
	DDD	µg/L	0.5	<2.5
	DDT	µg/L	2	<10
	DDT+DDE+DDD	µg/L	0.5	<2.5
	Dieldrin	µg/L	0.5	<2.5
	Endosulfan I	µg/L	0.5	<2.5
	Endosulfan II	µg/L	0.5	<2.5
	Endosulfan sulphate	µg/L	0.5	<2.5
	Endrin	µg/L	0.5	<2.5
	Endrin aldehyde	µg/L	0.5	<2.5
	Endrin ketone	µg/L	0.5	<2.5
	g-BHC (Lindane)	µg/L	0.5	<2.5
	Heptachlor	µg/L	0.5	<2.5
	Heptachlor (including its epoxide)	µg/L		<5
	Heptachlor epoxide	µg/L	0.5	<2.5
	Hexachlorobenzene	µg/L	0.5	<2.5
	Methoxychlor	µg/L	2	<10
OPP	Azinophos methyl	µg/L	0.5	<2.5
	Bromophos-ethyl	µg/L	0.5	<2.5
	Carbophenothion	µg/L	0.5	<2.5
	Chlorfenvinphos	µg/L	0.5	<2.5
	Chlorpyrifos	µg/L	0.5	<2.5
	Chlorpyrifos-methyl	µg/L	0.5	<2.5
	Demeton-S-methyl	µg/L	0.5	<2.5
	Diazinon	µg/L	0.5	<2.5
	Dichlorvos	µg/L	0.5	<2.5
	Dimethoate	µg/L	0.5	<2.5
	Ethion	µg/L	0.5	<2.5
	Fenamiphos	µg/L	0.5	<2.5
	Fenthion	µg/L	0.5	<2.5
	Malathion	µg/L	0.5	<2.5
	Methyl parathion	µg/L	2	<10
	Monocrotophos	µg/L	2	<10
	Parathion	µg/L	2	<10
	Pirimphos-ethyl	µg/L	0.5	<2.5
	Prothiofos	µg/L	0.5	<2.5
PAH	Naphthalene	µg/L	5	<5
	PAHs (Sum of total)	µg/L		<5
PCB	PCBs (Sum of total)	µg/L	1	<5

Table 3. Soil Analytical Results - Field Duplicate RPDs

			SDG	EM1301875	EM1301875		EM1301875	EM1301875		EM1301875	EM1301875	
			Field_ID	TP06/190213/0.1	DUPAA/190213/0.1B	RPD	TP12/200213/0.1	DUPAA/200213/0.1B	RPD	TP22/200213/0.1	DUPAA/210213/0.1B	RPD
			Sampled_Date-Time	19/02/2013 15:00	19/02/2013 15:00		20/02/2013 15:00	20/02/2013 15:00		20/02/2013 15:00	20/02/2013 15:00	
Chem_Group	**ChemName**	**Units**	**EQL**									
BTEX	Benzene	mg/kg	0.2	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0
	Toluene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Ethylbenzene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Xylene (m & p)	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Xylene (o)	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Xylene Total	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Sum of BTEX	mg/kg	0.2	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0
Inorganics	Moisture	%	1	10.4	13	22	7.3	7.7	5	6.5	7.3	12
	pH (Lab)	pH_Units	0.1	5.9	5.7	3	7.1	6.5	9	6.2	5.9	5
Metals	Arsenic	mg/kg	5	6	<5	18	8	8	0	**16**	**<5**	**105**
	Cadmium	mg/kg	1	<1	<1	0	<1	<1	0	<1	<1	0
	Chromium	mg/kg	2	46	38	19	50	51	2	72	46	44
	Copper	mg/kg	5	7	8	13	**12**	**<5**	**82**	<5	6	18
	Lead	mg/kg	5	16	14	13	14	13	7	15	14	7
	Mercury	mg/kg	0.1	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0
	Nickel	mg/kg	2	12	11	9	**22**	**8**	**93**	7	8	13
	Zinc	mg/kg	5	13	16	21	**35**	**<5**	**150**	**<5**	**12**	**82**
OCP	4,4-DDE	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	a-BHC	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Aldrin	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Aldrin + Dieldrin	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	b-BHC	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	chlordane	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Chlordane (cis)	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Chlordane (trans)	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	d-BHC	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	DDD	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	DDT	mg/kg	0.2	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0
	DDT+DDE+DDD	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Dieldrin	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Endosulfan I	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Endosulfan II	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Endosulfan sulphate	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Endrin	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Endrin aldehyde	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Endrin ketone	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	g-BHC (Lindane)	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Heptachlor	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Heptachlor epoxide	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Hexachlorobenzene	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Methoxychlor	mg/kg	0.2	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0
OPP	Azinophos methyl	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Bromophos-ethyl	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Carbophenothion	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Chlorpyrifos	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Chlorpyrifos-methyl	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Demeton-S-methyl	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Diazinon	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Dichlorvos	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Dimethoate	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Ethion	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Fenamiphos	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Fenthion	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Malathion	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Methyl parathion	mg/kg	0.2	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0
	Monocrotophos	mg/kg	0.2	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0
	Parathion	mg/kg	0.2	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0
	Pirimphos-ethyl	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Prothiofos	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
PAH	Acenaphthene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Acenaphthylene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Anthracene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Benz(a)anthracene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Benzo(a) pyrene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Benzo(b)fluoranthene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Benzo(g,h,i)perylene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Benzo(k)fluoranthene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Benzoapyrene TEQ	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Chrysene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Dibenz(a,h)anthracene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Fluoranthene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Fluorene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Naphthalene	mg/kg	1	<1	<1	0	<1	<1	0	<1	<1	0
	Naphthalene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Phenanthrene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Pyrene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
PAH/Phenols	Polycylic aromatic hydrocarbons EPA448	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
PCB	PCBs (Sum of total)	mg/kg	0.1	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0
TPH	C6 - C9 Fraction	mg/kg	10	<10	<10	0	<10	<10	0	<10	<10	0
	C10 - C16 Fraction	mg/kg	50	<50	<50	0	<50	<50	0	<50	<50	0
	C10 - C14 Fraction	mg/kg	50	<50	<50	0	<50	<50	0	<50	<50	0
	C15 - C28 Fraction	mg/kg	100	<100	<100	0	<100	<100	0	<100	<100	0
	C16 - C34 Fraction	mg/kg	100	<100	120	18	<100	<100	0	<100	<100	0
	C34 - C40 Fraction	mg/kg	100	<100	<100	0	<100	<100	0	<100	<100	0
	C10 - C40 Fraction (Sum)	mg/kg	50	**<50**	**120**	**82**	<50	<50	0	<50	<50	0
	C6 - C10 Fraction minus BTEX (F1)	mg/kg	10	<10	<10	0	<10	<10	0	<10	<10	0
	C29-C36 Fraction	mg/kg	100	<100	<100	0	<100	<100	0	<100	<100	0
	TPH C10-36 (Total)	mg/kg	50	<50	<50	0	<50	<50	0	<50	<50	0
	TPH C6-C10	mg/kg	10	<10	<10	0	<10	<10	0	<10	<10	0

*RPDs have only been considered where a concentration is greater than 0 times the EQL.
**High RPDs are in bold (Acceptable RPDs for each EQL multiplier range are: 50 (0-10000 x EQL); 50 (10000-10000 x EQL); 50 (> 10000 x EQL))
***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory

			SDG	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875	EM1301875
			Field_ID	FB/190213	FB/200213	FB/210213	RB/190213	RB/200213	RB/210213	TB/190213	TB/200213	TB/210213
			Sampled_Date-Time	19/02/2013 15:00	20/02/2013 15:00	21/02/2013 15:00	19/02/2013 15:00	20/02/2013 15:00	21/02/2013 15:00	19/02/2013 15:00	20/02/2013 15:00	21/02/2013 15:00
			Sample_Type	Field_B	Field_B	Field_B	Rinsate	Rinsate	Rinsate	Trip_B	Trip_B	Trip_B
Chem_Group	**ChemName**	**Units**	**EQL**									
Ammonia	Ammonia as N	mg/l	0.01									
BTEX	Benzene	µg/L	1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Toluene	µg/L	2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Ethylbenzene	µg/L	2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Xylene (m & p)	µg/L	2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Xylene (o)	µg/L	2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Xylene Total	µg/L	2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Sum of BTEX	µg/L	1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Inorganics	Nitrate (as N)	mg/l	0.01									
	Nitrite (as N)	mg/l	0.01									
	pH (Lab)	pH_Units	0.01				**7.36**	**6.84**				
	Nitrite + Nitrate as N	mg/l	0.01									
	TDS	mg/l	10									
Metals	Arsenic	µg/l	1				<1	<1	<1			
	Cadmium	µg/l	0.1				<0.1	<0.1	<0.1			
	Chromium	µg/l	1				<1	<1	<1			
	Copper	µg/l	1				<1	<1	<1			
	Lead	µg/l	1				<1	<1	<1			
	Mercury	µg/l	0.1				<0.1	<0.1	<0.1			
	Nickel	µg/l	1				<1	<1	<1			
	Zinc	µg/l	5				<5	<5	<5			
OCP	4,4-DDE	µg/L	0.5				<0.5	<1	<1			
	a-BHC	µg/L	0.5				<0.5	<1	<1			
	Aldrin	µg/L	0.5				<0.5	<1	<1			
	Aldrin + Dieldrin	µg/L	0.5				<0.5	<1	<1			
	b-BHC	µg/L	0.5				<0.5	<1	<1			
	chlordane	µg/L	0.5				<0.5	<1	<1			
	Chlordane (cis)	µg/L	0.5				<0.5	<1	<1			
	Chlordane (trans)	µg/L	0.5				<0.5	<1	<1			
	d-BHC	µg/L	0.5				<0.5	<1	<1			
	DDD	µg/L	0.5				<0.5	<1	<1			
	DDT	µg/L	2				<2	<4	<4			
	DDT+DDE+DDD	µg/L	0.5				<0.5	<1	<1			
	Dieldrin	µg/L	0.5				<0.5	<1	<1			
	Endosulfan I	µg/L	0.5				<0.5	<1	<1			
	Endosulfan II	µg/L	0.5				<0.5	<1	<1			
	Endosulfan sulphate	µg/L	0.5				<0.5	<1	<1			
	Endrin	µg/L	0.5				<0.5	<1	<1			
	Endrin aldehyde	µg/L	0.5				<0.5	<1	<1			
	Endrin ketone	µg/L	0.5				<0.5	<1	<1			
	g-BHC (Lindane)	µg/L	0.5				<0.5	<1	<1			
	Heptachlor	µg/L	0.5				<0.5	<1	<1			
	Heptachlor epoxide	µg/L	0.5				<0.5	<1	<1			
	Hexachlorobenzene	µg/L	0.5				<0.5	<1	<1			
	Methoxychlor	µg/L	2				<2	<4	<4			
OPP	Azinophos methyl	µg/L	0.5				<0.5	<1	<1			
	Bromophos-ethyl	µg/L	0.5				<0.5	<1	<1			
	Carbophenothion	µg/L	0.5				<0.5	<1	<1			
	Chlorfenvinphos	µg/L	0.5				<0.5	<1	<1			
	Chlorpyrifos	µg/L	0.5				<0.5	<1	<1			
	Chlorpyrifos-methyl	µg/L	0.5				<0.5	<1	<1			
	Demeton-S-methyl	µg/L	0.5				<0.5	<1	<1			
	Diazinon	µg/L	0.5				<0.5	<1	<1			
	Dichlorvos	µg/L	0.5				<0.5	<1	<1			
	Dimethoate	µg/L	0.5				<0.5	<1	<1			
	Ethion	µg/L	0.5				<0.5	<1	<1			
	Fenamiphos	µg/L	0.5				<0.5	<1	<1			
	Fenthion	µg/L	0.5				<0.5	<1	<1			
	Malathion	µg/L	0.5				<0.5	<1	<1			
	Methyl parathion	µg/L	2				<2	<4	<4			
	Monocrotophos	µg/L	2				<2	<4	<4			
	Parathion	µg/L	2				<2	<4	<4			
	Pirimphos-ethyl	µg/L	0.5				<0.5	<1	<1			
	Prothiofos	µg/L	0.5				<0.5	<1	<1			
PAH	Acenaphthene	µg/L	1	<1	<1	<1	<1	<1	<1			
	Acenaphthylene	µg/L	1	<1	<1	<1	<1	<1	<1			
	Anthracene	µg/L	1	<1	<1	<1	<1	<1	<1			
	Benz(a)anthracene	µg/L	1	<1	<1	<1	<1	<1	<1			
	Benzo(a) pyrene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			
	Benzo(b)fluoranthene	µg/L	1	<1	<1	<1	<1	<1	<1			
	Benzo(g,h,i)perylene	µg/L	1	<1	<1	<1	<1	<1	<1			
	Benzo(k)fluoranthene	µg/L	1	<1	<1	<1	<1	<1	<1			
	Benzoapyrene TEQ	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			
	Chrysene	µg/L	1	<1	<1	<1	<1	<1	<1			
	Dibenz(a,h)anthracene	µg/L	1	<1	<1	<1	<1	<1	<1			
	Fluoranthene	µg/L	1	<1	<1	<1	<1	<1	<1			
	Fluorene	µg/L	1	<1	<1	<1	<1	<1	<1			
	Indeno(1,2,3-c,d)pyrene	µg/L	1	<1	<1	<1	<1	<1	<1			
	Naphthalene	µg/L	1	<5	<5	<5	<5	<5	<5	<5	<5	<5
	Phenanthrene	µg/L	1	<1	<1	<1	<1	<1	<1			
	Pyrene	µg/L	1	<1	<1	<1	<1	<1	<1			
PAH/Phenols	Polycylic aromatic hydrocarbons EPA448	ug/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			
PCB	PCBs (Sum of total)	µg/L	1				<1	<2	<2			
TPH	C6 - C9 Fraction	µg/L	20	<20	<20	<20	<20	<20	<20	<20	<20	<20
	C10 - C16 Fraction	µg/L	100	<100	<100	<100	<100	<100	<100			
	C10 - C14 Fraction	µg/L	50	<50	<50	<50	<50	<50	<50			
	C15 - C28 Fraction	µg/L	100	<100	<100	<100	<100	<100	<100			
	C16 - C34 Fraction	µg/L	100	<100	<100	<100	<100	<100	<100			
	C34 - C40 Fraction	µg/L	100	<100	<100	<100	<100	<100	<100			
	C10 - C40 Fraction (Sum)	µg/L	100	<100	<100	<100	<100	<100	<100			
	C6 - C10 Fraction minus BTEX (F1)	µg/L	20	<20	<20	<20	<20	<20	<20	<20	<20	<20
	C29-C36 Fraction	µg/L	50	<50	<50	<50	<50	<50	<50			
	TPH C10-36 (Total)	µg/L	50	<50	<50	<50	<50	<50	<50			
	TPH C6-C10	µg/L	20	<20	<20	<20	<20	<20	<20	<20	<20	<20

Appendix I

Laboratory results certificates
including asbestos certificate

PB 100 YEARS ABN 84 797 323 433

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❑ **Bendigo** 36 Wattle Street, PO Box 2750 Bendigo VIC, 3554 Tel: (03) 5441 6552 Fax: (03) 5441 6694

Chain Order

Job Title:

PB Job Number: 2189202A

Job Location: MICKLEHAM

Project Manager: C. HOWELL

Laboratory Name: ALS

Address: 4-Westall Rd SPRINGVALE

Fax Number:

Phone Number: 8549 9600

Contact Name: Bronwyn Sheen

Delivery Method: Courier

Quote Number:

Terms of Business	PB	Other	Checked
	✓		

Results Expected by/on: Std.

Fax Results to: chowell@pb.com.

Fax Number: C. HOWELL

Phone Number: 9861 2454

Spreadsheet of Results Required: (Y) / N

Format: ESDAT

Turnaround Time Required: Standard

Invoice to: C. HOWELL

Comments:

SCANNED

Date Sampled	Time	Sample I.D.	Container Size	Sample Location	Medium*	Preservative Type	Filtered (X)	TPH	BTEX	PAH's	OC/OP/PCB's	Metals**	PH				HOLD		Initials	Comments/Additional Information and/or Analysis Required
19/02/13	1	TP04/190213/0.1	1 x Jar		S			✓	✓	✓	✓	✓	✓						50°C	
	2	TP04/190213/0.5			S							✓	✓						50°C	
	3	TP04/190213/1.0			S												✓		50°C	
	4	TP04/190213/1.3															✓		50°C	
	5	TP05/190213/0.1						✓	✓	✓	✓	✓	✓						50°C	
	6	TP05/190213/0.5															✓		50°C	
	7	TP05/190213/1.0										✓	✓						50°C	
	8	TP05/190213/1.5															✓		50°C	
	9	TP06/190213/0.1						✓	✓	✓	✓	✓	✓						50°C	
	10	TP06/190213/0.5										✓	✓				✓		50°C	
	11	TP06/190213/1.0															✓		50°C	
	12	TP06/190213/1.5															✓		50°C	

Samples sent to lab for
Micro Nitrate BOD pH
Colour Turbidity HP
Other Cu
Date 22/2

Environmental Division
Melbourne
Work Order
17:44 22/2/13 RT
EM1301875

Telephone : +61-3-8549 9600

Relinquished by:	Relinquished by:	Relinquished by:
Date & Time: 22/2/13	Date & Time:	Date & Time:
Company: PB	Company:	Company:
Signature:	Signature:	Signature:
Received in Good Order & Condition by (Name): Raymond	Received in Good Order & Condition by (Name):	Received in Good Order & Condition by (Name):
Date & Time: 22/2/13 15:20	Date & Time:	Date & Time:
Company: ALS	Company:	Company:
Signature:	Signature:	Signature:

Medium*: S = Soil, W = Water, V = Vapour

Legend**: (circle the following to be tested)
Metals: Al (As) Be (Cd) Co (Cr) (Cu) Fe (Hg)
Li Mg Mn (Ni) (Pb) Se Sn V (Zn)

Samples on Ice: ☑ Yes ☐ No

Please fax back a signed copy when samples are received at the laboratory

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PB 100 YEARS ABN 84 797 323 433

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❑ **Bendigo** 38 Wattle Street, PO Box 2750 Bendigo VIC, 3554 Tel: (03) 5441 6552 Fax: (03) 5441 6694

Chai

Order No

Job Title:	PB Job Number: 2189202A	Job Location: MICKLEHAM	Project Manager: C. HOWELL
Laboratory Name: ALS	Terms of Business: PB ✓	Other	Results Expected by/on: Std.
Address: 4 Westall Rd SPRINGVALE			Fax Results to: C. HOWELL
Fax Number:			Fax Number: chowell@pb.com.au
Phone Number: 8549 9600			Phone Number: 9861 2454
Contact Name: Bronwyn Sheen			Spreadsheet of Results Required: Y / N
Delivery Method: Courier			Format: ESDAT
Quote Number:			Turnaround Time Required: Standard
			Invoice to: C. HOWELL
			Comments:

Date Sampled	Time	Sample I.D.	Container Size	Sample Location	Medium*	Preservative Type	Filtered (X)	TPH	BTEX	PAH's	OC/OP/PCB's	Metals**	PFF			HOLD		Initials	Comments/Additional Information and/or Analysis Required
19/02/13	13	TP07/190213/0.1	1xJar		S			✓	✓	✓	✓	✓	✓					SC	
	14	TP07/190213/0.5										✓	✓					SO'C	
	15	TP07/190213/1.0														✓		SO'C	
	16	TP07/190213/1.5										✓	✓					SO'C	
	17	TP08/190213/0.1						✓	✓	✓	✓	✓	✓					SO'C	
	18	TP08/190213/0.5														✓		SO'C	
	19	TP08/190213/1.0										✓	✓					SO'C	
	20	TP08/190213/1.5														✓		SO'C	
	21	TP09/190213/0.1						✓	✓	✓	✓	✓	✓					SO'C	
	22	TP09/190213/0.5										✓	✓					SO'C	
	23	TP09/190213/1.0														✓		SO'C	
	24	TP09/190213/1.5														✓		SO'C	

Relinquished by: S. O'CONNOR	Relinquished by:	Relinquished by:	Medium*: S = Soil, W = Water, V = Vapour
Date & Time: 22/2/13	Date & Time:	Date & Time:	Legend**: (circle the following to be tested)
Company: PB	Company:	Company:	Metals: Al (As) Be (Cd) Co (Cr) (Cu) Fe Hg
Signature:	Signature:	Signature:	Li Mg Mn (Ni) (Pb) Se Sn V (Zn)
Received in Good Order & Condition by (Name): Raymond	Received in Good Order & Condition by (Name):	Received in Good Order & Condition by (Name):	Samples on Ice: ☑ Yes ☐ No
Date & Time: 22/2/13 15:20	Date & Time:	Date & Time:	***Please fax back a signed copy when samples are received at the laboratory***
Company: ALS	Company:	Company:	
Signature:	Signature:	Signature:	

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❑ **Bendigo** 36 Wattle Street, PO Box 2750 Bendigo VIC, 3554 Tel: (03) 5441 6552 Fax: (03) 5441 6694

Chain of Custody

Order No: 51168

Job Title:

PB Job Number: 289202A

Job Location: MICKLEHAM

Laboratory Name: ALS
Address: 4 Westall Rd SPRINGVALE
Fax Number:
Phone Number: 8549 9600
Contact Name: Bronwyn Sheen
Delivery Method: Courier
Quote Number:

Terms of Business	PB	Other	Checked
	✓		

Project Manager: C. HOWELL
Results Expected by/on: ASAP
Fax Results to: C. Howell
Fax Number: chowell@pb.com.au
Phone Number: 9861 2454
Spreadsheet of Results Required: Y / N
Format: ESdat
Turnaround Time Required: Standard
Invoice to: C. HOWELL
Comments:

Date Sampled	Time	Sample I.D.	Container Size	Sample Location	Medium*	Preservative Type	Filtered (X)	TPH	BTEX	PAH's	OC/OP/PCB's	Metals**	pH			HOLD		Initials	Comments/Additional Information and/or Analysis Required
19/02/13	25	TP01/190213/0.1	1 x Jar		S			✓	✓	✓	✓	✓	✓					SC	
	26	TP01/190213/0.5	↓		S							✓	✓					SC	
	27	TP01/190213/1.0	↓		S							✓	✓					SC	
	28	TP01/190213/1.5	1 x Jar		S							✓	✓					SC	
	29	RB/190213	1x Amber 1x Plastic (large) 2x Vials		W			✓	✓	✓	✓	✓	✓					SC	
	30	FB/190213	1x Amber 2x Vials		W			✓	✓	✓								SC	
	31	TB/190213	2x Vials		W			✓	✓	✓								SC	
↓	32	DUPAA/190213/0.1B	1x Jar		S			✓	✓	✓	✓	✓	✓					SC	
20/02/13	33	TP02/200213/0.1	↓		↓			✓	✓	✓	✓	✓	✓					SC	
↓	34	TP02/200213/0.5	↓		↓							✓	✓					SC	
	35	TP02/200213/1.0	↓		↓							✓	✓					SC	
	36	TP02/200213/1.5	↓		↓							✓	✓					SC	

Relinquished by:	Relinquished by:	Relinquished by:
Date & Time: 22/2/13	Date & Time:	Date & Time:
Company: PB	Company:	Company:
Signature:	Signature:	Signature:
Received in Good Order & Condition by (Name): Raymond	Received in Good Order & Condition by (Name):	Received in Good Order & Condition by (Name):
Date & Time: 22/2/13 15:20	Date & Time:	Date & Time:
Company: ALS	Company:	Company:
Signature:	Signature:	Signature:

Medium*: S = Soil, W = Water, V = Vapour

Legend**: (circle the following to be tested)
Metals: Al (As) Be (Cd) Co (Cr) (Cu) Fe (Hg)
Li Mg Mn (Ni) (Pb) Se Sn V (Zn)

Samples on Ice: ☑ Yes ☐ No

Please fax back a signed copy when samples are received at the laboratory

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❑ **Bendigo**
36 Wattle Street, PO Box 2750 Bendigo VIC, 3554
Tel: (03) 5441 6552 Fax: (03) 5441 6694

Chain of Custody

Order No: 51169

Job Title:

Laboratory Name: ALS
Address: 4 Westall Rd SPRINGVALE
Fax Number:
Phone Number: 8549 9600
Contact Name: Bronwyn Sheen
Delivery Method: COURIER
Quote Number:

PB Job Number: 2180202A
Job Location: Mickleham

Terms of Business	PB	Other	Checked
	✓		

Project Manager: C. Howell
Results Expected by/on: Std.
Fax Results to: C. Howell
Fax Number: chowell@pb.com.au
Phone Number: 9861 2454
Spreadsheet of Results Required: (Y) / N
Format: ESDat
Turnaround Time Required: Standard
Invoice to: C. Howell
Comments:

Date Sampled	Time	Sample I.D.	Container Size	Sample Location	Medium*	Preservative Type	Filtered (X)	TPH	BTEX	PAH's	OC/OP/PCB's	Metals**	pH			HOLD		Initials	Comments/Additional Information and/or Analysis Required
20/2/13	37	TP03/200213/0.1	4x Jar		S			✓	✓	✓	✓	✓	✓					SOC	
	38	TP03/200213/0.5										✓	✓					SOC	
	39	TP03/200213/1.0										✓	✓					SOC	
	40	TP03/200213/1.5										✓	✓					SOC	
	41	TP14/200213/0.1						✓	✓	✓	✓	✓	✓					SOC	
	42	TP14/200213/0.5										✓	✓			X		SOC	
	43	TP14/200213/1.0														✓		SOC	
	44	TP14/200213/1.4														✓		SOC	
	45	TP12/200213/0.1						✓	✓	✓	✓	✓	✓					SOC	
	46	TP12/200213/0.5														✓		SOC	
	47	TP12/200213/1.0														✓		SOC	
	48	TP12/200213/1.3										✓	✓					SOC	

Relinquished by:	Relinquished by:	Relinquished by:
S. O'Connor		
Date & Time: 22/2/13	Date & Time:	Date & Time:
Company: PB	Company:	Company:
Signature:	Signature:	Signature:
Received in Good Order & Condition by (Name): Raymond	Received in Good Order & Condition by (Name):	Received in Good Order & Condition by (Name):
Date & Time: 22/2/13 15:20	Date & Time:	Date & Time:
Company: ALS	Company:	Company:
Signature:	Signature:	Signature:

Medium*: S = Soil, W = Water, V = Vapour

Legend**: (circle the following to be tested)

Metals: Al (As) Be (Cd) Co (Cr) (Cu) Fe Hg
Li Mg Mn (Ni) (Pb) Se Sn V (Zn)

Samples on Ice: ☑ Yes ☐ No

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Chain of Custody

Order No: 51170

Job Title:

PB Job Number: 2189202A

Job Location: Mickleham

Project Manager: C. Howell

Results Expected by/on: Std.

Laboratory Name: ALS

Address: 4-Westall Rd SPRINGVALE

Fax Results to: C. Howell

Fax Number:

Phone Number: 9861 2484

Spreadsheet of Results Required: (Y) / N

Phone Number: 8549 9600

Contact Name: Bronwyn Sheen

Format: ESDat

Delivery Method: COURIER

Turnaround Time Required: Standard

Quote Number:

Invoice to: C. Howell

Comments:

Terms of Business	PB	Other	Checked
	✓		

Date Sampled	Time	Sample I.D.	Container Size	Sample Location	Medium*	Preservative Type	Filtered (X)	TPH	BTEX	PAH's	OC/OP/PCB's	Metals**	pH			HOLD	Initials	Comments/Additional Information and/or Analysis Required
20/02/13	49	TP15/200213/0.1	1xJar		S			✓	✓	✓	✓	✓	✓			✓	SOC	
	50	TP15/200213/0.5														✓	SOC	
	51	TP15/200213/1.0										✓				✓	SOC	
	52	TP15/200213/1.5										✓	✓				SOC	
	53	TP13/200213/0.1						✓	✓	✓	✓	✓	✓				SOC	
	54	TP13/200213/0.5														✓	SOC	
	55	TP13/200213/1.0										✓	✓				SOC	
	56	TP13/200213/1.5														✓	SOC	
	57	TP10/200213/0.1						✓	✓	✓	✓	✓	✓				SOC	
	58	TP10/200213/0.5										✗	✓				SOC	
	59	TP10/200213/1.0														✓	SOC	
	60	TP10/200213/1.5														✓	SOC	

Relinquished by: S. O'Connor	Relinquished by:	Relinquished by:
Date & Time: 22/2/13	Date & Time:	Date & Time:
Company: PB	Company:	Company:
Signature:	Signature:	Signature:
Received in Good Order & Condition by (Name): Raymond	Received in Good Order & Condition by (Name):	Received in Good Order & Condition by (Name):
Date & Time: 22/2/13 15:20	Date & Time:	Date & Time:
Company: ALS	Company:	Company:
Signature:	Signature:	Signature:

Medium*: S = Soil, W = Water, V = Vapour

Legend**: (circle the following to be tested)

Metals: Al (As) Be (Cd) Co (Cr) (Cu) Fe (Hg)
Li Mg Mn (Ni) (Pb) Se Sn V (Zn)

Samples on Ice: ☑ Yes ☐ No

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❑ **Bendigo** 36 Wattle Street, PO Box 2750 Bendigo VIC, 3554 Tel: (03) 5441 6552 Fax: (03) 5441 6694

Chain of Custody

Order No: 51171

Job Title:	PB Job Number: 280202A	Job Location: Mickleham	Project Manager: C. Howell
Laboratory Name: ALS			Results Expected by/on: Std.
Address: 4 Westall Rd SPRINGVALE			Fax Results to: Chowell@pb.com.au
Fax Number:			Fax Number: C. Howell
Phone Number: 85499600			Phone Number: 9861 2454
Contact Name: Bronwyn Sheen			Spreadsheet of Results Required: (Y) / N
Delivery Method: COURIER			Format: ESDat
Quote Number:			Turnaround Time Required: Standard
			Invoice to: C. Howell
			Comments:

Terms of Business	PB	Other	Checked
	✓		

Date Sampled	Time	Sample I.D.	Container Size	Sample Location	Medium*	Preservative Type	Filtered (X)	TPH	BTEX	PAHs	OC/OP/PCB's	Metals**	Hg			HOLD		Initials	Comments/Additional Information and/or Analysis Required
20/02/13	61	TP11/200213/0.1	1xJar		S			✓	✓	✓	✓	✓	✓				✓	Sd 2	
	62	TP11/200213/0.5																Sd 2	
	63	TP11/200213/1.0										✓	✓					Sd 2	
	64	TP11/200213/1.5										✓	✓					Sd 2	
	65	TP16/200213/0.1						✓	✓	✓	✓	✓	✓					Sd 2	
	66	TP16/200213/0.5																Sd 2	
	67	TP16/200213/1.0										✓	✓					Sd 2	
	68	TP17/200213/0.1						✓	✓	✓	✓	✓	✓					Sd 2	
	69	TP17/200213/0.5										✓	✓					Sd 2	
	70	TP21/200213/0.1						✓	✓	✓	✓	✓	✓					Sd 2	
	71	TP21/200213/0.5										✓	✓					Sd 2	
	72	TP21/200213/1.0										✓	✓					Sd 2	

Relinquished by: J. O'Connor	Relinquished by:	Relinquished by:	Medium*: S = Soil, W = Water, V = Vapour
Date & Time: 22/2/13	Date & Time:	Date & Time:	Legend**: (circle the following to be tested)
Company: PB	Company:	Company:	Metals: Al (As) Be (Cd) Co (Cr) (Cu) Fe (Hg)
Signature:	Signature:	Signature:	Li Mg Mn (Ni) (Pb) Se Sn V (Zn)
Received in Good Order & Condition by (Name): Raymond	Received in Good Order & Condition by (Name):	Received in Good Order & Condition by (Name):	Samples on Ice: ☑ Yes ☐ No
Date & Time: 22/2/13 15:20	Date & Time:	Date & Time:	***Please fax back a signed copy when samples are received at the laboratory***
Company: ALS	Company:	Company:	
Signature:	Signature:	Signature:	

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❑ **Sydney** Level 27, Ernst & Young Centre 680 George Street, GPO Box 5394, Sydney NSW 2000 Tel: (02) 9272 5100 Fax: (02) 9272 5101
❑ **Bendigo** 36 Wattle Street, PO Box 2750 Bendigo VIC, 3554 Tel: (03) 5441 6552 Fax: (03) 5441 6694

Chain of Custody

Order No: 51172

Job Title:	PB Job Number: 2189202A	Job Location: Mickleham	Project Manager: C. Howell
Laboratory Name: ALS	Terms of Business: PB ✓	Other	Checked	Results Expected by/on: Std.
Address: 4 Westall Rd SPRINGVALE			Fax Results to: C. Howell
Fax Number:			Fax Number: choweli@pb.com.au
Phone Number: 8549 9600			Phone Number: 9861 2455
Contact Name: Boonwya Sheen			Spreadsheet of Results Required: (Y) N
Delivery Method: COURIER			Format: ESDat
Quote Number:			Turnaround Time Required: Standard
			Invoice to: C. Howell
			Comments:

Date Sampled	Time	Sample I.D.	Container Size	Sample Location	Medium*	Preservative Type	Filtered (X)	TPH	BTEX	PAH's	OC/OP/PCB's	Metals**	RCI			HOLD		Initials	Comments/Additional Information and/or Analysis Required
20/02/13	73	TP21/200213/1.2	1xJar		S						X	✓	✓					SOC	
	74	TP23/200213/0.1						✓	✓	✓	✓	✓	✓					SOC	
	75	TP23/200213/0.5										✓	✓					SOC	
	76	TP23/200213/1.0														✓		SOC	
	77	TP23/200213/1.5														✓		SOC	
	78	TP22/200213/0.1						✓	✓	✓	✓	✓	✓					SOC	
	79	TP22/200213/0.5														✓		SOC	
	80	TP22/200213/1.0	1xJar		S							✓	✓					SOC	
20/02/13	81	RB/200213	1x Large Plastic 1x Amber 2x Vials 1x Plastic Sealy		W			✓	✓	✓	✓	✓	✓					SOC	
	82	TB/200213			W			✓	✓	✓								SOC	
	83	FB/200213			W			✓	✓	✓								SOC	
	84	DUPAA/200213/0.1B	1xJar		S			✓	✓	✓	✓	✓	✓					SOC	

Relinquished by: S. O'Connor	Relinquished by:	Relinquished by:
Date & Time: 22/2/13	Date & Time:	Date & Time:
Company: PB	Company:	Company:
Signature:	Signature:	Signature:
Received in Good Order & Condition by (Name): Raymond	Received in Good Order & Condition by (Name):	Received in Good Order & Condition by (Name):
Date & Time: 22/2/13 15:20	Date & Time:	Date & Time:
Company: ALS	Company:	Company:
Signature:	Signature:	Signature:

Medium*: S = Soil, W = Water, V = Vapour

Legend**: (circle the following to be tested)

Metals: Al (As) Be (Cd) Co (Cr) (Cu) Fe (Hg) Li Mg Mn (Ni) (Pb) Se Sn V (Zn)

Samples on Ice: ☑ Yes ☐ No

Please fax back a signed copy when samples are received at the laboratory

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Chain of Custody

Order No: 51173

Job Title:

Laboratory Name: ALS

Address: 4 Westall Rd SPRINGVALE

Fax Number:

Phone Number: 8549 9600

Contact Name: Bronwyn Sheen

Delivery Method: COURIER

Quote Number:

PB Job Number: 2189202A

Job Location: Middleham

Terms of Business	PB	Other	Checked
	✓		

Project Manager: C. Howell

Results Expected by/on: Std.

Fax Results to: C. Howell

Fax Number: chowell@pb.com.au

Phone Number: 9861 2454

Spreadsheet of Results Required: (Y) / N

Format: ESDat

Turnaround Time Required: Standard

Invoice to: C. Howell

Comments:

Date Sampled	Time	Sample I.D.	Container Size	Sample Location	Medium*	Preservative Type	Filtered (X)	TPH	BTEX	PAH's	OC/OP/PCB's	Metals**	pH			HOLD		Initials	Comments/Additional Information and/or Analysis Required
21/02/13	85	TP32/210213/0.1	1x Jar		S			✓	✓	✓	✓	✓	✓					SOC	
	86	TP32/210213/0.5										✓	✓					SOC	
	87	TP31/210213/0.1						✓	✓	✓	✓	✓	✓					SOC	
	88	TP31/210213/0.5														✓		SOC	
	89	TP31/210213/0.7										✓	✓					SOC	
	90	TP29/210213/0.1						✓	✓	✓	✓	✓	✓					SOC	
	91	TP29/210213/0.5										✓	✓					SOC	
	92	TP29/210213/1.0														✓		SOC	
	93	TP29/210213/1.5														✓		SOC	
	94	TP30/210213/0.1						✓	✓	✓	✓	✓	✓					SOC	
	95	TP30/210213/0.5										✓	✓					SOC	
	96	TP30/210213/1.0														✓		SOC	

Relinquished by: S. O'Connor	Relinquished by:	Relinquished by:
Date & Time: 22/02/13	Date & Time:	Date & Time:
Company: PB	Company:	Company:
Signature:	Signature:	Signature:
Received in Good Order & Condition by (Name): Raymond	Received in Good Order & Condition by (Name):	Received in Good Order & Condition by (Name):
Date & Time: 22/2/13 15:20	Date & Time:	Date & Time:
Company: ALS	Company:	Company:
Signature:	Signature:	Signature:

Medium*: S = Soil, W = Water, V = Vapour

Legend**: (circle the following to be tested)

Metals: Al (As) Be (Cd) Co (Cr) (Cu) Fe (Hg) Li Mg Mn (Ni) (Pb) Se Sn V (Zn)

Samples on Ice: ☑ Yes ☐ No

Please fax back a signed copy when samples are received at the laboratory

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Chain of Custody

Order No: 51174

Job Title:	
Laboratory Name:	ALS
Address:	4 - Westall Rd SPRINGVALE
Fax Number:	
Phone Number:	8549 9600
Contact Name:	Brown Sheen
Delivery Method:	COURIER
Quote Number:	

PB Job Number:	Job Location:
2189202A	Micklehamm

Terms of Business	PB	Other	Checked
	✓		

Project Manager:	C. Howell
Results Expected by/on:	Std.
Fax Results to:	C. Howell
Fax Number:	chowell@pb.com.au
Phone Number:	9861 2454
Spreadsheet of Results Required:	(Y) / N
Format:	ESDat
Turnaround Time Required:	Standard
Invoice to:	C. Howell
Comments:	

Date Sampled	Time	Sample I.D.	Container Size	Sample Location	Medium*	Preservative Type	Filtered (X)	TPH	BTEX	PAH's	OC/OP/PCB's	Metals**	pH			HOLD	Initials	Comments/Additional Information and/or Analysis Required
21/02/13	97	TP30/210213/1.5	1x Jar		S											✓	SC	
	98	TP27/210213/0.1						✓	✓	✓	✓	✓	✓				SC	
	99	TP27/210213/0.5														✓	SC	
	100	TP27/210213/1.0														✓	SC	
	101	TP27/210213/1.4										✓	✓				SC	
	102	TP26/210213/0.1						✓	✓	✓	✓	✓	✓				SC	
	103	TP26/210213/0.5														✓	SC	
	104	TP26/210213/1.0										✓	✓				SC	
	105	TP26/210213/1.2														✓	SC	
	106	TP24/210213/0.1						✓	✓	✓	✓	✓	✓				SC	
	107	TP24/210213/0.5														✓	SC	
	108	TP24/210213/1.2										✓	✓				SC	

Relinquished by:	Relinquished by:	Relinquished by:
S. O'Connor		
Date & Time: 22/2/13	Date & Time:	Date & Time:
Company: PB	Company:	Company:
Signature:	Signature:	Signature:
Received in Good Order & Condition by (Name): Raymond	Received in Good Order & Condition by (Name):	Received in Good Order & Condition by (Name):
Date & Time: 22/2/13 15:20	Date & Time:	Date & Time:
Company: ALS	Company:	Company:
Signature:	Signature:	Signature:

Medium*: S = Soil, W = Water, V = Vapour

Legend**: (circle the following to be tested)

Metals: Al (As) Be (Cd) Co (Cr) (Cu) Fe (Hg)
Li Mg Mn (Ni) (Pb) Se Sn V (Zn)

Samples on Ice: ☑ Yes ☐ No

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Chain of Custody

Order No: 51175

Job Title:	PB Job Number: 21892024	Job Location: Mickleham	Project Manager: C. Howell
Laboratory Name: ALS			Results Expected by/on: Std.
Address: 4 Westall Rd SPRINGVALE			Fax Results to: C. Howell
Fax Number:			Fax Number: chowell@pb.com.au
Phone Number: 8549 9600			Phone Number: 9861 2454
Contact Name: Bronwyn Sheen			Spreadsheet of Results Required: (Y) / N
Delivery Method: COURIER			Format: ESDat
Quote Number:			Turnaround Time Required: Standard
			Invoice to: C. Howell
			Comments:

Terms of Business	PB	Other	Checked
	✓		

Date Sampled	Time	Sample I.D.	Container Size	Sample Location	Medium*	Preservative Type	Filtered (X)	TPH	BTEX	PAH's	OC/OP/PCB's	Metals**	pH			HOLD		Initials	Comments/Additional Information and/or Analysis Required
21/02/13	109	TP19/210213/0.1	1x Jar		S			✓	✓	✓	✓	✓	✓					SOC	
	110	TP19/210213/0.5										✓	✓					SOC	
	111	TP19/210213/1.0														✓		SOC	
	112	TP19/210213/1.5														✓		SOC	
	113	TP20/210213/0.1						✓	✓	✓	✓	✓	✓					SOC	
	114	TP20/210213/0.5														✓		SOC	
	115	TP20/210213/1.0										✓	✓					SOC	
	116	TP20/210213/1.3														✓		SOC	
	117	TP25/210213/0.1						✓	✓	✓	✓	✓	✓					SOC	
	118	TP25/210213/0.5										✓	✓					SOC	
	119	TP25/210213/1.0														✓		SOC	
	120	TP25/210213/1.5														✓		SOC	

Relinquished by: S. O'Connor	Relinquished by:	Relinquished by:
Date & Time: 22/2/13	Date & Time:	Date & Time:
Company: PB	Company:	Company:
Signature:	Signature:	Signature:
Received in Good Order & Condition by (Name): Raymond	Received in Good Order & Condition by (Name):	Received in Good Order & Condition by (Name):
Date & Time: 22/2/13 15:20	Date & Time:	Date & Time:
Company: ALS	Company:	Company:
Signature:	Signature:	Signature:

Medium*: S = Soil, W = Water, V = Vapour

Legend**: (circle the following to be tested)

Metals: Al (As) Be (Cd) Co (Cr) (Cu) Fe (Hg) Li Mg Mn (Ni) (Pb) Se Sn V (Zn)

Samples on Ice: ☑ Yes ☐ No

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Chain of Custody

Order No: 51176

Job Title:

Laboratory Name: ALS
Address: 4 Westall Rd SPRINGVALE
Fax Number:
Phone Number: 8549 9600
Contact Name: Bronwyn Sheen
Delivery Method: COURIER
Quote Number:

PB Job Number: 2189202A
Job Location: Mickleham

Terms of Business	PB	Other	Checked
	✓		

Project Manager: C. Howell
Results Expected by/on: Std.
Fax Results to: C Howell
Fax Number: chowell@pb.com.au
Phone Number: 9861 2854
Spreadsheet of Results Required: (Y) / N
Format: ESPat
Turnaround Time Required: Standard
Invoice to: C. Howell
Comments:

Date Sampled	Time	Sample I.D.	Container Size	Sample Location	Medium*	Preservative Type	Filtered (X)	TPH	BTEX	PAH's	OC/OP/PCB's	Metals**	HOLD	Initials	Comments/Additional Information and/or Analysis Required
21/02/13	121	TP28/210213/0.1	1x Jar		S			✓	✓	✓	✓	✓	✓	SOE	
	122	TP28/210213/0.5											✓	SOE	
	123	TP28/210213/1.0											✓	SOE	
	124	TP28/210213/1.5										✓	✓	SOE	
	125	TP18/210213/0.1						✓	✓	✓	✓	✓	✓	SO'C	
	126	TP18/210213/0.5											✓	SO'C	
	127	TP18/210213/1.0										✓	✓	SO'C	
	128	TP18/210213/1.5											✓	SO'C	
	129	DUPAA/210213/0.1B	1x Jar		S			✓	✓	✓	✓	✓	✓	SO'C	
	130	RB/210213	2x Vials 1x Amber 6x Small metals plastic		W			✓	✓	✓	✓	✓	✓	SO'C	
	131	FB/210213	2x Vials 1x Amber		W			✓	✓	✓				SO'C	
	132	TB/210213	2x Vials		W			✓	✓	✓				SO'C	

Relinquished by:	Relinquished by:	Relinquished by:
S. O'Connor		
Date & Time: 22/2/13	Date & Time:	Date & Time:
Company: PB	Company:	Company:
Signature:	Signature:	Signature:
Received in Good Order & Condition by (Name): Raymond	Received in Good Order & Condition by (Name):	Received in Good Order & Condition by (Name):
Date & Time: 22/2/13 15:20	Date & Time:	Date & Time:
Company: ALS	Company:	Company:
Signature:	Signature:	Signature:

Medium*: S = Soil, W = Water, V = Vapour

Legend**: (circle the following to be tested)
Metals: Al (As) Be (Cd) Co (Cr) (Cu) Fe (Hg)
Li Mg Mn (Ni) (Pb) Se Sn V (Zn)

Samples on Ice: ☑ Yes ☐ No

Please fax back a signed copy when samples are received at the laboratory

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Chain of Custody

Order No: 51177

Job Title:	PB Job Number: 2189202 A	Job Location: Mrickleham	Project Manager: C. Howell
Laboratory Name: ALS			Results Expected by/on: Std.
Address: 4 Westall Rd SPRINGVALE			Fax Results to: C. Howell
Fax Number:			Fax Number: chowell@pb.com.au
Phone Number: 8549 9600			Phone Number: 9861 2454
Contact Name: Bronwyn Sheen			Spreadsheet of Results Required: (Y) / N
Delivery Method: COURIER			Format: ESDat
Quote Number:			Turnaround Time Required: Standard
			Invoice to: C. Howell
			Comments:

Terms of Business	PB	Other	Checked
	✓		

Date Sampled	Time	Sample I.D.	Container Size	Sample Location	Medium*	Preservative Type	Filtered (X)	TPH	BTEX	PAH's	OC/OP/PCB's	Metals**	TDS	Nitrate, nitrite	Ammonia	Cl	Initials	Comments/Additional Information and/or Analysis Required
21/02/13	16:00	SL2/210213/1W	1xLarge plastic 1xSmall sample plastic		W		N	✓	✓	✓	✓		✓	✓	✓	✓	SOL	
135			2xVials				N	✓	✓		✓		✓	✓	✓	✓	SO C	
			2xAmbers				N	✓	✓		✓		✓	✓	✓	✓	SO C	
135		DUPAA/210213/1WB	11				N	✓	✓		✓		✓	✓	✓	✓	SO C	
		extra sample C.H. 22/2/13																
135	TP 22A/200213/0.1		20/02 as per jw AK															

Relinquished by: S. O'Connor	Relinquished by:	Relinquished by:	Medium*: S = Soil, W = Water, V = Vapour
Date & Time: 22/2/13	Date & Time:	Date & Time:	Legend**: (circle the following to be tested)
Company: PB	Company:	Company:	Metals: Al (As) Be Cd Co Cr Cu Fe Hg
Signature:	Signature:	Signature:	Li Mg Mn Ni Pb Se Sn V Zn
Received in Good Order & Condition by (Name): Raymond	Received in Good Order & Condition by (Name):	Received in Good Order & Condition by (Name):	Samples on Ice: ☑ Yes ☐ No
Date & Time: 22/2/13 15:20	Date & Time:	Date & Time:	***Please fax back a signed copy when samples are received at the laboratory***
Company: ALS	Company:	Company:	
Signature:	Signature:	Signature:	

Raymond Thai

From: Raymond Thai
Sent: Friday, 22 February 2013 6:02 PM
To: Bronwyn Sheen
Cc: 'soconnor@pb.com.au'
Subject: PB 2189202A Mickleham - EM1301875
Attachments: 2013-02-22 17.18.37.jpg; 2013-02-22 17.19.14.jpg

Hi Bronwyn/Sam,

There was a number of issues with this work order described below:

- Jar labelled as TP/200213/1.0 assumed to be missing sample TP21/200213/1.0 (072)
- Jar labelled as TP/200213/0.1 assumed to be missing sample TP23/200213/0.1 (073)
- 2 ambers both labelled FB/200213 have been relabelled as FB/200213 A & FB/200213 B respectively. FB/200213 A will be allocated to FB/200213 and FB/200213 B will be allocated to FB/210213 in which no amber was received. Images have been attached.
- RB/210213 has 6 metals bottles listed on CoC but only received 4 – these bottles are also unspecified, please confirm whether filtered in the field.
- Extra soil sample received with ID TP22A/200213/0.1 currently placed on hold.
- Extra amber received labelled as SL/200213/1WC will be forwarded to MGT as instructed by Sam via phone conversation (22/02/13) next Monday.

Please provide clarification for the above discrepancies.

Regards, Ray

Raymond Thai

From: O'Connor, Samuel [SOConnor@pb.com.au]
Sent: Monday, 25 February 2013 9:03 AM
To: Raymond Thai
Subject: RE: PB 2189202A Mickleham - EM1301875

Hi Ray,

Sorry about the confusion. Everything assumed below is correct. Please do place TP22A/200213/0.1 on hold for now as this was intended for an in house asbestos analysis but I believe we already have sufficient samples to satisfy the project scope.

RB/210213 is unfiltered and there should only be four. I just ran out of the large plastic metals bottles.

Thanks heaps for your help,

Sam

Sam O'Connor
Graduate Environmental Scientist
Contaminated Land Management group

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SOConnor@pb.com.au

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From: Raymond Thai [mailto:Raymond.Thai@alsglobal.com]
Sent: Friday, 22 February 2013 6:02 PM
To: Bronwyn Sheen
Cc: O'Connor, Samuel
Subject: PB 2189202A Mickleham - EM1301875

Hi Bronwyn/Sam,

There was a number of issues with this work order described below:

- Jar labelled as TP/200213/1.0 assumed to be missing sample TP21/200213/1.0 (072)
- Jar labelled as TP/200213/0.1 assumed to be missing sample TP23/200213/0.1 (073)
- 2 ambers both labelled FB/200213 have been relabelled as FB/200213 A & FB/200213 B respectively. FB/200213 A will be allocated to FB/200213 and FB/200213 B will be allocated to FB/210213 in which no amber was received. Images have been attached.
- RB/210213 has 6 metals bottles listed on CoC but only received 4 – these bottles are also unspecified, please confirm whether filtered in the field.
- Extra soil sample received with ID TP22A/200213/0.1 currently placed on hold.

- Extra amber received labelled as SL/200213/1WC will be forwarded to MGT as instructed by Sam via phone conversation (22/02/13) next Monday.

Please provide clarification for the above discrepancies.

Regards, Ray

Environmental Division

CERTIFICATE OF ANALYSIS

Work Order	: **EM1301875**	Page	: 1 of 78
Client	: **PARSONS BRINCKERHOFF AUST P/L**	Laboratory	: Environmental Division Melbourne
Contact	: MS CLAIRE HOWELL	Contact	: Bronwyn Sheen
Address	: PO BOX 19016 SOUTHBANK VIC, AUSTRALIA 3066	Address	: 4 Westall Rd Springvale VIC Australia 3171
E-mail	: chowell@pb.com.au	E-mail	: bronwyn.sheen@alsglobal.com
Telephone	: +61 03 9861 1111	Telephone	: +61-3-8549 9636
Facsimile	: +61 03 9861 1144	Facsimile	: +61-3-8549 9601
Project	: 2189202A	QC Level	: NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Order number	: ----		
C-O-C number	: 51166-51177	Date Samples Received	: 22-FEB-2013
Sampler	: SOC	Issue Date	: 28-FEB-2013
Site	: MICKLEHAM		
		No. of samples received	: 135
Quote number	: EN/008/11	No. of samples analysed	: 88

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. All pages of this report have been checked and approved for release.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting

- **EK059G: LOR has been raised for Nitrite and Nitrate as N (NOx) due to laboratory background observed in the Method Blank**
- **EK059G:EM1301875 # 133 and 134 nox results have been confirmed by re-analysis.**
- **EP066/068: Particular samples required dilution prior to analysis due to matrix interferences. LOR values have been adjusted accordingly.**
- **EP071: Poor duplicate precision for sample EM1301875-133 due to sample heterogeneity. Confirmed by re-analysis.**

NATA Accredited Laboratory 825

Accredited for compliance with ISO/IEC 17025.

Signatories

This document has been electronically signed by the authorized signatories indicated below. Electronic signing has been carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Dilani Fernando	Senior Inorganic Chemist	Melbourne Inorganics
		Melbourne Inorganics
		Melbourne Inorganics
Eric Chau	Metals Team Leader	Melbourne Inorganics
		Melbourne Inorganics
Nancy Wang	Senior Semivolatile Instrument Chemist	Melbourne Inorganics
		Melbourne Organics
		Melbourne Organics
Nikki Stepniewski	Senior Inorganic Instrument Chemist	Melbourne Inorganics
		Melbourne Inorganics
		Melbourne Inorganics
Varsha Ho Wing	Non-Metals Team Leader	Melbourne Inorganics
		Melbourne Inorganics

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP04/190213/0.1	TP04/190213/0.5	TP05/190213/0.1	TP05/190213/1.0	TP06/190213/0.1
			Client sampling date / time	19-FEB-2013 15:00	19-FEB-2013 15:00	19-FEB-2013 15:00	19-FEB-2013 15:00	19-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-001	EM1301875-002	EM1301875-005	EM1301875-007	EM1301875-009
EA002 : pH (Soils)								
pH Value	----	0.1	pH Unit	5.6	7.5	5.5	7.5	5.9
EA055: Moisture Content								
Moisture Content (dried @ 103°C)	----	1.0	%	5.3	14.8	4.7	14.4	10.4
EG005T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	14	31	<5	<5	6
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	38	84	18	25	46
Copper	7440-50-8	5	mg/kg	6	7	<5	<5	7
Lead	7439-92-1	5	mg/kg	16	34	12	12	16
Nickel	7440-02-0	2	mg/kg	6	20	5	14	12
Zinc	7440-66-6	5	mg/kg	14	9	18	7	13
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	----	<0.1	----	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Dieldrin	60-57-1	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Endrin	72-20-8	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	----	<0.05	----	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP04/190213/0.1	TP04/190213/0.5	TP05/190213/0.1	TP05/190213/1.0	TP06/190213/0.1
			Client sampling date / time	19-FEB-2013 15:00	19-FEB-2013 15:00	19-FEB-2013 15:00	19-FEB-2013 15:00	19-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-001	EM1301875-002	EM1301875-005	EM1301875-007	EM1301875-009
EP068A: Organochlorine Pesticides (OC) - Continued								
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	----	<0.2	----	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	----	<0.2	----	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
^ Sum of DDD + DDE + DDT	----	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	----	<0.2	----	<0.2
Dimethoate	60-51-5	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Diazinon	333-41-5	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	----	<0.2	----	<0.2
Malathion	121-75-5	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Fenthion	55-38-9	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Parathion	56-38-2	0.2	mg/kg	<0.2	----	<0.2	----	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Ethion	563-12-2	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Carbophenothion	786-19-6	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Fluorene	86-73-7	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Anthracene	120-12-7	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	----	<0.5	----	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP04/190213/0.1	TP04/190213/0.5	TP05/190213/0.1	TP05/190213/1.0	TP06/190213/0.1
			Client sampling date / time	19-FEB-2013 15:00	19-FEB-2013 15:00	19-FEB-2013 15:00	19-FEB-2013 15:00	19-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-001	EM1301875-002	EM1301875-005	EM1301875-007	EM1301875-009
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Pyrene	129-00-0	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Chrysene	218-01-9	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Benzo(a)pyrene TEQ (WHO)	----	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	----	<10	----	<10
C10 - C14 Fraction	----	50	mg/kg	<50	----	<50	----	<50
C15 - C28 Fraction	----	100	mg/kg	<100	----	<100	----	<100
C29 - C36 Fraction	----	100	mg/kg	<100	----	<100	----	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	----	<50	----	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft								
C6 - C10 Fraction	----	10	mg/kg	<10	----	<10	----	<10
^ C6 - C10 Fraction minus BTEX (F1)	----	10	mg/kg	<10	----	<10	----	<10
>C10 - C16 Fraction	----	50	mg/kg	<50	----	<50	----	<50
>C16 - C34 Fraction	----	100	mg/kg	<100	----	<100	----	<100
>C34 - C40 Fraction	----	100	mg/kg	<100	----	<100	----	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	----	<50	----	<50
EP080: BTEX								
Benzene	71-43-2	0.2	mg/kg	<0.2	----	<0.2	----	<0.2
Toluene	108-88-3	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
EP080: BTEXN								
^ Sum of BTEX	----	0.2	mg/kg	<0.2	----	<0.2	----	<0.2
^ Total Xylenes	1330-20-7	0.5	mg/kg	<0.5	----	<0.5	----	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP04/190213/0.1	TP04/190213/0.5	TP05/190213/0.1	TP05/190213/1.0	TP06/190213/0.1
			Client sampling date / time	19-FEB-2013 15:00	19-FEB-2013 15:00	19-FEB-2013 15:00	19-FEB-2013 15:00	19-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-001	EM1301875-002	EM1301875-005	EM1301875-007	EM1301875-009
EP080: BTEXN - Continued								
Naphthalene	91-20-3	1	mg/kg	<1	----	<1	----	<1
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	104	----	108	----	93.3
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.1	%	97.8	----	102	----	90.2
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.1	%	99.8	----	106	----	97.4
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	95.6	----	87.3	----	91.2
2-Chlorophenol-D4	93951-73-6	0.1	%	98.9	----	92.5	----	95.1
2.4.6-Tribromophenol	118-79-6	0.1	%	96.1	----	95.7	----	99.5
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	107	----	106	----	105
Anthracene-d10	1719-06-8	0.1	%	102	----	100	----	102
4-Terphenyl-d14	1718-51-0	0.1	%	119	----	117	----	120
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.1	%	86.2	----	95.8	----	86.7
Toluene-D8	2037-26-5	0.1	%	82.2	----	89.0	----	80.7
4-Bromofluorobenzene	460-00-4	0.1	%	87.6	----	97.4	----	86.8

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP06/190213/0.5	TP07/190213/0.1	TP07/190213/0.5	TP07/190213/1.5	TP08/190213/0.1
			Client sampling date / time	19-FEB-2013 15:00	19-FEB-2013 15:00	19-FEB-2013 15:00	19-FEB-2013 15:00	19-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-010	EM1301875-013	EM1301875-014	EM1301875-016	EM1301875-017
EA002 : pH (Soils)								
pH Value	----	0.1	pH Unit	7.7	5.4	7.9	8.9	5.7
EA055: Moisture Content								
Moisture Content (dried @ 103°C)	----	1.0	%	17.3	6.7	19.6	14.2	5.9
EG005T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	6	<5	<5	<5	<5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	64	24	54	40	20
Copper	7440-50-8	5	mg/kg	10	<5	8	<5	<5
Lead	7439-92-1	5	mg/kg	12	9	12	9	12
Nickel	7440-02-0	2	mg/kg	25	6	19	19	6
Zinc	7440-66-6	5	mg/kg	11	10	13	10	9
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	----	<0.1	----	----	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	----	<0.05	----	----	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	----	<0.05	----	----	<0.05
beta-BHC	319-85-7	0.05	mg/kg	----	<0.05	----	----	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	----	<0.05	----	----	<0.05
delta-BHC	319-86-8	0.05	mg/kg	----	<0.05	----	----	<0.05
Heptachlor	76-44-8	0.05	mg/kg	----	<0.05	----	----	<0.05
Aldrin	309-00-2	0.05	mg/kg	----	<0.05	----	----	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	----	<0.05	----	----	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg	----	<0.05	----	----	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	----	<0.05	----	----	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg	----	<0.05	----	----	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	----	<0.05	----	----	<0.05
Dieldrin	60-57-1	0.05	mg/kg	----	<0.05	----	----	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg	----	<0.05	----	----	<0.05
Endrin	72-20-8	0.05	mg/kg	----	<0.05	----	----	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg	----	<0.05	----	----	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg	----	<0.05	----	----	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP06/190213/0.5	TP07/190213/0.1	TP07/190213/0.5	TP07/190213/1.5	TP08/190213/0.1
			Client sampling date / time	19-FEB-2013 15:00	19-FEB-2013 15:00	19-FEB-2013 15:00	19-FEB-2013 15:00	19-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-010	EM1301875-013	EM1301875-014	EM1301875-016	EM1301875-017
EP068A: Organochlorine Pesticides (OC) - Continued								
Endrin aldehyde	7421-93-4	0.05	mg/kg	----	<0.05	----	----	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg	----	<0.05	----	----	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg	----	<0.2	----	----	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg	----	<0.05	----	----	<0.05
Methoxychlor	72-43-5	0.2	mg/kg	----	<0.2	----	----	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	----	<0.05	----	----	<0.05
^ Sum of DDD + DDE + DDT	----	0.05	mg/kg	----	<0.05	----	----	<0.05
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	----	<0.05	----	----	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg	----	<0.05	----	----	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg	----	<0.2	----	----	<0.2
Dimethoate	60-51-5	0.05	mg/kg	----	<0.05	----	----	<0.05
Diazinon	333-41-5	0.05	mg/kg	----	<0.05	----	----	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	----	<0.05	----	----	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg	----	<0.2	----	----	<0.2
Malathion	121-75-5	0.05	mg/kg	----	<0.05	----	----	<0.05
Fenthion	55-38-9	0.05	mg/kg	----	<0.05	----	----	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg	----	<0.05	----	----	<0.05
Parathion	56-38-2	0.2	mg/kg	----	<0.2	----	----	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	----	<0.05	----	----	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg	----	<0.05	----	----	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg	----	<0.05	----	----	<0.05
Prothiofos	34643-46-4	0.05	mg/kg	----	<0.05	----	----	<0.05
Ethion	563-12-2	0.05	mg/kg	----	<0.05	----	----	<0.05
Carbophenothion	786-19-6	0.05	mg/kg	----	<0.05	----	----	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg	----	<0.05	----	----	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	----	<0.5	----	----	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	----	<0.5	----	----	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	----	<0.5	----	----	<0.5
Fluorene	86-73-7	0.5	mg/kg	----	<0.5	----	----	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	----	<0.5	----	----	<0.5
Anthracene	120-12-7	0.5	mg/kg	----	<0.5	----	----	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	----	<0.5	----	----	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP06/190213/0.5	TP07/190213/0.1	TP07/190213/0.5	TP07/190213/1.5	TP08/190213/0.1
			Client sampling date / time	19-FEB-2013 15:00	19-FEB-2013 15:00	19-FEB-2013 15:00	19-FEB-2013 15:00	19-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-010	EM1301875-013	EM1301875-014	EM1301875-016	EM1301875-017
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Pyrene	129-00-0	0.5	mg/kg	----	<0.5	----	----	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg	----	<0.5	----	----	<0.5
Chrysene	218-01-9	0.5	mg/kg	----	<0.5	----	----	<0.5
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	----	<0.5	----	----	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	----	<0.5	----	----	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg	----	<0.5	----	----	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	----	<0.5	----	----	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	----	<0.5	----	----	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	----	<0.5	----	----	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	----	<0.5	----	----	<0.5
Benzo(a)pyrene TEQ (WHO)	----	0.5	mg/kg	----	<0.5	----	----	<0.5
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	----	<10	----	----	<10
C10 - C14 Fraction	----	50	mg/kg	----	<50	----	----	<50
C15 - C28 Fraction	----	100	mg/kg	----	<100	----	----	<100
C29 - C36 Fraction	----	100	mg/kg	----	<100	----	----	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg	----	<50	----	----	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft								
C6 - C10 Fraction	----	10	mg/kg	----	<10	----	----	<10
^ C6 - C10 Fraction minus BTEX (F1)	----	10	mg/kg	----	<10	----	----	<10
>C10 - C16 Fraction	----	50	mg/kg	----	<50	----	----	<50
>C16 - C34 Fraction	----	100	mg/kg	----	<100	----	----	<100
>C34 - C40 Fraction	----	100	mg/kg	----	<100	----	----	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	----	<50	----	----	<50
EP080: BTEX								
Benzene	71-43-2	0.2	mg/kg	----	<0.2	----	----	<0.2
Toluene	108-88-3	0.5	mg/kg	----	<0.5	----	----	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	----	<0.5	----	----	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	----	<0.5	----	----	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	----	<0.5	----	----	<0.5
EP080: BTEXN								
^ Sum of BTEX	----	0.2	mg/kg	----	<0.2	----	----	<0.2
^ Total Xylenes	1330-20-7	0.5	mg/kg	----	<0.5	----	----	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP06/190213/0.5	TP07/190213/0.1	TP07/190213/0.5	TP07/190213/1.5	TP08/190213/0.1
			Client sampling date / time	19-FEB-2013 15:00	19-FEB-2013 15:00	19-FEB-2013 15:00	19-FEB-2013 15:00	19-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-010	EM1301875-013	EM1301875-014	EM1301875-016	EM1301875-017
EP080: BTEXN - Continued								
Naphthalene	91-20-3	1	mg/kg	----	<1	----	----	<1
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	----	106	----	----	112
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.1	%	----	103	----	----	110
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.1	%	----	110	----	----	120
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	----	84.2	----	----	92.6
2-Chlorophenol-D4	93951-73-6	0.1	%	----	91.4	----	----	95.2
2.4.6-Tribromophenol	118-79-6	0.1	%	----	86.1	----	----	94.9
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	----	94.6	----	----	106
Anthracene-d10	1719-06-8	0.1	%	----	93.9	----	----	97.4
4-Terphenyl-d14	1718-51-0	0.1	%	----	106	----	----	113
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.1	%	----	118	----	----	99.8
Toluene-D8	2037-26-5	0.1	%	----	114	----	----	93.8
4-Bromofluorobenzene	460-00-4	0.1	%	----	120	----	----	100

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP08/190213/1.0	TP09/190213/0.1	TP09/190213/0.5	TP01/190213/0.1	TP01/190213/0.5
			Client sampling date / time	19-FEB-2013 15:00	19-FEB-2013 15:00	19-FEB-2013 15:00	19-FEB-2013 15:00	19-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-019	EM1301875-021	EM1301875-022	EM1301875-025	EM1301875-026
EA002 : pH (Soils)								
pH Value	----	0.1	pH Unit	8.1	5.6	6.1	7.3	8.2
EA055: Moisture Content								
Moisture Content (dried @ 103°C)	----	1.0	%	13.6	7.1	10.8	8.7	13.1
EG005T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	<5	<5	6	<5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	31	20	26	24	32
Copper	7440-50-8	5	mg/kg	<5	<5	<5	14	6
Lead	7439-92-1	5	mg/kg	10	11	11	27	9
Nickel	7440-02-0	2	mg/kg	12	4	5	12	10
Zinc	7440-66-6	5	mg/kg	6	7	7	226	14
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	----	<0.1	----	<0.1	----
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	----	<0.05	----	<0.05	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	----	<0.05	----	<0.05	----
beta-BHC	319-85-7	0.05	mg/kg	----	<0.05	----	<0.05	----
gamma-BHC	58-89-9	0.05	mg/kg	----	<0.05	----	<0.05	----
delta-BHC	319-86-8	0.05	mg/kg	----	<0.05	----	<0.05	----
Heptachlor	76-44-8	0.05	mg/kg	----	<0.05	----	<0.05	----
Aldrin	309-00-2	0.05	mg/kg	----	<0.05	----	<0.05	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg	----	<0.05	----	<0.05	----
^ Total Chlordane (sum)	----	0.05	mg/kg	----	<0.05	----	<0.05	----
trans-Chlordane	5103-74-2	0.05	mg/kg	----	<0.05	----	<0.05	----
alpha-Endosulfan	959-98-8	0.05	mg/kg	----	<0.05	----	<0.05	----
cis-Chlordane	5103-71-9	0.05	mg/kg	----	<0.05	----	<0.05	----
Dieldrin	60-57-1	0.05	mg/kg	----	<0.05	----	<0.05	----
4.4`-DDE	72-55-9	0.05	mg/kg	----	<0.05	----	<0.05	----
Endrin	72-20-8	0.05	mg/kg	----	<0.05	----	<0.05	----
beta-Endosulfan	33213-65-9	0.05	mg/kg	----	<0.05	----	<0.05	----
4.4`-DDD	72-54-8	0.05	mg/kg	----	<0.05	----	<0.05	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP08/190213/1.0	TP09/190213/0.1	TP09/190213/0.5	TP01/190213/0.1	TP01/190213/0.5
			Client sampling date / time	19-FEB-2013 15:00	19-FEB-2013 15:00	19-FEB-2013 15:00	19-FEB-2013 15:00	19-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-019	EM1301875-021	EM1301875-022	EM1301875-025	EM1301875-026
EP068A: Organochlorine Pesticides (OC) - Continued								
Endrin aldehyde	7421-93-4	0.05	mg/kg	----	<0.05	----	<0.05	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg	----	<0.05	----	<0.05	----
4.4`-DDT	50-29-3	0.2	mg/kg	----	<0.2	----	<0.2	----
Endrin ketone	53494-70-5	0.05	mg/kg	----	<0.05	----	<0.05	----
Methoxychlor	72-43-5	0.2	mg/kg	----	<0.2	----	<0.2	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	----	<0.05	----	<0.05	----
^ Sum of DDD + DDE + DDT	----	0.05	mg/kg	----	<0.05	----	<0.05	----
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	----	<0.05	----	<0.05	----
Demeton-S-methyl	919-86-8	0.05	mg/kg	----	<0.05	----	<0.05	----
Monocrotophos	6923-22-4	0.2	mg/kg	----	<0.2	----	<0.2	----
Dimethoate	60-51-5	0.05	mg/kg	----	<0.05	----	<0.05	----
Diazinon	333-41-5	0.05	mg/kg	----	<0.05	----	<0.05	----
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	----	<0.05	----	<0.05	----
Parathion-methyl	298-00-0	0.2	mg/kg	----	<0.2	----	<0.2	----
Malathion	121-75-5	0.05	mg/kg	----	<0.05	----	<0.05	----
Fenthion	55-38-9	0.05	mg/kg	----	<0.05	----	<0.05	----
Chlorpyrifos	2921-88-2	0.05	mg/kg	----	<0.05	----	<0.05	----
Parathion	56-38-2	0.2	mg/kg	----	<0.2	----	<0.2	----
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	----	<0.05	----	<0.05	----
Bromophos-ethyl	4824-78-6	0.05	mg/kg	----	<0.05	----	<0.05	----
Fenamiphos	22224-92-6	0.05	mg/kg	----	<0.05	----	<0.05	----
Prothiofos	34643-46-4	0.05	mg/kg	----	<0.05	----	<0.05	----
Ethion	563-12-2	0.05	mg/kg	----	<0.05	----	<0.05	----
Carbophenothion	786-19-6	0.05	mg/kg	----	<0.05	----	<0.05	----
Azinphos Methyl	86-50-0	0.05	mg/kg	----	<0.05	----	<0.05	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	----	<0.5	----	<0.5	----
Acenaphthylene	208-96-8	0.5	mg/kg	----	<0.5	----	<0.5	----
Acenaphthene	83-32-9	0.5	mg/kg	----	<0.5	----	<0.5	----
Fluorene	86-73-7	0.5	mg/kg	----	<0.5	----	<0.5	----
Phenanthrene	85-01-8	0.5	mg/kg	----	<0.5	----	<0.5	----
Anthracene	120-12-7	0.5	mg/kg	----	<0.5	----	<0.5	----
Fluoranthene	206-44-0	0.5	mg/kg	----	<0.5	----	<0.5	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP08/190213/1.0	TP09/190213/0.1	TP09/190213/0.5	TP01/190213/0.1	TP01/190213/0.5
			Client sampling date / time	19-FEB-2013 15:00	19-FEB-2013 15:00	19-FEB-2013 15:00	19-FEB-2013 15:00	19-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-019	EM1301875-021	EM1301875-022	EM1301875-025	EM1301875-026
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Pyrene	129-00-0	0.5	mg/kg	----	<0.5	----	<0.5	----
Benz(a)anthracene	56-55-3	0.5	mg/kg	----	<0.5	----	<0.5	----
Chrysene	218-01-9	0.5	mg/kg	----	<0.5	----	<0.5	----
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	----	<0.5	----	<0.5	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	----	<0.5	----	<0.5	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	----	<0.5	----	<0.5	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	----	<0.5	----	<0.5	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	----	<0.5	----	<0.5	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	----	<0.5	----	<0.5	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	----	<0.5	----	<0.5	----
Benzo(a)pyrene TEQ (WHO)	----	0.5	mg/kg	----	<0.5	----	<0.5	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	----	<10	----	<10	----
C10 - C14 Fraction	----	50	mg/kg	----	<50	----	<50	----
C15 - C28 Fraction	----	100	mg/kg	----	<100	----	<100	----
C29 - C36 Fraction	----	100	mg/kg	----	<100	----	<100	----
^ C10 - C36 Fraction (sum)	----	50	mg/kg	----	<50	----	<50	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft								
C6 - C10 Fraction	----	10	mg/kg	----	<10	----	<10	----
^ C6 - C10 Fraction minus BTEX (F1)	----	10	mg/kg	----	<10	----	<10	----
>C10 - C16 Fraction	----	50	mg/kg	----	<50	----	<50	----
>C16 - C34 Fraction	----	100	mg/kg	----	<100	----	<100	----
>C34 - C40 Fraction	----	100	mg/kg	----	<100	----	<100	----
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	----	<50	----	<50	----
EP080: BTEX								
Benzene	71-43-2	0.2	mg/kg	----	<0.2	----	<0.2	----
Toluene	108-88-3	0.5	mg/kg	----	<0.5	----	<0.5	----
Ethylbenzene	100-41-4	0.5	mg/kg	----	<0.5	----	<0.5	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	----	<0.5	----	<0.5	----
ortho-Xylene	95-47-6	0.5	mg/kg	----	<0.5	----	<0.5	----
EP080: BTEXN								
^ Sum of BTEX	----	0.2	mg/kg	----	<0.2	----	<0.2	----
^ Total Xylenes	1330-20-7	0.5	mg/kg	----	<0.5	----	<0.5	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP08/190213/1.0	TP09/190213/0.1	TP09/190213/0.5	TP01/190213/0.1	TP01/190213/0.5
			Client sampling date / time	19-FEB-2013 15:00	19-FEB-2013 15:00	19-FEB-2013 15:00	19-FEB-2013 15:00	19-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-019	EM1301875-021	EM1301875-022	EM1301875-025	EM1301875-026
EP080: BTEXN - Continued								
Naphthalene	91-20-3	1	mg/kg	----	<1	----	<1	----
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	----	89.2	----	95.3	----
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.1	%	----	88.8	----	107	----
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.1	%	----	88.3	----	116	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	----	89.3	----	82.9	----
2-Chlorophenol-D4	93951-73-6	0.1	%	----	94.3	----	89.1	----
2.4.6-Tribromophenol	118-79-6	0.1	%	----	94.8	----	94.0	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	----	98.6	----	101	----
Anthracene-d10	1719-06-8	0.1	%	----	97.5	----	98.9	----
4-Terphenyl-d14	1718-51-0	0.1	%	----	113	----	115	----
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.1	%	----	102	----	92.8	----
Toluene-D8	2037-26-5	0.1	%	----	95.9	----	82.4	----
4-Bromofluorobenzene	460-00-4	0.1	%	----	101	----	88.3	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP01/190213/1.0	TP01/190213/1.5	DUPAA/190213/0.1B	TP02/200213/0.1	TP02/200213/0.5
			Client sampling date / time	19-FEB-2013 15:00	19-FEB-2013 15:00	19-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-027	EM1301875-028	EM1301875-032	EM1301875-033	EM1301875-034
EA002 : pH (Soils)								
pH Value	----	0.1	pH Unit	8.0	7.9	5.7	7.8	6.0
EA055: Moisture Content								
Moisture Content (dried @ 103°C)	----	1.0	%	18.9	15.4	13.0	6.3	12.8
EG005T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	<5	<5	38	<5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	32	30	38	27	31
Copper	7440-50-8	5	mg/kg	<5	<5	8	26	6
Lead	7439-92-1	5	mg/kg	10	10	14	35	13
Nickel	7440-02-0	2	mg/kg	14	10	11	29	9
Zinc	7440-66-6	5	mg/kg	10	6	16	178	12
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	----	----	<0.1	<0.1	----
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	----	----	<0.05	<0.05	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	----	----	<0.05	<0.05	----
beta-BHC	319-85-7	0.05	mg/kg	----	----	<0.05	<0.05	----
gamma-BHC	58-89-9	0.05	mg/kg	----	----	<0.05	<0.05	----
delta-BHC	319-86-8	0.05	mg/kg	----	----	<0.05	<0.05	----
Heptachlor	76-44-8	0.05	mg/kg	----	----	<0.05	<0.05	----
Aldrin	309-00-2	0.05	mg/kg	----	----	<0.05	<0.05	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg	----	----	<0.05	<0.05	----
^ Total Chlordane (sum)	----	0.05	mg/kg	----	----	<0.05	<0.05	----
trans-Chlordane	5103-74-2	0.05	mg/kg	----	----	<0.05	<0.05	----
alpha-Endosulfan	959-98-8	0.05	mg/kg	----	----	<0.05	<0.05	----
cis-Chlordane	5103-71-9	0.05	mg/kg	----	----	<0.05	<0.05	----
Dieldrin	60-57-1	0.05	mg/kg	----	----	<0.05	<0.05	----
4.4`-DDE	72-55-9	0.05	mg/kg	----	----	<0.05	<0.05	----
Endrin	72-20-8	0.05	mg/kg	----	----	<0.05	<0.05	----
beta-Endosulfan	33213-65-9	0.05	mg/kg	----	----	<0.05	<0.05	----
4.4`-DDD	72-54-8	0.05	mg/kg	----	----	<0.05	<0.05	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP01/190213/1.0	TP01/190213/1.5	DUPAA/190213/0.1B	TP02/200213/0.1	TP02/200213/0.5
			Client sampling date / time	19-FEB-2013 15:00	19-FEB-2013 15:00	19-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-027	EM1301875-028	EM1301875-032	EM1301875-033	EM1301875-034
EP068A: Organochlorine Pesticides (OC) - Continued								
Endrin aldehyde	7421-93-4	0.05	mg/kg	----	----	<0.05	<0.05	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg	----	----	<0.05	<0.05	----
4.4`-DDT	50-29-3	0.2	mg/kg	----	----	<0.2	<0.2	----
Endrin ketone	53494-70-5	0.05	mg/kg	----	----	<0.05	<0.05	----
Methoxychlor	72-43-5	0.2	mg/kg	----	----	<0.2	<0.2	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	----	----	<0.05	<0.05	----
^ Sum of DDD + DDE + DDT	----	0.05	mg/kg	----	----	<0.05	<0.05	----
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	----	----	<0.05	<0.05	----
Demeton-S-methyl	919-86-8	0.05	mg/kg	----	----	<0.05	<0.05	----
Monocrotophos	6923-22-4	0.2	mg/kg	----	----	<0.2	<0.2	----
Dimethoate	60-51-5	0.05	mg/kg	----	----	<0.05	<0.05	----
Diazinon	333-41-5	0.05	mg/kg	----	----	<0.05	<0.05	----
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	----	----	<0.05	<0.05	----
Parathion-methyl	298-00-0	0.2	mg/kg	----	----	<0.2	<0.2	----
Malathion	121-75-5	0.05	mg/kg	----	----	<0.05	<0.05	----
Fenthion	55-38-9	0.05	mg/kg	----	----	<0.05	<0.05	----
Chlorpyrifos	2921-88-2	0.05	mg/kg	----	----	<0.05	<0.05	----
Parathion	56-38-2	0.2	mg/kg	----	----	<0.2	<0.2	----
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	----	----	<0.05	<0.05	----
Bromophos-ethyl	4824-78-6	0.05	mg/kg	----	----	<0.05	<0.05	----
Fenamiphos	22224-92-6	0.05	mg/kg	----	----	<0.05	<0.05	----
Prothiofos	34643-46-4	0.05	mg/kg	----	----	<0.05	<0.05	----
Ethion	563-12-2	0.05	mg/kg	----	----	<0.05	<0.05	----
Carbophenothion	786-19-6	0.05	mg/kg	----	----	<0.05	<0.05	----
Azinphos Methyl	86-50-0	0.05	mg/kg	----	----	<0.05	<0.05	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	----	----	<0.5	<0.5	----
Acenaphthylene	208-96-8	0.5	mg/kg	----	----	<0.5	<0.5	----
Acenaphthene	83-32-9	0.5	mg/kg	----	----	<0.5	<0.5	----
Fluorene	86-73-7	0.5	mg/kg	----	----	<0.5	<0.5	----
Phenanthrene	85-01-8	0.5	mg/kg	----	----	<0.5	<0.5	----
Anthracene	120-12-7	0.5	mg/kg	----	----	<0.5	<0.5	----
Fluoranthene	206-44-0	0.5	mg/kg	----	----	<0.5	<0.5	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP01/190213/1.0	TP01/190213/1.5	DUPAA/190213/0.1B	TP02/200213/0.1	TP02/200213/0.5
			Client sampling date / time	19-FEB-2013 15:00	19-FEB-2013 15:00	19-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-027	EM1301875-028	EM1301875-032	EM1301875-033	EM1301875-034
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Pyrene	129-00-0	0.5	mg/kg	----	----	<0.5	<0.5	----
Benz(a)anthracene	56-55-3	0.5	mg/kg	----	----	<0.5	<0.5	----
Chrysene	218-01-9	0.5	mg/kg	----	----	<0.5	<0.5	----
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	----	----	<0.5	<0.5	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	----	----	<0.5	<0.5	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	----	----	<0.5	<0.5	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	----	----	<0.5	<0.5	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	----	----	<0.5	<0.5	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	----	----	<0.5	<0.5	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	----	----	<0.5	<0.5	----
Benzo(a)pyrene TEQ (WHO)	----	0.5	mg/kg	----	----	<0.5	<0.5	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	----	----	<10	<10	----
C10 - C14 Fraction	----	50	mg/kg	----	----	<50	<50	----
C15 - C28 Fraction	----	100	mg/kg	----	----	<100	<100	----
C29 - C36 Fraction	----	100	mg/kg	----	----	<100	<100	----
^ C10 - C36 Fraction (sum)	----	50	mg/kg	----	----	<50	<50	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft								
C6 - C10 Fraction	----	10	mg/kg	----	----	<10	<10	----
^ C6 - C10 Fraction minus BTEX (F1)	----	10	mg/kg	----	----	<10	<10	----
>C10 - C16 Fraction	----	50	mg/kg	----	----	<50	<50	----
>C16 - C34 Fraction	----	100	mg/kg	----	----	**120**	<100	----
>C34 - C40 Fraction	----	100	mg/kg	----	----	<100	<100	----
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	----	----	**120**	<50	----
EP080: BTEX								
Benzene	71-43-2	0.2	mg/kg	----	----	<0.2	<0.2	----
Toluene	108-88-3	0.5	mg/kg	----	----	<0.5	<0.5	----
Ethylbenzene	100-41-4	0.5	mg/kg	----	----	<0.5	<0.5	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	----	----	<0.5	<0.5	----
ortho-Xylene	95-47-6	0.5	mg/kg	----	----	<0.5	<0.5	----
EP080: BTEXN								
^ Sum of BTEX	----	0.2	mg/kg	----	----	<0.2	<0.2	----
^ Total Xylenes	1330-20-7	0.5	mg/kg	----	----	<0.5	<0.5	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP01/190213/1.0	TP01/190213/1.5	DUPAA/190213/0.1B	TP02/200213/0.1	TP02/200213/0.5
			Client sampling date / time	19-FEB-2013 15:00	19-FEB-2013 15:00	19-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-027	EM1301875-028	EM1301875-032	EM1301875-033	EM1301875-034
EP080: BTEXN - Continued								
Naphthalene	91-20-3	1	mg/kg	----	----	<1	<1	----
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	----	----	92.3	103	----
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.1	%	----	----	81.8	101	----
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.1	%	----	----	95.8	108	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	----	----	90.1	94.0	----
2-Chlorophenol-D4	93951-73-6	0.1	%	----	----	97.1	96.5	----
2.4.6-Tribromophenol	118-79-6	0.1	%	----	----	102	99.5	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	----	----	103	101	----
Anthracene-d10	1719-06-8	0.1	%	----	----	107	107	----
4-Terphenyl-d14	1718-51-0	0.1	%	----	----	120	119	----
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.1	%	----	----	102	97.6	----
Toluene-D8	2037-26-5	0.1	%	----	----	95.3	93.5	----
4-Bromofluorobenzene	460-00-4	0.1	%	----	----	100	98.3	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP02/200213/1.0	TP02/200213/1.5	TP03/200213/0.1	TP03/200213/0.5	TP03/200213/1.0
			Client sampling date / time	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-035	EM1301875-036	EM1301875-037	EM1301875-038	EM1301875-039
EA002 : pH (Soils)								
pH Value	----	0.1	pH Unit	7.5	7.7	7.1	8.7	8.7
EA055: Moisture Content								
Moisture Content (dried @ 103°C)	----	1.0	%	19.0	18.4	7.1	11.7	17.1
EG005T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	<5	<5	<5	<5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	41	36	14	25	38
Copper	7440-50-8	5	mg/kg	7	<5	19	<5	5
Lead	7439-92-1	5	mg/kg	13	15	56	10	14
Nickel	7440-02-0	2	mg/kg	21	19	11	9	32
Zinc	7440-66-6	5	mg/kg	13	7	485	8	10
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	----	----	<0.1	----	----
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	----	----	<0.05	----	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	----	----	<0.05	----	----
beta-BHC	319-85-7	0.05	mg/kg	----	----	<0.05	----	----
gamma-BHC	58-89-9	0.05	mg/kg	----	----	<0.05	----	----
delta-BHC	319-86-8	0.05	mg/kg	----	----	<0.05	----	----
Heptachlor	76-44-8	0.05	mg/kg	----	----	<0.05	----	----
Aldrin	309-00-2	0.05	mg/kg	----	----	<0.05	----	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg	----	----	<0.05	----	----
^ Total Chlordane (sum)	----	0.05	mg/kg	----	----	<0.05	----	----
trans-Chlordane	5103-74-2	0.05	mg/kg	----	----	<0.05	----	----
alpha-Endosulfan	959-98-8	0.05	mg/kg	----	----	<0.05	----	----
cis-Chlordane	5103-71-9	0.05	mg/kg	----	----	<0.05	----	----
Dieldrin	60-57-1	0.05	mg/kg	----	----	<0.05	----	----
4.4`-DDE	72-55-9	0.05	mg/kg	----	----	<0.05	----	----
Endrin	72-20-8	0.05	mg/kg	----	----	<0.05	----	----
beta-Endosulfan	33213-65-9	0.05	mg/kg	----	----	<0.05	----	----
4.4`-DDD	72-54-8	0.05	mg/kg	----	----	<0.05	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP02/200213/1.0	TP02/200213/1.5	TP03/200213/0.1	TP03/200213/0.5	TP03/200213/1.0
			Client sampling date / time	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-035	EM1301875-036	EM1301875-037	EM1301875-038	EM1301875-039
EP068A: Organochlorine Pesticides (OC) - Continued								
Endrin aldehyde	7421-93-4	0.05	mg/kg	----	----	<0.05	----	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg	----	----	<0.05	----	----
4.4`-DDT	50-29-3	0.2	mg/kg	----	----	<0.2	----	----
Endrin ketone	53494-70-5	0.05	mg/kg	----	----	<0.05	----	----
Methoxychlor	72-43-5	0.2	mg/kg	----	----	<0.2	----	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	----	----	<0.05	----	----
^ Sum of DDD + DDE + DDT	----	0.05	mg/kg	----	----	<0.05	----	----
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	----	----	<0.05	----	----
Demeton-S-methyl	919-86-8	0.05	mg/kg	----	----	<0.05	----	----
Monocrotophos	6923-22-4	0.2	mg/kg	----	----	<0.2	----	----
Dimethoate	60-51-5	0.05	mg/kg	----	----	<0.05	----	----
Diazinon	333-41-5	0.05	mg/kg	----	----	<0.05	----	----
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	----	----	<0.05	----	----
Parathion-methyl	298-00-0	0.2	mg/kg	----	----	<0.2	----	----
Malathion	121-75-5	0.05	mg/kg	----	----	<0.05	----	----
Fenthion	55-38-9	0.05	mg/kg	----	----	<0.05	----	----
Chlorpyrifos	2921-88-2	0.05	mg/kg	----	----	<0.05	----	----
Parathion	56-38-2	0.2	mg/kg	----	----	<0.2	----	----
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	----	----	<0.05	----	----
Bromophos-ethyl	4824-78-6	0.05	mg/kg	----	----	<0.05	----	----
Fenamiphos	22224-92-6	0.05	mg/kg	----	----	<0.05	----	----
Prothiofos	34643-46-4	0.05	mg/kg	----	----	<0.05	----	----
Ethion	563-12-2	0.05	mg/kg	----	----	<0.05	----	----
Carbophenothion	786-19-6	0.05	mg/kg	----	----	<0.05	----	----
Azinphos Methyl	86-50-0	0.05	mg/kg	----	----	<0.05	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	----	----	<0.5	----	----
Acenaphthylene	208-96-8	0.5	mg/kg	----	----	<0.5	----	----
Acenaphthene	83-32-9	0.5	mg/kg	----	----	<0.5	----	----
Fluorene	86-73-7	0.5	mg/kg	----	----	<0.5	----	----
Phenanthrene	85-01-8	0.5	mg/kg	----	----	<0.5	----	----
Anthracene	120-12-7	0.5	mg/kg	----	----	<0.5	----	----
Fluoranthene	206-44-0	0.5	mg/kg	----	----	<0.5	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP02/200213/1.0	TP02/200213/1.5	TP03/200213/0.1	TP03/200213/0.5	TP03/200213/1.0
			Client sampling date / time	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-035	EM1301875-036	EM1301875-037	EM1301875-038	EM1301875-039
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Pyrene	129-00-0	0.5	mg/kg	----	----	<0.5	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg	----	----	<0.5	----	----
Chrysene	218-01-9	0.5	mg/kg	----	----	<0.5	----	----
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	----	----	<0.5	----	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	----	----	<0.5	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	----	----	<0.5	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	----	----	<0.5	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	----	----	<0.5	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	----	----	<0.5	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	----	----	<0.5	----	----
Benzo(a)pyrene TEQ (WHO)	----	0.5	mg/kg	----	----	<0.5	----	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	----	----	<10	----	----
C10 - C14 Fraction	----	50	mg/kg	----	----	<50	----	----
C15 - C28 Fraction	----	100	mg/kg	----	----	<100	----	----
C29 - C36 Fraction	----	100	mg/kg	----	----	**110**	----	----
^ C10 - C36 Fraction (sum)	----	50	mg/kg	----	----	**110**	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft								
C6 - C10 Fraction	----	10	mg/kg	----	----	<10	----	----
^ C6 - C10 Fraction minus BTEX (F1)	----	10	mg/kg	----	----	<10	----	----
>C10 - C16 Fraction	----	50	mg/kg	----	----	<50	----	----
>C16 - C34 Fraction	----	100	mg/kg	----	----	**140**	----	----
>C34 - C40 Fraction	----	100	mg/kg	----	----	<100	----	----
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	----	----	**140**	----	----
EP080: BTEX								
Benzene	71-43-2	0.2	mg/kg	----	----	<0.2	----	----
Toluene	108-88-3	0.5	mg/kg	----	----	<0.5	----	----
Ethylbenzene	100-41-4	0.5	mg/kg	----	----	<0.5	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	----	----	<0.5	----	----
ortho-Xylene	95-47-6	0.5	mg/kg	----	----	<0.5	----	----
EP080: BTEXN								
^ Sum of BTEX	----	0.2	mg/kg	----	----	<0.2	----	----
^ Total Xylenes	1330-20-7	0.5	mg/kg	----	----	<0.5	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP02/200213/1.0	TP02/200213/1.5	TP03/200213/0.1	TP03/200213/0.5	TP03/200213/1.0
			Client sampling date / time	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-035	EM1301875-036	EM1301875-037	EM1301875-038	EM1301875-039
EP080: BTEXN - Continued								
Naphthalene	91-20-3	1	mg/kg	----	----	<1	----	----
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	----	----	88.7	----	----
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.1	%	----	----	84.2	----	----
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.1	%	----	----	96.2	----	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	----	----	92.2	----	----
2-Chlorophenol-D4	93951-73-6	0.1	%	----	----	93.0	----	----
2.4.6-Tribromophenol	118-79-6	0.1	%	----	----	101	----	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	----	----	104	----	----
Anthracene-d10	1719-06-8	0.1	%	----	----	102	----	----
4-Terphenyl-d14	1718-51-0	0.1	%	----	----	111	----	----
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.1	%	----	----	98.7	----	----
Toluene-D8	2037-26-5	0.1	%	----	----	93.1	----	----
4-Bromofluorobenzene	460-00-4	0.1	%	----	----	99.8	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP03/200213/1.5	TP14/200213/0.1	TP14/200213/0.5	TP12/200213/0.1	TP12/200213/1.3
			Client sampling date / time	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-040	EM1301875-041	EM1301875-042	EM1301875-045	EM1301875-048
EA002 : pH (Soils)								
pH Value	----	0.1	pH Unit	8.5	5.2	6.8	7.1	8.5
EA055: Moisture Content								
Moisture Content (dried @ 103°C)	----	1.0	%	17.1	7.4	12.3	7.3	21.3
EG005T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	<5	<5	8	<5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	30	26	50	50	58
Copper	7440-50-8	5	mg/kg	<5	11	8	12	7
Lead	7439-92-1	5	mg/kg	12	16	10	14	13
Nickel	7440-02-0	2	mg/kg	14	10	17	22	23
Zinc	7440-66-6	5	mg/kg	8	29	14	35	8
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	----	<0.1	----	<0.1	----
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	----	<0.05	----	<0.05	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	----	<0.05	----	<0.05	----
beta-BHC	319-85-7	0.05	mg/kg	----	<0.05	----	<0.05	----
gamma-BHC	58-89-9	0.05	mg/kg	----	<0.05	----	<0.05	----
delta-BHC	319-86-8	0.05	mg/kg	----	<0.05	----	<0.05	----
Heptachlor	76-44-8	0.05	mg/kg	----	<0.05	----	<0.05	----
Aldrin	309-00-2	0.05	mg/kg	----	<0.05	----	<0.05	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg	----	<0.05	----	<0.05	----
^ Total Chlordane (sum)	----	0.05	mg/kg	----	<0.05	----	<0.05	----
trans-Chlordane	5103-74-2	0.05	mg/kg	----	<0.05	----	<0.05	----
alpha-Endosulfan	959-98-8	0.05	mg/kg	----	<0.05	----	<0.05	----
cis-Chlordane	5103-71-9	0.05	mg/kg	----	<0.05	----	<0.05	----
Dieldrin	60-57-1	0.05	mg/kg	----	<0.05	----	<0.05	----
4.4`-DDE	72-55-9	0.05	mg/kg	----	<0.05	----	<0.05	----
Endrin	72-20-8	0.05	mg/kg	----	<0.05	----	<0.05	----
beta-Endosulfan	33213-65-9	0.05	mg/kg	----	<0.05	----	<0.05	----
4.4`-DDD	72-54-8	0.05	mg/kg	----	<0.05	----	<0.05	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP03/200213/1.5	TP14/200213/0.1	TP14/200213/0.5	TP12/200213/0.1	TP12/200213/1.3
			Client sampling date / time	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-040	EM1301875-041	EM1301875-042	EM1301875-045	EM1301875-048
EP068A: Organochlorine Pesticides (OC) - Continued								
Endrin aldehyde	7421-93-4	0.05	mg/kg	----	<0.05	----	<0.05	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg	----	<0.05	----	<0.05	----
4.4`-DDT	50-29-3	0.2	mg/kg	----	<0.2	----	<0.2	----
Endrin ketone	53494-70-5	0.05	mg/kg	----	<0.05	----	<0.05	----
Methoxychlor	72-43-5	0.2	mg/kg	----	<0.2	----	<0.2	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	----	<0.05	----	<0.05	----
^ Sum of DDD + DDE + DDT	----	0.05	mg/kg	----	<0.05	----	<0.05	----
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	----	<0.05	----	<0.05	----
Demeton-S-methyl	919-86-8	0.05	mg/kg	----	<0.05	----	<0.05	----
Monocrotophos	6923-22-4	0.2	mg/kg	----	<0.2	----	<0.2	----
Dimethoate	60-51-5	0.05	mg/kg	----	<0.05	----	<0.05	----
Diazinon	333-41-5	0.05	mg/kg	----	<0.05	----	<0.05	----
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	----	<0.05	----	<0.05	----
Parathion-methyl	298-00-0	0.2	mg/kg	----	<0.2	----	<0.2	----
Malathion	121-75-5	0.05	mg/kg	----	<0.05	----	<0.05	----
Fenthion	55-38-9	0.05	mg/kg	----	<0.05	----	<0.05	----
Chlorpyrifos	2921-88-2	0.05	mg/kg	----	<0.05	----	<0.05	----
Parathion	56-38-2	0.2	mg/kg	----	<0.2	----	<0.2	----
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	----	<0.05	----	<0.05	----
Bromophos-ethyl	4824-78-6	0.05	mg/kg	----	<0.05	----	<0.05	----
Fenamiphos	22224-92-6	0.05	mg/kg	----	<0.05	----	<0.05	----
Prothiofos	34643-46-4	0.05	mg/kg	----	<0.05	----	<0.05	----
Ethion	563-12-2	0.05	mg/kg	----	<0.05	----	<0.05	----
Carbophenothion	786-19-6	0.05	mg/kg	----	<0.05	----	<0.05	----
Azinphos Methyl	86-50-0	0.05	mg/kg	----	<0.05	----	<0.05	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	----	<0.5	----	<0.5	----
Acenaphthylene	208-96-8	0.5	mg/kg	----	<0.5	----	<0.5	----
Acenaphthene	83-32-9	0.5	mg/kg	----	<0.5	----	<0.5	----
Fluorene	86-73-7	0.5	mg/kg	----	<0.5	----	<0.5	----
Phenanthrene	85-01-8	0.5	mg/kg	----	<0.5	----	<0.5	----
Anthracene	120-12-7	0.5	mg/kg	----	<0.5	----	<0.5	----
Fluoranthene	206-44-0	0.5	mg/kg	----	<0.5	----	<0.5	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP03/200213/1.5	TP14/200213/0.1	TP14/200213/0.5	TP12/200213/0.1	TP12/200213/1.3
			Client sampling date / time	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-040	EM1301875-041	EM1301875-042	EM1301875-045	EM1301875-048
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Pyrene	129-00-0	0.5	mg/kg	----	<0.5	----	<0.5	----
Benz(a)anthracene	56-55-3	0.5	mg/kg	----	<0.5	----	<0.5	----
Chrysene	218-01-9	0.5	mg/kg	----	<0.5	----	<0.5	----
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	----	<0.5	----	<0.5	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	----	<0.5	----	<0.5	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	----	<0.5	----	<0.5	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	----	<0.5	----	<0.5	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	----	<0.5	----	<0.5	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	----	<0.5	----	<0.5	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	----	<0.5	----	<0.5	----
Benzo(a)pyrene TEQ (WHO)	----	0.5	mg/kg	----	<0.5	----	<0.5	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	----	<10	----	<10	----
C10 - C14 Fraction	----	50	mg/kg	----	<50	----	<50	----
C15 - C28 Fraction	----	100	mg/kg	----	<100	----	<100	----
C29 - C36 Fraction	----	100	mg/kg	----	**120**	----	<100	----
^ C10 - C36 Fraction (sum)	----	50	mg/kg	----	**120**	----	<50	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft								
C6 - C10 Fraction	----	10	mg/kg	----	<10	----	<10	----
^ C6 - C10 Fraction minus BTEX (F1)	----	10	mg/kg	----	<10	----	<10	----
>C10 - C16 Fraction	----	50	mg/kg	----	<50	----	<50	----
>C16 - C34 Fraction	----	100	mg/kg	----	**160**	----	<100	----
>C34 - C40 Fraction	----	100	mg/kg	----	<100	----	<100	----
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	----	**160**	----	<50	----
EP080: BTEX								
Benzene	71-43-2	0.2	mg/kg	----	<0.2	----	<0.2	----
Toluene	108-88-3	0.5	mg/kg	----	<0.5	----	<0.5	----
Ethylbenzene	100-41-4	0.5	mg/kg	----	<0.5	----	<0.5	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	----	<0.5	----	<0.5	----
ortho-Xylene	95-47-6	0.5	mg/kg	----	<0.5	----	<0.5	----
EP080: BTEXN								
^ Sum of BTEX	----	0.2	mg/kg	----	<0.2	----	<0.2	----
^ Total Xylenes	1330-20-7	0.5	mg/kg	----	<0.5	----	<0.5	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP03/200213/1.5	TP14/200213/0.1	TP14/200213/0.5	TP12/200213/0.1	TP12/200213/1.3
			Client sampling date / time	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-040	EM1301875-041	EM1301875-042	EM1301875-045	EM1301875-048
EP080: BTEXN - Continued								
Naphthalene	91-20-3	1	mg/kg	----	<1	----	<1	----
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	----	100	----	104	----
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.1	%	----	93.0	----	101	----
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.1	%	----	109	----	110	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	----	92.1	----	105	----
2-Chlorophenol-D4	93951-73-6	0.1	%	----	89.4	----	101	----
2.4.6-Tribromophenol	118-79-6	0.1	%	----	102	----	99.5	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	----	94.6	----	94.8	----
Anthracene-d10	1719-06-8	0.1	%	----	103	----	98.3	----
4-Terphenyl-d14	1718-51-0	0.1	%	----	111	----	109	----
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.1	%	----	101	----	90.3	----
Toluene-D8	2037-26-5	0.1	%	----	97.5	----	84.9	----
4-Bromofluorobenzene	460-00-4	0.1	%	----	101	----	88.8	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP15/200213/0.1	TP15/200213/1.5	TP13/200213/0.1	TP13/200213/1.0	TP10/200213/0.1
			Client sampling date / time	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-049	EM1301875-052	EM1301875-053	EM1301875-055	EM1301875-057
EA002 : pH (Soils)								
pH Value	----	0.1	pH Unit	5.7	5.0	5.8	7.8	6.1
EA055: Moisture Content								
Moisture Content (dried @ 103°C)	----	1.0	%	10.5	19.8	7.2	14.4	9.5
EG005T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	<5	7	<5	<5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	27	28	42	44	20
Copper	7440-50-8	5	mg/kg	7	<5	6	8	<5
Lead	7439-92-1	5	mg/kg	15	12	15	11	10
Nickel	7440-02-0	2	mg/kg	11	8	8	16	6
Zinc	7440-66-6	5	mg/kg	22	5	11	12	7
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	----	<0.1	----	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Dieldrin	60-57-1	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Endrin	72-20-8	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	----	<0.05	----	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP15/200213/0.1	TP15/200213/1.5	TP13/200213/0.1	TP13/200213/1.0	TP10/200213/0.1
			Client sampling date / time	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-049	EM1301875-052	EM1301875-053	EM1301875-055	EM1301875-057
EP068A: Organochlorine Pesticides (OC) - Continued								
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	----	<0.2	----	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	----	<0.2	----	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
^ Sum of DDD + DDE + DDT	----	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	----	<0.2	----	<0.2
Dimethoate	60-51-5	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Diazinon	333-41-5	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	----	<0.2	----	<0.2
Malathion	121-75-5	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Fenthion	55-38-9	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Parathion	56-38-2	0.2	mg/kg	<0.2	----	<0.2	----	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Ethion	563-12-2	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Carbophenothion	786-19-6	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Fluorene	86-73-7	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Anthracene	120-12-7	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	----	<0.5	----	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP15/200213/0.1	TP15/200213/1.5	TP13/200213/0.1	TP13/200213/1.0	TP10/200213/0.1
			Client sampling date / time	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-049	EM1301875-052	EM1301875-053	EM1301875-055	EM1301875-057
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Pyrene	129-00-0	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Chrysene	218-01-9	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Benzo(a)pyrene TEQ (WHO)	----	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	----	<10	----	<10
C10 - C14 Fraction	----	50	mg/kg	<50	----	<50	----	<50
C15 - C28 Fraction	----	100	mg/kg	<100	----	<100	----	<100
C29 - C36 Fraction	----	100	mg/kg	<100	----	<100	----	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	----	<50	----	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft								
C6 - C10 Fraction	----	10	mg/kg	<10	----	<10	----	<10
^ C6 - C10 Fraction minus BTEX (F1)	----	10	mg/kg	<10	----	<10	----	<10
>C10 - C16 Fraction	----	50	mg/kg	<50	----	<50	----	<50
>C16 - C34 Fraction	----	100	mg/kg	**110**	----	<100	----	<100
>C34 - C40 Fraction	----	100	mg/kg	<100	----	<100	----	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	**110**	----	<50	----	<50
EP080: BTEX								
Benzene	71-43-2	0.2	mg/kg	<0.2	----	<0.2	----	<0.2
Toluene	108-88-3	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
EP080: BTEXN								
^ Sum of BTEX	----	0.2	mg/kg	<0.2	----	<0.2	----	<0.2
^ Total Xylenes	1330-20-7	0.5	mg/kg	<0.5	----	<0.5	----	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP15/200213/0.1	TP15/200213/1.5	TP13/200213/0.1	TP13/200213/1.0	TP10/200213/0.1
			Client sampling date / time	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-049	EM1301875-052	EM1301875-053	EM1301875-055	EM1301875-057
EP080: BTEXN - Continued								
Naphthalene	91-20-3	1	mg/kg	<1	----	<1	----	<1
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	95.3	----	101	----	95.3
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.1	%	93.9	----	95.4	----	88.2
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.1	%	95.8	----	103	----	91.7
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	96.0	----	103	----	87.0
2-Chlorophenol-D4	93951-73-6	0.1	%	93.3	----	98.8	----	90.1
2.4.6-Tribromophenol	118-79-6	0.1	%	99.4	----	106	----	98.3
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	102	----	99.1	----	99.9
Anthracene-d10	1719-06-8	0.1	%	100	----	107	----	100
4-Terphenyl-d14	1718-51-0	0.1	%	112	----	120	----	112
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.1	%	93.4	----	98.0	----	94.6
Toluene-D8	2037-26-5	0.1	%	89.7	----	89.2	----	92.9
4-Bromofluorobenzene	460-00-4	0.1	%	94.9	----	91.7	----	94.6

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP10/200213/0.5	TP11/200213/0.1	TP11/200213/1.0	TP11/200213/1.5	TP16/200213/0.1
			Client sampling date / time	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-058	EM1301875-061	EM1301875-063	EM1301875-064	EM1301875-065
EA002 : pH (Soils)								
pH Value	----	0.1	pH Unit	7.0	5.7	7.4	7.4	6.0
EA055: Moisture Content								
Moisture Content (dried @ 103°C)	----	1.0	%	18.5	12.3	17.3	14.3	6.5
EG005T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	27	<5	<5	11
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	45	44	41	22	44
Copper	7440-50-8	5	mg/kg	8	6	6	<5	7
Lead	7439-92-1	5	mg/kg	12	17	12	8	16
Nickel	7440-02-0	2	mg/kg	25	10	16	10	10
Zinc	7440-66-6	5	mg/kg	14	10	10	<5	13
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	----	<0.1	----	----	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	----	<0.05	----	----	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	----	<0.05	----	----	<0.05
beta-BHC	319-85-7	0.05	mg/kg	----	<0.05	----	----	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	----	<0.05	----	----	<0.05
delta-BHC	319-86-8	0.05	mg/kg	----	<0.05	----	----	<0.05
Heptachlor	76-44-8	0.05	mg/kg	----	<0.05	----	----	<0.05
Aldrin	309-00-2	0.05	mg/kg	----	<0.05	----	----	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	----	<0.05	----	----	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg	----	<0.05	----	----	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	----	<0.05	----	----	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg	----	<0.05	----	----	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	----	<0.05	----	----	<0.05
Dieldrin	60-57-1	0.05	mg/kg	----	<0.05	----	----	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg	----	<0.05	----	----	<0.05
Endrin	72-20-8	0.05	mg/kg	----	<0.05	----	----	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg	----	<0.05	----	----	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg	----	<0.05	----	----	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP10/200213/0.5	TP11/200213/0.1	TP11/200213/1.0	TP11/200213/1.5	TP16/200213/0.1
			Client sampling date / time	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-058	EM1301875-061	EM1301875-063	EM1301875-064	EM1301875-065
EP068A: Organochlorine Pesticides (OC) - Continued								
Endrin aldehyde	7421-93-4	0.05	mg/kg	----	<0.05	----	----	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg	----	<0.05	----	----	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg	----	<0.2	----	----	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg	----	<0.05	----	----	<0.05
Methoxychlor	72-43-5	0.2	mg/kg	----	<0.2	----	----	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	----	<0.05	----	----	<0.05
^ Sum of DDD + DDE + DDT	----	0.05	mg/kg	----	<0.05	----	----	<0.05
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	----	<0.05	----	----	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg	----	<0.05	----	----	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg	----	<0.2	----	----	<0.2
Dimethoate	60-51-5	0.05	mg/kg	----	<0.05	----	----	<0.05
Diazinon	333-41-5	0.05	mg/kg	----	<0.05	----	----	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	----	<0.05	----	----	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg	----	<0.2	----	----	<0.2
Malathion	121-75-5	0.05	mg/kg	----	<0.05	----	----	<0.05
Fenthion	55-38-9	0.05	mg/kg	----	<0.05	----	----	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg	----	<0.05	----	----	<0.05
Parathion	56-38-2	0.2	mg/kg	----	<0.2	----	----	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	----	<0.05	----	----	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg	----	<0.05	----	----	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg	----	<0.05	----	----	<0.05
Prothiofos	34643-46-4	0.05	mg/kg	----	<0.05	----	----	<0.05
Ethion	563-12-2	0.05	mg/kg	----	<0.05	----	----	<0.05
Carbophenothion	786-19-6	0.05	mg/kg	----	<0.05	----	----	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg	----	<0.05	----	----	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	----	<0.5	----	----	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	----	<0.5	----	----	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	----	<0.5	----	----	<0.5
Fluorene	86-73-7	0.5	mg/kg	----	<0.5	----	----	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	----	<0.5	----	----	<0.5
Anthracene	120-12-7	0.5	mg/kg	----	<0.5	----	----	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	----	<0.5	----	----	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP10/200213/0.5	TP11/200213/0.1	TP11/200213/1.0	TP11/200213/1.5	TP16/200213/0.1
			Client sampling date / time	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-058	EM1301875-061	EM1301875-063	EM1301875-064	EM1301875-065
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Pyrene	129-00-0	0.5	mg/kg	----	<0.5	----	----	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg	----	<0.5	----	----	<0.5
Chrysene	218-01-9	0.5	mg/kg	----	<0.5	----	----	<0.5
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	----	<0.5	----	----	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	----	<0.5	----	----	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg	----	<0.5	----	----	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	----	<0.5	----	----	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	----	<0.5	----	----	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	----	<0.5	----	----	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	----	<0.5	----	----	<0.5
Benzo(a)pyrene TEQ (WHO)	----	0.5	mg/kg	----	<0.5	----	----	<0.5
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	----	<10	----	----	<10
C10 - C14 Fraction	----	50	mg/kg	----	<50	----	----	<50
C15 - C28 Fraction	----	100	mg/kg	----	<100	----	----	<100
C29 - C36 Fraction	----	100	mg/kg	----	<100	----	----	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg	----	<50	----	----	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft								
C6 - C10 Fraction	----	10	mg/kg	----	<10	----	----	<10
^ C6 - C10 Fraction minus BTEX (F1)	----	10	mg/kg	----	<10	----	----	<10
>C10 - C16 Fraction	----	50	mg/kg	----	<50	----	----	<50
>C16 - C34 Fraction	----	100	mg/kg	----	<100	----	----	<100
>C34 - C40 Fraction	----	100	mg/kg	----	<100	----	----	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	----	<50	----	----	<50
EP080: BTEX								
Benzene	71-43-2	0.2	mg/kg	----	<0.2	----	----	<0.2
Toluene	108-88-3	0.5	mg/kg	----	<0.5	----	----	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	----	<0.5	----	----	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	----	<0.5	----	----	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	----	<0.5	----	----	<0.5
EP080: BTEXN								
^ Sum of BTEX	----	0.2	mg/kg	----	<0.2	----	----	<0.2
^ Total Xylenes	1330-20-7	0.5	mg/kg	----	<0.5	----	----	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP10/200213/0.5	TP11/200213/0.1	TP11/200213/1.0	TP11/200213/1.5	TP16/200213/0.1
			Client sampling date / time	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-058	EM1301875-061	EM1301875-063	EM1301875-064	EM1301875-065
EP080: BTEXN - Continued								
Naphthalene	91-20-3	1	mg/kg	----	<1	----	----	<1
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	----	99.9	----	----	103
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.1	%	----	92.6	----	----	97.7
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.1	%	----	98.8	----	----	97.0
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	----	103	----	----	94.6
2-Chlorophenol-D4	93951-73-6	0.1	%	----	94.8	----	----	92.4
2.4.6-Tribromophenol	118-79-6	0.1	%	----	108	----	----	98.3
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	----	97.2	----	----	95.0
Anthracene-d10	1719-06-8	0.1	%	----	104	----	----	95.1
4-Terphenyl-d14	1718-51-0	0.1	%	----	118	----	----	106
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.1	%	----	88.1	----	----	117
Toluene-D8	2037-26-5	0.1	%	----	85.4	----	----	115
4-Bromofluorobenzene	460-00-4	0.1	%	----	87.4	----	----	119

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP16/200213/1.0	TP17/200213/0.1	TP17/200213/0.5	TP21/200213/0.1	TP21/200213/0.5
			Client sampling date / time	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-067	EM1301875-068	EM1301875-069	EM1301875-070	EM1301875-071
EA002 : pH (Soils)								
pH Value	----	0.1	pH Unit	8.0	5.9	6.6	6.2	7.7
EA055: Moisture Content								
Moisture Content (dried @ 103°C)	----	1.0	%	13.3	11.0	15.5	6.3	12.0
EG005T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	5	<5	15	<5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	2	<1
Chromium	7440-47-3	2	mg/kg	44	38	36	106	48
Copper	7440-50-8	5	mg/kg	7	6	7	8	8
Lead	7439-92-1	5	mg/kg	8	15	9	18	8
Nickel	7440-02-0	2	mg/kg	21	13	23	16	16
Zinc	7440-66-6	5	mg/kg	12	11	10	22	8
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	----	<0.1	----	<0.1	----
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	----	<0.05	----	<0.05	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	----	<0.05	----	<0.05	----
beta-BHC	319-85-7	0.05	mg/kg	----	<0.05	----	<0.05	----
gamma-BHC	58-89-9	0.05	mg/kg	----	<0.05	----	<0.05	----
delta-BHC	319-86-8	0.05	mg/kg	----	<0.05	----	<0.05	----
Heptachlor	76-44-8	0.05	mg/kg	----	<0.05	----	<0.05	----
Aldrin	309-00-2	0.05	mg/kg	----	<0.05	----	<0.05	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg	----	<0.05	----	<0.05	----
^ Total Chlordane (sum)	----	0.05	mg/kg	----	<0.05	----	<0.05	----
trans-Chlordane	5103-74-2	0.05	mg/kg	----	<0.05	----	<0.05	----
alpha-Endosulfan	959-98-8	0.05	mg/kg	----	<0.05	----	<0.05	----
cis-Chlordane	5103-71-9	0.05	mg/kg	----	<0.05	----	<0.05	----
Dieldrin	60-57-1	0.05	mg/kg	----	<0.05	----	<0.05	----
4.4`-DDE	72-55-9	0.05	mg/kg	----	<0.05	----	<0.05	----
Endrin	72-20-8	0.05	mg/kg	----	<0.05	----	<0.05	----
beta-Endosulfan	33213-65-9	0.05	mg/kg	----	<0.05	----	<0.05	----
4.4`-DDD	72-54-8	0.05	mg/kg	----	<0.05	----	<0.05	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP16/200213/1.0	TP17/200213/0.1	TP17/200213/0.5	TP21/200213/0.1	TP21/200213/0.5
			Client sampling date / time	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-067	EM1301875-068	EM1301875-069	EM1301875-070	EM1301875-071
EP068A: Organochlorine Pesticides (OC) - Continued								
Endrin aldehyde	7421-93-4	0.05	mg/kg	----	<0.05	----	<0.05	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg	----	<0.05	----	<0.05	----
4.4`-DDT	50-29-3	0.2	mg/kg	----	<0.2	----	<0.2	----
Endrin ketone	53494-70-5	0.05	mg/kg	----	<0.05	----	<0.05	----
Methoxychlor	72-43-5	0.2	mg/kg	----	<0.2	----	<0.2	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	----	<0.05	----	<0.05	----
^ Sum of DDD + DDE + DDT	----	0.05	mg/kg	----	<0.05	----	<0.05	----
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	----	<0.05	----	<0.05	----
Demeton-S-methyl	919-86-8	0.05	mg/kg	----	<0.05	----	<0.05	----
Monocrotophos	6923-22-4	0.2	mg/kg	----	<0.2	----	<0.2	----
Dimethoate	60-51-5	0.05	mg/kg	----	<0.05	----	<0.05	----
Diazinon	333-41-5	0.05	mg/kg	----	<0.05	----	<0.05	----
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	----	<0.05	----	<0.05	----
Parathion-methyl	298-00-0	0.2	mg/kg	----	<0.2	----	<0.2	----
Malathion	121-75-5	0.05	mg/kg	----	<0.05	----	<0.05	----
Fenthion	55-38-9	0.05	mg/kg	----	<0.05	----	<0.05	----
Chlorpyrifos	2921-88-2	0.05	mg/kg	----	<0.05	----	<0.05	----
Parathion	56-38-2	0.2	mg/kg	----	<0.2	----	<0.2	----
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	----	<0.05	----	<0.05	----
Bromophos-ethyl	4824-78-6	0.05	mg/kg	----	<0.05	----	<0.05	----
Fenamiphos	22224-92-6	0.05	mg/kg	----	<0.05	----	<0.05	----
Prothiofos	34643-46-4	0.05	mg/kg	----	<0.05	----	<0.05	----
Ethion	563-12-2	0.05	mg/kg	----	<0.05	----	<0.05	----
Carbophenothion	786-19-6	0.05	mg/kg	----	<0.05	----	<0.05	----
Azinphos Methyl	86-50-0	0.05	mg/kg	----	<0.05	----	<0.05	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	----	<0.5	----	<0.5	----
Acenaphthylene	208-96-8	0.5	mg/kg	----	<0.5	----	<0.5	----
Acenaphthene	83-32-9	0.5	mg/kg	----	<0.5	----	<0.5	----
Fluorene	86-73-7	0.5	mg/kg	----	<0.5	----	<0.5	----
Phenanthrene	85-01-8	0.5	mg/kg	----	<0.5	----	<0.5	----
Anthracene	120-12-7	0.5	mg/kg	----	<0.5	----	<0.5	----
Fluoranthene	206-44-0	0.5	mg/kg	----	<0.5	----	<0.5	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP16/200213/1.0	TP17/200213/0.1	TP17/200213/0.5	TP21/200213/0.1	TP21/200213/0.5
			Client sampling date / time	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-067	EM1301875-068	EM1301875-069	EM1301875-070	EM1301875-071
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Pyrene	129-00-0	0.5	mg/kg	----	<0.5	----	<0.5	----
Benz(a)anthracene	56-55-3	0.5	mg/kg	----	<0.5	----	<0.5	----
Chrysene	218-01-9	0.5	mg/kg	----	<0.5	----	<0.5	----
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	----	<0.5	----	<0.5	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	----	<0.5	----	<0.5	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	----	<0.5	----	<0.5	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	----	<0.5	----	<0.5	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	----	<0.5	----	<0.5	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	----	<0.5	----	<0.5	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	----	<0.5	----	<0.5	----
Benzo(a)pyrene TEQ (WHO)	----	0.5	mg/kg	----	<0.5	----	<0.5	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	----	<10	----	<10	----
C10 - C14 Fraction	----	50	mg/kg	----	<50	----	<50	----
C15 - C28 Fraction	----	100	mg/kg	----	<100	----	<100	----
C29 - C36 Fraction	----	100	mg/kg	----	<100	----	<100	----
^ C10 - C36 Fraction (sum)	----	50	mg/kg	----	<50	----	<50	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft								
C6 - C10 Fraction	----	10	mg/kg	----	<10	----	<10	----
^ C6 - C10 Fraction minus BTEX (F1)	----	10	mg/kg	----	<10	----	<10	----
>C10 - C16 Fraction	----	50	mg/kg	----	<50	----	<50	----
>C16 - C34 Fraction	----	100	mg/kg	----	<100	----	<100	----
>C34 - C40 Fraction	----	100	mg/kg	----	<100	----	<100	----
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	----	<50	----	<50	----
EP080: BTEX								
Benzene	71-43-2	0.2	mg/kg	----	<0.2	----	<0.2	----
Toluene	108-88-3	0.5	mg/kg	----	<0.5	----	<0.5	----
Ethylbenzene	100-41-4	0.5	mg/kg	----	<0.5	----	<0.5	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	----	<0.5	----	<0.5	----
ortho-Xylene	95-47-6	0.5	mg/kg	----	<0.5	----	<0.5	----
EP080: BTEXN								
^ Sum of BTEX	----	0.2	mg/kg	----	<0.2	----	<0.2	----
^ Total Xylenes	1330-20-7	0.5	mg/kg	----	<0.5	----	<0.5	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP16/200213/1.0	TP17/200213/0.1	TP17/200213/0.5	TP21/200213/0.1	TP21/200213/0.5
			Client sampling date / time	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-067	EM1301875-068	EM1301875-069	EM1301875-070	EM1301875-071
EP080: BTEXN - Continued								
Naphthalene	91-20-3	1	mg/kg	----	<1	----	<1	----
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	----	104	----	86.9	----
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.1	%	----	98.9	----	84.4	----
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.1	%	----	102	----	86.6	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	----	97.4	----	94.7	----
2-Chlorophenol-D4	93951-73-6	0.1	%	----	97.1	----	92.4	----
2.4.6-Tribromophenol	118-79-6	0.1	%	----	106	----	104	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	----	110	----	96.2	----
Anthracene-d10	1719-06-8	0.1	%	----	106	----	100	----
4-Terphenyl-d14	1718-51-0	0.1	%	----	117	----	110	----
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.1	%	----	89.7	----	87.6	----
Toluene-D8	2037-26-5	0.1	%	----	86.1	----	79.4	----
4-Bromofluorobenzene	460-00-4	0.1	%	----	89.8	----	82.5	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP21/200213/1.0	TP21/200213/1.2	TP23/200213/0.1	TP23/200213/0.5	TP22/200213/0.1
			Client sampling date / time	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-072	EM1301875-073	EM1301875-074	EM1301875-075	EM1301875-078
EA002 : pH (Soils)								
pH Value	----	0.1	pH Unit	8.3	8.2	5.4	6.4	6.2
EA055: Moisture Content								
Moisture Content (dried @ 103°C)	----	1.0	%	15.6	15.4	6.7	14.6	6.5
EG005T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	<5	<5	<5	16
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	35	46	25	42	72
Copper	7440-50-8	5	mg/kg	6	7	6	7	<5
Lead	7439-92-1	5	mg/kg	7	8	11	7	15
Nickel	7440-02-0	2	mg/kg	13	15	6	12	7
Zinc	7440-66-6	5	mg/kg	7	9	8	9	<5
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	----	----	<0.1	----	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	----	----	<0.05	----	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	----	----	<0.05	----	<0.05
beta-BHC	319-85-7	0.05	mg/kg	----	----	<0.05	----	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	----	----	<0.05	----	<0.05
delta-BHC	319-86-8	0.05	mg/kg	----	----	<0.05	----	<0.05
Heptachlor	76-44-8	0.05	mg/kg	----	----	<0.05	----	<0.05
Aldrin	309-00-2	0.05	mg/kg	----	----	<0.05	----	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	----	----	<0.05	----	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg	----	----	<0.05	----	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	----	----	<0.05	----	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg	----	----	<0.05	----	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	----	----	<0.05	----	<0.05
Dieldrin	60-57-1	0.05	mg/kg	----	----	<0.05	----	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg	----	----	<0.05	----	<0.05
Endrin	72-20-8	0.05	mg/kg	----	----	<0.05	----	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg	----	----	<0.05	----	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg	----	----	<0.05	----	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP21/200213/1.0	TP21/200213/1.2	TP23/200213/0.1	TP23/200213/0.5	TP22/200213/0.1
			Client sampling date / time	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-072	EM1301875-073	EM1301875-074	EM1301875-075	EM1301875-078
EP068A: Organochlorine Pesticides (OC) - Continued								
Endrin aldehyde	7421-93-4	0.05	mg/kg	----	----	<0.05	----	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg	----	----	<0.05	----	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg	----	----	<0.2	----	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg	----	----	<0.05	----	<0.05
Methoxychlor	72-43-5	0.2	mg/kg	----	----	<0.2	----	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	----	----	<0.05	----	<0.05
^ Sum of DDD + DDE + DDT	----	0.05	mg/kg	----	----	<0.05	----	<0.05
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	----	----	<0.05	----	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg	----	----	<0.05	----	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg	----	----	<0.2	----	<0.2
Dimethoate	60-51-5	0.05	mg/kg	----	----	<0.05	----	<0.05
Diazinon	333-41-5	0.05	mg/kg	----	----	<0.05	----	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	----	----	<0.05	----	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg	----	----	<0.2	----	<0.2
Malathion	121-75-5	0.05	mg/kg	----	----	<0.05	----	<0.05
Fenthion	55-38-9	0.05	mg/kg	----	----	<0.05	----	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg	----	----	<0.05	----	<0.05
Parathion	56-38-2	0.2	mg/kg	----	----	<0.2	----	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	----	----	<0.05	----	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg	----	----	<0.05	----	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg	----	----	<0.05	----	<0.05
Prothiofos	34643-46-4	0.05	mg/kg	----	----	<0.05	----	<0.05
Ethion	563-12-2	0.05	mg/kg	----	----	<0.05	----	<0.05
Carbophenothion	786-19-6	0.05	mg/kg	----	----	<0.05	----	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg	----	----	<0.05	----	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	----	----	<0.5	----	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	----	----	<0.5	----	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	----	----	<0.5	----	<0.5
Fluorene	86-73-7	0.5	mg/kg	----	----	<0.5	----	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	----	----	<0.5	----	<0.5
Anthracene	120-12-7	0.5	mg/kg	----	----	<0.5	----	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	----	----	<0.5	----	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP21/200213/1.0	TP21/200213/1.2	TP23/200213/0.1	TP23/200213/0.5	TP22/200213/0.1
			Client sampling date / time	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-072	EM1301875-073	EM1301875-074	EM1301875-075	EM1301875-078
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Pyrene	129-00-0	0.5	mg/kg	----	----	<0.5	----	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg	----	----	<0.5	----	<0.5
Chrysene	218-01-9	0.5	mg/kg	----	----	<0.5	----	<0.5
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	----	----	<0.5	----	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	----	----	<0.5	----	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg	----	----	<0.5	----	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	----	----	<0.5	----	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	----	----	<0.5	----	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	----	----	<0.5	----	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	----	----	<0.5	----	<0.5
Benzo(a)pyrene TEQ (WHO)	----	0.5	mg/kg	----	----	<0.5	----	<0.5
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	----	----	<10	----	<10
C10 - C14 Fraction	----	50	mg/kg	----	----	<50	----	<50
C15 - C28 Fraction	----	100	mg/kg	----	----	<100	----	<100
C29 - C36 Fraction	----	100	mg/kg	----	----	<100	----	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg	----	----	<50	----	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft								
C6 - C10 Fraction	----	10	mg/kg	----	----	<10	----	<10
^ C6 - C10 Fraction minus BTEX (F1)	----	10	mg/kg	----	----	<10	----	<10
>C10 - C16 Fraction	----	50	mg/kg	----	----	<50	----	<50
>C16 - C34 Fraction	----	100	mg/kg	----	----	<100	----	<100
>C34 - C40 Fraction	----	100	mg/kg	----	----	<100	----	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	----	----	<50	----	<50
EP080: BTEX								
Benzene	71-43-2	0.2	mg/kg	----	----	<0.2	----	<0.2
Toluene	108-88-3	0.5	mg/kg	----	----	<0.5	----	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	----	----	<0.5	----	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	----	----	<0.5	----	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	----	----	<0.5	----	<0.5
EP080: BTEXN								
^ Sum of BTEX	----	0.2	mg/kg	----	----	<0.2	----	<0.2
^ Total Xylenes	1330-20-7	0.5	mg/kg	----	----	<0.5	----	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP21/200213/1.0	TP21/200213/1.2	TP23/200213/0.1	TP23/200213/0.5	TP22/200213/0.1
			Client sampling date / time	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-072	EM1301875-073	EM1301875-074	EM1301875-075	EM1301875-078
EP080: BTEXN - Continued								
Naphthalene	91-20-3	1	mg/kg	----	----	<1	----	<1
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	----	----	100	----	97.8
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.1	%	----	----	94.2	----	99.0
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.1	%	----	----	94.3	----	101
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	----	----	112	----	77.3
2-Chlorophenol-D4	93951-73-6	0.1	%	----	----	99.6	----	99.0
2.4.6-Tribromophenol	118-79-6	0.1	%	----	----	108	----	85.2
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	----	----	95.1	----	94.7
Anthracene-d10	1719-06-8	0.1	%	----	----	101	----	84.9
4-Terphenyl-d14	1718-51-0	0.1	%	----	----	103	----	101
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.1	%	----	----	84.1	----	83.9
Toluene-D8	2037-26-5	0.1	%	----	----	78.5	----	80.7
4-Bromofluorobenzene	460-00-4	0.1	%	----	----	81.9	----	84.3

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP22/200213/1.0	DUPAA/200213/0.1B	TP32/210213/0.1	TP32/210213/0.5	TP31/210213/0.1
			Client sampling date / time	20-FEB-2013 15:00	20-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-080	EM1301875-084	EM1301875-085	EM1301875-086	EM1301875-087
EA002 : pH (Soils)								
pH Value	----	0.1	pH Unit	8.8	6.5	6.4	6.6	6.0
EA055: Moisture Content								
Moisture Content (dried @ 103°C)	----	1.0	%	12.0	7.7	13.9	9.9	12.1
EG005T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	8	<5	<5	<5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	45	51	70	65	23
Copper	7440-50-8	5	mg/kg	<5	<5	16	15	7
Lead	7439-92-1	5	mg/kg	8	13	42	23	11
Nickel	7440-02-0	2	mg/kg	25	8	16	30	8
Zinc	7440-66-6	5	mg/kg	7	<5	24	18	18
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.2	<0.1	<0.1
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	----	<0.1	<0.1	----	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	----	<0.05	<0.05	----	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	----	<0.05	<0.05	----	<0.05
beta-BHC	319-85-7	0.05	mg/kg	----	<0.05	<0.05	----	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	----	<0.05	<0.05	----	<0.05
delta-BHC	319-86-8	0.05	mg/kg	----	<0.05	<0.05	----	<0.05
Heptachlor	76-44-8	0.05	mg/kg	----	<0.05	<0.05	----	<0.05
Aldrin	309-00-2	0.05	mg/kg	----	<0.05	<0.05	----	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	----	<0.05	<0.05	----	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg	----	<0.05	<0.05	----	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	----	<0.05	<0.05	----	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg	----	<0.05	<0.05	----	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	----	<0.05	<0.05	----	<0.05
Dieldrin	60-57-1	0.05	mg/kg	----	<0.05	<0.05	----	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg	----	<0.05	<0.05	----	<0.05
Endrin	72-20-8	0.05	mg/kg	----	<0.05	<0.05	----	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg	----	<0.05	<0.05	----	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg	----	<0.05	<0.05	----	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP22/200213/1.0	DUPAA/200213/0.1B	TP32/210213/0.1	TP32/210213/0.5	TP31/210213/0.1
			Client sampling date / time	20-FEB-2013 15:00	20-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-080	EM1301875-084	EM1301875-085	EM1301875-086	EM1301875-087
EP068A: Organochlorine Pesticides (OC) - Continued								
Endrin aldehyde	7421-93-4	0.05	mg/kg	----	<0.05	<0.05	----	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg	----	<0.05	<0.05	----	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg	----	<0.2	<0.2	----	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg	----	<0.05	<0.05	----	<0.05
Methoxychlor	72-43-5	0.2	mg/kg	----	<0.2	<0.2	----	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	----	<0.05	<0.05	----	<0.05
^ Sum of DDD + DDE + DDT	----	0.05	mg/kg	----	<0.05	<0.05	----	<0.05
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	----	<0.05	<0.05	----	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg	----	<0.05	<0.05	----	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg	----	<0.2	<0.2	----	<0.2
Dimethoate	60-51-5	0.05	mg/kg	----	<0.05	<0.05	----	<0.05
Diazinon	333-41-5	0.05	mg/kg	----	<0.05	<0.05	----	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	----	<0.05	<0.05	----	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg	----	<0.2	<0.2	----	<0.2
Malathion	121-75-5	0.05	mg/kg	----	<0.05	<0.05	----	<0.05
Fenthion	55-38-9	0.05	mg/kg	----	<0.05	<0.05	----	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg	----	<0.05	<0.05	----	<0.05
Parathion	56-38-2	0.2	mg/kg	----	<0.2	<0.2	----	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	----	<0.05	<0.05	----	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg	----	<0.05	<0.05	----	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg	----	<0.05	<0.05	----	<0.05
Prothiofos	34643-46-4	0.05	mg/kg	----	<0.05	<0.05	----	<0.05
Ethion	563-12-2	0.05	mg/kg	----	<0.05	<0.05	----	<0.05
Carbophenothion	786-19-6	0.05	mg/kg	----	<0.05	<0.05	----	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg	----	<0.05	<0.05	----	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	----	<0.5	<0.5	----	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	----	<0.5	<0.5	----	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	----	<0.5	<0.5	----	<0.5
Fluorene	86-73-7	0.5	mg/kg	----	<0.5	<0.5	----	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	----	<0.5	<0.5	----	<0.5
Anthracene	120-12-7	0.5	mg/kg	----	<0.5	<0.5	----	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	----	<0.5	<0.5	----	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP22/200213/1.0	DUPAA/200213/0.1B	TP32/210213/0.1	TP32/210213/0.5	TP31/210213/0.1
			Client sampling date / time	20-FEB-2013 15:00	20-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-080	EM1301875-084	EM1301875-085	EM1301875-086	EM1301875-087
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Pyrene	129-00-0	0.5	mg/kg	----	<0.5	<0.5	----	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg	----	<0.5	<0.5	----	<0.5
Chrysene	218-01-9	0.5	mg/kg	----	<0.5	<0.5	----	<0.5
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	----	<0.5	<0.5	----	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	----	<0.5	<0.5	----	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg	----	<0.5	<0.5	----	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	----	<0.5	<0.5	----	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	----	<0.5	<0.5	----	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	----	<0.5	<0.5	----	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	----	<0.5	<0.5	----	<0.5
Benzo(a)pyrene TEQ (WHO)	----	0.5	mg/kg	----	<0.5	<0.5	----	<0.5
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	----	<10	<10	----	<10
C10 - C14 Fraction	----	50	mg/kg	----	<50	<50	----	<50
C15 - C28 Fraction	----	100	mg/kg	----	<100	<100	----	<100
C29 - C36 Fraction	----	100	mg/kg	----	<100	<100	----	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg	----	<50	<50	----	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft								
C6 - C10 Fraction	----	10	mg/kg	----	<10	<10	----	<10
^ C6 - C10 Fraction minus BTEX (F1)	----	10	mg/kg	----	<10	<10	----	<10
>C10 - C16 Fraction	----	50	mg/kg	----	<50	<50	----	<50
>C16 - C34 Fraction	----	100	mg/kg	----	<100	<100	----	<100
>C34 - C40 Fraction	----	100	mg/kg	----	<100	<100	----	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	----	<50	<50	----	<50
EP080: BTEX								
Benzene	71-43-2	0.2	mg/kg	----	<0.2	<0.2	----	<0.2
Toluene	108-88-3	0.5	mg/kg	----	<0.5	<0.5	----	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	----	<0.5	<0.5	----	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	----	<0.5	<0.5	----	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	----	<0.5	<0.5	----	<0.5
EP080: BTEXN								
^ Sum of BTEX	----	0.2	mg/kg	----	<0.2	<0.2	----	<0.2
^ Total Xylenes	1330-20-7	0.5	mg/kg	----	<0.5	<0.5	----	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP22/200213/1.0	DUPAA/200213/0.1B	TP32/210213/0.1	TP32/210213/0.5	TP31/210213/0.1
			Client sampling date / time	20-FEB-2013 15:00	20-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-080	EM1301875-084	EM1301875-085	EM1301875-086	EM1301875-087
EP080: BTEXN - Continued								
Naphthalene	91-20-3	1	mg/kg	----	<1	<1	----	<1
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	----	108	102	----	97.0
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.1	%	----	108	102	----	99.5
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.1	%	----	111	102	----	105
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	----	102	113	----	108
2-Chlorophenol-D4	93951-73-6	0.1	%	----	89.7	99.6	----	103
2.4.6-Tribromophenol	118-79-6	0.1	%	----	75.2	76.6	----	69.8
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	----	91.9	105	----	91.7
Anthracene-d10	1719-06-8	0.1	%	----	68.9	110	----	89.7
4-Terphenyl-d14	1718-51-0	0.1	%	----	92.7	112	----	104
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.1	%	----	90.0	93.9	----	79.5
Toluene-D8	2037-26-5	0.1	%	----	86.7	90.1	----	77.5
4-Bromofluorobenzene	460-00-4	0.1	%	----	87.0	92.7	----	80.9

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP31/210213/0.7	TP29/210213/0.1	TP29/210213/0.5	TP30/210213/0.1	TP30/210213/0.5
			Client sampling date / time	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-089	EM1301875-090	EM1301875-091	EM1301875-094	EM1301875-095
EA002 : pH (Soils)								
pH Value	----	0.1	pH Unit	8.1	6.2	6.3	5.8	5.9
EA055: Moisture Content								
Moisture Content (dried @ 103°C)	----	1.0	%	14.9	8.8	14.7	6.3	12.2
EG005T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	<5	<5	<5	<5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	43	22	40	29	63
Copper	7440-50-8	5	mg/kg	7	<5	7	<5	7
Lead	7439-92-1	5	mg/kg	8	8	9	10	9
Nickel	7440-02-0	2	mg/kg	14	6	13	4	12
Zinc	7440-66-6	5	mg/kg	8	7	10	<5	9
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	----	<0.1	----	<0.1	----
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	----	<0.05	----	<0.05	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	----	<0.05	----	<0.05	----
beta-BHC	319-85-7	0.05	mg/kg	----	<0.05	----	<0.05	----
gamma-BHC	58-89-9	0.05	mg/kg	----	<0.05	----	<0.05	----
delta-BHC	319-86-8	0.05	mg/kg	----	<0.05	----	<0.05	----
Heptachlor	76-44-8	0.05	mg/kg	----	<0.05	----	<0.05	----
Aldrin	309-00-2	0.05	mg/kg	----	<0.05	----	<0.05	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg	----	<0.05	----	<0.05	----
^ Total Chlordane (sum)	----	0.05	mg/kg	----	<0.05	----	<0.05	----
trans-Chlordane	5103-74-2	0.05	mg/kg	----	<0.05	----	<0.05	----
alpha-Endosulfan	959-98-8	0.05	mg/kg	----	<0.05	----	<0.05	----
cis-Chlordane	5103-71-9	0.05	mg/kg	----	<0.05	----	<0.05	----
Dieldrin	60-57-1	0.05	mg/kg	----	<0.05	----	<0.05	----
4.4`-DDE	72-55-9	0.05	mg/kg	----	<0.05	----	<0.05	----
Endrin	72-20-8	0.05	mg/kg	----	<0.05	----	<0.05	----
beta-Endosulfan	33213-65-9	0.05	mg/kg	----	<0.05	----	<0.05	----
4.4`-DDD	72-54-8	0.05	mg/kg	----	<0.05	----	<0.05	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP31/210213/0.7	TP29/210213/0.1	TP29/210213/0.5	TP30/210213/0.1	TP30/210213/0.5
			Client sampling date / time	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-089	EM1301875-090	EM1301875-091	EM1301875-094	EM1301875-095
EP068A: Organochlorine Pesticides (OC) - Continued								
Endrin aldehyde	7421-93-4	0.05	mg/kg	----	<0.05	----	<0.05	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg	----	<0.05	----	<0.05	----
4.4`-DDT	50-29-3	0.2	mg/kg	----	<0.2	----	<0.2	----
Endrin ketone	53494-70-5	0.05	mg/kg	----	<0.05	----	<0.05	----
Methoxychlor	72-43-5	0.2	mg/kg	----	<0.2	----	<0.2	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	----	<0.05	----	<0.05	----
^ Sum of DDD + DDE + DDT	----	0.05	mg/kg	----	<0.05	----	<0.05	----
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	----	<0.05	----	<0.05	----
Demeton-S-methyl	919-86-8	0.05	mg/kg	----	<0.05	----	<0.05	----
Monocrotophos	6923-22-4	0.2	mg/kg	----	<0.2	----	<0.2	----
Dimethoate	60-51-5	0.05	mg/kg	----	<0.05	----	<0.05	----
Diazinon	333-41-5	0.05	mg/kg	----	<0.05	----	<0.05	----
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	----	<0.05	----	<0.05	----
Parathion-methyl	298-00-0	0.2	mg/kg	----	<0.2	----	<0.2	----
Malathion	121-75-5	0.05	mg/kg	----	<0.05	----	<0.05	----
Fenthion	55-38-9	0.05	mg/kg	----	<0.05	----	<0.05	----
Chlorpyrifos	2921-88-2	0.05	mg/kg	----	<0.05	----	<0.05	----
Parathion	56-38-2	0.2	mg/kg	----	<0.2	----	<0.2	----
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	----	<0.05	----	<0.05	----
Bromophos-ethyl	4824-78-6	0.05	mg/kg	----	<0.05	----	<0.05	----
Fenamiphos	22224-92-6	0.05	mg/kg	----	<0.05	----	<0.05	----
Prothiofos	34643-46-4	0.05	mg/kg	----	<0.05	----	<0.05	----
Ethion	563-12-2	0.05	mg/kg	----	<0.05	----	<0.05	----
Carbophenothion	786-19-6	0.05	mg/kg	----	<0.05	----	<0.05	----
Azinphos Methyl	86-50-0	0.05	mg/kg	----	<0.05	----	<0.05	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	----	<0.5	----	<0.5	----
Acenaphthylene	208-96-8	0.5	mg/kg	----	<0.5	----	<0.5	----
Acenaphthene	83-32-9	0.5	mg/kg	----	<0.5	----	<0.5	----
Fluorene	86-73-7	0.5	mg/kg	----	<0.5	----	<0.5	----
Phenanthrene	85-01-8	0.5	mg/kg	----	<0.5	----	<0.5	----
Anthracene	120-12-7	0.5	mg/kg	----	<0.5	----	<0.5	----
Fluoranthene	206-44-0	0.5	mg/kg	----	<0.5	----	<0.5	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP31/210213/0.7	TP29/210213/0.1	TP29/210213/0.5	TP30/210213/0.1	TP30/210213/0.5
			Client sampling date / time	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-089	EM1301875-090	EM1301875-091	EM1301875-094	EM1301875-095
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Pyrene	129-00-0	0.5	mg/kg	----	<0.5	----	<0.5	----
Benz(a)anthracene	56-55-3	0.5	mg/kg	----	<0.5	----	<0.5	----
Chrysene	218-01-9	0.5	mg/kg	----	<0.5	----	<0.5	----
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	----	<0.5	----	<0.5	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	----	<0.5	----	<0.5	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	----	<0.5	----	<0.5	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	----	<0.5	----	<0.5	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	----	<0.5	----	<0.5	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	----	<0.5	----	<0.5	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	----	<0.5	----	<0.5	----
Benzo(a)pyrene TEQ (WHO)	----	0.5	mg/kg	----	<0.5	----	<0.5	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	----	<10	----	<10	----
C10 - C14 Fraction	----	50	mg/kg	----	<50	----	<50	----
C15 - C28 Fraction	----	100	mg/kg	----	<100	----	<100	----
C29 - C36 Fraction	----	100	mg/kg	----	<100	----	<100	----
^ C10 - C36 Fraction (sum)	----	50	mg/kg	----	<50	----	<50	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft								
C6 - C10 Fraction	----	10	mg/kg	----	<10	----	<10	----
^ C6 - C10 Fraction minus BTEX (F1)	----	10	mg/kg	----	<10	----	<10	----
>C10 - C16 Fraction	----	50	mg/kg	----	<50	----	<50	----
>C16 - C34 Fraction	----	100	mg/kg	----	<100	----	<100	----
>C34 - C40 Fraction	----	100	mg/kg	----	<100	----	<100	----
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	----	<50	----	<50	----
EP080: BTEX								
Benzene	71-43-2	0.2	mg/kg	----	<0.2	----	<0.2	----
Toluene	108-88-3	0.5	mg/kg	----	<0.5	----	<0.5	----
Ethylbenzene	100-41-4	0.5	mg/kg	----	<0.5	----	<0.5	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	----	<0.5	----	<0.5	----
ortho-Xylene	95-47-6	0.5	mg/kg	----	<0.5	----	<0.5	----
EP080: BTEXN								
^ Sum of BTEX	----	0.2	mg/kg	----	<0.2	----	<0.2	----
^ Total Xylenes	1330-20-7	0.5	mg/kg	----	<0.5	----	<0.5	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP31/210213/0.7	TP29/210213/0.1	TP29/210213/0.5	TP30/210213/0.1	TP30/210213/0.5
			Client sampling date / time	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-089	EM1301875-090	EM1301875-091	EM1301875-094	EM1301875-095
EP080: BTEXN - Continued								
Naphthalene	91-20-3	1	mg/kg	----	<1	----	<1	----
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	----	115	----	95.1	----
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.1	%	----	111	----	94.8	----
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.1	%	----	113	----	94.5	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	----	106	----	82.1	----
2-Chlorophenol-D4	93951-73-6	0.1	%	----	88.6	----	85.8	----
2.4.6-Tribromophenol	118-79-6	0.1	%	----	70.2	----	88.8	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	----	98.0	----	87.0	----
Anthracene-d10	1719-06-8	0.1	%	----	109	----	89.4	----
4-Terphenyl-d14	1718-51-0	0.1	%	----	110	----	102	----
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.1	%	----	92.8	----	86.8	----
Toluene-D8	2037-26-5	0.1	%	----	92.4	----	86.4	----
4-Bromofluorobenzene	460-00-4	0.1	%	----	95.4	----	90.2	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP27/210213/0.1	TP27/210213/1.4	TP26/210213/0.1	TP26/210213/1.0	TP24/210213/0.1
			Client sampling date / time	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-098	EM1301875-101	EM1301875-102	EM1301875-104	EM1301875-106
EA002 : pH (Soils)								
pH Value	----	0.1	pH Unit	5.3	8.1	5.8	8.4	5.8
EA055: Moisture Content								
Moisture Content (dried @ 103°C)	----	1.0	%	10.2	14.5	13.9	13.2	5.9
EG005T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	<5	<5	<5	<5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	24	35	42	38	21
Copper	7440-50-8	5	mg/kg	7	5	7	5	<5
Lead	7439-92-1	5	mg/kg	10	8	12	8	10
Nickel	7440-02-0	2	mg/kg	7	13	11	13	6
Zinc	7440-66-6	5	mg/kg	11	7	9	7	7
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	----	<0.1	----	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Dieldrin	60-57-1	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Endrin	72-20-8	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	----	<0.05	----	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP27/210213/0.1	TP27/210213/1.4	TP26/210213/0.1	TP26/210213/1.0	TP24/210213/0.1
			Client sampling date / time	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-098	EM1301875-101	EM1301875-102	EM1301875-104	EM1301875-106
EP068A: Organochlorine Pesticides (OC) - Continued								
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	----	<0.2	----	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	----	<0.2	----	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
^ Sum of DDD + DDE + DDT	----	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	----	<0.2	----	<0.2
Dimethoate	60-51-5	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Diazinon	333-41-5	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	----	<0.2	----	<0.2
Malathion	121-75-5	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Fenthion	55-38-9	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Parathion	56-38-2	0.2	mg/kg	<0.2	----	<0.2	----	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Ethion	563-12-2	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Carbophenothion	786-19-6	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Fluorene	86-73-7	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Anthracene	120-12-7	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	----	<0.5	----	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP27/210213/0.1	TP27/210213/1.4	TP26/210213/0.1	TP26/210213/1.0	TP24/210213/0.1
			Client sampling date / time	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-098	EM1301875-101	EM1301875-102	EM1301875-104	EM1301875-106
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Pyrene	129-00-0	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Chrysene	218-01-9	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Benzo(a)pyrene TEQ (WHO)	----	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	----	<10	----	<10
C10 - C14 Fraction	----	50	mg/kg	<50	----	<50	----	<50
C15 - C28 Fraction	----	100	mg/kg	<100	----	<100	----	<100
C29 - C36 Fraction	----	100	mg/kg	<100	----	<100	----	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	----	<50	----	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft								
C6 - C10 Fraction	----	10	mg/kg	<10	----	<10	----	<10
^ C6 - C10 Fraction minus BTEX (F1)	----	10	mg/kg	<10	----	<10	----	<10
>C10 - C16 Fraction	----	50	mg/kg	<50	----	<50	----	<50
>C16 - C34 Fraction	----	100	mg/kg	<100	----	<100	----	<100
>C34 - C40 Fraction	----	100	mg/kg	<100	----	<100	----	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	----	<50	----	<50
EP080: BTEX								
Benzene	71-43-2	0.2	mg/kg	<0.2	----	<0.2	----	<0.2
Toluene	108-88-3	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
EP080: BTEXN								
^ Sum of BTEX	----	0.2	mg/kg	<0.2	----	<0.2	----	<0.2
^ Total Xylenes	1330-20-7	0.5	mg/kg	<0.5	----	<0.5	----	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP27/210213/0.1	TP27/210213/1.4	TP26/210213/0.1	TP26/210213/1.0	TP24/210213/0.1
			Client sampling date / time	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-098	EM1301875-101	EM1301875-102	EM1301875-104	EM1301875-106
EP080: BTEXN - Continued								
Naphthalene	91-20-3	1	mg/kg	<1	----	<1	----	<1
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	105	----	101	----	103
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.1	%	105	----	96.5	----	99.8
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.1	%	108	----	97.8	----	100
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	99.2	----	97.3	----	88.7
2-Chlorophenol-D4	93951-73-6	0.1	%	93.3	----	94.6	----	92.0
2.4.6-Tribromophenol	118-79-6	0.1	%	104	----	98.8	----	101
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	91.8	----	99.4	----	101
Anthracene-d10	1719-06-8	0.1	%	99.4	----	96.0	----	98.6
4-Terphenyl-d14	1718-51-0	0.1	%	111	----	114	----	116
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.1	%	93.0	----	118	----	88.6
Toluene-D8	2037-26-5	0.1	%	80.2	----	116	----	86.2
4-Bromofluorobenzene	460-00-4	0.1	%	86.9	----	120	----	85.4

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP24/210213/1.2	TP19/210213/0.1	TP19/210213/0.5	TP20/210213/0.1	TP20/210213/1.0
			Client sampling date / time	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-108	EM1301875-109	EM1301875-110	EM1301875-113	EM1301875-115
EA002 : pH (Soils)								
pH Value	----	0.1	pH Unit	6.9	5.8	6.1	5.7	8.5
EA055: Moisture Content								
Moisture Content (dried @ 103°C)	----	1.0	%	13.2	7.5	11.8	6.2	12.1
EG005T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	<5	6	<5	<5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	38	19	58	28	47
Copper	7440-50-8	5	mg/kg	6	<5	7	<5	<5
Lead	7439-92-1	5	mg/kg	8	8	13	9	9
Nickel	7440-02-0	2	mg/kg	12	5	13	6	16
Zinc	7440-66-6	5	mg/kg	9	5	7	6	6
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	----	<0.1	----	<0.1	----
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	----	<0.05	----	<0.05	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	----	<0.05	----	<0.05	----
beta-BHC	319-85-7	0.05	mg/kg	----	<0.05	----	<0.05	----
gamma-BHC	58-89-9	0.05	mg/kg	----	<0.05	----	<0.05	----
delta-BHC	319-86-8	0.05	mg/kg	----	<0.05	----	<0.05	----
Heptachlor	76-44-8	0.05	mg/kg	----	<0.05	----	<0.05	----
Aldrin	309-00-2	0.05	mg/kg	----	<0.05	----	<0.05	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg	----	<0.05	----	<0.05	----
^ Total Chlordane (sum)	----	0.05	mg/kg	----	<0.05	----	<0.05	----
trans-Chlordane	5103-74-2	0.05	mg/kg	----	<0.05	----	<0.05	----
alpha-Endosulfan	959-98-8	0.05	mg/kg	----	<0.05	----	<0.05	----
cis-Chlordane	5103-71-9	0.05	mg/kg	----	<0.05	----	<0.05	----
Dieldrin	60-57-1	0.05	mg/kg	----	<0.05	----	<0.05	----
4.4`-DDE	72-55-9	0.05	mg/kg	----	<0.05	----	<0.05	----
Endrin	72-20-8	0.05	mg/kg	----	<0.05	----	<0.05	----
beta-Endosulfan	33213-65-9	0.05	mg/kg	----	<0.05	----	<0.05	----
4.4`-DDD	72-54-8	0.05	mg/kg	----	<0.05	----	<0.05	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP24/210213/1.2	TP19/210213/0.1	TP19/210213/0.5	TP20/210213/0.1	TP20/210213/1.0
			Client sampling date / time	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-108	EM1301875-109	EM1301875-110	EM1301875-113	EM1301875-115
EP068A: Organochlorine Pesticides (OC) - Continued								
Endrin aldehyde	7421-93-4	0.05	mg/kg	----	<0.05	----	<0.05	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg	----	<0.05	----	<0.05	----
4.4`-DDT	50-29-3	0.2	mg/kg	----	<0.2	----	<0.2	----
Endrin ketone	53494-70-5	0.05	mg/kg	----	<0.05	----	<0.05	----
Methoxychlor	72-43-5	0.2	mg/kg	----	<0.2	----	<0.2	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	----	<0.05	----	<0.05	----
^ Sum of DDD + DDE + DDT	----	0.05	mg/kg	----	<0.05	----	<0.05	----
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	----	<0.05	----	<0.05	----
Demeton-S-methyl	919-86-8	0.05	mg/kg	----	<0.05	----	<0.05	----
Monocrotophos	6923-22-4	0.2	mg/kg	----	<0.2	----	<0.2	----
Dimethoate	60-51-5	0.05	mg/kg	----	<0.05	----	<0.05	----
Diazinon	333-41-5	0.05	mg/kg	----	<0.05	----	<0.05	----
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	----	<0.05	----	<0.05	----
Parathion-methyl	298-00-0	0.2	mg/kg	----	<0.2	----	<0.2	----
Malathion	121-75-5	0.05	mg/kg	----	<0.05	----	<0.05	----
Fenthion	55-38-9	0.05	mg/kg	----	<0.05	----	<0.05	----
Chlorpyrifos	2921-88-2	0.05	mg/kg	----	<0.05	----	<0.05	----
Parathion	56-38-2	0.2	mg/kg	----	<0.2	----	<0.2	----
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	----	<0.05	----	<0.05	----
Bromophos-ethyl	4824-78-6	0.05	mg/kg	----	<0.05	----	<0.05	----
Fenamiphos	22224-92-6	0.05	mg/kg	----	<0.05	----	<0.05	----
Prothiofos	34643-46-4	0.05	mg/kg	----	<0.05	----	<0.05	----
Ethion	563-12-2	0.05	mg/kg	----	<0.05	----	<0.05	----
Carbophenothion	786-19-6	0.05	mg/kg	----	<0.05	----	<0.05	----
Azinphos Methyl	86-50-0	0.05	mg/kg	----	<0.05	----	<0.05	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	----	<0.5	----	<0.5	----
Acenaphthylene	208-96-8	0.5	mg/kg	----	<0.5	----	<0.5	----
Acenaphthene	83-32-9	0.5	mg/kg	----	<0.5	----	<0.5	----
Fluorene	86-73-7	0.5	mg/kg	----	<0.5	----	<0.5	----
Phenanthrene	85-01-8	0.5	mg/kg	----	<0.5	----	<0.5	----
Anthracene	120-12-7	0.5	mg/kg	----	<0.5	----	<0.5	----
Fluoranthene	206-44-0	0.5	mg/kg	----	<0.5	----	<0.5	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP24/210213/1.2	TP19/210213/0.1	TP19/210213/0.5	TP20/210213/0.1	TP20/210213/1.0
			Client sampling date / time	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-108	EM1301875-109	EM1301875-110	EM1301875-113	EM1301875-115
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Pyrene	129-00-0	0.5	mg/kg	----	<0.5	----	<0.5	----
Benz(a)anthracene	56-55-3	0.5	mg/kg	----	<0.5	----	<0.5	----
Chrysene	218-01-9	0.5	mg/kg	----	<0.5	----	<0.5	----
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	----	<0.5	----	<0.5	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	----	<0.5	----	<0.5	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	----	<0.5	----	<0.5	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	----	<0.5	----	<0.5	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	----	<0.5	----	<0.5	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	----	<0.5	----	<0.5	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	----	<0.5	----	<0.5	----
Benzo(a)pyrene TEQ (WHO)	----	0.5	mg/kg	----	<0.5	----	<0.5	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	----	<10	----	<10	----
C10 - C14 Fraction	----	50	mg/kg	----	<50	----	<50	----
C15 - C28 Fraction	----	100	mg/kg	----	<100	----	<100	----
C29 - C36 Fraction	----	100	mg/kg	----	<100	----	<100	----
^ C10 - C36 Fraction (sum)	----	50	mg/kg	----	<50	----	<50	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft								
C6 - C10 Fraction	----	10	mg/kg	----	<10	----	<10	----
^ C6 - C10 Fraction minus BTEX (F1)	----	10	mg/kg	----	<10	----	<10	----
>C10 - C16 Fraction	----	50	mg/kg	----	<50	----	<50	----
>C16 - C34 Fraction	----	100	mg/kg	----	<100	----	<100	----
>C34 - C40 Fraction	----	100	mg/kg	----	<100	----	<100	----
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	----	<50	----	<50	----
EP080: BTEX								
Benzene	71-43-2	0.2	mg/kg	----	<0.2	----	<0.2	----
Toluene	108-88-3	0.5	mg/kg	----	<0.5	----	<0.5	----
Ethylbenzene	100-41-4	0.5	mg/kg	----	<0.5	----	<0.5	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	----	<0.5	----	<0.5	----
ortho-Xylene	95-47-6	0.5	mg/kg	----	<0.5	----	<0.5	----
EP080: BTEXN								
^ Sum of BTEX	----	0.2	mg/kg	----	<0.2	----	<0.2	----
^ Total Xylenes	1330-20-7	0.5	mg/kg	----	<0.5	----	<0.5	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP24/210213/1.2	TP19/210213/0.1	TP19/210213/0.5	TP20/210213/0.1	TP20/210213/1.0
			Client sampling date / time	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-108	EM1301875-109	EM1301875-110	EM1301875-113	EM1301875-115
EP080: BTEXN - Continued								
Naphthalene	91-20-3	1	mg/kg	----	<1	----	<1	----
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	----	87.2	----	75.8	----
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.1	%	----	86.0	----	76.6	----
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.1	%	----	85.6	----	77.8	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	----	86.6	----	87.8	----
2-Chlorophenol-D4	93951-73-6	0.1	%	----	87.8	----	98.4	----
2.4.6-Tribromophenol	118-79-6	0.1	%	----	93.6	----	93.2	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	----	92.8	----	96.5	----
Anthracene-d10	1719-06-8	0.1	%	----	94.4	----	95.8	----
4-Terphenyl-d14	1718-51-0	0.1	%	----	110	----	113	----
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.1	%	----	98.8	----	91.2	----
Toluene-D8	2037-26-5	0.1	%	----	95.7	----	87.1	----
4-Bromofluorobenzene	460-00-4	0.1	%	----	98.5	----	90.4	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP25/210213/0.1	TP25/210213/0.5	TP28/210213/0.1	TP28/210213/1.5	TP18/210213/0.1
			Client sampling date / time	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-117	EM1301875-118	EM1301875-121	EM1301875-124	EM1301875-125
EA002 : pH (Soils)								
pH Value	----	0.1	pH Unit	5.5	6.7	5.7	8.5	5.8
EA055: Moisture Content								
Moisture Content (dried @ 103°C)	----	1.0	%	7.4	14.1	5.3	12.6	10.9
EG005T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	<5	6	<5	<5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	29	40	52	41	28
Copper	7440-50-8	5	mg/kg	6	7	6	<5	6
Lead	7439-92-1	5	mg/kg	17	8	14	9	10
Nickel	7440-02-0	2	mg/kg	7	18	8	16	8
Zinc	7440-66-6	5	mg/kg	9	10	11	<5	10
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	----	<0.1	----	<0.1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Dieldrin	60-57-1	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Endrin	72-20-8	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	----	<0.05	----	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP25/210213/0.1	TP25/210213/0.5	TP28/210213/0.1	TP28/210213/1.5	TP18/210213/0.1
			Client sampling date / time	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-117	EM1301875-118	EM1301875-121	EM1301875-124	EM1301875-125
EP068A: Organochlorine Pesticides (OC) - Continued								
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	----	<0.2	----	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	----	<0.2	----	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
^ Sum of DDD + DDE + DDT	----	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	----	<0.2	----	<0.2
Dimethoate	60-51-5	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Diazinon	333-41-5	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	----	<0.2	----	<0.2
Malathion	121-75-5	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Fenthion	55-38-9	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Parathion	56-38-2	0.2	mg/kg	<0.2	----	<0.2	----	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Ethion	563-12-2	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Carbophenothion	786-19-6	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	----	<0.05	----	<0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Fluorene	86-73-7	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Anthracene	120-12-7	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	----	<0.5	----	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP25/210213/0.1	TP25/210213/0.5	TP28/210213/0.1	TP28/210213/1.5	TP18/210213/0.1
			Client sampling date / time	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-117	EM1301875-118	EM1301875-121	EM1301875-124	EM1301875-125
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Pyrene	129-00-0	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Chrysene	218-01-9	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Benzo(a)pyrene TEQ (WHO)	----	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	----	<10	----	<10
C10 - C14 Fraction	----	50	mg/kg	<50	----	<50	----	<50
C15 - C28 Fraction	----	100	mg/kg	<100	----	<100	----	<100
C29 - C36 Fraction	----	100	mg/kg	<100	----	<100	----	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	----	<50	----	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft								
C6 - C10 Fraction	----	10	mg/kg	<10	----	<10	----	<10
^ C6 - C10 Fraction minus BTEX (F1)	----	10	mg/kg	<10	----	<10	----	<10
>C10 - C16 Fraction	----	50	mg/kg	<50	----	<50	----	<50
>C16 - C34 Fraction	----	100	mg/kg	<100	----	<100	----	<100
>C34 - C40 Fraction	----	100	mg/kg	<100	----	<100	----	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	----	<50	----	<50
EP080: BTEX								
Benzene	71-43-2	0.2	mg/kg	<0.2	----	<0.2	----	<0.2
Toluene	108-88-3	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
EP080: BTEXN								
^ Sum of BTEX	----	0.2	mg/kg	<0.2	----	<0.2	----	<0.2
^ Total Xylenes	1330-20-7	0.5	mg/kg	<0.5	----	<0.5	----	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP25/210213/0.1	TP25/210213/0.5	TP28/210213/0.1	TP28/210213/1.5	TP18/210213/0.1
			Client sampling date / time	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-117	EM1301875-118	EM1301875-121	EM1301875-124	EM1301875-125
EP080: BTEXN - Continued								
Naphthalene	91-20-3	1	mg/kg	<1	----	<1	----	<1
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	65.3	----	83.5	----	89.6
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.1	%	67.9	----	87.5	----	92.6
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.1	%	69.9	----	91.3	----	91.7
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	79.5	----	91.5	----	90.5
2-Chlorophenol-D4	93951-73-6	0.1	%	81.1	----	88.8	----	90.8
2.4.6-Tribromophenol	118-79-6	0.1	%	90.3	----	93.3	----	103
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	88.7	----	95.2	----	101
Anthracene-d10	1719-06-8	0.1	%	90.3	----	95.8	----	96.9
4-Terphenyl-d14	1718-51-0	0.1	%	106	----	112	----	113
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.1	%	114	----	91.8	----	90.7
Toluene-D8	2037-26-5	0.1	%	108	----	88.5	----	84.9
4-Bromofluorobenzene	460-00-4	0.1	%	112	----	89.0	----	79.6

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP18/210213/1.0	DUPAA/210213/0.1B	----	----	----
			Client sampling date / time	21-FEB-2013 15:00	21-FEB-2013 15:00	----	----	----
Compound	CAS Number	LOR	Unit	EM1301875-127	EM1301875-129	----	----	----
EA002 : pH (Soils)								
pH Value	----	0.1	pH Unit	6.9	5.9	----	----	----
EA055: Moisture Content								
Moisture Content (dried @ 103°C)	----	1.0	%	20.1	7.3	----	----	----
EG005T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	<5	----	----	----
Cadmium	7440-43-9	1	mg/kg	<1	<1	----	----	----
Chromium	7440-47-3	2	mg/kg	25	46	----	----	----
Copper	7440-50-8	5	mg/kg	6	6	----	----	----
Lead	7439-92-1	5	mg/kg	8	14	----	----	----
Nickel	7440-02-0	2	mg/kg	16	8	----	----	----
Zinc	7440-66-6	5	mg/kg	5	12	----	----	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	----	----	----
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	----	<0.1	----	----	----
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	----	<0.05	----	----	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	----	<0.05	----	----	----
beta-BHC	319-85-7	0.05	mg/kg	----	<0.05	----	----	----
gamma-BHC	58-89-9	0.05	mg/kg	----	<0.05	----	----	----
delta-BHC	319-86-8	0.05	mg/kg	----	<0.05	----	----	----
Heptachlor	76-44-8	0.05	mg/kg	----	<0.05	----	----	----
Aldrin	309-00-2	0.05	mg/kg	----	<0.05	----	----	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg	----	<0.05	----	----	----
^ Total Chlordane (sum)	----	0.05	mg/kg	----	<0.05	----	----	----
trans-Chlordane	5103-74-2	0.05	mg/kg	----	<0.05	----	----	----
alpha-Endosulfan	959-98-8	0.05	mg/kg	----	<0.05	----	----	----
cis-Chlordane	5103-71-9	0.05	mg/kg	----	<0.05	----	----	----
Dieldrin	60-57-1	0.05	mg/kg	----	<0.05	----	----	----
4.4`-DDE	72-55-9	0.05	mg/kg	----	<0.05	----	----	----
Endrin	72-20-8	0.05	mg/kg	----	<0.05	----	----	----
beta-Endosulfan	33213-65-9	0.05	mg/kg	----	<0.05	----	----	----
4.4`-DDD	72-54-8	0.05	mg/kg	----	<0.05	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP18/210213/1.0	DUPAA/210213/0.1B	----	----	----
			Client sampling date / time	21-FEB-2013 15:00	21-FEB-2013 15:00	----	----	----
Compound	CAS Number	LOR	Unit	EM1301875-127	EM1301875-129	----	----	----
EP068A: Organochlorine Pesticides (OC) - Continued								
Endrin aldehyde	7421-93-4	0.05	mg/kg	----	<0.05	----	----	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg	----	<0.05	----	----	----
4.4`-DDT	50-29-3	0.2	mg/kg	----	<0.2	----	----	----
Endrin ketone	53494-70-5	0.05	mg/kg	----	<0.05	----	----	----
Methoxychlor	72-43-5	0.2	mg/kg	----	<0.2	----	----	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	----	<0.05	----	----	----
^ Sum of DDD + DDE + DDT	----	0.05	mg/kg	----	<0.05	----	----	----
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	----	<0.05	----	----	----
Demeton-S-methyl	919-86-8	0.05	mg/kg	----	<0.05	----	----	----
Monocrotophos	6923-22-4	0.2	mg/kg	----	<0.2	----	----	----
Dimethoate	60-51-5	0.05	mg/kg	----	<0.05	----	----	----
Diazinon	333-41-5	0.05	mg/kg	----	<0.05	----	----	----
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	----	<0.05	----	----	----
Parathion-methyl	298-00-0	0.2	mg/kg	----	<0.2	----	----	----
Malathion	121-75-5	0.05	mg/kg	----	<0.05	----	----	----
Fenthion	55-38-9	0.05	mg/kg	----	<0.05	----	----	----
Chlorpyrifos	2921-88-2	0.05	mg/kg	----	<0.05	----	----	----
Parathion	56-38-2	0.2	mg/kg	----	<0.2	----	----	----
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	----	<0.05	----	----	----
Bromophos-ethyl	4824-78-6	0.05	mg/kg	----	<0.05	----	----	----
Fenamiphos	22224-92-6	0.05	mg/kg	----	<0.05	----	----	----
Prothiofos	34643-46-4	0.05	mg/kg	----	<0.05	----	----	----
Ethion	563-12-2	0.05	mg/kg	----	<0.05	----	----	----
Carbophenothion	786-19-6	0.05	mg/kg	----	<0.05	----	----	----
Azinphos Methyl	86-50-0	0.05	mg/kg	----	<0.05	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	----	<0.5	----	----	----
Acenaphthylene	208-96-8	0.5	mg/kg	----	<0.5	----	----	----
Acenaphthene	83-32-9	0.5	mg/kg	----	<0.5	----	----	----
Fluorene	86-73-7	0.5	mg/kg	----	<0.5	----	----	----
Phenanthrene	85-01-8	0.5	mg/kg	----	<0.5	----	----	----
Anthracene	120-12-7	0.5	mg/kg	----	<0.5	----	----	----
Fluoranthene	206-44-0	0.5	mg/kg	----	<0.5	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP18/210213/1.0	DUPAA/210213/0.1B	----	----	----
			Client sampling date / time	21-FEB-2013 15:00	21-FEB-2013 15:00	----	----	----
Compound	CAS Number	LOR	Unit	EM1301875-127	EM1301875-129	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Pyrene	129-00-0	0.5	mg/kg	----	<0.5	----	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg	----	<0.5	----	----	----
Chrysene	218-01-9	0.5	mg/kg	----	<0.5	----	----	----
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	----	<0.5	----	----	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	----	<0.5	----	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	----	<0.5	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	----	<0.5	----	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	----	<0.5	----	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	----	<0.5	----	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	----	<0.5	----	----	----
Benzo(a)pyrene TEQ (WHO)	----	0.5	mg/kg	----	<0.5	----	----	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	----	<10	----	----	----
C10 - C14 Fraction	----	50	mg/kg	----	<50	----	----	----
C15 - C28 Fraction	----	100	mg/kg	----	<100	----	----	----
C29 - C36 Fraction	----	100	mg/kg	----	<100	----	----	----
^ C10 - C36 Fraction (sum)	----	50	mg/kg	----	<50	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft								
C6 - C10 Fraction	----	10	mg/kg	----	<10	----	----	----
^ C6 - C10 Fraction minus BTEX (F1)	----	10	mg/kg	----	<10	----	----	----
>C10 - C16 Fraction	----	50	mg/kg	----	<50	----	----	----
>C16 - C34 Fraction	----	100	mg/kg	----	<100	----	----	----
>C34 - C40 Fraction	----	100	mg/kg	----	<100	----	----	----
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	----	<50	----	----	----
EP080: BTEX								
Benzene	71-43-2	0.2	mg/kg	----	<0.2	----	----	----
Toluene	108-88-3	0.5	mg/kg	----	<0.5	----	----	----
Ethylbenzene	100-41-4	0.5	mg/kg	----	<0.5	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	----	<0.5	----	----	----
ortho-Xylene	95-47-6	0.5	mg/kg	----	<0.5	----	----	----
EP080: BTEXN								
^ Sum of BTEX	----	0.2	mg/kg	----	<0.2	----	----	----
^ Total Xylenes	1330-20-7	0.5	mg/kg	----	<0.5	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	TP18/210213/1.0	DUPAA/210213/0.1B	----	----	----
			Client sampling date / time	21-FEB-2013 15:00	21-FEB-2013 15:00	----	----	----
Compound	CAS Number	LOR	Unit	EM1301875-127	EM1301875-129	----	----	----
EP080: BTEXN - Continued								
Naphthalene	91-20-3	1	mg/kg	----	<1	----	----	----
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	----	87.2	----	----	----
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.1	%	----	89.4	----	----	----
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.1	%	----	89.1	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	----	85.1	----	----	----
2-Chlorophenol-D4	93951-73-6	0.1	%	----	85.4	----	----	----
2.4.6-Tribromophenol	118-79-6	0.1	%	----	88.5	----	----	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	----	91.7	----	----	----
Anthracene-d10	1719-06-8	0.1	%	----	87.6	----	----	----
4-Terphenyl-d14	1718-51-0	0.1	%	----	105	----	----	----
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.1	%	----	89.4	----	----	----
Toluene-D8	2037-26-5	0.1	%	----	82.6	----	----	----
4-Bromofluorobenzene	460-00-4	0.1	%	----	86.0	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Client sample ID	RB/190213	FB/190213	TB/190213	RB/200213	TB/200213
			Client sampling date / time	19-FEB-2013 15:00	19-FEB-2013 15:00	19-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-029	EM1301875-030	EM1301875-031	EM1301875-081	EM1301875-082
EA005: pH								
pH Value	----	0.01	pH Unit	**7.36**	----	----	**6.84**	----
EG020T: Total Metals by ICP-MS								
Arsenic	7440-38-2	0.001	mg/L	<0.001	----	----	<0.001	----
Cadmium	7440-43-9	0.0001	mg/L	<0.0001	----	----	<0.0001	----
Chromium	7440-47-3	0.001	mg/L	<0.001	----	----	<0.001	----
Copper	7440-50-8	0.001	mg/L	<0.001	----	----	<0.001	----
Nickel	7440-02-0	0.001	mg/L	<0.001	----	----	<0.001	----
Lead	7439-92-1	0.001	mg/L	<0.001	----	----	<0.001	----
Zinc	7440-66-6	0.005	mg/L	<0.005	----	----	<0.005	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.0001	mg/L	<0.0001	----	----	<0.0001	----
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	1	µg/L	<1	----	----	<2	----
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.5	µg/L	<0.5	----	----	<1.0	----
Hexachlorobenzene (HCB)	118-74-1	0.5	µg/L	<0.5	----	----	<1.0	----
beta-BHC	319-85-7	0.5	µg/L	<0.5	----	----	<1.0	----
gamma-BHC	58-89-9	0.5	µg/L	<0.5	----	----	<1.0	----
delta-BHC	319-86-8	0.5	µg/L	<0.5	----	----	<1.0	----
Heptachlor	76-44-8	0.5	µg/L	<0.5	----	----	<1.0	----
Aldrin	309-00-2	0.5	µg/L	<0.5	----	----	<1.0	----
Heptachlor epoxide	1024-57-3	0.5	µg/L	<0.5	----	----	<1.0	----
trans-Chlordane	5103-74-2	0.5	µg/L	<0.5	----	----	<1.0	----
alpha-Endosulfan	959-98-8	0.5	µg/L	<0.5	----	----	<1.0	----
cis-Chlordane	5103-71-9	0.5	µg/L	<0.5	----	----	<1.0	----
Dieldrin	60-57-1	0.5	µg/L	<0.5	----	----	<1.0	----
4.4`-DDE	72-55-9	0.5	µg/L	<0.5	----	----	<1.0	----
Endrin	72-20-8	0.5	µg/L	<0.5	----	----	<1.0	----
beta-Endosulfan	33213-65-9	0.5	µg/L	<0.5	----	----	<1.0	----
4.4`-DDD	72-54-8	0.5	µg/L	<0.5	----	----	<1.0	----
Endrin aldehyde	7421-93-4	0.5	µg/L	<0.5	----	----	<1.0	----
Endosulfan sulfate	1031-07-8	0.5	µg/L	<0.5	----	----	<1.0	----
4.4`-DDT	50-29-3	2.0	µg/L	<2.0	----	----	<4.0	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Client sample ID	RB/190213	FB/190213	TB/190213	RB/200213	TB/200213
			Client sampling date / time	19-FEB-2013 15:00	19-FEB-2013 15:00	19-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-029	EM1301875-030	EM1301875-031	EM1301875-081	EM1301875-082
EP068A: Organochlorine Pesticides (OC) - Continued								
Endrin ketone	53494-70-5	0.5	µg/L	<0.5	----	----	<1.0	----
Methoxychlor	72-43-5	2.0	µg/L	<2.0	----	----	<4.0	----
^ Total Chlordane (sum)	----	0.5	µg/L	<0.5	----	----	<1.0	----
^ Sum of DDD + DDE + DDT	----	0.5	µg/L	<0.5	----	----	<1.0	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.5	µg/L	<0.5	----	----	<1.0	----
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.5	µg/L	<0.5	----	----	<1.0	----
Demeton-S-methyl	919-86-8	0.5	µg/L	<0.5	----	----	<1.0	----
Monocrotophos	6923-22-4	2.0	µg/L	<2.0	----	----	<4.0	----
Dimethoate	60-51-5	0.5	µg/L	<0.5	----	----	<1.0	----
Diazinon	333-41-5	0.5	µg/L	<0.5	----	----	<1.0	----
Chlorpyrifos-methyl	5598-13-0	0.5	µg/L	<0.5	----	----	<1.0	----
Parathion-methyl	298-00-0	2.0	µg/L	<2.0	----	----	<4.0	----
Malathion	121-75-5	0.5	µg/L	<0.5	----	----	<1.0	----
Fenthion	55-38-9	0.5	µg/L	<0.5	----	----	<1.0	----
Chlorpyrifos	2921-88-2	0.5	µg/L	<0.5	----	----	<1.0	----
Parathion	56-38-2	2.0	µg/L	<2.0	----	----	<4.0	----
Pirimphos-ethyl	23505-41-1	0.5	µg/L	<0.5	----	----	<1.0	----
Chlorfenvinphos	470-90-6	0.5	µg/L	<0.5	----	----	<1.0	----
Bromophos-ethyl	4824-78-6	0.5	µg/L	<0.5	----	----	<1.0	----
Fenamiphos	22224-92-6	0.5	µg/L	<0.5	----	----	<1.0	----
Prothiofos	34643-46-4	0.5	µg/L	<0.5	----	----	<1.0	----
Ethion	563-12-2	0.5	µg/L	<0.5	----	----	<1.0	----
Carbophenothion	786-19-6	0.5	µg/L	<0.5	----	----	<1.0	----
Azinphos Methyl	86-50-0	0.5	µg/L	<0.5	----	----	<1.0	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	1.0	µg/L	<1.0	<1.0	----	<1.0	----
Acenaphthylene	208-96-8	1.0	µg/L	<1.0	<1.0	----	<1.0	----
Acenaphthene	83-32-9	1.0	µg/L	<1.0	<1.0	----	<1.0	----
Fluorene	86-73-7	1.0	µg/L	<1.0	<1.0	----	<1.0	----
Phenanthrene	85-01-8	1.0	µg/L	<1.0	<1.0	----	<1.0	----
Anthracene	120-12-7	1.0	µg/L	<1.0	<1.0	----	<1.0	----
Fluoranthene	206-44-0	1.0	µg/L	<1.0	<1.0	----	<1.0	----
Pyrene	129-00-0	1.0	µg/L	<1.0	<1.0	----	<1.0	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Client sample ID	RB/190213	FB/190213	TB/190213	RB/200213	TB/200213
			Client sampling date / time	19-FEB-2013 15:00	19-FEB-2013 15:00	19-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-029	EM1301875-030	EM1301875-031	EM1301875-081	EM1301875-082
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Benz(a)anthracene	56-55-3	1.0	µg/L	<1.0	<1.0	----	<1.0	----
Chrysene	218-01-9	1.0	µg/L	<1.0	<1.0	----	<1.0	----
Benzo(b)fluoranthene	205-99-2	1.0	µg/L	<1.0	<1.0	----	<1.0	----
Benzo(k)fluoranthene	207-08-9	1.0	µg/L	<1.0	<1.0	----	<1.0	----
Benzo(a)pyrene	50-32-8	0.5	µg/L	<0.5	<0.5	----	<0.5	----
Indeno(1.2.3.cd)pyrene	193-39-5	1.0	µg/L	<1.0	<1.0	----	<1.0	----
Dibenz(a.h)anthracene	53-70-3	1.0	µg/L	<1.0	<1.0	----	<1.0	----
Benzo(g.h.i)perylene	191-24-2	1.0	µg/L	<1.0	<1.0	----	<1.0	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	µg/L	<0.5	<0.5	----	<0.5	----
^ Benzo(a)pyrene TEQ (WHO)	----	0.5	µg/L	<0.5	<0.5	----	<0.5	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	20	µg/L	<20	<20	<20	<20	<20
C10 - C14 Fraction	----	50	µg/L	<50	<50	----	<50	----
C15 - C28 Fraction	----	100	µg/L	<100	<100	----	<100	----
C29 - C36 Fraction	----	50	µg/L	<50	<50	----	<50	----
^ C10 - C36 Fraction (sum)	----	50	µg/L	<50	<50	----	<50	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft								
C6 - C10 Fraction	----	20	µg/L	<20	<20	<20	<20	<20
^ C6 - C10 Fraction minus BTEX (F1)	----	20	µg/L	<20	<20	<20	<20	<20
>C10 - C16 Fraction	----	100	µg/L	<100	<100	----	<100	----
>C16 - C34 Fraction	----	100	µg/L	<100	<100	----	<100	----
>C34 - C40 Fraction	----	100	µg/L	<100	<100	----	<100	----
^ >C10 - C40 Fraction (sum)	----	100	µg/L	<100	<100	----	<100	----
EP080: BTEXN								
Benzene	71-43-2	1	µg/L	<1	<1	<1	<1	<1
Toluene	108-88-3	2	µg/L	<2	<2	<2	<2	<2
Ethylbenzene	100-41-4	2	µg/L	<2	<2	<2	<2	<2
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	<2	<2	<2	<2
ortho-Xylene	95-47-6	2	µg/L	<2	<2	<2	<2	<2
^ Total Xylenes	1330-20-7	2	µg/L	<2	<2	<2	<2	<2
^ Sum of BTEX	----	1	µg/L	<1	<1	<1	<1	<1
Naphthalene	91-20-3	5	µg/L	<5	<5	<5	<5	<5
EP066S: PCB Surrogate								

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Client sample ID	RB/190213	FB/190213	TB/190213	RB/200213	TB/200213
			Client sampling date / time	19-FEB-2013 15:00	19-FEB-2013 15:00	19-FEB-2013 15:00	20-FEB-2013 15:00	20-FEB-2013 15:00
Compound	CAS Number	LOR	Unit	EM1301875-029	EM1301875-030	EM1301875-031	EM1301875-081	EM1301875-082
EP066S: PCB Surrogate - Continued								
Decachlorobiphenyl	2051-24-3	0.1	%	62.4	----	----	64.1	----
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.1	%	77.0	----	----	79.0	----
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.1	%	73.7	----	----	93.8	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	16.2	24.2	----	16.1	----
2-Chlorophenol-D4	93951-73-6	0.1	%	26.9	55.6	----	38.4	----
2.4.6-Tribromophenol	118-79-6	0.1	%	83.8	54.6	----	38.8	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	40.3	53.4	----	37.2	----
Anthracene-d10	1719-06-8	0.1	%	83.5	68.3	----	69.4	----
4-Terphenyl-d14	1718-51-0	0.1	%	101	70.3	----	59.8	----
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.1	%	88.0	88.8	89.4	93.8	94.5
Toluene-D8	2037-26-5	0.1	%	94.6	88.0	95.1	94.9	97.4
4-Bromofluorobenzene	460-00-4	0.1	%	88.1	86.0	89.2	90.3	90.1

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Client sample ID	FB/200213	RB/210213	FB/210213	TB/210213	SL2/210213/1W
			Client sampling date / time	20-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 16:00
Compound	CAS Number	LOR	Unit	EM1301875-083	EM1301875-130	EM1301875-131	EM1301875-132	EM1301875-133
EA005: pH								
pH Value	----	0.01	pH Unit	----	----	----	----	**7.17**
EA015: Total Dissolved Solids								
Total Dissolved Solids @180°C	----	10	mg/L	----	----	----	----	**304**
EG020T: Total Metals by ICP-MS								
Arsenic	7440-38-2	0.001	mg/L	----	<0.001	----	----	----
Cadmium	7440-43-9	0.0001	mg/L	----	<0.0001	----	----	----
Chromium	7440-47-3	0.001	mg/L	----	<0.001	----	----	----
Copper	7440-50-8	0.001	mg/L	----	<0.001	----	----	----
Nickel	7440-02-0	0.001	mg/L	----	<0.001	----	----	----
Lead	7439-92-1	0.001	mg/L	----	<0.001	----	----	----
Zinc	7440-66-6	0.005	mg/L	----	<0.005	----	----	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.0001	mg/L	----	<0.0001	----	----	----
EK055G: Ammonia as N by Discrete Analyser								
Ammonia as N	7664-41-7	0.01	mg/L	----	----	----	----	**1.96**
EK057G: Nitrite as N by Discrete Analyser								
Nitrite as N	----	0.01	mg/L	----	----	----	----	<0.01
EK058G: Nitrate as N by Discrete Analyser								
Nitrate as N	14797-55-8	0.01	mg/L	----	----	----	----	**0.77**
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser								
Nitrite + Nitrate as N	----	0.01	mg/L	----	----	----	----	**0.77**
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	1	µg/L	----	<2	----	----	<5
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.5	µg/L	----	<1.0	----	----	<2.5
Hexachlorobenzene (HCB)	118-74-1	0.5	µg/L	----	<1.0	----	----	<2.5
beta-BHC	319-85-7	0.5	µg/L	----	<1.0	----	----	<2.5
gamma-BHC	58-89-9	0.5	µg/L	----	<1.0	----	----	<2.5
delta-BHC	319-86-8	0.5	µg/L	----	<1.0	----	----	<2.5
Heptachlor	76-44-8	0.5	µg/L	----	<1.0	----	----	<2.5
Aldrin	309-00-2	0.5	µg/L	----	<1.0	----	----	<2.5
Heptachlor epoxide	1024-57-3	0.5	µg/L	----	<1.0	----	----	<2.5
trans-Chlordane	5103-74-2	0.5	µg/L	----	<1.0	----	----	<2.5

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Client sample ID	FB/200213	RB/210213	FB/210213	TB/210213	SL2/210213/1W
			Client sampling date / time	20-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 16:00
Compound	CAS Number	LOR	Unit	EM1301875-083	EM1301875-130	EM1301875-131	EM1301875-132	EM1301875-133
EP068A: Organochlorine Pesticides (OC) - Continued								
alpha-Endosulfan	959-98-8	0.5	µg/L	----	<1.0	----	----	<2.5
cis-Chlordane	5103-71-9	0.5	µg/L	----	<1.0	----	----	<2.5
Dieldrin	60-57-1	0.5	µg/L	----	<1.0	----	----	<2.5
4.4`-DDE	72-55-9	0.5	µg/L	----	<1.0	----	----	<2.5
Endrin	72-20-8	0.5	µg/L	----	<1.0	----	----	<2.5
beta-Endosulfan	33213-65-9	0.5	µg/L	----	<1.0	----	----	<2.5
4.4`-DDD	72-54-8	0.5	µg/L	----	<1.0	----	----	<2.5
Endrin aldehyde	7421-93-4	0.5	µg/L	----	<1.0	----	----	<2.5
Endosulfan sulfate	1031-07-8	0.5	µg/L	----	<1.0	----	----	<2.5
4.4`-DDT	50-29-3	2.0	µg/L	----	<4.0	----	----	<10.0
Endrin ketone	53494-70-5	0.5	µg/L	----	<1.0	----	----	<2.5
Methoxychlor	72-43-5	2.0	µg/L	----	<4.0	----	----	<10.0
^ Total Chlordane (sum)	----	0.5	µg/L	----	<1.0	----	----	<2.5
^ Sum of DDD + DDE + DDT	----	0.5	µg/L	----	<1.0	----	----	<2.5
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.5	µg/L	----	<1.0	----	----	<2.5
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.5	µg/L	----	<1.0	----	----	<2.5
Demeton-S-methyl	919-86-8	0.5	µg/L	----	<1.0	----	----	<2.5
Monocrotophos	6923-22-4	2.0	µg/L	----	<4.0	----	----	<10.0
Dimethoate	60-51-5	0.5	µg/L	----	<1.0	----	----	<2.5
Diazinon	333-41-5	0.5	µg/L	----	<1.0	----	----	<2.5
Chlorpyrifos-methyl	5598-13-0	0.5	µg/L	----	<1.0	----	----	<2.5
Parathion-methyl	298-00-0	2.0	µg/L	----	<4.0	----	----	<10.0
Malathion	121-75-5	0.5	µg/L	----	<1.0	----	----	<2.5
Fenthion	55-38-9	0.5	µg/L	----	<1.0	----	----	<2.5
Chlorpyrifos	2921-88-2	0.5	µg/L	----	<1.0	----	----	<2.5
Parathion	56-38-2	2.0	µg/L	----	<4.0	----	----	<10.0
Pirimphos-ethyl	23505-41-1	0.5	µg/L	----	<1.0	----	----	<2.5
Chlorfenvinphos	470-90-6	0.5	µg/L	----	<1.0	----	----	<2.5
Bromophos-ethyl	4824-78-6	0.5	µg/L	----	<1.0	----	----	<2.5
Fenamiphos	22224-92-6	0.5	µg/L	----	<1.0	----	----	<2.5
Prothiofos	34643-46-4	0.5	µg/L	----	<1.0	----	----	<2.5
Ethion	563-12-2	0.5	µg/L	----	<1.0	----	----	<2.5
Carbophenothion	786-19-6	0.5	µg/L	----	<1.0	----	----	<2.5

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Client sample ID	FB/200213	RB/210213	FB/210213	TB/210213	SL2/210213/1W
			Client sampling date / time	20-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 16:00
Compound	CAS Number	LOR	Unit	EM1301875-083	EM1301875-130	EM1301875-131	EM1301875-132	EM1301875-133
EP068B: Organophosphorus Pesticides (OP) - Continued								
Azinphos Methyl	86-50-0	0.5	µg/L	----	<1.0	----	----	<2.5
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Acenaphthylene	208-96-8	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Acenaphthene	83-32-9	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Fluorene	86-73-7	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Phenanthrene	85-01-8	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Anthracene	120-12-7	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Fluoranthene	206-44-0	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Pyrene	129-00-0	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Benz(a)anthracene	56-55-3	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Chrysene	218-01-9	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Benzo(b)fluoranthene	205-99-2	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Benzo(k)fluoranthene	207-08-9	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Benzo(a)pyrene	50-32-8	0.5	µg/L	<0.5	<0.5	<0.5	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Dibenz(a.h)anthracene	53-70-3	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Benzo(g.h.i)perylene	191-24-2	1.0	µg/L	<1.0	<1.0	<1.0	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	µg/L	<0.5	<0.5	<0.5	----	----
^ Benzo(a)pyrene TEQ (WHO)	----	0.5	µg/L	<0.5	<0.5	<0.5	----	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	20	µg/L	<20	<20	<20	<20	<20
C10 - C14 Fraction	----	50	µg/L	<50	<50	<50	----	**100**
C15 - C28 Fraction	----	100	µg/L	<100	<100	<100	----	**54700**
C29 - C36 Fraction	----	50	µg/L	<50	<50	<50	----	**87900**
^ C10 - C36 Fraction (sum)	----	50	µg/L	<50	<50	<50	----	**143000**
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft								
C6 - C10 Fraction	----	20	µg/L	<20	<20	<20	<20	<20
^ C6 - C10 Fraction minus BTEX (F1)	----	20	µg/L	<20	<20	<20	<20	<20
>C10 - C16 Fraction	----	100	µg/L	<100	<100	<100	----	**200**
>C16 - C34 Fraction	----	100	µg/L	<100	<100	<100	----	**122000**
>C34 - C40 Fraction	----	100	µg/L	<100	<100	<100	----	**40900**
^ >C10 - C40 Fraction (sum)	----	100	µg/L	<100	<100	<100	----	**163000**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Client sample ID	FB/200213	RB/210213	FB/210213	TB/210213	SL2/210213/1W
			Client sampling date / time	20-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 15:00	21-FEB-2013 16:00
Compound	CAS Number	LOR	Unit	EM1301875-083	EM1301875-130	EM1301875-131	EM1301875-132	EM1301875-133
EP080: BTEXN								
Benzene	71-43-2	1	µg/L	<1	<1	<1	<1	<1
Toluene	108-88-3	2	µg/L	<2	<2	<2	<2	<2
Ethylbenzene	100-41-4	2	µg/L	<2	<2	<2	<2	<2
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	<2	<2	<2	<2
ortho-Xylene	95-47-6	2	µg/L	<2	<2	<2	<2	<2
^ Total Xylenes	1330-20-7	2	µg/L	<2	<2	<2	<2	<2
^ Sum of BTEX	----	1	µg/L	<1	<1	<1	<1	<1
Naphthalene	91-20-3	5	µg/L	<5	<5	<5	<5	<5
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	----	45.4	----	----	97.0
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.1	%	----	57.7	----	----	73.0
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.1	%	----	62.7	----	----	71.1
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	24.0	16.4	16.0	----	----
2-Chlorophenol-D4	93951-73-6	0.1	%	51.5	30.2	28.9	----	----
2.4.6-Tribromophenol	118-79-6	0.1	%	67.8	33.1	44.3	----	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	38.1	34.0	38.0	----	----
Anthracene-d10	1719-06-8	0.1	%	95.7	82.5	91.5	----	----
4-Terphenyl-d14	1718-51-0	0.1	%	72.5	42.5	66.9	----	----
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.1	%	93.9	92.6	90.1	91.2	102
Toluene-D8	2037-26-5	0.1	%	90.3	93.6	91.3	93.9	103
4-Bromofluorobenzene	460-00-4	0.1	%	85.1	87.2	87.7	89.2	89.8

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Client sample ID	DUPAA/210213/1WB	----	----	----	----
			Client sampling date / time	21-FEB-2013 15:00	----	----	----	----
Compound	CAS Number	LOR	Unit	EM1301875-134	----	----	----	----
EA005: pH								
pH Value	----	0.01	pH Unit	7.13	----	----	----	----
EA015: Total Dissolved Solids								
Total Dissolved Solids @180°C	----	10	mg/L	322	----	----	----	----
EK055G: Ammonia as N by Discrete Analyser								
Ammonia as N	7664-41-7	0.01	mg/L	1.87	----	----	----	----
EK057G: Nitrite as N by Discrete Analyser								
Nitrite as N	----	0.01	mg/L	<0.01	----	----	----	----
EK058G: Nitrate as N by Discrete Analyser								
Nitrate as N	14797-55-8	0.01	mg/L	0.48	----	----	----	----
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser								
Nitrite + Nitrate as N	----	0.01	mg/L	0.48	----	----	----	----
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	1	µg/L	<10	----	----	----	----
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.5	µg/L	<2.5	----	----	----	----
Hexachlorobenzene (HCB)	118-74-1	0.5	µg/L	<2.5	----	----	----	----
beta-BHC	319-85-7	0.5	µg/L	<2.5	----	----	----	----
gamma-BHC	58-89-9	0.5	µg/L	<2.5	----	----	----	----
delta-BHC	319-86-8	0.5	µg/L	<2.5	----	----	----	----
Heptachlor	76-44-8	0.5	µg/L	<2.5	----	----	----	----
Aldrin	309-00-2	0.5	µg/L	<2.5	----	----	----	----
Heptachlor epoxide	1024-57-3	0.5	µg/L	<2.5	----	----	----	----
trans-Chlordane	5103-74-2	0.5	µg/L	<2.5	----	----	----	----
alpha-Endosulfan	959-98-8	0.5	µg/L	<2.5	----	----	----	----
cis-Chlordane	5103-71-9	0.5	µg/L	<2.5	----	----	----	----
Dieldrin	60-57-1	0.5	µg/L	<2.5	----	----	----	----
4.4`-DDE	72-55-9	0.5	µg/L	<2.5	----	----	----	----
Endrin	72-20-8	0.5	µg/L	<2.5	----	----	----	----
beta-Endosulfan	33213-65-9	0.5	µg/L	<2.5	----	----	----	----
4.4`-DDD	72-54-8	0.5	µg/L	<2.5	----	----	----	----
Endrin aldehyde	7421-93-4	0.5	µg/L	<2.5	----	----	----	----
Endosulfan sulfate	1031-07-8	0.5	µg/L	<2.5	----	----	----	----
4.4`-DDT	50-29-3	2.0	µg/L	<10.0	----	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Client sample ID	DUPAA/210213/1WB	----	----	----	----
			Client sampling date / time	21-FEB-2013 15:00	----	----	----	----
Compound	CAS Number	LOR	Unit	EM1301875-134	----	----	----	----
EP068A: Organochlorine Pesticides (OC) - Continued								
Endrin ketone	53494-70-5	0.5	µg/L	<2.5	----	----	----	----
Methoxychlor	72-43-5	2.0	µg/L	<10.0	----	----	----	----
^ Total Chlordane (sum)	----	0.5	µg/L	<2.5	----	----	----	----
^ Sum of DDD + DDE + DDT	----	0.5	µg/L	<2.5	----	----	----	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.5	µg/L	<2.5	----	----	----	----
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.5	µg/L	<2.5	----	----	----	----
Demeton-S-methyl	919-86-8	0.5	µg/L	<2.5	----	----	----	----
Monocrotophos	6923-22-4	2.0	µg/L	<10.0	----	----	----	----
Dimethoate	60-51-5	0.5	µg/L	<2.5	----	----	----	----
Diazinon	333-41-5	0.5	µg/L	<2.5	----	----	----	----
Chlorpyrifos-methyl	5598-13-0	0.5	µg/L	<2.5	----	----	----	----
Parathion-methyl	298-00-0	2.0	µg/L	<10.0	----	----	----	----
Malathion	121-75-5	0.5	µg/L	<2.5	----	----	----	----
Fenthion	55-38-9	0.5	µg/L	<2.5	----	----	----	----
Chlorpyrifos	2921-88-2	0.5	µg/L	<2.5	----	----	----	----
Parathion	56-38-2	2.0	µg/L	<10.0	----	----	----	----
Pirimphos-ethyl	23505-41-1	0.5	µg/L	<2.5	----	----	----	----
Chlorfenvinphos	470-90-6	0.5	µg/L	<2.5	----	----	----	----
Bromophos-ethyl	4824-78-6	0.5	µg/L	<2.5	----	----	----	----
Fenamiphos	22224-92-6	0.5	µg/L	<2.5	----	----	----	----
Prothiofos	34643-46-4	0.5	µg/L	<2.5	----	----	----	----
Ethion	563-12-2	0.5	µg/L	<2.5	----	----	----	----
Carbophenothion	786-19-6	0.5	µg/L	<2.5	----	----	----	----
Azinphos Methyl	86-50-0	0.5	µg/L	<2.5	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	20	µg/L	<20	----	----	----	----
C10 - C14 Fraction	----	50	µg/L	**70**	----	----	----	----
C15 - C28 Fraction	----	100	µg/L	**109000**	----	----	----	----
C29 - C36 Fraction	----	50	µg/L	**218000**	----	----	----	----
^ C10 - C36 Fraction (sum)	----	50	µg/L	**327000**	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft								
C6 - C10 Fraction	----	20	µg/L	<20	----	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Client sample ID	DUPAA/210213/1WB	----	----	----	----
			Client sampling date / time	21-FEB-2013 15:00	----	----	----	----
Compound	CAS Number	LOR	Unit	EM1301875-134	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft - Continued								
^ C6 - C10 Fraction minus BTEX (F1)	----	20	µg/L	<20	----	----	----	----
>C10 - C16 Fraction	----	100	µg/L	**290**	----	----	----	----
>C16 - C34 Fraction	----	100	µg/L	**274000**	----	----	----	----
>C34 - C40 Fraction	----	100	µg/L	**116000**	----	----	----	----
^ >C10 - C40 Fraction (sum)	----	100	µg/L	**390000**	----	----	----	----
EP080: BTEXN								
Benzene	71-43-2	1	µg/L	<1	----	----	----	----
Toluene	108-88-3	2	µg/L	<2	----	----	----	----
Ethylbenzene	100-41-4	2	µg/L	<2	----	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	----	----	----	----
ortho-Xylene	95-47-6	2	µg/L	<2	----	----	----	----
^ Total Xylenes	1330-20-7	2	µg/L	<2	----	----	----	----
^ Sum of BTEX	----	1	µg/L	<1	----	----	----	----
Naphthalene	91-20-3	5	µg/L	<5	----	----	----	----
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	**80.0**	----	----	----	----
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.1	%	**Not Determined**	----	----	----	----
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.1	%	**Not Determined**	----	----	----	----
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.1	%	**99.5**	----	----	----	----
Toluene-D8	2037-26-5	0.1	%	**98.7**	----	----	----	----
4-Bromofluorobenzene	460-00-4	0.1	%	**87.7**	----	----	----	----

Surrogate Control Limits

Sub-Matrix: **SOIL**

Compound	CAS Number	Recovery Limits (%) Low	High
EP066S: PCB Surrogate			
Decachlorobiphenyl	2051-24-3	33	133
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	29.8	146
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	23.7	146
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	54	125
2-Chlorophenol-D4	93951-73-6	65	123
2.4.6-Tribromophenol	118-79-6	34	122
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	61	125
Anthracene-d10	1719-06-8	62	130
4-Terphenyl-d14	1718-51-0	67	133
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	51	125
Toluene-D8	2037-26-5	55	125
4-Bromofluorobenzene	460-00-4	51	133

Sub-Matrix: **WATER**

Compound	CAS Number	Recovery Limits (%) Low	High
EP066S: PCB Surrogate			
Decachlorobiphenyl	2051-24-3	41	125
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	38	129
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	35	135
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	15.8	70
2-Chlorophenol-D4	93951-73-6	10	113
2.4.6-Tribromophenol	118-79-6	26	138
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	32	122
Anthracene-d10	1719-06-8	39	127
4-Terphenyl-d14	1718-51-0	37	137
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	70	132
Toluene-D8	2037-26-5	69	125
4-Bromofluorobenzene	460-00-4	61	129

Environmental Division

QUALITY CONTROL REPORT

Work Order	: **EM1301875**	Page	: 1 of 32
Client	: **PARSONS BRINCKERHOFF AUST P/L**	Laboratory	: Environmental Division Melbourne
Contact	: MS CLAIRE HOWELL	Contact	: Bronwyn Sheen
Address	: PO BOX 19016 SOUTHBANK VIC, AUSTRALIA 3066	Address	: 4 Westall Rd Springvale VIC Australia 3171
E-mail	: chowell@pb.com.au	E-mail	: bronwyn.sheen@alsglobal.com
Telephone	: +61 03 9861 1111	Telephone	: +61-3-8549 9636
Facsimile	: +61 03 9861 1144	Facsimile	: +61-3-8549 9601
Project	: 2189202A	QC Level	: NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Site	: MICKLEHAM		
C-O-C number	: 51166-51177	Date Samples Received	: 22-FEB-2013
Sampler	: SOC	Issue Date	: 28-FEB-2013
Order number	: ----		
		No. of samples received	: 135
Quote number	: EN/008/11	No. of samples analysed	: 88

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. All pages of this report have been checked and approved for release.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Key :
Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
# = Indicates failed QC

NATA Accredited Laboratory 825

Accredited for compliance with ISO/IEC 17025.

Signatories

This document has been electronically signed by the authorized signatories indicated below. Electronic signing has been carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	Position	Accreditation Category
Dilani Fernando	Senior Inorganic Chemist	Melbourne Inorganics
		Melbourne Inorganics
		Melbourne Inorganics
Eric Chau	Metals Team Leader	Melbourne Inorganics
		Melbourne Inorganics
Nancy Wang	Senior Semivolatile Instrument Chemist	Melbourne Inorganics
		Melbourne Organics
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Nikki Stepniewski	Senior Inorganic Instrument Chemist	Melbourne Inorganics
		Melbourne Inorganics
		Melbourne Inorganics
Varsha Ho Wing	Non-Metals Team Leader	Melbourne Inorganics
		Melbourne Inorganics

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR:- No Limit; Result between 10 and 20 times LOR:- 0% - 50%; Result > 20 times LOR:- 0% - 20%.

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EA002 : pH (Soils) (QC Lot: 2745097)									
EM1301875-001	TP04/190213/0.1	EA002: pH Value	----	0.1	pH Unit	5.6	5.4	3.6	0% - 20%
EM1301875-019	TP08/190213/1.0	EA002: pH Value	----	0.1	pH Unit	8.1	8.1	0.0	0% - 20%
EA002 : pH (Soils) (QC Lot: 2745098)									
EM1301875-035	TP02/200213/1.0	EA002: pH Value	----	0.1	pH Unit	7.5	7.2	4.1	0% - 20%
EM1301875-049	TP15/200213/0.1	EA002: pH Value	----	0.1	pH Unit	5.7	6.0	5.1	0% - 20%
EA002 : pH (Soils) (QC Lot: 2745099)									
EM1301875-067	TP16/200213/1.0	EA002: pH Value	----	0.1	pH Unit	8.0	7.9	1.2	0% - 20%
EA002 : pH (Soils) (QC Lot: 2745100)									
EM1301862-001	Anonymous	EA002: pH Value	----	0.1	pH Unit	7.5	7.6	1.3	0% - 20%
EM1301875-095	TP30/210213/0.5	EA002: pH Value	----	0.1	pH Unit	5.9	6.0	1.7	0% - 20%
EA002 : pH (Soils) (QC Lot: 2745101)									
EM1301875-115	TP20/210213/1.0	EA002: pH Value	----	0.1	pH Unit	8.5	8.4	1.2	0% - 20%
EA055: Moisture Content (QC Lot: 2745092)									
EM1301836-001	Anonymous	EA055-103: Moisture Content (dried @ 103°C)	----	1.0	%	6.8	7.5	9.8	No Limit
EM1301875-013	TP07/190213/0.1	EA055-103: Moisture Content (dried @ 103°C)	----	1.0	%	6.7	7.0	4.7	No Limit
EA055: Moisture Content (QC Lot: 2745093)									
EM1301875-028	TP01/190213/1.5	EA055-103: Moisture Content (dried @ 103°C)	----	1.0	%	15.4	16.2	5.1	0% - 50%
EM1301875-041	TP14/200213/0.1	EA055-103: Moisture Content (dried @ 103°C)	----	1.0	%	7.4	7.7	3.6	No Limit
EA055: Moisture Content (QC Lot: 2745094)									
EM1301875-061	TP11/200213/0.1	EA055-103: Moisture Content (dried @ 103°C)	----	1.0	%	12.3	15.0	20.2	0% - 50%
EM1301875-073	TP21/200213/1.2	EA055-103: Moisture Content (dried @ 103°C)	----	1.0	%	15.4	14.9	3.2	0% - 50%
EA055: Moisture Content (QC Lot: 2745095)									
EM1301875-090	TP29/210213/0.1	EA055-103: Moisture Content (dried @ 103°C)	----	1.0	%	8.8	8.9	0.0	No Limit
EM1301875-109	TP19/210213/0.1	EA055-103: Moisture Content (dried @ 103°C)	----	1.0	%	7.5	6.3	17.8	No Limit
EA055: Moisture Content (QC Lot: 2745096)									
EM1301875-129	DUPAA/210213/0.1B	EA055-103: Moisture Content (dried @ 103°C)	----	1.0	%	7.3	7.0	4.3	No Limit
EG005T: Total Metals by ICP-AES (QC Lot: 2745117)									
EM1301875-001	TP04/190213/0.1	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	38	35	6.3	0% - 50%
		EG005T: Nickel	7440-02-0	2	mg/kg	6	7	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	14	9	48.9	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	6	5	0.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	16	15	7.4	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	14	14	0.0	No Limit

Sub-Matrix: **SOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EG005T: Total Metals by ICP-AES (QC Lot: 2745117) - continued									
EM1301875-017	TP08/190213/0.1	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	20	28	36.8	0% - 50%
		EG005T: Nickel	7440-02-0	2	mg/kg	6	6	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	6	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	12	12	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	9	7	24.7	No Limit
EG005T: Total Metals by ICP-AES (QC Lot: 2745119)									
EM1301875-035	TP02/200213/1.0	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	41	42	0.0	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	21	21	0.0	0% - 50%
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	7	7	0.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	13	12	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	13	13	0.0	No Limit
EM1301875-048	TP12/200213/1.3	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	58	64	10.9	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	23	24	7.2	0% - 50%
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	7	6	0.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	13	12	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	8	9	0.0	No Limit
EG005T: Total Metals by ICP-AES (QC Lot: 2745121)									
EM1301875-067	TP16/200213/1.0	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	44	44	0.0	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	21	22	6.5	0% - 50%
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	7	8	14.6	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	8	10	24.5	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	12	13	10.6	No Limit
EM1301875-078	TP22/200213/0.1	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	72	84	16.2	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	7	7	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	16	22	32.6	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	15	15	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	<5	<5	0.0	No Limit
EG005T: Total Metals by ICP-AES (QC Lot: 2745123)									
EM1301875-098	TP27/210213/0.1	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	24	24	0.0	0% - 50%

Sub-Matrix: **SOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EG005T: Total Metals by ICP-AES (QC Lot: 2745123) - continued									
EM1301875-098	TP27/210213/0.1	EG005T: Nickel	7440-02-0	2	mg/kg	7	7	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	7	7	0.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	10	10	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	11	11	0.0	No Limit
EM1301875-115	TP20/210213/1.0	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	47	48	0.0	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	16	18	10.2	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	<5	5	0.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	9	9	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	6	6	0.0	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 2745118)									
EM1301875-001	TP04/190213/0.1	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EM1301875-017	TP08/190213/0.1	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 2745120)									
EM1301875-035	TP02/200213/1.0	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EM1301875-048	TP12/200213/1.3	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 2745122)									
EM1301875-067	TP16/200213/1.0	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EM1301875-078	TP22/200213/0.1	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 2745124)									
EM1301875-098	TP27/210213/0.1	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EM1301875-115	TP20/210213/1.0	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 2745110)									
EM1301875-001	TP04/190213/0.1	EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EM1301875-041	TP14/200213/0.1	EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 2745112)									
EM1301875-078	TP22/200213/0.1	EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EM1301875-113	TP20/210213/0.1	EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 2745109)									
EM1301875-001	TP04/190213/0.1	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.0	No Limit

Sub-Matrix: **SOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP068A: Organochlorine Pesticides (OC) (QC Lot: 2745109) - continued									
EM1301875-001	TP04/190213/0.1	EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
EM1301875-041	TP14/200213/0.1	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 2745111)									
EM1301875-078	TP22/200213/0.1	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit

Sub-Matrix: **SOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP068A: Organochlorine Pesticides (OC) (QC Lot: 2745111) - continued									
EM1301875-078	TP22/200213/0.1	EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
EM1301875-113	TP20/210213/0.1	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 2745109)									
EM1301875-001	TP04/190213/0.1	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit

Sub-Matrix: **SOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 2745109) - continued									
EM1301875-001	TP04/190213/0.1	EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
EM1301875-041	TP14/200213/0.1	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 2745111)									
EM1301875-078	TP22/200213/0.1	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.0	No Limit

Sub-Matrix: **SOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 2745111) - continued									
EM1301875-078	TP22/200213/0.1	EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
EM1301875-113	TP20/210213/0.1	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 2745114)									
EM1301875-001	TP04/190213/0.1	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 2745114) - continued									
EM1301875-001	TP04/190213/0.1	EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EM1301875-041	TP14/200213/0.1	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 2745116)									
EM1301875-078	TP22/200213/0.1	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 2745116) - continued									
EM1301875-078	TP22/200213/0.1	EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EM1301875-113	TP20/210213/0.1	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 2745082)									
EM1301875-001	TP04/190213/0.1	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EM1301875-041	TP14/200213/0.1	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 2745084)									
EM1301875-078	TP22/200213/0.1	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EM1301875-113	TP20/210213/0.1	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 2745113)									
EM1301875-001	TP04/190213/0.1	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
EM1301875-041	TP14/200213/0.1	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	120	120	0.0	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071: C10 - C36 Fraction (sum)	----	50	mg/kg	120	120	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 2745115)									
EM1301875-078	TP22/200213/0.1	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
EM1301875-113	TP20/210213/0.1	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit

Sub-Matrix: **SOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
				Laboratory Duplicate (DUP) Report					
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 2745115) - continued									
EM1301875-113	TP20/210213/0.1	EP071: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QC Lot: 2745082)									
EM1301875-001	TP04/190213/0.1	EP080: C6 - C10 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EM1301875-041	TP14/200213/0.1	EP080: C6 - C10 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QC Lot: 2745084)									
EM1301875-078	TP22/200213/0.1	EP080: C6 - C10 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EM1301875-113	TP20/210213/0.1	EP080: C6 - C10 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QC Lot: 2745113)									
EM1301875-001	TP04/190213/0.1	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
EM1301875-041	TP14/200213/0.1	EP071: >C16 - C34 Fraction	----	100	mg/kg	160	160	0.0	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071: >C10 - C40 Fraction (sum)	----	50	mg/kg	160	160	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QC Lot: 2745115)									
EM1301875-078	TP22/200213/0.1	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
EM1301875-113	TP20/210213/0.1	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
EP080: BTEXN (QC Lot: 2745082)									
EM1301875-001	TP04/190213/0.1	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
EM1301875-041	TP14/200213/0.1	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit

Sub-Matrix: **SOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
				Laboratory Duplicate (DUP) Report					
EP080: BTEXN (QC Lot: 2745084)									
EM1301875-078	TP22/200213/0.1	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
EM1301875-113	TP20/210213/0.1	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit

Sub-Matrix: **WATER**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
				Laboratory Duplicate (DUP) Report					
EA005: pH (QC Lot: 2744789)									
EM1301779-001	Anonymous	EA005: pH Value	----	0.01	pH Unit	12.4	12.4	0.2	0% - 20%
EM1301886-001	Anonymous	EA005: pH Value	----	0.01	pH Unit	7.74	7.75	0.1	0% - 20%
EA015: Total Dissolved Solids (QC Lot: 2746136)									
EM1301827-007	Anonymous	EA015H: Total Dissolved Solids @180°C	----	10	mg/L	1820	1800	1.0	0% - 20%
EM1301861-001	Anonymous	EA015H: Total Dissolved Solids @180°C	----	10	mg/L	3600	3610	0.1	0% - 20%
EG020T: Total Metals by ICP-MS (QC Lot: 2746357)									
EM1301840-008	Anonymous	EG020A-T: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit
		EG020A-T: Arsenic	7440-38-2	0.001	mg/L	0.006	0.007	0.0	No Limit
		EG020A-T: Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Copper	7440-50-8	0.001	mg/L	0.010	0.010	0.0	0% - 50%
		EG020A-T: Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Nickel	7440-02-0	0.001	mg/L	0.002	0.002	0.0	No Limit
		EG020A-T: Zinc	7440-66-6	0.005	mg/L	0.007	0.009	27.6	No Limit
EM1301875-130	RB/210213	EG020A-T: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit
		EG020A-T: Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Nickel	7440-02-0	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Zinc	7440-66-6	0.005	mg/L	<0.005	<0.005	0.0	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 2746215)									
EM1301875-029	RB/190213	EG035T: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit

Sub-Matrix: **WATER**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
				Laboratory Duplicate (DUP) Report					
EK055G: Ammonia as N by Discrete Analyser (QC Lot: 2745057)									
EB1303344-024	Anonymous	EK055G: Ammonia as N	7664-41-7	0.01	mg/L	6.01	6.15	2.4	0% - 20%
EM1301756-001	Anonymous	EK055G: Ammonia as N	7664-41-7	0.01	mg/L	1260	1250	1.1	0% - 20%
EK057G: Nitrite as N by Discrete Analyser (QC Lot: 2745004)									
EM1301875-133	SL2/210213/1W	EK057G: Nitrite as N	----	0.01	mg/L	<0.01	<0.01	0.0	No Limit
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser (QC Lot: 2745058)									
EM1301756-001	Anonymous	EK059G: Nitrite + Nitrate as N	----	0.01	mg/L	<0.50	<0.50	0.0	0% - 20%
EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 2744898)									
EM1301875-133	SL2/210213/1W	EP066: Total Polychlorinated biphenyls	----	1	µg/L	<5	<5	0.0	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 2744897)									
EM1301875-133	SL2/210213/1W	EP068: alpha-BHC	319-84-6	0.5	µg/L	<2.5	<2.5	0.0	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.5	µg/L	<2.5	<2.5	0.0	No Limit
		EP068: beta-BHC	319-85-7	0.5	µg/L	<2.5	<2.5	0.0	No Limit
		EP068: gamma-BHC	58-89-9	0.5	µg/L	<2.5	<2.5	0.0	No Limit
		EP068: delta-BHC	319-86-8	0.5	µg/L	<2.5	<2.5	0.0	No Limit
		EP068: Heptachlor	76-44-8	0.5	µg/L	<2.5	<2.5	0.0	No Limit
		EP068: Aldrin	309-00-2	0.5	µg/L	<2.5	<2.5	0.0	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.5	µg/L	<2.5	<2.5	0.0	No Limit
		EP068: trans-Chlordane	5103-74-2	0.5	µg/L	<2.5	<2.5	0.0	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.5	µg/L	<2.5	<2.5	0.0	No Limit
		EP068: cis-Chlordane	5103-71-9	0.5	µg/L	<2.5	<2.5	0.0	No Limit
		EP068: Dieldrin	60-57-1	0.5	µg/L	<2.5	<2.5	0.0	No Limit
		EP068: 4.4`-DDE	72-55-9	0.5	µg/L	<2.5	<2.5	0.0	No Limit
		EP068: Endrin	72-20-8	0.5	µg/L	<2.5	<2.5	0.0	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.5	µg/L	<2.5	<2.5	0.0	No Limit
		EP068: 4.4`-DDD	72-54-8	0.5	µg/L	<2.5	<2.5	0.0	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.5	µg/L	<2.5	<2.5	0.0	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.5	µg/L	<2.5	<2.5	0.0	No Limit
		EP068: Endrin ketone	53494-70-5	0.5	µg/L	<2.5	<2.5	0.0	No Limit
		EP068: 4.4`-DDT	50-29-3	2.0	µg/L	<10.0	<10.0	0.0	No Limit
		EP068: Methoxychlor	72-43-5	2.0	µg/L	<10.0	<10.0	0.0	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 2744897)									
EM1301875-133	SL2/210213/1W	EP068: Dichlorvos	62-73-7	0.5	µg/L	<2.5	<2.5	0.0	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.5	µg/L	<2.5	<2.5	0.0	No Limit
		EP068: Dimethoate	60-51-5	0.5	µg/L	<2.5	<2.5	0.0	No Limit
		EP068: Diazinon	333-41-5	0.5	µg/L	<2.5	<2.5	0.0	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5	µg/L	<2.5	<2.5	0.0	No Limit
		EP068: Malathion	121-75-5	0.5	µg/L	<2.5	<2.5	0.0	No Limit
		EP068: Fenthion	55-38-9	0.5	µg/L	<2.5	<2.5	0.0	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.5	µg/L	<2.5	<2.5	0.0	No Limit

Sub-Matrix: **WATER**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
				Laboratory Duplicate (DUP) Report					
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 2744897) - continued									
EM1301875-133	SL2/210213/1W	EP068: Pirimphos-ethyl	23505-41-1	0.5	µg/L	<2.5	<2.5	0.0	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.5	µg/L	<2.5	<2.5	0.0	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.5	µg/L	<2.5	<2.5	0.0	No Limit
		EP068: Fenamiphos	22224-92-6	0.5	µg/L	<2.5	<2.5	0.0	No Limit
		EP068: Prothiofos	34643-46-4	0.5	µg/L	<2.5	<2.5	0.0	No Limit
		EP068: Ethion	563-12-2	0.5	µg/L	<2.5	<2.5	0.0	No Limit
		EP068: Carbophenothion	786-19-6	0.5	µg/L	<2.5	<2.5	0.0	No Limit
		EP068: Azinphos Methyl	86-50-0	0.5	µg/L	<2.5	<2.5	0.0	No Limit
		EP068: Monocrotophos	6923-22-4	2.0	µg/L	<10.0	<10.0	0.0	No Limit
		EP068: Parathion-methyl	298-00-0	2.0	µg/L	<10.0	<10.0	0.0	No Limit
		EP068: Parathion	56-38-2	2.0	µg/L	<10.0	<10.0	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 2744895)									
EM1301875-133	SL2/210213/1W	EP071: C15 - C28 Fraction	----	100	µg/L	54700	12300	# 126	0% - 20%
		EP071: C10 - C14 Fraction	----	50	µg/L	100	<50	62.4	No Limit
		EP071: C29 - C36 Fraction	----	50	µg/L	87900	24100	# 114	0% - 20%
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 2745500)									
EM1301826-004	Anonymous	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.0	No Limit
EM1301875-133	SL2/210213/1W	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QC Lot: 2744895)									
EM1301875-133	SL2/210213/1W	EP071: >C10 - C16 Fraction	----	100	µg/L	200	<100	66.8	No Limit
		EP071: >C16 - C34 Fraction	----	100	µg/L	122000	32200	# 117	0% - 20%
		EP071: >C34 - C40 Fraction	----	100	µg/L	40900	10100	# 121	0% - 20%
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QC Lot: 2745500)									
EM1301826-004	Anonymous	EP080: C6 - C10 Fraction	----	20	µg/L	<20	<20	0.0	No Limit
EM1301875-133	SL2/210213/1W	EP080: C6 - C10 Fraction	----	20	µg/L	<20	<20	0.0	No Limit
EP080: BTEXN (QC Lot: 2745500)									
EM1301826-004	Anonymous	EP080: Benzene	71-43-2	1	µg/L	<1	<1	0.0	No Limit
		EP080: Toluene	108-88-3	2	µg/L	<2	<2	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	2	µg/L	<2	<2	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	<2	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	2	µg/L	<2	<2	0.0	No Limit
		EP080: Naphthalene	91-20-3	5	µg/L	<5	<5	0.0	No Limit
EM1301875-133	SL2/210213/1W	EP080: Benzene	71-43-2	1	µg/L	<1	<1	0.0	No Limit
		EP080: Toluene	108-88-3	2	µg/L	<2	<2	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	2	µg/L	<2	<2	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	<2	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	2	µg/L	<2	<2	0.0	No Limit
		EP080: Naphthalene	91-20-3	5	µg/L	<5	<5	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*

Method Blank (MB) and Laboratory Control Spike (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Sample (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EG005T: Total Metals by ICP-AES (QCLot: 2745117)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	13.6 mg/kg	103	88	122
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	2.8 mg/kg	92.0	75	117
EG005T: Chromium	7440-47-3	2	mg/kg	<2	60.9 mg/kg	105	84	118
EG005T: Copper	7440-50-8	5	mg/kg	<5	55.1 mg/kg	96.0	87	117
EG005T: Lead	7439-92-1	5	mg/kg	<5	54.9 mg/kg	99.9	86	116
EG005T: Nickel	7440-02-0	2	mg/kg	<2	55.1 mg/kg	108	86	118
EG005T: Zinc	7440-66-6	5	mg/kg	<5	105 mg/kg	106	81	115
EG005T: Total Metals by ICP-AES (QCLot: 2745119)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	13.6 mg/kg	107	88	122
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	2.8 mg/kg	96.6	75	117
EG005T: Chromium	7440-47-3	2	mg/kg	<2	60.9 mg/kg	109	84	118
EG005T: Copper	7440-50-8	5	mg/kg	<5	55.1 mg/kg	99.0	87	117
EG005T: Lead	7439-92-1	5	mg/kg	<5	54.9 mg/kg	104	86	116
EG005T: Nickel	7440-02-0	2	mg/kg	<2	55.1 mg/kg	112	86	118
EG005T: Zinc	7440-66-6	5	mg/kg	<5	105 mg/kg	111	81	115
EG005T: Total Metals by ICP-AES (QCLot: 2745121)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	13.6 mg/kg	103	88	122
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	2.8 mg/kg	94.8	75	117
EG005T: Chromium	7440-47-3	2	mg/kg	<2	60.9 mg/kg	107	84	118
EG005T: Copper	7440-50-8	5	mg/kg	<5	55.1 mg/kg	97.6	87	117
EG005T: Lead	7439-92-1	5	mg/kg	<5	54.9 mg/kg	102	86	116
EG005T: Nickel	7440-02-0	2	mg/kg	<2	55.1 mg/kg	109	86	118
EG005T: Zinc	7440-66-6	5	mg/kg	<5	105 mg/kg	108	81	115
EG005T: Total Metals by ICP-AES (QCLot: 2745123)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	13.6 mg/kg	93.9	88	122
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	2.8 mg/kg	89.8	75	117
EG005T: Chromium	7440-47-3	2	mg/kg	<2	60.9 mg/kg	104	84	118
EG005T: Copper	7440-50-8	5	mg/kg	<5	55.1 mg/kg	103	87	117
EG005T: Lead	7439-92-1	5	mg/kg	<5	54.9 mg/kg	94.1	86	116
EG005T: Nickel	7440-02-0	2	mg/kg	<2	55.1 mg/kg	102	86	118
EG005T: Zinc	7440-66-6	5	mg/kg	<5	105 mg/kg	94.7	81	115
EG035T: Total Recoverable Mercury by FIMS (QCLot: 2745118)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	1.47 mg/kg	93.2	81	123
EG035T: Total Recoverable Mercury by FIMS (QCLot: 2745120)								

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%) LCS	Recovery Limits (%) Low	Recovery Limits (%) High
EG035T: Total Recoverable Mercury by FIMS (QCLot: 2745120) - continued								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	1.47 mg/kg	92.9	81	123
EG035T: Total Recoverable Mercury by FIMS (QCLot: 2745122)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	1.47 mg/kg	92.6	81	123
EG035T: Total Recoverable Mercury by FIMS (QCLot: 2745124)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	1.47 mg/kg	90.6	81	123
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 2745110)								
EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	1.1 mg/kg	102	55	135
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 2745112)								
EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	1.1 mg/kg	96.4	55	135
EP068A: Organochlorine Pesticides (OC) (QCLot: 2745109)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	86.1	52	133
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	82.4	50	132
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	87.6	50	138
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	87.7	54	132
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	90.7	51	133
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	86.2	51	134
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	89.0	52	133
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	90.7	54	136
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	90.0	53	136
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	90.9	53	133
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	90.3	52	137
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	91.8	49	132
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	93.5	53	134
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	92.4	45	141
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	95.7	54	132
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	96.2	52	136
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	80.9	49	135
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	88.3	49	142
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	98.3	40	146
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	90.0	51	137
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	107	38	149
EP068A: Organochlorine Pesticides (OC) (QCLot: 2745111)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	82.8	52	133
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	76.4	50	132
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	84.7	50	138
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	85.2	54	132
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	97.8	51	133
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	100	51	134

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%) LCS	Recovery Limits (%) Low	Recovery Limits (%) High
EP068A: Organochlorine Pesticides (OC) (QCLot: 2745111) - continued								
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	94.4	52	133
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	96.2	54	136
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	95.8	53	136
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	103	53	133
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	96.0	52	137
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	97.0	49	132
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	96.4	53	134
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	104	45	141
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	107	54	132
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	95.9	52	136
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	93.5	49	135
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	99.9	49	142
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	119	40	146
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	98.0	51	137
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	126	38	149
EP068B: Organophosphorus Pesticides (OP) (QCLot: 2745109)								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	63.3	35	137
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	72.4	26.8	140
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	35.3	10	185
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	86.7	46	144
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	91.9	50	134
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	84.8	52	134
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	81.1	50	137
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	79.6	46	140
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	89.9	50	134
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	85.6	52	134
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	86.0	47	139
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	90.8	48	137
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	94.4	52	136
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	89.1	37	136
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	88.7	50	136
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	90.2	50	136
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	86.0	47	138
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	83.5	19.6	170
EP068B: Organophosphorus Pesticides (OP) (QCLot: 2745111)								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	89.4	35	137
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	87.0	26.8	140
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	116	10	185
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	103	46	144

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%) LCS	Recovery Limits (%) Low	Recovery Limits (%) High
EP068B: Organophosphorus Pesticides (OP) (QCLot: 2745111) - continued								
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	94.4	50	134
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	91.1	52	134
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	94.8	50	137
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	95.5	46	140
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	92.3	50	134
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	91.1	52	134
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	91.2	47	139
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	94.0	48	137
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	99.8	52	136
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	95.0	37	136
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	91.1	50	136
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	93.9	50	136
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	93.0	47	138
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	80.5	19.6	170
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 2745114)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	10 mg/kg	91.8	66	124
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	10 mg/kg	91.8	65	128
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	10 mg/kg	94.3	66	123
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	10 mg/kg	99.0	65	124
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	10 mg/kg	101	65	122
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	10 mg/kg	96.2	65	121
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	10 mg/kg	100	67	123
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	10 mg/kg	101	66	124
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	10 mg/kg	97.8	64	124
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	10 mg/kg	101	64	127
EP075(SIM): Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	<0.5	10 mg/kg	108	60	126
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	10 mg/kg	103	63	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	10 mg/kg	90.0	63	125
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	10 mg/kg	95.9	58	120
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	10 mg/kg	95.5	58	119
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	10 mg/kg	95.0	57	120
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 2745116)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	10 mg/kg	94.1	66	124
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	10 mg/kg	89.4	65	128
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	10 mg/kg	90.9	66	123
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	10 mg/kg	93.0	65	124
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	10 mg/kg	94.4	65	122
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	10 mg/kg	90.0	65	121
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	10 mg/kg	89.2	67	123

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%) LCS	Recovery Limits (%) Low	Recovery Limits (%) High
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 2745116) - continued								
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	10 mg/kg	88.4	66	124
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	10 mg/kg	77.2	64	124
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	10 mg/kg	79.9	64	127
EP075(SIM): Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	<0.5	10 mg/kg	90.2	60	126
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	10 mg/kg	91.4	63	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	10 mg/kg	97.5	63	125
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	10 mg/kg	85.0	58	120
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	10 mg/kg	83.0	58	119
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	10 mg/kg	82.7	57	120
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2745082)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	36 mg/kg	80.5	63	129
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2745084)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	36 mg/kg	78.7	63	129
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2745113)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	602 mg/kg	104	55	121
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	1875 mg/kg	94.3	72	124
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	738 mg/kg	93.1	66	116
EP071: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2745115)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	602 mg/kg	78.4	55	121
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	1875 mg/kg	79.7	72	124
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	738 mg/kg	82.3	66	116
EP071: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QCLot: 2745082)								
EP080: C6 - C10 Fraction	----	10	mg/kg	<10	45 mg/kg	79.5	60	134
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QCLot: 2745084)								
EP080: C6 - C10 Fraction	----	10	mg/kg	<10	45 mg/kg	77.6	60	134
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QCLot: 2745113)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	929 mg/kg	96.2	66	122
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	2237 mg/kg	90.5	69	119
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	232 mg/kg	94.3	44	124
EP071: >C10 - C40 Fraction (sum)	----	100	mg/kg	<100	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QCLot: 2745115)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	929 mg/kg	76.6	66	122
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	2237 mg/kg	82.2	69	119
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	232 mg/kg	74.2	44	124
EP071: >C10 - C40 Fraction (sum)	----	100	mg/kg	<100	----	----	----	----
EP080: BTEXN (QCLot: 2745082)								

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EP080: BTEXN (QCLot: 2745082) - continued								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	2 mg/kg	90.9	68	120
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	2 mg/kg	89.2	69	123
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	2 mg/kg	87.6	65	121
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	4 mg/kg	86.6	63	131
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	2 mg/kg	91.3	66	130
EP080: Naphthalene	91-20-3	1	mg/kg	<1	0.5 mg/kg	107	56	136
EP080: BTEXN (QCLot: 2745084)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	2 mg/kg	87.3	68	120
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	2 mg/kg	87.0	69	123
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	2 mg/kg	81.7	65	121
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	4 mg/kg	83.2	63	131
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	2 mg/kg	91.9	66	130
EP080: Naphthalene	91-20-3	1	mg/kg	<1	0.5 mg/kg	96.4	56	136

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EA015: Total Dissolved Solids (QCLot: 2746136)								
EA015H: Total Dissolved Solids @180°C	----	10	mg/L	<10	2000 mg/L	102	98	104
EG020T: Total Metals by ICP-MS (QCLot: 2746357)								
EG020A-T: Arsenic	7440-38-2	0.001	mg/L	<0.001	0.1 mg/L	97.6	94	114
EG020A-T: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	0.1 mg/L	97.9	90	112
EG020A-T: Chromium	7440-47-3	0.001	mg/L	<0.001	0.1 mg/L	97.8	88	116
EG020A-T: Copper	7440-50-8	0.001	mg/L	<0.001	0.1 mg/L	92.8	89	113
EG020A-T: Lead	7439-92-1	0.001	mg/L	<0.001	0.1 mg/L	105	91	115
EG020A-T: Nickel	7440-02-0	0.001	mg/L	<0.001	0.1 mg/L	102	90	116
EG020A-T: Zinc	7440-66-6	0.005	mg/L	<0.005	0.1 mg/L	93.9	87	113
EG035T: Total Recoverable Mercury by FIMS (QCLot: 2746215)								
EG035T: Mercury	7439-97-6	0.0001	mg/L	<0.0001	0.0100 mg/L	90.6	78	124
EK055G: Ammonia as N by Discrete Analyser (QCLot: 2745057)								
EK055G: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	1.0 mg/L	96.2	76	122
EK057G: Nitrite as N by Discrete Analyser (QCLot: 2745004)								
EK057G: Nitrite as N	----	0.01	mg/L	<0.01	0.5 mg/L	100	84	112
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser (QCLot: 2745058)								
EK059G: Nitrite + Nitrate as N	----	0.01	mg/L	<0.02	0.5 mg/L	103	73	127
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 2744898)								
EP066: Total Polychlorinated biphenyls	----	1	µg/L	<1	10 µg/L	62.0	54	136

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%) LCS	Recovery Limits (%) Low	Recovery Limits (%) High
EP068A: Organochlorine Pesticides (OC) (QCLot: 2744897)								
EP068: alpha-BHC	319-84-6	0.5	µg/L	<0.5	5 µg/L	66.9	59	123
EP068: Hexachlorobenzene (HCB)	118-74-1	0.5	µg/L	<0.5	5 µg/L	66.2	53	120
EP068: beta-BHC	319-85-7	0.5	µg/L	<0.5	5 µg/L	70.5	58	127
EP068: gamma-BHC	58-89-9	0.5	µg/L	<0.5	5 µg/L	79.5	59	129
EP068: delta-BHC	319-86-8	0.5	µg/L	<0.5	5 µg/L	70.2	58	127
EP068: Heptachlor	76-44-8	0.5	µg/L	<0.5	5 µg/L	80.0	55	119
EP068: Aldrin	309-00-2	0.5	µg/L	<0.5	5 µg/L	71.2	60	125
EP068: Heptachlor epoxide	1024-57-3	0.5	µg/L	<0.5	5 µg/L	71.5	58	126
EP068: trans-Chlordane	5103-74-2	0.5	µg/L	<0.5	5 µg/L	70.3	59	125
EP068: alpha-Endosulfan	959-98-8	0.5	µg/L	<0.5	5 µg/L	73.7	51	135
EP068: cis-Chlordane	5103-71-9	0.5	µg/L	<0.5	5 µg/L	71.0	60	125
EP068: Dieldrin	60-57-1	0.5	µg/L	<0.5	5 µg/L	71.4	59	134
EP068: 4.4`-DDE	72-55-9	0.5	µg/L	<0.5	5 µg/L	70.8	61	127
EP068: Endrin	72-20-8	0.5	µg/L	<0.5	5 µg/L	82.7	62	130
EP068: beta-Endosulfan	33213-65-9	0.5	µg/L	<0.5	5 µg/L	72.4	63	132
EP068: 4.4`-DDD	72-54-8	0.5	µg/L	<0.5	5 µg/L	70.2	61	128
EP068: Endrin aldehyde	7421-93-4	0.5	µg/L	<0.5	5 µg/L	76.5	40	144
EP068: Endosulfan sulfate	1031-07-8	0.5	µg/L	<0.5	5 µg/L	73.1	44	134
EP068: 4.4`-DDT	50-29-3	2.0	µg/L	<2.0	5 µg/L	106	38	118
EP068: Endrin ketone	53494-70-5	0.5	µg/L	<0.5	5 µg/L	70.1	46	132
EP068: Methoxychlor	72-43-5	2.0	µg/L	<2.0	5 µg/L	86.1	33	123
EP068B: Organophosphorus Pesticides (OP) (QCLot: 2744897)								
EP068: Dichlorvos	62-73-7	0.5	µg/L	<0.5	5 µg/L	68.3	37	109
EP068: Demeton-S-methyl	919-86-8	0.5	µg/L	<0.5	5 µg/L	86.2	36	118
EP068: Monocrotophos	6923-22-4	2.0	µg/L	<2.0	5 µg/L	25.4	10	28.2
EP068: Dimethoate	60-51-5	0.5	µg/L	<0.5	5 µg/L	71.8	49	113
EP068: Diazinon	333-41-5	0.5	µg/L	<0.5	5 µg/L	75.3	61	125
EP068: Chlorpyrifos-methyl	5598-13-0	0.5	µg/L	<0.5	5 µg/L	72.2	63	120
EP068: Parathion-methyl	298-00-0	2.0	µg/L	<2.0	5 µg/L	69.0	47	118
EP068: Malathion	121-75-5	0.5	µg/L	<0.5	5 µg/L	76.0	45	129
EP068: Fenthion	55-38-9	0.5	µg/L	<0.5	5 µg/L	73.4	60	121
EP068: Chlorpyrifos	2921-88-2	0.5	µg/L	<0.5	5 µg/L	75.7	47	127
EP068: Parathion	56-38-2	2.0	µg/L	<2.0	5 µg/L	76.3	55	122
EP068: Pirimphos-ethyl	23505-41-1	0.5	µg/L	<0.5	5 µg/L	72.9	59	125
EP068: Chlorfenvinphos	470-90-6	0.5	µg/L	<0.5	5 µg/L	91.6	61	125
EP068: Bromophos-ethyl	4824-78-6	0.5	µg/L	<0.5	5 µg/L	67.7	61	120
EP068: Fenamiphos	22224-92-6	0.5	µg/L	<0.5	5 µg/L	92.1	59	127
EP068: Prothiofos	34643-46-4	0.5	µg/L	<0.5	5 µg/L	79.1	49	121
EP068: Ethion	563-12-2	0.5	µg/L	<0.5	5 µg/L	71.6	45	123

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EP068B: Organophosphorus Pesticides (OP) (QCLot: 2744897) - continued								
EP068: Carbophenothion	786-19-6	0.5	µg/L	<0.5	5 µg/L	79.8	46	126
EP068: Azinphos Methyl	86-50-0	0.5	µg/L	<0.5	5 µg/L	28.4	26.9	147
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 2744896)								
EP075(SIM): Naphthalene	91-20-3	1	µg/L	<1.0	5 µg/L	56.1	27.5	126
EP075(SIM): Acenaphthylene	208-96-8	1	µg/L	<1.0	5 µg/L	56.3	35	127
EP075(SIM): Acenaphthene	83-32-9	1	µg/L	<1.0	5 µg/L	75.0	35	128
EP075(SIM): Fluorene	86-73-7	1	µg/L	<1.0	5 µg/L	88.2	36	132
EP075(SIM): Phenanthrene	85-01-8	1	µg/L	<1.0	5 µg/L	86.2	42	132
EP075(SIM): Anthracene	120-12-7	1	µg/L	<1.0	5 µg/L	89.7	42	133
EP075(SIM): Fluoranthene	206-44-0	1	µg/L	<1.0	5 µg/L	82.2	41	137
EP075(SIM): Pyrene	129-00-0	1	µg/L	<1.0	5 µg/L	92.4	40	140
EP075(SIM): Benz(a)anthracene	56-55-3	1	µg/L	<1.0	5 µg/L	96.0	33	147
EP075(SIM): Chrysene	218-01-9	1	µg/L	<1.0	5 µg/L	90.4	37	145
EP075(SIM): Benzo(b)fluoranthene	205-99-2	1	µg/L	<1.0	5 µg/L	112	35	150
EP075(SIM): Benzo(k)fluoranthene	207-08-9	1	µg/L	<1.0	5 µg/L	107	39	140
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	µg/L	<0.5	5 µg/L	123	41	138
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	1	µg/L	<1.0	5 µg/L	109	35	139
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	1	µg/L	<1.0	5 µg/L	116	36	141
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	1	µg/L	<1.0	5 µg/L	98.5	10	140
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2744895)								
EP071: C10 - C14 Fraction	----	50	µg/L	<50	3610 µg/L	75.1	64	124
EP071: C15 - C28 Fraction	----	100	µg/L	<100	10340 µg/L	91.0	70	130
EP071: C29 - C36 Fraction	----	50	µg/L	<50	3790 µg/L	98.5	68	128
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2745500)								
EP080: C6 - C9 Fraction	----	20	µg/L	<20	360 µg/L	85.3	60	126
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QCLot: 2744895)								
EP071: >C10 - C16 Fraction	----	100	µg/L	<100	5070 µg/L	84.1	70	130
EP071: >C16 - C34 Fraction	----	100	µg/L	<100	11230 µg/L	95.8	70	130
EP071: >C34 - C40 Fraction	----	100	µg/L	<100	1010 µg/L	124	70	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QCLot: 2745500)								
EP080: C6 - C10 Fraction	----	20	µg/L	<20	450 µg/L	85.3	56	130
EP080: BTEXN (QCLot: 2745500)								
EP080: Benzene	71-43-2	1	µg/L	<1	20 µg/L	92.3	65	125
EP080: Toluene	108-88-3	2	µg/L	<2	20 µg/L	90.2	67	123
EP080: Ethylbenzene	100-41-4	2	µg/L	<2	20 µg/L	87.7	62	120
EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	40 µg/L	90.2	60	126
EP080: ortho-Xylene	95-47-6	2	µg/L	<2	20 µg/L	96.0	66	124

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EP080: BTEXN (QCLot: 2745500) - continued								
EP080: Naphthalene	91-20-3	5	µg/L	<5	5 µg/L	98.2	65	129

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **SOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Recovery Limits (%): Low	Recovery Limits (%): High
EG005T: Total Metals by ICP-AES (QCLot: 2745117)							
EM1301875-002	TP04/190213/0.5	EG005T: Arsenic	7440-38-2	50 mg/kg	98.6	78	124
		EG005T: Cadmium	7440-43-9	50 mg/kg	99.5	84	116
		EG005T: Chromium	7440-47-3	50 mg/kg	95.2	79	121
		EG005T: Copper	7440-50-8	50 mg/kg	96.3	82	124
		EG005T: Lead	7439-92-1	50 mg/kg	95.4	76	124
		EG005T: Nickel	7440-02-0	50 mg/kg	95.6	78	120
		EG005T: Zinc	7440-66-6	50 mg/kg	95.6	74	128
EG005T: Total Metals by ICP-AES (QCLot: 2745119)							
EM1301875-036	TP02/200213/1.5	EG005T: Arsenic	7440-38-2	50 mg/kg	96.0	78	124
		EG005T: Cadmium	7440-43-9	50 mg/kg	105	84	116
		EG005T: Chromium	7440-47-3	50 mg/kg	97.7	79	121
		EG005T: Copper	7440-50-8	50 mg/kg	102	82	124
		EG005T: Lead	7439-92-1	50 mg/kg	99.2	76	124
		EG005T: Nickel	7440-02-0	50 mg/kg	105	78	120
		EG005T: Zinc	7440-66-6	50 mg/kg	101	74	128
EG005T: Total Metals by ICP-AES (QCLot: 2745121)							
EM1301875-068	TP17/200213/0.1	EG005T: Arsenic	7440-38-2	50 mg/kg	96.3	78	124
		EG005T: Cadmium	7440-43-9	50 mg/kg	97.9	84	116
		EG005T: Chromium	7440-47-3	50 mg/kg	84.9	79	121
		EG005T: Copper	7440-50-8	50 mg/kg	97.5	82	124
		EG005T: Lead	7439-92-1	50 mg/kg	84.3	76	124
		EG005T: Nickel	7440-02-0	50 mg/kg	90.5	78	120
		EG005T: Zinc	7440-66-6	50 mg/kg	97.3	74	128
EG005T: Total Metals by ICP-AES (QCLot: 2745123)							
EM1301875-101	TP27/210213/1.4	EG005T: Arsenic	7440-38-2	50 mg/kg	94.0	78	124
		EG005T: Cadmium	7440-43-9	50 mg/kg	98.4	84	116
		EG005T: Chromium	7440-47-3	50 mg/kg	99.7	79	121
		EG005T: Copper	7440-50-8	50 mg/kg	99.6	82	124

Sub-Matrix: **SOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%) MS	Recovery Limits (%) Low	High
EG005T: Total Metals by ICP-AES (QCLot: 2745123) - continued							
EM1301875-101	TP27/210213/1.4	EG005T: Lead	7439-92-1	50 mg/kg	103	76	124
		EG005T: Nickel	7440-02-0	50 mg/kg	105	78	120
		EG005T: Zinc	7440-66-6	50 mg/kg	105	74	128
EG035T: Total Recoverable Mercury by FIMS (QCLot: 2745118)							
EM1301875-002	TP04/190213/0.5	EG035T: Mercury	7439-97-6	5.0 mg/kg	98.5	80	120
EG035T: Total Recoverable Mercury by FIMS (QCLot: 2745120)							
EM1301875-036	TP02/200213/1.5	EG035T: Mercury	7439-97-6	5.0 mg/kg	102	80	120
EG035T: Total Recoverable Mercury by FIMS (QCLot: 2745122)							
EM1301875-068	TP17/200213/0.1	EG035T: Mercury	7439-97-6	5.0 mg/kg	96.2	80	120
EG035T: Total Recoverable Mercury by FIMS (QCLot: 2745124)							
EM1301875-101	TP27/210213/1.4	EG035T: Mercury	7439-97-6	5.0 mg/kg	88.2	80	120
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 2745110)							
EM1301875-009	TP06/190213/0.1	EP066: Total Polychlorinated biphenyls	----	1.1 mg/kg	97.3	55	132
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 2745112)							
EM1301875-085	TP32/210213/0.1	EP066: Total Polychlorinated biphenyls	----	1.1 mg/kg	88.2	55	132
EP068A: Organochlorine Pesticides (OC) (QCLot: 2745109)							
EM1301875-005	TP05/190213/0.1	EP068: gamma-BHC	58-89-9	0.5 mg/kg	116	30	129
		EP068: Heptachlor	76-44-8	0.5 mg/kg	107	22.2	129
		EP068: Aldrin	309-00-2	0.5 mg/kg	97.9	25	128
		EP068: Dieldrin	60-57-1	0.5 mg/kg	98.8	36	132
		EP068: Endrin	72-20-8	0.5 mg/kg	115	32	138
		EP068: 4.4`-DDT	50-29-3	0.5 mg/kg	88.4	21.8	140
EP068A: Organochlorine Pesticides (OC) (QCLot: 2745111)							
EM1301875-084	DUPAA/200213/0.1B	EP068: gamma-BHC	58-89-9	0.5 mg/kg	83.1	30	129
		EP068: Heptachlor	76-44-8	0.5 mg/kg	86.2	22.2	129
		EP068: Aldrin	309-00-2	0.5 mg/kg	101	25	128
		EP068: Dieldrin	60-57-1	0.5 mg/kg	102	36	132
		EP068: Endrin	72-20-8	0.5 mg/kg	107	32	138
		EP068: 4.4`-DDT	50-29-3	0.5 mg/kg	39.4	21.8	140
EP068B: Organophosphorus Pesticides (OP) (QCLot: 2745109)							
EM1301875-005	TP05/190213/0.1	EP068: Diazinon	333-41-5	0.5 mg/kg	90.3	39	129
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	93.6	39	126
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	89.0	38	130
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	87.4	35	114
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	85.7	39	125
EP068B: Organophosphorus Pesticides (OP) (QCLot: 2745111)							

Sub-Matrix: **SOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%) MS	Recovery Limits (%) Low	High
EP068B: Organophosphorus Pesticides (OP) (QCLot: 2745111) - continued							
EM1301875-084	DUPAA/200213/0.1B	EP068: Diazinon	333-41-5	0.5 mg/kg	99.9	39	129
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	102	39	126
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	97.6	38	130
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	94.2	35	114
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	94.9	39	125
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 2745114)							
EM1301875-009	TP06/190213/0.1	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	87.7	67	122
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	100	64	125
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 2745116)							
EM1301875-085	TP32/210213/0.1	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	90.0	67	122
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	102	64	125
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2745082)							
EM1301875-005	TP05/190213/0.1	EP080: C6 - C9 Fraction	----	28 mg/kg	70.9	44	124
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2745084)							
EM1301875-084	DUPAA/200213/0.1B	EP080: C6 - C9 Fraction	----	28 mg/kg	62.7	44	124
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2745113)							
EM1301875-005	TP05/190213/0.1	EP071: C10 - C14 Fraction	----	602 mg/kg	106	53	123
		EP071: C15 - C28 Fraction	----	1875 mg/kg	94.1	70	124
		EP071: C29 - C36 Fraction	----	738 mg/kg	90.0	64	118
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2745115)							
EM1301875-084	DUPAA/200213/0.1B	EP071: C10 - C14 Fraction	----	602 mg/kg	85.6	53	123
		EP071: C15 - C28 Fraction	----	1875 mg/kg	90.2	70	124
		EP071: C29 - C36 Fraction	----	738 mg/kg	97.1	64	118
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QCLot: 2745082)							
EM1301875-005	TP05/190213/0.1	EP080: C6 - C10 Fraction	----	33 mg/kg	66.0	45	127
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QCLot: 2745084)							
EM1301875-084	DUPAA/200213/0.1B	EP080: C6 - C10 Fraction	----	33 mg/kg	61.1	45	127
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QCLot: 2745113)							
EM1301875-005	TP05/190213/0.1	EP071: >C10 - C16 Fraction	----	929 mg/kg	97.4	65	123
		EP071: >C16 - C34 Fraction	----	2237 mg/kg	89.7	67	121
		EP071: >C34 - C40 Fraction	----	232 mg/kg	77.2	44	126
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QCLot: 2745115)							
EM1301875-084	DUPAA/200213/0.1B	EP071: >C10 - C16 Fraction	----	929 mg/kg	84.5	65	123
		EP071: >C16 - C34 Fraction	----	2237 mg/kg	96.4	67	121
		EP071: >C34 - C40 Fraction	----	232 mg/kg	80.4	44	126

Sub-Matrix: **SOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%) MS	Recovery Limits (%) Low	High
EP080: BTEXN (QCLot: 2745082)							
EM1301875-005	TP05/190213/0.1	EP080: Benzene	71-43-2	2 mg/kg	85.7	43	137
		EP080: Toluene	108-88-3	2 mg/kg	89.2	51	137
EP080: BTEXN (QCLot: 2745084)							
EM1301875-084	DUPAA/200213/0.1B	EP080: Benzene	71-43-2	2 mg/kg	92.6	43	137
		EP080: Toluene	108-88-3	2 mg/kg	96.7	51	137

Sub-Matrix: **WATER**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%) MS	Recovery Limits (%) Low	High
EG020T: Total Metals by ICP-MS (QCLot: 2746357)							
EM1301840-008	Anonymous	EG020A-T: Arsenic	7440-38-2	1 mg/L	100	72	146
		EG020A-T: Cadmium	7440-43-9	0.25 mg/L	101	73	131
		EG020A-T: Chromium	7440-47-3	1 mg/L	95.2	65	131
		EG020A-T: Copper	7440-50-8	1 mg/L	93.0	71	125
		EG020A-T: Lead	7439-92-1	1 mg/L	89.3	68	130
		EG020A-T: Nickel	7440-02-0	1 mg/L	93.8	72	128
		EG020A-T: Zinc	7440-66-6	1 mg/L	101	67	129
EG035T: Total Recoverable Mercury by FIMS (QCLot: 2746215)							
EM1301875-081	RB/200213	EG035T: Mercury	7439-97-6	0.0100 mg/L	94.5	68	128
EK055G: Ammonia as N by Discrete Analyser (QCLot: 2745057)							
EB1304105-001	Anonymous	EK055G: Ammonia as N	7664-41-7	1.0 mg/L	# Not Determined	70	130
EK057G: Nitrite as N by Discrete Analyser (QCLot: 2745004)							
EM1301875-134	DUPAA/210213/1WB	EK057G: Nitrite as N	----	0.5 mg/L	113	70	130
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser (QCLot: 2745058)							
EM1301756-002	Anonymous	EK059G: Nitrite + Nitrate as N	----	0.5 mg/L	# Not Determined	70	130
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 2744898)							
EM1301875-134	DUPAA/210213/1WB	EP066: Total Polychlorinated biphenyls	----	10 µg/L	75.0	61	135
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2745500)							
EM1301875-029	RB/190213	EP080: C6 - C9 Fraction	----	280 µg/L	66.9	46	126
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QCLot: 2745500)							
EM1301875-029	RB/190213	EP080: C6 - C10 Fraction	----	330 µg/L	65.9	45	127
EP080: BTEXN (QCLot: 2745500)							
EM1301875-029	RB/190213	EP080: Benzene	71-43-2	20 µg/L	71.7	53	127
		EP080: Toluene	108-88-3	20 µg/L	80.2	56	126

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

The quality control term Matrix Spike (MS) and Matrix Spike Duplicate (MSD) refers to intralaboratory split samples spiked with a representative set of target analytes. The purpose of these QC parameters are to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **SOIL**

				Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report						
				Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	MSD	Low	High	Value	Control Limit
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2745082)										
EM1301875-005	TP05/190213/0.1	EP080: C6 - C9 Fraction	----	28 mg/kg	70.9	----	44	124	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QCLot: 2745082)										
EM1301875-005	TP05/190213/0.1	EP080: C6 - C10 Fraction	----	33 mg/kg	66.0	----	45	127	----	----
EP080: BTEXN (QCLot: 2745082)										
EM1301875-005	TP05/190213/0.1	EP080: Benzene	71-43-2	2 mg/kg	85.7	----	43	137	----	----
		EP080: Toluene	108-88-3	2 mg/kg	89.2	----	51	137	----	----
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2745084)										
EM1301875-084	DUPAA/200213/0.1B	EP080: C6 - C9 Fraction	----	28 mg/kg	62.7	----	44	124	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QCLot: 2745084)										
EM1301875-084	DUPAA/200213/0.1B	EP080: C6 - C10 Fraction	----	33 mg/kg	61.1	----	45	127	----	----
EP080: BTEXN (QCLot: 2745084)										
EM1301875-084	DUPAA/200213/0.1B	EP080: Benzene	71-43-2	2 mg/kg	92.6	----	43	137	----	----
		EP080: Toluene	108-88-3	2 mg/kg	96.7	----	51	137	----	----
EP068A: Organochlorine Pesticides (OC) (QCLot: 2745109)										
EM1301875-005	TP05/190213/0.1	EP068: gamma-BHC	58-89-9	0.5 mg/kg	116	----	30	129	----	----
		EP068: Heptachlor	76-44-8	0.5 mg/kg	107	----	22.2	129	----	----
		EP068: Aldrin	309-00-2	0.5 mg/kg	97.9	----	25	128	----	----
		EP068: Dieldrin	60-57-1	0.5 mg/kg	98.8	----	36	132	----	----
		EP068: Endrin	72-20-8	0.5 mg/kg	115	----	32	138	----	----
		EP068: 4.4`-DDT	50-29-3	0.5 mg/kg	88.4	----	21.8	140	----	----
EP068B: Organophosphorus Pesticides (OP) (QCLot: 2745109)										
EM1301875-005	TP05/190213/0.1	EP068: Diazinon	333-41-5	0.5 mg/kg	90.3	----	39	129	----	----
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	93.6	----	39	126	----	----
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	89.0	----	38	130	----	----
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	87.4	----	35	114	----	----
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	85.7	----	39	125	----	----
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 2745110)										
EM1301875-009	TP06/190213/0.1	EP066: Total Polychlorinated biphenyls	----	1.1 mg/kg	97.3	----	55	132	----	----
EP068A: Organochlorine Pesticides (OC) (QCLot: 2745111)										
EM1301875-084	DUPAA/200213/0.1B	EP068: gamma-BHC	58-89-9	0.5 mg/kg	83.1	----	30	129	----	----
		EP068: Heptachlor	76-44-8	0.5 mg/kg	86.2	----	22.2	129	----	----
		EP068: Aldrin	309-00-2	0.5 mg/kg	101	----	25	128	----	----
		EP068: Dieldrin	60-57-1	0.5 mg/kg	102	----	36	132	----	----

Sub-Matrix: **SOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report: Spike Concentration	Spike Recovery (%): MS	Spike Recovery (%): MSD	Recovery Limits (%): Low	Recovery Limits (%): High	RPDs (%): Value	RPDs (%): Control Limit
EP068A: Organochlorine Pesticides (OC) (QCLot: 2745111) - continued										
EM1301875-084	DUPAA/200213/0.1B	EP068: Endrin	72-20-8	0.5 mg/kg	107	----	32	138	----	----
		EP068: 4.4`-DDT	50-29-3	0.5 mg/kg	39.4	----	21.8	140	----	----
EP068B: Organophosphorus Pesticides (OP) (QCLot: 2745111)										
EM1301875-084	DUPAA/200213/0.1B	EP068: Diazinon	333-41-5	0.5 mg/kg	99.9	----	39	129	----	----
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	102	----	39	126	----	----
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	97.6	----	38	130	----	----
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	94.2	----	35	114	----	----
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	94.9	----	39	125	----	----
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 2745112)										
EM1301875-085	TP32/210213/0.1	EP066: Total Polychlorinated biphenyls	----	1.1 mg/kg	88.2	----	55	132	----	----
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2745113)										
EM1301875-005	TP05/190213/0.1	EP071: C10 - C14 Fraction	----	602 mg/kg	106	----	53	123	----	----
		EP071: C15 - C28 Fraction	----	1875 mg/kg	94.1	----	70	124	----	----
		EP071: C29 - C36 Fraction	----	738 mg/kg	90.0	----	64	118	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QCLot: 2745113)										
EM1301875-005	TP05/190213/0.1	EP071: >C10 - C16 Fraction	----	929 mg/kg	97.4	----	65	123	----	----
		EP071: >C16 - C34 Fraction	----	2237 mg/kg	89.7	----	67	121	----	----
		EP071: >C34 - C40 Fraction	----	232 mg/kg	77.2	----	44	126	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 2745114)										
EM1301875-009	TP06/190213/0.1	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	87.7	----	67	122	----	----
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	100	----	64	125	----	----
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2745115)										
EM1301875-084	DUPAA/200213/0.1B	EP071: C10 - C14 Fraction	----	602 mg/kg	85.6	----	53	123	----	----
		EP071: C15 - C28 Fraction	----	1875 mg/kg	90.2	----	70	124	----	----
		EP071: C29 - C36 Fraction	----	738 mg/kg	97.1	----	64	118	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QCLot: 2745115)										
EM1301875-084	DUPAA/200213/0.1B	EP071: >C10 - C16 Fraction	----	929 mg/kg	84.5	----	65	123	----	----
		EP071: >C16 - C34 Fraction	----	2237 mg/kg	96.4	----	67	121	----	----
		EP071: >C34 - C40 Fraction	----	232 mg/kg	80.4	----	44	126	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 2745116)										
EM1301875-085	TP32/210213/0.1	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	90.0	----	67	122	----	----
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	102	----	64	125	----	----
EG005T: Total Metals by ICP-AES (QCLot: 2745117)										
EM1301875-002	TP04/190213/0.5	EG005T: Arsenic	7440-38-2	50 mg/kg	98.6	----	78	124	----	----
		EG005T: Cadmium	7440-43-9	50 mg/kg	99.5	----	84	116	----	----
		EG005T: Chromium	7440-47-3	50 mg/kg	95.2	----	79	121	----	----
		EG005T: Copper	7440-50-8	50 mg/kg	96.3	----	82	124	----	----

Sub-Matrix: **SOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report: Spike Concentration	Spike Recovery (%) MS	Spike Recovery (%) MSD	Recovery Limits (%) Low	Recovery Limits (%) High	RPDs (%) Value	RPDs (%) Control Limit
EG005T: Total Metals by ICP-AES (QCLot: 2745117) - continued										
EM1301875-002	TP04/190213/0.5	EG005T: Lead	7439-92-1	50 mg/kg	95.4	----	76	124	----	----
		EG005T: Nickel	7440-02-0	50 mg/kg	95.6	----	78	120	----	----
		EG005T: Zinc	7440-66-6	50 mg/kg	95.6	----	74	128	----	----
EG035T: Total Recoverable Mercury by FIMS (QCLot: 2745118)										
EM1301875-002	TP04/190213/0.5	EG035T: Mercury	7439-97-6	5.0 mg/kg	98.5	----	80	120	----	----
EG005T: Total Metals by ICP-AES (QCLot: 2745119)										
EM1301875-036	TP02/200213/1.5	EG005T: Arsenic	7440-38-2	50 mg/kg	96.0	----	78	124	----	----
		EG005T: Cadmium	7440-43-9	50 mg/kg	105	----	84	116	----	----
		EG005T: Chromium	7440-47-3	50 mg/kg	97.7	----	79	121	----	----
		EG005T: Copper	7440-50-8	50 mg/kg	102	----	82	124	----	----
		EG005T: Lead	7439-92-1	50 mg/kg	99.2	----	76	124	----	----
		EG005T: Nickel	7440-02-0	50 mg/kg	105	----	78	120	----	----
		EG005T: Zinc	7440-66-6	50 mg/kg	101	----	74	128	----	----
EG035T: Total Recoverable Mercury by FIMS (QCLot: 2745120)										
EM1301875-036	TP02/200213/1.5	EG035T: Mercury	7439-97-6	5.0 mg/kg	102	----	80	120	----	----
EG005T: Total Metals by ICP-AES (QCLot: 2745121)										
EM1301875-068	TP17/200213/0.1	EG005T: Arsenic	7440-38-2	50 mg/kg	96.3	----	78	124	----	----
		EG005T: Cadmium	7440-43-9	50 mg/kg	97.9	----	84	116	----	----
		EG005T: Chromium	7440-47-3	50 mg/kg	84.9	----	79	121	----	----
		EG005T: Copper	7440-50-8	50 mg/kg	97.5	----	82	124	----	----
		EG005T: Lead	7439-92-1	50 mg/kg	84.3	----	76	124	----	----
		EG005T: Nickel	7440-02-0	50 mg/kg	90.5	----	78	120	----	----
		EG005T: Zinc	7440-66-6	50 mg/kg	97.3	----	74	128	----	----
EG035T: Total Recoverable Mercury by FIMS (QCLot: 2745122)										
EM1301875-068	TP17/200213/0.1	EG035T: Mercury	7439-97-6	5.0 mg/kg	96.2	----	80	120	----	----
EG005T: Total Metals by ICP-AES (QCLot: 2745123)										
EM1301875-101	TP27/210213/1.4	EG005T: Arsenic	7440-38-2	50 mg/kg	94.0	----	78	124	----	----
		EG005T: Cadmium	7440-43-9	50 mg/kg	98.4	----	84	116	----	----
		EG005T: Chromium	7440-47-3	50 mg/kg	99.7	----	79	121	----	----
		EG005T: Copper	7440-50-8	50 mg/kg	99.6	----	82	124	----	----
		EG005T: Lead	7439-92-1	50 mg/kg	103	----	76	124	----	----
		EG005T: Nickel	7440-02-0	50 mg/kg	105	----	78	120	----	----
		EG005T: Zinc	7440-66-6	50 mg/kg	105	----	74	128	----	----
EG035T: Total Recoverable Mercury by FIMS (QCLot: 2745124)										
EM1301875-101	TP27/210213/1.4	EG035T: Mercury	7439-97-6	5.0 mg/kg	88.2	----	80	120	----	----

Sub-Matrix: **WATER**

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report: Spike	Spike Recovery (%)	Recovery Limits (%)	RPDs (%)

Sub-Matrix: **WATER**

				Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report						
				Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	MSD	Low	High	Value	Control Limit
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 2744898)										
EM1301875-134	DUPAA/210213/1WB	EP066: Total Polychlorinated biphenyls	----	10 µg/L	75.0	----	61	135	----	----
EK057G: Nitrite as N by Discrete Analyser (QCLot: 2745004)										
EM1301875-134	DUPAA/210213/1WB	EK057G: Nitrite as N	----	0.5 mg/L	113	----	70	130	----	----
EK055G: Ammonia as N by Discrete Analyser (QCLot: 2745057)										
EB1304105-001	Anonymous	EK055G: Ammonia as N	7664-41-7	1.0 mg/L	# Not Determined	----	70	130	----	----
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser (QCLot: 2745058)										
EM1301756-002	Anonymous	EK059G: Nitrite + Nitrate as N	----	0.5 mg/L	# Not Determined	----	70	130	----	----
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2745500)										
EM1301875-029	RB/190213	EP080: C6 - C9 Fraction	----	280 µg/L	66.9	----	46	126	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QCLot: 2745500)										
EM1301875-029	RB/190213	EP080: C6 - C10 Fraction	----	330 µg/L	65.9	----	45	127	----	----
EP080: BTEXN (QCLot: 2745500)										
EM1301875-029	RB/190213	EP080: Benzene	71-43-2	20 µg/L	71.7	----	53	127	----	----
		EP080: Toluene	108-88-3	20 µg/L	80.2	----	56	126	----	----
EG035T: Total Recoverable Mercury by FIMS (QCLot: 2746215)										
EM1301875-081	RB/200213	EG035T: Mercury	7439-97-6	0.0100 mg/L	94.5	----	68	128	----	----
EG020T: Total Metals by ICP-MS (QCLot: 2746357)										
EM1301840-008	Anonymous	EG020A-T: Arsenic	7440-38-2	1 mg/L	100	----	72	146	----	----
		EG020A-T: Cadmium	7440-43-9	0.25 mg/L	101	----	73	131	----	----
		EG020A-T: Chromium	7440-47-3	1 mg/L	95.2	----	65	131	----	----
		EG020A-T: Copper	7440-50-8	1 mg/L	93.0	----	71	125	----	----
		EG020A-T: Lead	7439-92-1	1 mg/L	89.3	----	68	130	----	----
		EG020A-T: Nickel	7440-02-0	1 mg/L	93.8	----	72	128	----	----
		EG020A-T: Zinc	7440-66-6	1 mg/L	101	----	67	129	----	----

Environmental Division

INTERPRETIVE QUALITY CONTROL REPORT

Work Order	: **EM1301875**	Page	: 1 of 24
Client	: PARSONS BRINCKERHOFF AUST P/L	Laboratory	: Environmental Division Melbourne
Contact	: MS CLAIRE HOWELL	Contact	: Bronwyn Sheen
Address	: PO BOX 19016 SOUTHBANK VIC, AUSTRALIA 3066	Address	: 4 Westall Rd Springvale VIC Australia 3171
E-mail	: chowell@pb.com.au	E-mail	: bronwyn.sheen@alsglobal.com
Telephone	: +61 03 9861 1111	Telephone	: +61-3-8549 9636
Facsimile	: +61 03 9861 1144	Facsimile	: +61-3-8549 9601
Project	: 2189202A	QC Level	: NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Site	: MICKLEHAM		
C-O-C number	: 51166-51177	Date Samples Received	: 22-FEB-2013
Sampler	: SOC	Issue Date	: 28-FEB-2013
Order number	: ----		
		No. of samples received	: 135
Quote number	: EN/008/11	No. of samples analysed	: 88

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. All pages of this report have been checked and approved for release.

This Interpretive Quality Control Report contains the following information:

- Analysis Holding Time Compliance
- Quality Control Parameter Frequency Compliance
- Brief Method Summaries
- Summary of Outliers

Analysis Holding Time Compliance

The following report summarises extraction / preparation and analysis times and compares with recommended holding times. Dates reported represent first date of extraction or analysis and precludes subsequent dilutions and reruns. Information is also provided re the sample container (preservative) from which the analysis aliquot was taken. Elapsed period to analysis represents number of days from sampling where no extraction / digestion is involved or period from extraction / digestion where this is present. For composite samples, sampling date is assumed to be that of the oldest sample contributing to the composite. Sample date for laboratory produced leachates is assumed as the completion date of the leaching process. Outliers for holding time are based on USEPA SW 846, APHA, AS and NEPM (1999). A listing of breaches is provided in the Summary of Outliers.

Holding times for leachate methods (excluding elutriates) vary according to the analytes being determined on the resulting solution. For non -volatile analytes, the holding time compliance assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These soil holding times are: Organics (14 days); Mercury (28 days) & other metals (180 days). A recorded breach therefore does not guarantee a breach for all non-volatile parameters.

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA002 : pH (Soils)								
Soil Glass Jar - Unpreserved (EA002)								
TP04/190213/0.1,	TP04/190213/0.5,	**19-FEB-2013**	**26-FEB-2013**	26-FEB-2013	✓	**26-FEB-2013**	26-FEB-2013	✓
TP05/190213/0.1,	TP05/190213/1.0,							
TP06/190213/0.1,	TP06/190213/0.5,							
TP07/190213/0.1,	TP07/190213/0.5,							
TP07/190213/1.5,	TP08/190213/0.1,							
TP08/190213/1.0,	TP09/190213/0.1,							
TP09/190213/0.5,	TP01/190213/0.1,							
TP01/190213/0.5,	TP01/190213/1.0,							
TP01/190213/1.5,	DUPAA/190213/0.1B							
Soil Glass Jar - Unpreserved (EA002)								
TP02/200213/0.1,	TP02/200213/0.5,	**20-FEB-2013**	**26-FEB-2013**	27-FEB-2013	✓	**26-FEB-2013**	26-FEB-2013	✓
TP02/200213/1.0,	TP02/200213/1.5,							
TP03/200213/0.1,	TP03/200213/0.5,							
TP03/200213/1.0,	TP03/200213/1.5,							
TP14/200213/0.1,	TP14/200213/0.5,							
TP12/200213/0.1,	TP12/200213/1.3,							
TP15/200213/0.1,	TP15/200213/1.5,							
TP13/200213/0.1,	TP13/200213/1.0,							
TP10/200213/0.1,	TP10/200213/0.5,							
TP11/200213/0.1,	TP11/200213/1.0,							
TP11/200213/1.5,	TP16/200213/0.1,							
TP16/200213/1.0,	TP17/200213/0.1,							
TP17/200213/0.5,	TP21/200213/0.1,							
TP21/200213/0.5,	TP21/200213/1.0,							
TP21/200213/1.2,	TP23/200213/0.1,							
TP23/200213/0.5,	TP22/200213/0.1,							
TP22/200213/1.0,	DUPAA/200213/0.1B							
Soil Glass Jar - Unpreserved (EA002)								

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA002 : pH (Soils) - Continued								
TP32/210213/0.1,	TP32/210213/0.5,	**21-FEB-2013**	**26-FEB-2013**	28-FEB-2013	✓	**26-FEB-2013**	26-FEB-2013	✓
TP31/210213/0.1,	TP31/210213/0.7,							
TP29/210213/0.1,	TP29/210213/0.5,							
TP30/210213/0.1,	TP30/210213/0.5,							
TP27/210213/0.1,	TP27/210213/1.4,							
TP26/210213/0.1,	TP26/210213/1.0,							
TP24/210213/0.1,	TP24/210213/1.2,							
TP19/210213/0.1,	TP19/210213/0.5,							
TP20/210213/0.1,	TP20/210213/1.0,							
TP25/210213/0.1,	TP25/210213/0.5,							
TP28/210213/0.1,	TP28/210213/1.5,							
TP18/210213/0.1,	TP18/210213/1.0,							
DUPAA/210213/0.1B								

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA055: Moisture Content								
Soil Glass Jar - Unpreserved (EA055-103)								
TP04/190213/0.1,	TP04/190213/0.5,	**19-FEB-2013**	**----**	----	----	**25-FEB-2013**	05-MAR-2013	✓
TP05/190213/0.1,	TP05/190213/1.0,							
TP06/190213/0.1,	TP06/190213/0.5,							
TP07/190213/0.1,	TP07/190213/0.5,							
TP07/190213/1.5,	TP08/190213/0.1,							
TP08/190213/1.0,	TP09/190213/0.1,							
TP09/190213/0.5,	TP01/190213/0.1,							
TP01/190213/0.5,	TP01/190213/1.0,							
TP01/190213/1.5,	DUPAA/190213/0.1B							
Soil Glass Jar - Unpreserved (EA055-103)								
TP02/200213/0.1,	TP02/200213/0.5,	**20-FEB-2013**	**----**	----	----	**25-FEB-2013**	06-MAR-2013	✓
TP02/200213/1.0,	TP02/200213/1.5,							
TP03/200213/0.1,	TP03/200213/0.5,							
TP03/200213/1.0,	TP03/200213/1.5,							
TP14/200213/0.1,	TP14/200213/0.5,							
TP12/200213/0.1,	TP12/200213/1.3,							
TP15/200213/0.1,	TP15/200213/1.5,							
TP13/200213/0.1,	TP13/200213/1.0,							
TP10/200213/0.1,	TP10/200213/0.5,							
TP11/200213/0.1,	TP11/200213/1.0,							
TP11/200213/1.5,	TP16/200213/0.1,							
TP16/200213/1.0,	TP17/200213/0.1,							
TP17/200213/0.5,	TP21/200213/0.1,							
TP21/200213/0.5,	TP21/200213/1.0,							
TP21/200213/1.2,	TP23/200213/0.1,							
TP23/200213/0.5,	TP22/200213/0.1,							
TP22/200213/1.0,	DUPAA/200213/0.1B							
Soil Glass Jar - Unpreserved (EA055-103)								
TP32/210213/0.1,	TP32/210213/0.5,	**21-FEB-2013**	**----**	----	----	**25-FEB-2013**	07-MAR-2013	✓
TP31/210213/0.1,	TP31/210213/0.7,							
TP29/210213/0.1,	TP29/210213/0.5,							
TP30/210213/0.1,	TP30/210213/0.5,							
TP27/210213/0.1,	TP27/210213/1.4,							
TP26/210213/0.1,	TP26/210213/1.0,							
TP24/210213/0.1,	TP24/210213/1.2,							
TP19/210213/0.1,	TP19/210213/0.5,							
TP20/210213/0.1,	TP20/210213/1.0,							
TP25/210213/0.1,	TP25/210213/0.5,							
TP28/210213/0.1,	TP28/210213/1.5,							
TP18/210213/0.1,	TP18/210213/1.0,							
DUPAA/210213/0.1B								

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG005T: Total Metals by ICP-AES								
Soil Glass Jar - Unpreserved (EG005T)								
TP04/190213/0.1,	TP04/190213/0.5,	**19-FEB-2013**	**26-FEB-2013**	18-AUG-2013	✓	**27-FEB-2013**	18-AUG-2013	✓
TP05/190213/0.1,	TP05/190213/1.0,							
TP06/190213/0.1,	TP06/190213/0.5,							
TP07/190213/0.1,	TP07/190213/0.5,							
TP07/190213/1.5,	TP08/190213/0.1,							
TP08/190213/1.0,	TP09/190213/0.1,							
TP09/190213/0.5,	TP01/190213/0.1,							
TP01/190213/0.5,	TP01/190213/1.0,							
TP01/190213/1.5,	DUPAA/190213/0.1B							
Soil Glass Jar - Unpreserved (EG005T)								
TP02/200213/0.1,	TP02/200213/0.5,	**20-FEB-2013**	**26-FEB-2013**	19-AUG-2013	✓	**27-FEB-2013**	19-AUG-2013	✓
TP02/200213/1.0,	TP02/200213/1.5,							
TP03/200213/0.1,	TP03/200213/0.5,							
TP03/200213/1.0,	TP03/200213/1.5,							
TP14/200213/0.1,	TP14/200213/0.5,							
TP12/200213/0.1,	TP12/200213/1.3,							
TP15/200213/0.1,	TP15/200213/1.5,							
TP13/200213/0.1,	TP13/200213/1.0,							
TP10/200213/0.1,	TP10/200213/0.5,							
TP11/200213/0.1,	TP11/200213/1.0,							
TP11/200213/1.5,	TP16/200213/0.1,							
TP16/200213/1.0,	TP17/200213/0.1,							
TP17/200213/0.5,	TP21/200213/0.1,							
TP21/200213/0.5,	TP21/200213/1.0,							
TP21/200213/1.2,	TP23/200213/0.1,							
TP23/200213/0.5,	TP22/200213/0.1,							
TP22/200213/1.0,	DUPAA/200213/0.1B							
Soil Glass Jar - Unpreserved (EG005T)								
TP32/210213/0.1,	TP32/210213/0.5,	**21-FEB-2013**	**26-FEB-2013**	20-AUG-2013	✓	**27-FEB-2013**	20-AUG-2013	✓
TP31/210213/0.1,	TP31/210213/0.7,							
TP29/210213/0.1,	TP29/210213/0.5,							
TP30/210213/0.1,	TP30/210213/0.5,							
TP27/210213/0.1,	TP27/210213/1.4,							
TP26/210213/0.1,	TP26/210213/1.0,							
TP24/210213/0.1,	TP24/210213/1.2,							
TP19/210213/0.1,	TP19/210213/0.5,							
TP20/210213/0.1,	TP20/210213/1.0,							
TP25/210213/0.1,	TP25/210213/0.5,							
TP28/210213/0.1,	TP28/210213/1.5,							
TP18/210213/0.1,	TP18/210213/1.0,							
DUPAA/210213/0.1B								

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG035T: Total Recoverable Mercury by FIMS								
Soil Glass Jar - Unpreserved (EG035T)								
TP04/190213/0.1,	TP04/190213/0.5,	**19-FEB-2013**	**26-FEB-2013**	19-MAR-2013	✓	**27-FEB-2013**	19-MAR-2013	✓
TP05/190213/0.1,	TP05/190213/1.0,							
TP06/190213/0.1,	TP06/190213/0.5,							
TP07/190213/0.1,	TP07/190213/0.5,							
TP07/190213/1.5,	TP08/190213/0.1,							
TP08/190213/1.0,	TP09/190213/0.1,							
TP09/190213/0.5,	TP01/190213/0.1,							
TP01/190213/0.5,	TP01/190213/1.0,							
TP01/190213/1.5,	DUPAA/190213/0.1B							
Soil Glass Jar - Unpreserved (EG035T)								
TP02/200213/0.1,	TP02/200213/0.5,	**20-FEB-2013**	**26-FEB-2013**	20-MAR-2013	✓	**27-FEB-2013**	20-MAR-2013	✓
TP02/200213/1.0,	TP02/200213/1.5,							
TP03/200213/0.1,	TP03/200213/0.5,							
TP03/200213/1.0,	TP03/200213/1.5,							
TP14/200213/0.1,	TP14/200213/0.5,							
TP12/200213/0.1,	TP12/200213/1.3,							
TP15/200213/0.1,	TP15/200213/1.5,							
TP13/200213/0.1,	TP13/200213/1.0,							
TP10/200213/0.1,	TP10/200213/0.5,							
TP11/200213/0.1,	TP11/200213/1.0,							
TP11/200213/1.5,	TP16/200213/0.1,							
TP16/200213/1.0,	TP17/200213/0.1,							
TP17/200213/0.5,	TP21/200213/0.1,							
TP21/200213/0.5,	TP21/200213/1.0,							
TP21/200213/1.2,	TP23/200213/0.1,							
TP23/200213/0.5,	TP22/200213/0.1,							
TP22/200213/1.0,	DUPAA/200213/0.1B							
Soil Glass Jar - Unpreserved (EG035T)								
TP32/210213/0.1,	TP32/210213/0.5,	**21-FEB-2013**	**26-FEB-2013**	21-MAR-2013	✓	**27-FEB-2013**	21-MAR-2013	✓
TP31/210213/0.1,	TP31/210213/0.7,							
TP29/210213/0.1,	TP29/210213/0.5,							
TP30/210213/0.1,	TP30/210213/0.5,							
TP27/210213/0.1,	TP27/210213/1.4,							
TP26/210213/0.1,	TP26/210213/1.0,							
TP24/210213/0.1,	TP24/210213/1.2,							
TP19/210213/0.1,	TP19/210213/0.5,							
TP20/210213/0.1,	TP20/210213/1.0,							
TP25/210213/0.1,	TP25/210213/0.5,							
TP28/210213/0.1,	TP28/210213/1.5,							
TP18/210213/0.1,	TP18/210213/1.0,							
DUPAA/210213/0.1B								

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP066: Polychlorinated Biphenyls (PCB)							
Soil Glass Jar - Unpreserved (EP066) TP04/190213/0.1, TP05/190213/0.1, TP06/190213/0.1, TP07/190213/0.1, TP08/190213/0.1, TP09/190213/0.1, TP01/190213/0.1, DUPAA/190213/0.1B	**19-FEB-2013**	**26-FEB-2013**	05-MAR-2013	✓	**27-FEB-2013**	07-APR-2013	✓
Soil Glass Jar - Unpreserved (EP066) TP02/200213/0.1, TP03/200213/0.1, TP14/200213/0.1, TP12/200213/0.1, TP15/200213/0.1, TP13/200213/0.1, TP10/200213/0.1, TP11/200213/0.1, TP16/200213/0.1, TP17/200213/0.1, TP21/200213/0.1, TP23/200213/0.1, TP22/200213/0.1, DUPAA/200213/0.1B	**20-FEB-2013**	**26-FEB-2013**	06-MAR-2013	✓	**27-FEB-2013**	07-APR-2013	✓
Soil Glass Jar - Unpreserved (EP066) TP32/210213/0.1, TP31/210213/0.1, TP29/210213/0.1, TP30/210213/0.1, TP27/210213/0.1, TP26/210213/0.1, TP24/210213/0.1, TP19/210213/0.1, TP20/210213/0.1, TP25/210213/0.1, TP28/210213/0.1, TP18/210213/0.1, DUPAA/210213/0.1B	**21-FEB-2013**	**26-FEB-2013**	07-MAR-2013	✓	**27-FEB-2013**	07-APR-2013	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP068A: Organochlorine Pesticides (OC)							
Soil Glass Jar - Unpreserved (EP068) TP04/190213/0.1, TP05/190213/0.1, TP06/190213/0.1, TP07/190213/0.1, TP08/190213/0.1, TP09/190213/0.1, TP01/190213/0.1, DUPAA/190213/0.1B	**19-FEB-2013**	**26-FEB-2013**	05-MAR-2013	✓	**27-FEB-2013**	07-APR-2013	✓
Soil Glass Jar - Unpreserved (EP068) TP02/200213/0.1, TP03/200213/0.1, TP14/200213/0.1, TP12/200213/0.1, TP15/200213/0.1, TP13/200213/0.1, TP10/200213/0.1, TP11/200213/0.1, TP16/200213/0.1, TP17/200213/0.1, TP21/200213/0.1, TP23/200213/0.1, TP22/200213/0.1, DUPAA/200213/0.1B	**20-FEB-2013**	**26-FEB-2013**	06-MAR-2013	✓	**27-FEB-2013**	07-APR-2013	✓
Soil Glass Jar - Unpreserved (EP068) TP32/210213/0.1, TP31/210213/0.1, TP29/210213/0.1, TP30/210213/0.1, TP27/210213/0.1, TP26/210213/0.1, TP24/210213/0.1, TP19/210213/0.1, TP20/210213/0.1, TP25/210213/0.1, TP28/210213/0.1, TP18/210213/0.1, DUPAA/210213/0.1B	**21-FEB-2013**	**26-FEB-2013**	07-MAR-2013	✓	**27-FEB-2013**	07-APR-2013	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP068B: Organophosphorus Pesticides (OP)							
Soil Glass Jar - Unpreserved (EP068) TP04/190213/0.1, TP05/190213/0.1, TP06/190213/0.1, TP07/190213/0.1, TP08/190213/0.1, TP09/190213/0.1, TP01/190213/0.1, DUPAA/190213/0.1B	**19-FEB-2013**	**26-FEB-2013**	05-MAR-2013	✓	**27-FEB-2013**	07-APR-2013	✓
Soil Glass Jar - Unpreserved (EP068) TP02/200213/0.1, TP03/200213/0.1, TP14/200213/0.1, TP12/200213/0.1, TP15/200213/0.1, TP13/200213/0.1, TP10/200213/0.1, TP11/200213/0.1, TP16/200213/0.1, TP17/200213/0.1, TP21/200213/0.1, TP23/200213/0.1, TP22/200213/0.1, DUPAA/200213/0.1B	**20-FEB-2013**	**26-FEB-2013**	06-MAR-2013	✓	**27-FEB-2013**	07-APR-2013	✓
Soil Glass Jar - Unpreserved (EP068) TP32/210213/0.1, TP31/210213/0.1, TP29/210213/0.1, TP30/210213/0.1, TP27/210213/0.1, TP26/210213/0.1, TP24/210213/0.1, TP19/210213/0.1, TP20/210213/0.1, TP25/210213/0.1, TP28/210213/0.1, TP18/210213/0.1, DUPAA/210213/0.1B	**21-FEB-2013**	**26-FEB-2013**	07-MAR-2013	✓	**27-FEB-2013**	07-APR-2013	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft								
Soil Glass Jar - Unpreserved (EP071)								
TP04/190213/0.1,	TP05/190213/0.1,	**19-FEB-2013**	**26-FEB-2013**	05-MAR-2013	✓	**26-FEB-2013**	07-APR-2013	✓
TP06/190213/0.1,	TP07/190213/0.1,							
TP08/190213/0.1,	TP09/190213/0.1,							
TP01/190213/0.1,	DUPAA/190213/0.1B							
Soil Glass Jar - Unpreserved (EP071)								
TP02/200213/0.1,	TP03/200213/0.1,	**20-FEB-2013**	**26-FEB-2013**	06-MAR-2013	✓	**26-FEB-2013**	07-APR-2013	✓
TP14/200213/0.1,	TP12/200213/0.1,							
TP15/200213/0.1,	TP13/200213/0.1,							
TP10/200213/0.1,	TP11/200213/0.1,							
TP16/200213/0.1,	TP17/200213/0.1,							
TP21/200213/0.1,	TP23/200213/0.1							
Soil Glass Jar - Unpreserved (EP071)								
TP22/200213/0.1,	DUPAA/200213/0.1B	**20-FEB-2013**	**27-FEB-2013**	06-MAR-2013	✓	**27-FEB-2013**	08-APR-2013	✓
Soil Glass Jar - Unpreserved (EP071)								
TP32/210213/0.1,	TP31/210213/0.1,	**21-FEB-2013**	**27-FEB-2013**	07-MAR-2013	✓	**27-FEB-2013**	08-APR-2013	✓
TP29/210213/0.1,	TP30/210213/0.1,							
TP27/210213/0.1,	TP26/210213/0.1,							
TP24/210213/0.1,	TP19/210213/0.1,							
TP20/210213/0.1,	TP25/210213/0.1,							
TP28/210213/0.1,	TP18/210213/0.1,							
DUPAA/210213/0.1B								

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075(SIM)) TP04/190213/0.1, TP05/190213/0.1, TP06/190213/0.1, TP07/190213/0.1, TP08/190213/0.1, TP09/190213/0.1, TP01/190213/0.1, DUPAA/190213/0.1B	**19-FEB-2013**	**26-FEB-2013**	05-MAR-2013	✓	**26-FEB-2013**	07-APR-2013	✓
Soil Glass Jar - Unpreserved (EP075(SIM)) TP02/200213/0.1, TP03/200213/0.1, TP14/200213/0.1, TP12/200213/0.1, TP15/200213/0.1, TP13/200213/0.1, TP10/200213/0.1, TP11/200213/0.1, TP16/200213/0.1, TP17/200213/0.1, TP21/200213/0.1, TP23/200213/0.1	**20-FEB-2013**	**26-FEB-2013**	06-MAR-2013	✓	**26-FEB-2013**	07-APR-2013	✓
Soil Glass Jar - Unpreserved (EP075(SIM)) TP22/200213/0.1, DUPAA/200213/0.1B	**20-FEB-2013**	**27-FEB-2013**	06-MAR-2013	✓	**27-FEB-2013**	08-APR-2013	✓
Soil Glass Jar - Unpreserved (EP075(SIM)) TP32/210213/0.1, TP31/210213/0.1, TP29/210213/0.1, TP30/210213/0.1, TP27/210213/0.1, TP26/210213/0.1, TP24/210213/0.1, TP19/210213/0.1, TP20/210213/0.1, TP25/210213/0.1, TP28/210213/0.1, TP18/210213/0.1, DUPAA/210213/0.1B	**21-FEB-2013**	**27-FEB-2013**	07-MAR-2013	✓	**27-FEB-2013**	08-APR-2013	✓

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080: BTEX								
Soil Glass Jar - Unpreserved (EP080)								
TP04/190213/0.1,	TP05/190213/0.1,	**19-FEB-2013**	**25-FEB-2013**	05-MAR-2013	✓	**26-FEB-2013**	05-MAR-2013	✓
TP06/190213/0.1,	TP07/190213/0.1,							
TP08/190213/0.1,	TP09/190213/0.1,							
TP01/190213/0.1,	DUPAA/190213/0.1B							
Soil Glass Jar - Unpreserved (EP080)								
TP02/200213/0.1,	TP03/200213/0.1,	**20-FEB-2013**	**25-FEB-2013**	06-MAR-2013	✓	**26-FEB-2013**	06-MAR-2013	✓
TP14/200213/0.1,	TP12/200213/0.1,							
TP15/200213/0.1,	TP13/200213/0.1,							
TP10/200213/0.1,	TP11/200213/0.1,							
TP16/200213/0.1,	TP17/200213/0.1,							
TP21/200213/0.1,	TP23/200213/0.1,							
TP22/200213/0.1,	DUPAA/200213/0.1B							
Soil Glass Jar - Unpreserved (EP080)								
TP32/210213/0.1,	TP31/210213/0.1,	**21-FEB-2013**	**25-FEB-2013**	07-MAR-2013	✓	**26-FEB-2013**	07-MAR-2013	✓
TP29/210213/0.1,	TP30/210213/0.1,							
TP27/210213/0.1,	TP26/210213/0.1,							
TP24/210213/0.1,	TP19/210213/0.1,							
TP20/210213/0.1,	TP25/210213/0.1,							
TP28/210213/0.1,	TP18/210213/0.1,							
DUPAA/210213/0.1B								

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080: BTEXN								
Soil Glass Jar - Unpreserved (EP080)								
TP04/190213/0.1,	TP05/190213/0.1,	**19-FEB-2013**	**25-FEB-2013**	05-MAR-2013	✓	**26-FEB-2013**	05-MAR-2013	✓
TP06/190213/0.1,	TP07/190213/0.1,							
TP08/190213/0.1,	TP09/190213/0.1,							
TP01/190213/0.1,	DUPAA/190213/0.1B							
Soil Glass Jar - Unpreserved (EP080)								
TP02/200213/0.1,	TP03/200213/0.1,	**20-FEB-2013**	**25-FEB-2013**	06-MAR-2013	✓	**26-FEB-2013**	06-MAR-2013	✓
TP14/200213/0.1,	TP12/200213/0.1,							
TP15/200213/0.1,	TP13/200213/0.1,							
TP10/200213/0.1,	TP11/200213/0.1,							
TP16/200213/0.1,	TP17/200213/0.1,							
TP21/200213/0.1,	TP23/200213/0.1,							
TP22/200213/0.1,	DUPAA/200213/0.1B							
Soil Glass Jar - Unpreserved (EP080)								
TP32/210213/0.1,	TP31/210213/0.1,	**21-FEB-2013**	**25-FEB-2013**	07-MAR-2013	✓	**26-FEB-2013**	07-MAR-2013	✓
TP29/210213/0.1,	TP30/210213/0.1,							
TP27/210213/0.1,	TP26/210213/0.1,							
TP24/210213/0.1,	TP19/210213/0.1,							
TP20/210213/0.1,	TP25/210213/0.1,							
TP28/210213/0.1,	TP18/210213/0.1,							
DUPAA/210213/0.1B								

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation: Date extracted	Extraction / Preparation: Due for extraction	Extraction / Preparation: Evaluation	Analysis: Date analysed	Analysis: Due for analysis	Analysis: Evaluation
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved (EP080) TP04/190213/0.1, TP05/190213/0.1, TP06/190213/0.1, TP07/190213/0.1, TP08/190213/0.1, TP09/190213/0.1, TP01/190213/0.1, DUPAA/190213/0.1B	**19-FEB-2013**	**25-FEB-2013**	05-MAR-2013	✓	**26-FEB-2013**	05-MAR-2013	✓
Soil Glass Jar - Unpreserved (EP080) TP02/200213/0.1, TP03/200213/0.1, TP14/200213/0.1, TP12/200213/0.1, TP15/200213/0.1, TP13/200213/0.1, TP10/200213/0.1, TP11/200213/0.1, TP16/200213/0.1, TP17/200213/0.1, TP21/200213/0.1, TP23/200213/0.1, TP22/200213/0.1, DUPAA/200213/0.1B	**20-FEB-2013**	**25-FEB-2013**	06-MAR-2013	✓	**26-FEB-2013**	06-MAR-2013	✓
Soil Glass Jar - Unpreserved (EP080) TP32/210213/0.1, TP31/210213/0.1, TP29/210213/0.1, TP30/210213/0.1, TP27/210213/0.1, TP26/210213/0.1, TP24/210213/0.1, TP19/210213/0.1, TP20/210213/0.1, TP25/210213/0.1, TP28/210213/0.1, TP18/210213/0.1, DUPAA/210213/0.1B	**21-FEB-2013**	**25-FEB-2013**	07-MAR-2013	✓	**26-FEB-2013**	07-MAR-2013	✓

Matrix: **WATER**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation: Date extracted	Extraction / Preparation: Due for extraction	Extraction / Preparation: Evaluation	Analysis: Date analysed	Analysis: Due for analysis	Analysis: Evaluation
EA005: pH							
Clear Plastic Bottle - Natural (EA005) RB/190213	**19-FEB-2013**	**----**	----	----	**25-FEB-2013**	19-FEB-2013	×
Clear Plastic Bottle - Natural (EA005) RB/200213	**20-FEB-2013**	**----**	----	----	**25-FEB-2013**	20-FEB-2013	×
Clear Plastic Bottle - Natural (EA005) SL2/210213/1W, DUPAA/210213/1WB	**21-FEB-2013**	**----**	----	----	**25-FEB-2013**	21-FEB-2013	×
EA015: Total Dissolved Solids							
Clear Plastic Bottle - Natural (EA015H) SL2/210213/1W, DUPAA/210213/1WB	**21-FEB-2013**	**---**	28-FEB-2013	----	**26-FEB-2013**	28-FEB-2013	✓
EG020T: Total Metals by ICP-MS							
Clear Plastic Bottle - Natural (EG020A-T) RB/190213	**19-FEB-2013**	**26-FEB-2013**	18-AUG-2013	✓	**27-FEB-2013**	18-AUG-2013	✓
Clear Plastic Bottle - Natural (EG020A-T) RB/200213	**20-FEB-2013**	**26-FEB-2013**	19-AUG-2013	✓	**27-FEB-2013**	19-AUG-2013	✓
Clear Plastic Bottle - Nitric Acid; Unspecified (EG020A-T) RB/210213	**21-FEB-2013**	**26-FEB-2013**	20-AUG-2013	✓	**27-FEB-2013**	20-AUG-2013	✓

Matrix: **WATER**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG035T: Total Recoverable Mercury by FIMS								
Clear Plastic Bottle - Natural (EG035T) RB/190213		**19-FEB-2013**	**----**	----	----	**26-FEB-2013**	19-MAR-2013	✓
Clear Plastic Bottle - Natural (EG035T) RB/200213		**20-FEB-2013**	**----**	----	----	**26-FEB-2013**	20-MAR-2013	✓
Clear Plastic Bottle - Nitric Acid; Unspecified (EG035T) RB/210213		**21-FEB-2013**	**----**	----	----	**26-FEB-2013**	21-MAR-2013	✓
EK055G: Ammonia as N by Discrete Analyser								
Clear Plastic Bottle - Sulfuric Acid (EK055G) SL2/210213/1W,	DUPAA/210213/1WB	**21-FEB-2013**	**---**	21-MAR-2013	----	**26-FEB-2013**	21-MAR-2013	✓
EK057G: Nitrite as N by Discrete Analyser								
Clear Plastic Bottle - Natural (EK057G) SL2/210213/1W,	DUPAA/210213/1WB	**21-FEB-2013**	**---**	23-FEB-2013	----	**22-FEB-2013**	23-FEB-2013	✓
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser								
Clear Plastic Bottle - Sulfuric Acid (EK059G) SL2/210213/1W,	DUPAA/210213/1WB	**21-FEB-2013**	**---**	21-MAR-2013	----	**26-FEB-2013**	21-MAR-2013	✓
EP066: Polychlorinated Biphenyls (PCB)								
Amber Glass Bottle - Unpreserved (EP066) RB/190213		**19-FEB-2013**	**25-FEB-2013**	26-FEB-2013	✓	**27-FEB-2013**	06-APR-2013	✓
Amber Glass Bottle - Unpreserved (EP066) RB/200213		**20-FEB-2013**	**25-FEB-2013**	27-FEB-2013	✓	**27-FEB-2013**	06-APR-2013	✓
Amber Glass Bottle - Unpreserved (EP066) RB/210213, DUPAA/210213/1WB	SL2/210213/1W,	**21-FEB-2013**	**25-FEB-2013**	28-FEB-2013	✓	**27-FEB-2013**	06-APR-2013	✓
EP068A: Organochlorine Pesticides (OC)								
Amber Glass Bottle - Unpreserved (EP068) RB/190213		**19-FEB-2013**	**25-FEB-2013**	26-FEB-2013	✓	**27-FEB-2013**	06-APR-2013	✓
Amber Glass Bottle - Unpreserved (EP068) RB/200213		**20-FEB-2013**	**25-FEB-2013**	27-FEB-2013	✓	**27-FEB-2013**	06-APR-2013	✓
Amber Glass Bottle - Unpreserved (EP068) RB/210213, DUPAA/210213/1WB	SL2/210213/1W,	**21-FEB-2013**	**25-FEB-2013**	28-FEB-2013	✓	**27-FEB-2013**	06-APR-2013	✓
EP068B: Organophosphorus Pesticides (OP)								
Amber Glass Bottle - Unpreserved (EP068) RB/190213		**19-FEB-2013**	**25-FEB-2013**	26-FEB-2013	✓	**27-FEB-2013**	06-APR-2013	✓
Amber Glass Bottle - Unpreserved (EP068) RB/200213		**20-FEB-2013**	**25-FEB-2013**	27-FEB-2013	✓	**27-FEB-2013**	06-APR-2013	✓
Amber Glass Bottle - Unpreserved (EP068) RB/210213, DUPAA/210213/1WB	SL2/210213/1W,	**21-FEB-2013**	**25-FEB-2013**	28-FEB-2013	✓	**27-FEB-2013**	06-APR-2013	✓

Matrix: **WATER**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft								
Amber Glass Bottle - Unpreserved (EP071)								
RB/190213,	FB/190213	**19-FEB-2013**	**25-FEB-2013**	26-FEB-2013	✓	**27-FEB-2013**	06-APR-2013	✓
Amber Glass Bottle - Unpreserved (EP071)								
RB/200213,	FB/200213	**20-FEB-2013**	**25-FEB-2013**	27-FEB-2013	✓	**27-FEB-2013**	06-APR-2013	✓
Amber Glass Bottle - Unpreserved (EP071)								
RB/210213, SL2/210213/1W,	FB/210213, DUPAA/210213/1WB	**21-FEB-2013**	**25-FEB-2013**	28-FEB-2013	✓	**27-FEB-2013**	06-APR-2013	✓
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Amber Glass Bottle - Unpreserved (EP075(SIM))								
RB/190213,	FB/190213	**19-FEB-2013**	**25-FEB-2013**	26-FEB-2013	✓	**27-FEB-2013**	06-APR-2013	✓
Amber Glass Bottle - Unpreserved (EP075(SIM))								
RB/200213,	FB/200213	**20-FEB-2013**	**25-FEB-2013**	27-FEB-2013	✓	**27-FEB-2013**	06-APR-2013	✓
Amber Glass Bottle - Unpreserved (EP075(SIM))								
RB/210213,	FB/210213	**21-FEB-2013**	**25-FEB-2013**	28-FEB-2013	✓	**27-FEB-2013**	06-APR-2013	✓
EP080: BTEXN								
Amber VOC Vial - Sulfuric Acid (EP080)								
RB/190213, TB/190213	FB/190213,	**19-FEB-2013**	**25-FEB-2013**	05-MAR-2013	✓	**26-FEB-2013**	05-MAR-2013	✓
Amber VOC Vial - Sulfuric Acid (EP080)								
RB/200213, FB/200213	TB/200213,	**20-FEB-2013**	**25-FEB-2013**	06-MAR-2013	✓	**26-FEB-2013**	06-MAR-2013	✓
Amber VOC Vial - Sulfuric Acid (EP080)								
RB/210213, TB/210213, DUPAA/210213/1WB	FB/210213, SL2/210213/1W,	**21-FEB-2013**	**25-FEB-2013**	07-MAR-2013	✓	**26-FEB-2013**	07-MAR-2013	✓
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft								
Amber VOC Vial - Sulfuric Acid (EP080)								
RB/190213, TB/190213	FB/190213,	**19-FEB-2013**	**25-FEB-2013**	05-MAR-2013	✓	**26-FEB-2013**	05-MAR-2013	✓
Amber VOC Vial - Sulfuric Acid (EP080)								
RB/200213, FB/200213	TB/200213,	**20-FEB-2013**	**25-FEB-2013**	06-MAR-2013	✓	**26-FEB-2013**	06-MAR-2013	✓
Amber VOC Vial - Sulfuric Acid (EP080)								
RB/210213, TB/210213, DUPAA/210213/1WB	FB/210213, SL2/210213/1W,	**21-FEB-2013**	**25-FEB-2013**	07-MAR-2013	✓	**26-FEB-2013**	07-MAR-2013	✓

Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(where) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **SOIL**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	Method	QC	Regular	Actual	Expected	Evaluation	
Laboratory Duplicates (DUP)							
Moisture Content	EA055-103	9	86	10.5	10.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
PAH/Phenols (SIM)	EP075(SIM)	4	39	10.3	10.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Pesticides by GCMS	EP068	4	36	11.1	10.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
pH (1:5)	EA002	8	78	10.3	10.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Polychlorinated Biphenyls (PCB)	EP066	4	36	11.1	10.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Total Mercury by FIMS	EG035T	8	78	10.3	10.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Total Metals by ICP-AES	EG005T	8	80	10.0	10.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
TPH - Semivolatile Fraction	EP071	4	38	10.5	10.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
TPH Volatiles/BTEX	EP080	4	37	10.8	10.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Laboratory Control Samples (LCS)							
PAH/Phenols (SIM)	EP075(SIM)	2	39	5.1	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Pesticides by GCMS	EP068	2	36	5.6	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Polychlorinated Biphenyls (PCB)	EP066	2	36	5.6	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Total Mercury by FIMS	EG035T	4	78	5.1	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Total Metals by ICP-AES	EG005T	4	80	5.0	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
TPH - Semivolatile Fraction	EP071	2	38	5.3	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
TPH Volatiles/BTEX	EP080	2	37	5.4	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Method Blanks (MB)							
PAH/Phenols (SIM)	EP075(SIM)	2	39	5.1	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Pesticides by GCMS	EP068	2	36	5.6	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Polychlorinated Biphenyls (PCB)	EP066	2	36	5.6	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Total Mercury by FIMS	EG035T	4	78	5.1	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Total Metals by ICP-AES	EG005T	4	80	5.0	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
TPH - Semivolatile Fraction	EP071	2	38	5.3	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
TPH Volatiles/BTEX	EP080	2	37	5.4	5.0	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Matrix Spikes (MS)							
PAH/Phenols (SIM)	EP075(SIM)	2	39	5.1	5.0	✓	ALS QCS3 requirement
Pesticides by GCMS	EP068	2	36	5.6	5.0	✓	ALS QCS3 requirement
Polychlorinated Biphenyls (PCB)	EP066	2	36	5.6	5.0	✓	ALS QCS3 requirement
Total Mercury by FIMS	EG035T	4	78	5.1	5.0	✓	ALS QCS3 requirement
Total Metals by ICP-AES	EG005T	4	80	5.0	5.0	✓	ALS QCS3 requirement
TPH - Semivolatile Fraction	EP071	2	38	5.3	5.0	✓	ALS QCS3 requirement
TPH Volatiles/BTEX	EP080	2	37	5.4	5.0	✓	ALS QCS3 requirement

Matrix: **WATER**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	Method	QC	Regular	Actual	Expected	Evaluation	

Matrix: **WATER**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP)							
Ammonia as N by Discrete analyser	EK055G	2	18	**11.1**	**10.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Nitrite and Nitrate as N (NOx) by Discrete Analyser	EK059G	1	8	**12.5**	**10.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Nitrite as N by Discrete Analyser	EK057G	1	3	**33.3**	**10.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Pesticides by GCMS	EP068	1	5	**20.0**	**10.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
pH	EA005	2	16	**12.5**	**10.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Polychlorinated Biphenyls (PCB)	EP066	1	5	**20.0**	**10.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Total Dissolved Solids (High Level)	EA015H	2	20	**10.0**	**10.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Total Mercury by FIMS	EG035T	1	5	**20.0**	**10.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Total Metals by ICP-MS - Suite A	EG020A-T	2	13	**15.4**	**10.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
TPH - Semivolatile Fraction	EP071	1	11	**9.1**	**10.0**	×	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
TPH Volatiles/BTEX	EP080	2	20	**10.0**	**10.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Laboratory Control Samples (LCS)							
Ammonia as N by Discrete analyser	EK055G	1	18	**5.6**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Nitrite and Nitrate as N (NOx) by Discrete Analyser	EK059G	1	8	**12.5**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Nitrite as N by Discrete Analyser	EK057G	1	3	**33.3**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	1	9	**11.1**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Pesticides by GCMS	EP068	1	5	**20.0**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Polychlorinated Biphenyls (PCB)	EP066	1	5	**20.0**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Total Dissolved Solids (High Level)	EA015H	1	20	**5.0**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Total Mercury by FIMS	EG035T	1	5	**20.0**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Total Metals by ICP-MS - Suite A	EG020A-T	1	13	**7.7**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
TPH - Semivolatile Fraction	EP071	1	11	**9.1**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
TPH Volatiles/BTEX	EP080	1	20	**5.0**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Method Blanks (MB)							
Ammonia as N by Discrete analyser	EK055G	1	18	**5.6**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Nitrite and Nitrate as N (NOx) by Discrete Analyser	EK059G	1	8	**12.5**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Nitrite as N by Discrete Analyser	EK057G	1	3	**33.3**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	1	9	**11.1**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Pesticides by GCMS	EP068	1	5	**20.0**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Polychlorinated Biphenyls (PCB)	EP066	1	5	**20.0**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Total Dissolved Solids (High Level)	EA015H	1	20	**5.0**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Total Mercury by FIMS	EG035T	1	5	**20.0**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Total Metals by ICP-MS - Suite A	EG020A-T	1	13	**7.7**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
TPH - Semivolatile Fraction	EP071	1	11	**9.1**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
TPH Volatiles/BTEX	EP080	1	20	**5.0**	**5.0**	✓	NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Matrix Spikes (MS)							
Ammonia as N by Discrete analyser	EK055G	1	18	**5.6**	**5.0**	✓	ALS QCS3 requirement
Nitrite and Nitrate as N (NOx) by Discrete Analyser	EK059G	1	8	**12.5**	**5.0**	✓	ALS QCS3 requirement
Nitrite as N by Discrete Analyser	EK057G	1	3	**33.3**	**5.0**	✓	ALS QCS3 requirement
Polychlorinated Biphenyls (PCB)	EP066	1	5	**20.0**	**5.0**	✓	ALS QCS3 requirement

Matrix: **WATER**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Matrix Spikes (MS) - Continued							
Total Mercury by FIMS	EG035T	1	5	**20.0**	**5.0**	✓	ALS QCS3 requirement
Total Metals by ICP-MS - Suite A	EG020A-T	1	13	**7.7**	**5.0**	✓	ALS QCS3 requirement
TPH Volatiles/BTEX	EP080	1	20	**5.0**	**5.0**	✓	ALS QCS3 requirement

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
pH (1:5)	EA002	SOIL	(APHA 21st ed., 4500H+) pH is determined on soil samples after a 1:5 soil/water leach. This method is compliant with NEPM (1999) Schedule B(3) (Method 103)
Moisture Content	EA055-103	SOIL	A gravimetric procedure based on weight loss over a 12 hour drying period at 103-105 degrees C. This method is compliant with NEPM (2010 Draft) Schedule B(3) Section 7.1 and Table 1 (14 day holding time).
Total Metals by ICP-AES	EG005T	SOIL	(APHA 21st ed., 3120; USEPA SW 846 - 6010) (ICPAES) Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM (1999) Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	AS 3550, APHA 21st ed., 3112 Hg - B (Flow-injection (SnCl2)(Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM (1999) Schedule B(3)
Polychlorinated Biphenyls (PCB)	EP066	SOIL	(USEPA SW 846 - 8270B) Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (1999) Schedule B(3) (Method 504)
Pesticides by GCMS	EP068	SOIL	(USEPA SW 846 - 8270B) Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM (1999) Schedule B(3) (Method 504,505)
TPH - Semivolatile Fraction	EP071	SOIL	(USEPA SW 846 - 8015A) Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C36. This method is compliant with NEPM (1999) Schedule B(3) (Method 506.1)
PAH/Phenols (SIM)	EP075(SIM)	SOIL	(USEPA SW 846 - 8270B) Extracts are analysed by Capillary GC/MS in Selective Ion Mode (SIM) and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (1999) Schedule B(3) (Method 502 and 507)
TPH Volatiles/BTEX	EP080	SOIL	(USEPA SW 846 - 8260B) Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (1999) Schedule B(3) (Method 501)
pH	EA005	WATER	APHA 21st ed. 4500 H+ B. pH of water samples is determined by ISE either manually or by automated pH meter. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)
Total Dissolved Solids (High Level)	EA015H	WATER	In-House, APHA 21st ed., 2540C A gravimetric procedure that determines the amount of `filterable` residue in an aqueous sample. A well-mixed sample is filtered through a glass fibre filter (1.2um). The filtrate is evaporated to dryness and dried to constant weight at 180+/-5C. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)
Total Metals by ICP-MS - Suite A	EG020A-T	WATER	(APHA 21st ed., 3125; USEPA SW846 - 6020, ALS QWI-EN/EG020): The ICPMS technique utilizes a highly efficient argon plasma to ionize selected elements. Ions are then passed into a high vacuum mass spectrometer, which separates the analytes based on their distinct mass to charge ratios prior to their measurement by a discrete dynode ion detector.

Analytical Methods	Method	Matrix	Method Descriptions
Total Mercury by FIMS	EG035T	WATER	AS 3550, APHA 21st ed. 3112 Hg - B (Flow-injection (SnCl2)(Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. A bromate/bromide reagent is used to oxidise any organic mercury compounds in the unfiltered sample. The ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)
Ammonia as N by Discrete analyser	EK055G	WATER	APHA 21st ed., 4500-NH3 G Ammonia is determined by direct colorimetry by Discrete Analyser. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)
Nitrite as N by Discrete Analyser	EK057G	WATER	APHA 21st ed., 4500-NO2- B. Nitrite is determined by direct colourimetry by Discrete Analyser. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)
Nitrate as N by Discrete Analyser	EK058G	WATER	APHA 21st ed., 4500-NO3- F. Nitrate is reduced to nitrite by way of a chemical reduction followed by quantification by Discrete Analyser. Nitrite is determined seperately by direct colourimetry and result for Nitrate calculated as the difference between the two results. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)
Nitrite and Nitrate as N (NOx) by Discrete Analyser	EK059G	WATER	APHA 21st ed., 4500-NO3- F. Combined oxidised Nitrogen (NO2+NO3) is determined by Chemical Reduction and direct colourimetry by Discrete Analyser. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)
Polychlorinated Biphenyls (PCB)	EP066	WATER	USEPA SW 846 - 8270D Sample extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)
Pesticides by GCMS	EP068	WATER	USEPA SW 846 - 8270D Sample extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)
TPH - Semivolatile Fraction	EP071	WATER	USEPA SW 846 - 8015A The sample extract is analysed by Capillary GC/FID and quantification is by comparison against an established 5 point calibration curve of n-Alkane standards. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	WATER	USEPA SW 846 - 8270D Sample extracts are analysed by Capillary GC/MS in SIM Mode and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)
TPH Volatiles/BTEX	EP080	WATER	USEPA SW 846 - 8260B Water samples are directly purged prior to analysis by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. Alternatively, a sample is equilibrated in a headspace vial and a portion of the headspace determined by GCMS analysis. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)

Preparation Methods	Method	Matrix	Method Descriptions
1:5 solid / water leach for soluble analytes	EN34	SOIL	10 g of soil is mixed with 50 mL of distilled water and tumbled end over end for 1 hour. Water soluble salts are leached from the soil by the continuous suspension. Samples are settled and the water filtered off for analysis.
Methanolic Extraction of Soils for Purge and Trap	ORG16	SOIL	(USEPA SW 846 - 5030A) 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids (Option A - Concentrating)	ORG17A	SOIL	In-house, Mechanical agitation (tumbler). 20g of sample, Na2SO4 and surrogate are extracted with 150mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.
Tumbler Extraction of Solids (Option B - Non-concentrating)	ORG17B	SOIL	In-house, Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 20mL 1:1 DCM/Acetone by end over end tumble. The solvent is transferred directly to a GC vial for analysis.

Preparation Methods	Method	Matrix	Method Descriptions
Digestion for Total Recoverable Metals	EN25	WATER	USEPA SW846-3005 Method 3005 is a Nitric/Hydrochloric acid digestion procedure used to prepare surface and ground water samples for analysis by ICPAES or ICPMS. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)
Separatory Funnel Extraction of Liquids	ORG14	WATER	USEPA SW 846 - 3510B 500 mL to 1L of sample is transferred to a separatory funnel and serially extracted three times using 60mL DCM for each extract. The resultant extracts are combined, dehydrated and concentrated for analysis. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2). ALS default excludes sediment which may be resident in the container.

Summary of Outliers

Outliers : Quality Control Samples

The following report highlights outliers flagged in the Quality Control (QC) Report. Surrogate recovery limits are static and based on USEPA SW846 or ALS-QWI/EN/38 (in the absence of specific USEPA limits). This report displays QC Outliers (breaches) only.

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **WATER**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Duplicate (DUP) RPDs							
EP080/071: Total Petroleum Hydrocarbons	EM1301875-133	SL2/210213/1W	**C15 - C28 Fraction**	----	126 %	0-20%	**RPD exceeds LOR based limits**
EP080/071: Total Petroleum Hydrocarbons	EM1301875-133	SL2/210213/1W	**C29 - C36 Fraction**	----	114 %	0-20%	**RPD exceeds LOR based limits**
EP080/071: Total Recoverable Hydrocarbons - NEPM 2	EM1301875-133	SL2/210213/1W	**>C16 - C34 Fraction**	----	117 %	0-20%	**RPD exceeds LOR based limits**
EP080/071: Total Recoverable Hydrocarbons - NEPM 2	EM1301875-133	SL2/210213/1W	**>C34 - C40 Fraction**	----	121 %	0-20%	**RPD exceeds LOR based limits**
Matrix Spike (MS) Recoveries							
EK055G: Ammonia as N by Discrete Analyser	EB1304105-001	Anonymous	**Ammonia as N**	7664-41-7	Not Determined	----	**MS recovery not determined, background level greater than or equal to 4x spike level.**
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Ar	EM1301756-002	Anonymous	**Nitrite + Nitrate as N**	----	Not Determined	----	**Matrix spike recovery not determined due to sample matrix interference.**

- **For all matrices, no Method Blank value outliers occur.**
- **For all matrices, no Laboratory Control outliers occur.**

Regular Sample Surrogates

Sub-Matrix: **WATER**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Samples Submitted							
EP068S: Organochlorine Pesticide Surrogate	EM1301875-134	DUPAA/210213/1WB	**Dibromo-DDE**	21655-73-2	Not Determined	----	**Surrogate recovery not determined due to (target or non-target) matrix interferences**
EP068T: Organophosphorus Pesticide Surrogate	EM1301875-134	DUPAA/210213/1WB	**DEF**	78-48-8	Not Determined	----	**Surrogate recovery not determined due to (target or non-target) matrix interferences**

Outliers : Analysis Holding Time Compliance

This report displays Holding Time breaches only. Only the respective Extraction / Preparation and/or Analysis component is/are displayed.

Matrix: **WATER**

Method	*Extraction / Preparation*			*Analysis*		
Container / Client Sample ID(s)	*Date extracted*	*Due for extraction*	***Days overdue***	*Date analysed*	*Due for analysis*	***Days overdue***
EA005: pH						
Clear Plastic Bottle - Natural						
RB/190213	----	----	----	25-FEB-2013	19-FEB-2013	**6**

Matrix: **WATER**

Method / Container / Client Sample ID(s)	Extraction / Preparation			Analysis		
	Date extracted	Due for extraction	Days overdue	Date analysed	Due for analysis	Days overdue
EA005: pH - Analysis Holding Time Compliance						
Clear Plastic Bottle - Natural						
RB/200213	----	----	----	25-FEB-2013	20-FEB-2013	**5**
Clear Plastic Bottle - Natural						
SL2/210213/1W, DUPAA/210213/1WB	----	----	----	25-FEB-2013	21-FEB-2013	**4**

Outliers : Frequency of Quality Control Samples

The following report highlights breaches in the Frequency of Quality Control Samples.

Matrix: **WATER**

Quality Control Sample Type / Method	Count		Rate (%)		Quality Control Specification
	QC	Regular	Actual	Expected	
Laboratory Duplicates (DUP)					
TPH - Semivolatile Fraction	1	11	9.1	10.0	NEPM 1999 Schedule B(3) and ALS QCS3 requirement

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Chain of Custody

Order No: 51178

Job Title:

PB Job Number: 2189202A

Job Location: MICKLEHAM

Laboratory Name: MGT - Labmark
Address: 1868 Dandenong Rd CLAYTON
Fax Number: ~~scoonor@pb.com.au~~
Phone Number: ~~9861 2366~~ 9265 9301
Contact Name: ~~S. O'Connor~~ Ruth Callander
Delivery Method: Courier
Quote Number: -STD-

Terms of Business	PB	Other	Checked
	✓		

Project Manager: C. HOWELL
Results Expected by/on: Standard
Fax Results to: C. HOWELL
Fax Number: chowell@pb.com.au
Phone Number: 9861 2454
Spreadsheet of Results Required: (Y) / N
Format: ESDAT
Turnaround Time Required: Standard
Invoice to: C. HOWELL
Comments:

Date Sampled	Time	Sample I.D.	Container Size	Sample Location	Medium*	Preservative Type	Filtered (X)	TPH	BTEX	PAH's	OC/OP/PCB's	Metals**	pH	TDS	Nitrite, Nitrate	Ammonia	Initials	Comments/Additional Information and/or Analysis Required
21/2/13	16:00	SL2/210213/1WC	1x Large plastic (Metals)		W			✓	✓		✓		✓	✓	✓	✓	SOL	
↓	↓	↓	1x Small plastic (OC, OP, Nitrate)		W			✓	✓		✓		✓	✓	✓	✓	SO°C	
			2x Ambers		W			✓	✓		✓		✓	✓	✓	✓	SO°C	
			2x Vials		W			✓	✓		✓		✓	✓	✓	✓	SO°C	
19/2/13		TP06/190213/0.1C	1x Jar		S			✓	✓	✓	✓	✓	✓				SO°C	
20/2/13		TP22/200213/0.1C	↓		S			✓	✓	✓	✓	✓	✓				SO°C	
21/2/13		TP28/200213/0.1C			S			✓	✓	✓	✓	✓	✓				SO°C	

Relinquished by:	Relinquished by:	Relinquished by:
Date & Time: 22/2/13	Date & Time:	Date & Time:
Company: PB	Company:	Company:
Signature:	Signature:	Signature:
Received in Good Order & Condition by (Name):	Received in Good Order & Condition by (Name):	Received in Good Order & Condition by (Name): MGT
Date & Time:	Date & Time:	Date & Time: 22/2/2013 12:12pm
Company:	Company:	Company: MGT
Signature:	Signature:	Signature: #369775

Medium*: S = Soil, W = Water, V = Vapour

Legend**: (circle the following to be tested)
Metals: Al (As) Be (Cd) Co (Cr) (Cu) Fe (Hg)
Li Mg Mn (Ni) (Pb) Se Sn V (Zn)

Samples on Ice: ☑ Yes ☐ No

Please fax back a signed copy when samples are received at the laboratory

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❑ **Melbourne** Level 7, 457 St. Kilda Road, PO Box 7209 Melbourne VIC 8004 Tel: (03) 9861 1111 Fax: (03) 9861 1144
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❑ **Sydney** Level 27, Ernst & Young Centre 680 George Street, GPO Box 5394, Sydney NSW 2000 Tel: (02) 9272 5100 Fax: (02) 9272 5101
❑ **Bendigo** 36 Wattle Street, PO Box 2750 Bendigo VIC, 3554 Tel: (03) 5441 6552 Fax: (03) 5441 6694

Chain of Custody

Order No: 51166

COURIER

Job Title:

PB Job Number: 2189202A

Job Location: MICKLEHAM

Laboratory Name: ALS

Address: 4-Westall Rd SPRINGVALE

Fax Number:

Phone Number: 8549 9600

Contact Name: Bronwyn Sheen

Delivery Method: Courier

Quote Number:

Terms of Business	PB	Other	Checked
	✓		

Project Manager: C. HOWELL

Results Expected by/on: Std.

Fax Results to: chowell@pb.com.au

Fax Number: C. HOWELL

Phone Number: 9861 2457

Spreadsheet of Results Required: (Y) / N

Format: ESDAT

Turnaround Time Required: Standard

Invoice to: C. HOWELL

Comments:

Date Sampled	Time	Sample I.D.	Container Size	Sample Location	Medium*	Preservative Type	Filtered (X)	TPH	BTEX	PAH's	OC/OP/PCB's	Metals**	PH			HOLD		Initials	Comments/Additional Information and/or Analysis Required
19/02/13	1	TP04/190213/0.1	1 x Jar		S			✓	✓	✓	✓	✓	✓					50°C	
	2	TP04/190213/0.5			S							✓	✓				✓	50°C	SL2/210213/1WC accidentally sent to ALS. Sam (PB) requested for amber to be forwarded to MGT. R.T 22/2/13
	3	TP04/190213/1.0			S											✓		50°C	
	4	TP04/190213/1.2														✓	✓	50°C	
	5	TP05/190213/0.1						✓	✓	✓	✓	✓	✓					50°C	
	6	TP05/190213/0.5														✓		50°C	Environmental Division Melbourne Work Order EM1301875
	7	TP05/190213/1.0										✓	✓					50°C	17:44 22/2/13 RT
	8	TP05/190213/1.5														✓		50°C	
	9	TP06/190213/0.1						✓	✓	✓	✓	✓	✓					50°C	
	10	TP06/190213/0.5										✓	✓			✓		50°C	
	11	TP06/190213/1.0														✓	✓	50°C	
	12	TP06/190213/1.5														✓		50°C	

Telephone : +61-3-8549 9600

Relinquished by:	Relinquished by:	Relinquished by:
S. O'CONNOR	Wyan ALS	
Date & Time: 22/2/13	Date & Time: 25/2/13 11:20AM	Date & Time:
Company: PB	Company:	Company:
Signature:	Signature:	Signature:

Received in Good Order & Condition by (Name):	Received in Good Order & Condition by (Name):	Received in Good Order & Condition by (Name):
Raymond		
Date & Time: 22/2/13 15:20	Date & Time:	Date & Time:
Company: ALS	Company:	Company:
Signature:	Signature:	Signature:

Medium*: S = Soil, W = Water, V = Vapour

Legend**: (circle the following to be tested)

Metals: Al (As) Be (Cd) Co (Cr) (Cu) Fe (Hg) Li Mg Mn (Ni) (Pb) Se Sn V (Zn)

Samples on Ice: ☑ Yes ☐ No

3

Please fax back a signed copy when samples are received at the laboratory

mgt LabMark ENVIRONMENTAL LABORATORIES

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NATA # 1261
Site # 1254 & 14271

Sydney
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16 Mars Road
Lane Cove West NSW 2066
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

Brisbane
1/21 Smallwood Place
Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Sample Receipt Advice

Company name: **Parsons Brinckerhoff Australia P/L**

Contact name: Claire Howell
Client job number: MICKLEHAM 2189202A
COC number: 51178
Turn around time: 5 Day
Date/Time received: Feb 22, 2013 12:42 AM
mgt-LabMark reference: **369775**

Sample information

- ☑ A detailed list of analytes logged into our LIMS, is included in the attached summary table.
- ☑ 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.
- ☑ Organic samples had Teflon liners.
- ☑ Sample containers for volatile analysis received with zero headspace.
- ☒ Some samples have been subcontracted.
- N/A Custody Seals intact (if used).

Contact notes

If you have any questions with respect to these samples please contact:

Natalie Krasselt on Phone : (+61) (3) 8564 5000 or by e.mail:
Natalie.Krasselt@mgtlabmark.com.au

Results will be delivered electronically via e.mail to Claire Howell - chowell@pb.com.au.

mgt-LabMark Sample Receipt

mgt LabMark ENVIRONMENTAL LABORATORIES

Certificate of Analysis

Parsons Brinckerhoff Australia P/L
Lvl 15, 28 FreshwaterPlace
Southbank
VIC 3006

NATA Accredited
Accreditation Number 1261
Site Number 1254

Accredited for compliance with ISO/IEC 17025.
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: **Claire Howell**

Report **369775-S**
Client Reference MICKLEHAM 2189202A
Received Date Feb 22, 2013

Client Sample ID			**TP06/190213/0.1C**	**TP22/200213/0.1C**	**TP28/200213/0.1C**
Sample Matrix			**Soil**	**Soil**	**Soil**
mgt-LabMark Sample No.			**M13-Fe16873**	**M13-Fe16874**	**M13-Fe16875**
Date Sampled			**Feb 19, 2013**	**Feb 20, 2013**	**Feb 21, 2013**
Test/Reference	LOR	Unit			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions					
TRH C6-C9	20	mg/kg	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	76	< 50	< 50
TRH C10-36 (Total)	50	mg/kg	76	< 50	< 50
BTEX					
Benzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Toluene	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Ethylbenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05
o-Xylene	0.05	mg/kg	< 0.05	< 0.05	< 0.05
m&p-Xylenes	0.10	mg/kg	< 0.1	< 0.1	< 0.1
Xylenes - Total	0.15	mg/kg	< 0.15	< 0.15	< 0.15
Fluorobenzene (surr.)	1	%	91	92	94
Total Recoverable Hydrocarbons - Draft 2010 NEPM Fractions *					
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100
Polycyclic Aromatic Hydrocarbons					
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(b)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5

Client Sample ID			TP06/190213/0.1C	TP22/200213/0.1C	TP28/200213/0.1C
Sample Matrix			**Soil**	**Soil**	**Soil**
mgt-LabMark Sample No.			**M13-Fe16873**	**M13-Fe16874**	**M13-Fe16875**
Date Sampled			**Feb 19, 2013**	**Feb 20, 2013**	**Feb 21, 2013**
Test/Reference	LOR	Unit			
Polycyclic Aromatic Hydrocarbons					
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Total PAH	0.5	mg/kg	< 0.5	< 0.5	< 0.5
p-Terphenyl-d14 (surr.)	1	%	97	104	97
2-Fluorobiphenyl (surr.)	1	%	98	105	97
Organochlorine Pesticides					
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05
a-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05
b-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Chlordane	0.1	mg/kg	< 0.1	< 0.1	< 0.1
d-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Toxaphene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	50	54	98
Tetrachloro-m-xylene (surr.)	1	%	100	107	115
Organophosphorous Pesticides					
Bolstar	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Demeton-O	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Diazinon	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Disulfoton	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Ethion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Ethoprop	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Fenthion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Merphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Methyl azinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Mevinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Naled	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Phorate	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Ronnel	0.2	mg/kg	< 0.2	< 0.2	< 0.2

Client Sample ID			TP06/190213/0.1C	TP22/200213/0.1C	TP28/200213/0.1C
Sample Matrix			**Soil**	**Soil**	**Soil**
mgt-LabMark Sample No.			**M13-Fe16873**	**M13-Fe16874**	**M13-Fe16875**
Date Sampled			**Feb 19, 2013**	**Feb 20, 2013**	**Feb 21, 2013**
Test/Reference	LOR	Unit			
Organophosphorous Pesticides					
Tokuthion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Trichloronate	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Triphenylphosphate (surr.)	1	%	108	125	111
Polychlorinated Biphenyls					
Aroclor-1016	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Aroclor-1232	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Aroclor-1242	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Aroclor-1248	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Aroclor-1254	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Aroclor-1260	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Total PCB	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	50	54	98
Tetrachloro-m-xylene (surr.)	1	%	100	107	115
pH (1:5 Aqueous extract)	0.1	units	5.9	6.6	6.1
% Moisture	0.1	%	8.7	5.0	5.0
Heavy Metals					
Arsenic	2	mg/kg	2.4	17	3.8
Cadmium	0.4	mg/kg	< 0.4	0.6	< 0.4
Chromium	5	mg/kg	19	63	45
Copper	5	mg/kg	6.5	5.8	< 5
Lead	5	mg/kg	8.3	13	15
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	5.8	7.0	5.7
Zinc	5	mg/kg	8.2	< 5	11

Sample History

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

Description	Testing Site	Extracted	Holding Time
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Brisbane	Feb 25, 2013	14 Day
- Method: TRH C6-C36 - MGT 100A			
Total Recoverable Hydrocarbons - Draft 2010 NEPM Fractions	Brisbane	Feb 25, 2013	14 Day
- Method: LM-LTM-ORG2010			
BTEX	Brisbane	Feb 25, 2013	14 Day
- Method: USEPA 8260 - MGT 350A Monocyclic Aromatic Hydrocarbons			
Polycyclic Aromatic Hydrocarbons	Melbourne	Feb 22, 2013	14 Day
- Method: USEPA 8270 Polycyclic Aromatic Hydrocarbons			
Organochlorine Pesticides	Melbourne	Feb 22, 2013	14 Day
- Method: USEPA 8081 Organochlorine Pesticides			
Organophosphorous Pesticides	Melbourne	Feb 22, 2013	14 Day
- Method: USEPA 8141 Organophosphorus Pesticides			
Polychlorinated Biphenyls	Melbourne	Feb 22, 2013	14 Day
- Method: USEPA 8082 Polychlorinated Biphenyls			
pH (1:5 Aqueous extract)	Melbourne	Feb 25, 2013	7 Day
- Method: APHA 4500 pH by Direct Measurement			
% Moisture	Melbourne	Feb 22, 2013	14 Day
- Method: Method 102 - ANZECC - % Moisture			
Heavy Metals	Melbourne	Feb 22, 2013	180 Day
- Method: USEPA 6010/6020 Heavy Metals			

mgt LabMark ENVIRONMENTAL LABORATORIES

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NATA # 1261 Site # 18217

Brisbane
1/21 Smallwood Place
Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Company Name: Parsons Brinckerhoff Australia P/L
Address: Lvl 15, 28 FreshwaterPlace
Southbank
VIC 3006

Client Job No.: MICKLEHAM 2189202A

Order No.:
Report #: 369775
Phone: 9861 1111
Fax: 9861 1144

Received: Feb 22, 2013 12:42 AM
Due: Mar 1, 2013
Priority: 5 Day
Contact Name: Claire Howell

mgt-LabMark Client Manager: Natalie Krasselt

Sample Detail					% Moisture	Ammonia (as N)	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Nitrate (as N)	Nitrite (as N)	pH	pH (1:5 Aqueous extract)	Total Dissolved Solids	Zinc	BTEX	BTEX	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Organophosphorous Pesticides	Polychlorinated Biphenyls	Total Recoverable Hydrocarbons
Laboratory where analysis is conducted																										
Melbourne Laboratory - NATA Site # 1254 & 14271					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X
Sydney Laboratory - NATA Site # 18217																										
Brisbane Laboratory - NATA Site # 20794																					X					
External Laboratory																										
Sample ID	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**																						
SL2/210213/1 WC	Feb 21, 2013	4:00PM	Water	M13-Fe16872		X								X	X	X		X		X			X	X	X	X
TP06/190213/0 .1C	Feb 19, 2013	4:00PM	Soil	M13-Fe16873	X		X	X	X	X	X	X	X				X		X		X	X	X	X	X	X
TP22/200213/0 .1C	Feb 20, 2013	4:00PM	Soil	M13-Fe16874	X		X	X	X	X	X	X	X				X		X		X	X	X	X	X	X
TP28/200213/0 .1C	Feb 21, 2013	4:00PM	Soil	M13-Fe16875	X		X	X	X	X	X	X	X				X		X		X	X	X	X	X	X

mgt-LabMark Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Actual PQLs are matrix dependant. Quoted PQLs may be raised where sample extracts are diluted due to interferences.
4. Results are uncorrected for matrix spikes or surrogate recoveries.
5. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
6. Samples were analysed on an 'as received' basis. 7. This report replaces any interim results previously issued.

Holding Times

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

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

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

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

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

UNITS

mg/kg: milligrams per Kilogram

ug/l: micrograms per litre

ppb: Parts per billion

org/100ml: Organisms per 100 millilitres

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

mg/l: milligrams per litre

ppm: Parts per million

%: Percentage

NTU: Units

TERMS

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery
CRM	Certified Reference Material - reported as percent recovery
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands. In the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
Batch Duplicate	A second piece of analysis from a sample outside of the clients batch of samples but run within the laboratory batch of analysis.
Batch SPIKE	Spike recovery reported on a sample from outside of the clients batch of samples but run within the laboratory batch of analysis.
USEPA	United States Environment Protection Authority
APHA	American Public Health Association
ASLP	Australian Standard Leaching Procedure (AS4439.3)
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within

QC - ACCEPTANCE CRITERIA

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

Results <10 times the LOR : No Limit

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

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

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

QC DATA GENERAL COMMENTS

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

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions TRH C6-C36 - MGT 100A							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Method Blank							
BTEX USEPA 8260 - MGT 350A Monocyclic Aromatic Hydrocarbons							
Benzene	mg/kg	< 0.05			0.05	Pass	
Toluene	mg/kg	< 0.05			0.05	Pass	
Ethylbenzene	mg/kg	< 0.05			0.05	Pass	
o-Xylene	mg/kg	< 0.05			0.05	Pass	
m&p-Xylenes	mg/kg	< 0.1			0.10	Pass	
Xylenes - Total	mg/kg	< 0.15			0.15	Pass	
Method Blank							
Total Recoverable Hydrocarbons - Draft 2010 NEPM Fractions LM-LTM-ORG2010							
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH C6-C10 less BTEX (F1)	mg/kg	< 20			20	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons USEPA 8270 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)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 USEPA 8081 Organochlorine Pesticides							
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-BHC	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-BHC	mg/kg	< 0.05			0.05	Pass	
Chlordane	mg/kg	< 0.1			0.1	Pass	
d-BHC	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Endosulfan II	mg/kg	< 0.05			0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	
Endrin aldehyde	mg/kg	< 0.05			0.05	Pass	
Endrin ketone	mg/kg	< 0.05			0.05	Pass	
g-BHC (Lindane)	mg/kg	< 0.05			0.05	Pass	
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.05			0.05	Pass	
Toxaphene	mg/kg	< 0.1			0.1	Pass	
Method Blank							
Organophosphorous Pesticides USEPA 8141 Organophosphorus Pesticides							
Bolstar	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos	mg/kg	< 0.2			0.2	Pass	
Demeton-O	mg/kg	< 0.2			0.2	Pass	
Diazinon	mg/kg	< 0.2			0.2	Pass	
Dichlorvos	mg/kg	< 0.2			0.2	Pass	
Disulfoton	mg/kg	< 0.2			0.2	Pass	
Ethion	mg/kg	< 0.2			0.2	Pass	
Ethoprop	mg/kg	< 0.2			0.2	Pass	
Fenitrothion	mg/kg	< 0.2			0.2	Pass	
Fensulfothion	mg/kg	< 0.2			0.2	Pass	
Fenthion	mg/kg	< 0.2			0.2	Pass	
Merphos	mg/kg	< 0.2			0.2	Pass	
Methyl azinphos	mg/kg	< 0.2			0.2	Pass	
Methyl parathion	mg/kg	< 0.2			0.2	Pass	
Mevinphos	mg/kg	< 0.2			0.2	Pass	
Naled	mg/kg	< 0.5			0.5	Pass	
Phorate	mg/kg	< 0.2			0.2	Pass	
Ronnel	mg/kg	< 0.2			0.2	Pass	
Tokuthion	mg/kg	< 0.2			0.2	Pass	
Trichloronate	mg/kg	< 0.2			0.2	Pass	
Method Blank							
Polychlorinated Biphenyls USEPA 8082 Polychlorinated Biphenyls							
Aroclor-1016	mg/kg	< 0.1			0.1	Pass	
Aroclor-1221	mg/kg	< 0.1			0.1	Pass	
Aroclor-1232	mg/kg	< 0.1			0.1	Pass	
Aroclor-1242	mg/kg	< 0.1			0.1	Pass	
Aroclor-1248	mg/kg	< 0.1			0.1	Pass	
Aroclor-1254	mg/kg	< 0.1			0.1	Pass	
Aroclor-1260	mg/kg	< 0.1			0.1	Pass	
Total PCB	mg/kg	< 0.1			0.1	Pass	
Method Blank							
Heavy Metals USEPA 6010/6020 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	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions TRH C6-C36 -							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
MGT 100A							
TRH C6-C9	%	92			70-130	Pass	
TRH C10-C14	%	96			70-130	Pass	
LCS - % Recovery							
BTEX USEPA 8260 - MGT 350A Monocyclic Aromatic Hydrocarbons							
Benzene	%	86			70-130	Pass	
Toluene	%	89			70-130	Pass	
Ethylbenzene	%	91			70-130	Pass	
m&p-Xylenes	%	85			70-130	Pass	
Xylenes - Total	%	85			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - Draft 2010 NEPM Fractions LM-LTM-ORG2010							
TRH C6-C10	%	81			70-130	Pass	
TRH >C10-C16	%	92			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons USEPA 8270 Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	110			70-130	Pass	
Acenaphthylene	%	111			70-130	Pass	
Anthracene	%	112			70-130	Pass	
Benz(a)anthracene	%	111			70-130	Pass	
Benzo(a)pyrene	%	113			70-130	Pass	
Benzo(b)fluoranthene	%	98			70-130	Pass	
Benzo(g.h.i)perylene	%	100			70-130	Pass	
Benzo(k)fluoranthene	%	119			70-130	Pass	
Chrysene	%	105			70-130	Pass	
Dibenz(a.h)anthracene	%	114			70-130	Pass	
Fluoranthene	%	106			70-130	Pass	
Fluorene	%	107			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	108			70-130	Pass	
Naphthalene	%	106			70-130	Pass	
Phenanthrene	%	107			70-130	Pass	
Pyrene	%	106			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides USEPA 8081 Organochlorine Pesticides							
4.4'-DDD	%	125			70-130	Pass	
4.4'-DDE	%	99			70-130	Pass	
4.4'-DDT	%	91			70-130	Pass	
a-BHC	%	123			70-130	Pass	
Aldrin	%	106			70-130	Pass	
b-BHC	%	107			70-130	Pass	
d-BHC	%	119			70-130	Pass	
Dieldrin	%	105			70-130	Pass	
Endosulfan I	%	101			70-130	Pass	
Endosulfan II	%	106			70-130	Pass	
Endosulfan sulphate	%	98			70-130	Pass	
Endrin	%	109			70-130	Pass	
Endrin aldehyde	%	99			70-130	Pass	
Endrin ketone	%	117			70-130	Pass	
g-BHC (Lindane)	%	111			70-130	Pass	
Heptachlor	%	97			70-130	Pass	
Heptachlor epoxide	%	103			70-130	Pass	
Hexachlorobenzene	%	99			70-130	Pass	
Methoxychlor	%	93			70-130	Pass	
LCS - % Recovery							

Test			Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Organophosphorous Pesticides USEPA 8141 Organophosphorus Pesticides									
Diazinon			%	116			70-130	Pass	
Ethion			%	119			70-130	Pass	
Fenitrothion			%	128			70-130	Pass	
Methyl parathion			%	105			70-130	Pass	
Mevinphos			%	120			70-130	Pass	
LCS - % Recovery									
Polychlorinated Biphenyls USEPA 8082 Polychlorinated Biphenyls									
Aroclor-1260			%	112			70-130	Pass	
LCS - % Recovery									
Heavy Metals USEPA 6010/6020 Heavy Metals									
Arsenic			%	80			80-120	Pass	
Cadmium			%	90			80-120	Pass	
Chromium			%	94			80-120	Pass	
Copper			%	98			80-120	Pass	
Lead			%	90			80-120	Pass	
Mercury			%	108			75-125	Pass	
Nickel			%	92			80-120	Pass	
Zinc			%	86			80-120	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	M13-Fe15568	NCP	%	102			70-130	Pass	
Acenaphthylene	M13-Fe15568	NCP	%	102			70-130	Pass	
Anthracene	M13-Fe15568	NCP	%	106			70-130	Pass	
Benz(a)anthracene	M13-Fe15568	NCP	%	124			70-130	Pass	
Benzo(a)pyrene	M13-Fe15568	NCP	%	106			70-130	Pass	
Benzo(b)fluoranthene	M13-Fe15568	NCP	%	99			70-130	Pass	
Benzo(g.h.i)perylene	M13-Fe15568	NCP	%	113			70-130	Pass	
Benzo(k)fluoranthene	M13-Fe15568	NCP	%	104			70-130	Pass	
Chrysene	M13-Fe15568	NCP	%	117			70-130	Pass	
Dibenz(a.h)anthracene	M13-Fe15568	NCP	%	120			70-130	Pass	
Fluoranthene	M13-Fe15568	NCP	%	114			70-130	Pass	
Fluorene	M13-Fe15568	NCP	%	101			70-130	Pass	
Indeno(1.2.3-cd)pyrene	M13-Fe15568	NCP	%	117			70-130	Pass	
Naphthalene	M13-Fe15568	NCP	%	101			70-130	Pass	
Phenanthrene	M13-Fe15568	NCP	%	100			70-130	Pass	
Pyrene	M13-Fe15568	NCP	%	114			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
4.4'-DDD	M13-Fe19067	NCP	%	117			70-130	Pass	
4.4'-DDE	M13-Fe19067	NCP	%	95			70-130	Pass	
4.4'-DDT	M13-Fe19067	NCP	%	78			70-130	Pass	
a-BHC	M13-Fe19067	NCP	%	114			70-130	Pass	
Aldrin	M13-Fe19067	NCP	%	104			70-130	Pass	
b-BHC	M13-Fe19067	NCP	%	104			70-130	Pass	
d-BHC	M13-Fe19067	NCP	%	111			70-130	Pass	
Dieldrin	M13-Fe19067	NCP	%	104			70-130	Pass	
Endosulfan I	M13-Fe19067	NCP	%	98			70-130	Pass	
Endosulfan II	M13-Fe19067	NCP	%	94			70-130	Pass	
Endosulfan sulphate	M13-Fe19067	NCP	%	85			70-130	Pass	
Endrin	M13-Fe19067	NCP	%	95			70-130	Pass	
Endrin aldehyde	M13-Fe19067	NCP	%	94			70-130	Pass	
Endrin ketone	M13-Fe19067	NCP	%	104			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
g-BHC (Lindane)	M13-Fe19067	NCP	%	107			70-130	Pass	
Heptachlor	M13-Fe19067	NCP	%	94			70-130	Pass	
Heptachlor epoxide	M13-Fe19067	NCP	%	100			70-130	Pass	
Hexachlorobenzene	M13-Fe19067	NCP	%	100			70-130	Pass	
Methoxychlor	M13-Fe19067	NCP	%	73			70-130	Pass	
Spike - % Recovery									
Organophosphorous Pesticides				Result 1					
Diazinon	M13-Fe17095	NCP	%	118			70-130	Pass	
Ethion	M13-Fe17095	NCP	%	104			70-130	Pass	
Fenitrothion	M13-Fe17095	NCP	%	112			70-130	Pass	
Methyl parathion	M13-Fe17095	NCP	%	86			70-130	Pass	
Mevinphos	M13-Fe17095	NCP	%	109			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	M13-Fe17041	NCP	%	75			75-125	Pass	
Cadmium	M13-Fe16882	NCP	%	80			75-125	Pass	
Chromium	M13-Fe16882	NCP	%	93			75-125	Pass	
Copper	M13-Fe16882	NCP	%	87			75-125	Pass	
Lead	M13-Fe17041	NCP	%	83			75-125	Pass	
Mercury	M13-Fe16882	NCP	%	101			70-130	Pass	
Nickel	M13-Fe17041	NCP	%	82			75-125	Pass	
Zinc	M13-Fe17041	NCP	%	76			75-125	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C6-C9	M13-Fe16874	CP	%	93			70-130	Pass	
TRH C10-C14	M13-Fe16874	CP	%	99			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	M13-Fe16874	CP	%	85			70-130	Pass	
Toluene	M13-Fe16874	CP	%	86			70-130	Pass	
Ethylbenzene	M13-Fe16874	CP	%	91			70-130	Pass	
o-Xylene	M13-Fe16874	CP	%	93			70-130	Pass	
m&p-Xylenes	M13-Fe16874	CP	%	91			70-130	Pass	
Xylenes - Total	M13-Fe16874	CP	%	92			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - Draft 2010 NEPM Fractions				Result 1					
TRH C6-C10	M13-Fe16874	CP	%	82			70-130	Pass	
TRH >C10-C16	M13-Fe16874	CP	%	94			70-130	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	M13-Fe17095	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	M13-Fe17095	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	M13-Fe17095	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	M13-Fe17095	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	M13-Fe17095	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b)fluoranthene	M13-Fe17095	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	M13-Fe17095	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	M13-Fe17095	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	M13-Fe17095	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	M13-Fe17095	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	M13-Fe17095	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	M13-Fe17095	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	M13-Fe17095	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	M13-Fe17095	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Phenanthrene	M13-Fe17095	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	M13-Fe17095	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
4.4'-DDD	M13-Fe19067	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	M13-Fe19067	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	M13-Fe19067	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-BHC	M13-Fe19067	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	M13-Fe19067	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-BHC	M13-Fe19067	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Chlordane	M13-Fe19067	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
d-BHC	M13-Fe19067	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	M13-Fe19067	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	M13-Fe19067	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	M13-Fe19067	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	M13-Fe19067	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	M13-Fe19067	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	M13-Fe19067	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	M13-Fe19067	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-BHC (Lindane)	M13-Fe19067	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	M13-Fe19067	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	M13-Fe19067	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	M13-Fe19067	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	M13-Fe19067	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Toxaphene	M13-Fe19067	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Duplicate									
Organophosphorous Pesticides				Result 1	Result 2	RPD			
Bolstar	M13-Fe17095	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos	M13-Fe17095	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Demeton-O	M13-Fe17095	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Diazinon	M13-Fe17095	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dichlorvos	M13-Fe17095	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Disulfoton	M13-Fe17095	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethion	M13-Fe17095	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethoprop	M13-Fe17095	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenitrothion	M13-Fe17095	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fensulfothion	M13-Fe17095	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenthion	M13-Fe17095	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Merphos	M13-Fe17095	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methyl azinphos	M13-Fe17095	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methyl parathion	M13-Fe17095	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Mevinphos	M13-Fe17095	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Naled	M13-Fe17095	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phorate	M13-Fe17095	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ronnel	M13-Fe17095	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tokuthion	M13-Fe17095	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Trichloronate	M13-Fe17095	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	M13-Fe19067	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1221	M13-Fe19067	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1232	M13-Fe19067	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1242	M13-Fe19067	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1248	M13-Fe19067	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1254	M13-Fe19067	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	

Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1260	M13-Fe19067	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Total PCB	M13-Fe19067	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	M13-Fe16882	NCP	mg/kg	7.4	7.7	5.0	30%	Pass	
Cadmium	M13-Fe16882	NCP	mg/kg	0.70	0.70	7.0	30%	Pass	
Chromium	M13-Fe16882	NCP	mg/kg	14	13	8.0	30%	Pass	
Copper	M13-Fe16882	NCP	mg/kg	35	41	15	30%	Pass	
Lead	M13-Fe17041	NCP	mg/kg	6.0	6.6	10	30%	Pass	
Mercury	M13-Fe16618	NCP	mg/kg	< 0.1	< 0.1	6.0	30%	Pass	
Nickel	M13-Fe16882	NCP	mg/kg	6.5	6.9	6.0	30%	Pass	
Zinc	M13-Fe17041	NCP	mg/kg	21	22	3.0	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C6-C9	M13-Fe16874	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	M13-Fe16874	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	M13-Fe16874	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	M13-Fe16874	CP	mg/kg	< 50	< 50	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	M13-Fe16874	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Toluene	M13-Fe16874	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Ethylbenzene	M13-Fe16874	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
o-Xylene	M13-Fe16874	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
m&p-Xylenes	M13-Fe16874	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total	M13-Fe16874	CP	mg/kg	< 0.15	< 0.15	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - Draft 2010 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	M13-Fe16874	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	M13-Fe16874	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C6-C10 less BTEX (F1)	M13-Fe16874	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	M13-Fe16874	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	M13-Fe16874	CP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	M13-Fe16874	CP	mg/kg	< 100	< 100	<1	30%	Pass	

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Organic samples had Teflon liners	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.

Authorised By

Natalie Krasselt	Client Services
Stacey Jenkins	Senior Analyst-Organic (VIC)
Emily Rosenberg	Senior Analyst-Metal (VIC)
Richard Corner	Senior Analyst-Volatile (QLD)
Huong Le	Senior Analyst-Inorganic (VIC)

Glenn Jackson

Laboratory Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

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

Uncertainty data is available on request

mgt LabMark ENVIRONMENTAL LABORATORIES

Certificate of Analysis

Parsons Brinckerhoff Australia P/L
Lvl 15, 28 FreshwaterPlace
Southbank
VIC 3006

NATA Accredited
Accreditation Number 1261
Site Number 1254

Accredited for compliance with ISO/IEC 17025.
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: **Claire Howell**

Report **369775-W**
Client Reference MICKLEHAM 2189202A
Received Date Feb 22, 2013

Client Sample ID			**SL2/210213/1WC**
Sample Matrix			**Water**
mgt-LabMark Sample No.			**M13-Fe16872**
Date Sampled			**Feb 21, 2013**
Test/Reference	LOR	Unit	
Total Recoverable Hydrocarbons - 1999 NEPM Fractions			
TRH C6-C9	0.02	mg/L	< 0.02
TRH C10-C14	0.05	mg/L	< 0.05
TRH C15-C28	0.1	mg/L	5.1
TRH C29-C36	0.1	mg/L	12
TRH C10-36 (Total)	0.1	mg/L	17
BTEX			
Benzene	0.001	mg/L	< 0.001
Toluene	0.001	mg/L	< 0.001
Ethylbenzene	0.001	mg/L	< 0.001
o-Xylene	0.001	mg/L	< 0.001
m&p-Xylenes	0.002	mg/L	< 0.002
Xylenes - Total	0.003	mg/L	< 0.003
Fluorobenzene (surr.)	1	%	115
Total Recoverable Hydrocarbons - Draft 2010 NEPM Fractions *			
Naphthalene[N02]	0.02	mg/L	< 0.02
TRH C6-C10	0.02	mg/L	< 0.02
TRH C6-C10 less BTEX (F1)[N04]	0.02	mg/L	< 0.02
TRH >C10-C16	0.05	mg/L	< 0.05
TRH >C10-C16 less Naphthalene (F2)[N01]	0.05	mg/L	< 0.05
TRH >C16-C34	0.1	mg/L	13
TRH >C34-C40	0.1	mg/L	3.8
Organochlorine Pesticides			
4.4'-DDD	0.0001	mg/L	< 0.0001
4.4'-DDE	0.0001	mg/L	< 0.0001
4.4'-DDT	0.0001	mg/L	< 0.0001
a-BHC	0.0001	mg/L	< 0.0001
Aldrin	0.0001	mg/L	< 0.0001
b-BHC	0.0001	mg/L	< 0.0001
Chlordane	0.001	mg/L	< 0.001
d-BHC	0.0001	mg/L	< 0.0001
Dieldrin	0.0001	mg/L	< 0.0001
Endosulfan I	0.0001	mg/L	< 0.0001
Endosulfan II	0.0001	mg/L	< 0.0001
Endosulfan sulphate	0.0001	mg/L	< 0.0001
Endrin	0.0001	mg/L	< 0.0001
Endrin aldehyde	0.0001	mg/L	< 0.0001

Client Sample ID			SL2/210213/1WC
Sample Matrix			**Water**
mgt-LabMark Sample No.			**M13-Fe16872**
Date Sampled			**Feb 21, 2013**
Test/Reference	LOR	Unit	
Organochlorine Pesticides			
Endrin ketone	0.0001	mg/L	< 0.0001
g-BHC (Lindane)	0.0001	mg/L	< 0.0001
Heptachlor	0.0001	mg/L	< 0.0001
Heptachlor epoxide	0.0001	mg/L	< 0.0001
Hexachlorobenzene	0.0001	mg/L	< 0.0001
Methoxychlor	0.0001	mg/L	< 0.0001
Toxaphene	0.001	mg/L	< 0.001
Dibutylchlorendate (surr.)	1	%	62
Tetrachloro-m-xylene (surr.)	1	%	58
Polychlorinated Biphenyls			
Aroclor-1016	0.001	mg/L	< 0.001
Aroclor-1221	0.001	mg/L	< 0.001
Aroclor-1232	0.001	mg/L	< 0.001
Aroclor-1242	0.001	mg/L	< 0.001
Aroclor-1248	0.001	mg/L	< 0.001
Aroclor-1254	0.001	mg/L	< 0.001
Aroclor-1260	0.001	mg/L	< 0.001
Total PCB	0.001	mg/L	< 0.001
Dibutylchlorendate (surr.)	1	%	62
Tetrachloro-m-xylene (surr.)	1	%	58
Ammonia (as N)	0.01	mg/L	2.2
Nitrate (as N)	0.02	mg/L	0.60
Nitrite (as N)	0.02	mg/L	< 0.02
pH	0.1	units	7.7
Total Dissolved Solids	10	mg/L	400

Description	Testing Site	Extracted	Holding Time
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Melbourne	Feb 25, 2013	7 Day
- Method: TRH C6-C36 - MGT 100A			
Total Recoverable Hydrocarbons - Draft 2010 NEPM Fractions	Melbourne	Feb 25, 2013	7 Day
- Method: LM-LTM-ORG2010			
BTEX	Melbourne	Feb 25, 2013	14 Day
- Method: USEPA 8260 - MGT 350A Monocyclic Aromatic Hydrocarbons and MGT 100A			
Organochlorine Pesticides	Melbourne	Feb 25, 2013	7 Day
- Method: USEPA 8081 Organochlorine Pesticides			
Polychlorinated Biphenyls	Melbourne	Feb 25, 2013	7 Day
- Method: USEPA 8082 Polychlorinated Biphenyls			
Ammonia (as N)	Melbourne	Feb 22, 2013	28 Day
- Method: APHA 4500-NH3 Ammonia Nitrogen by FIA			
Nitrate (as N)	Melbourne	Feb 22, 2013	2 Day
- Method: APHA 4500-NO3 Nitrate Nitrogen by FIA			
Nitrite (as N)	Melbourne	Feb 22, 2013	2 Day
- Method: APHA 4500-NO2 Nitrite Nitrogen by FIA			
pH	Melbourne	Feb 25, 2013	0 Hours
- Method: APHA 4500 pH by Direct Measurement - ** Samples analysed outside holding time. Analysis should be performed in situ. Results for reference only.			
Total Dissolved Solids	Melbourne	Feb 22, 2013	7 Day
- Method: APHA 2540C Total Dissolved Solids			

mgt LabMark ENVIRONMENTAL LABORATORIES

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Murarrie QLD 4172
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NATA # 1261 Site # 20794

Company Name:	Parsons Brinckerhoff Australia P/L	**Order No.:**		**Received:**	Feb 22, 2013 12:42 AM
Address:	Lvl 15, 28 FreshwaterPlace Southbank VIC 3006	**Report #:**	369775	**Due:**	Mar 1, 2013
		Phone:	9861 1111	**Priority:**	5 Day
		Fax:	9861 1144	**Contact Name:**	Claire Howell
Client Job No.:	MICKLEHAM 2189202A				

mgt-LabMark Client Manager: Natalie Krasselt

Sample Detail					% Moisture	Ammonia (as N)	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Nitrate (as N)	Nitrite (as N)	pH	pH (1:5 Aqueous extract)	Total Dissolved Solids	Zinc	BTEX	BTEX	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Organophosphorous Pesticides	Polychlorinated Biphenyls	Total Recoverable Hydrocarbons
Laboratory where analysis is conducted																										
Melbourne Laboratory - NATA Site # 1254 & 14271					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X
Sydney Laboratory - NATA Site # 18217																										
Brisbane Laboratory - NATA Site # 20794																					X					
External Laboratory																										
Sample ID	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**																						
SL2/210213/1 WC	Feb 21, 2013	4:00PM	Water	M13-Fe16872		X								X	X	X		X		X			X	X	X	X
TP06/190213/0 .1C	Feb 19, 2013	4:00PM	Soil	M13-Fe16873	X		X	X	X	X	X	X	X				X		X		X	X	X	X	X	X
TP22/200213/0 .1C	Feb 20, 2013	4:00PM	Soil	M13-Fe16874	X		X	X	X	X	X	X	X				X		X		X	X	X	X	X	X
TP28/200213/0 .1C	Feb 21, 2013	4:00PM	Soil	M13-Fe16875	X		X	X	X	X	X	X	X				X		X		X	X	X	X	X	X

mgt-LabMark Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Actual PQLs are matrix dependant. Quoted PQLs may be raised where sample extracts are diluted due to interferences.
4. Results are uncorrected for matrix spikes or surrogate recoveries.
5. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
6. Samples were analysed on an 'as received' basis. 7. This report replaces any interim results previously issued.

Holding Times

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

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

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

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

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

UNITS

mg/kg: milligrams per Kilogram

ug/l: micrograms per litre

ppb: Parts per billion

org/100ml: Organisms per 100 millilitres

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

mg/l: milligrams per litre

ppm: Parts per million

%: Percentage

NTU: Units

TERMS

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery
CRM	Certified Reference Material - reported as percent recovery
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands. In the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
Batch Duplicate	A second piece of analysis from a sample outside of the clients batch of samples but run within the laboratory batch of analysis.
Batch SPIKE	Spike recovery reported on a sample from outside of the clients batch of samples but run within the laboratory batch of analysis.
USEPA	United States Environment Protection Authority
APHA	American Public Health Association
ASLP	Australian Standard Leaching Procedure (AS4439.3)
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within

QC - ACCEPTANCE CRITERIA

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

Results <10 times the LOR : No Limit

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

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

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

QC DATA GENERAL COMMENTS

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

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions TRH C6-C36 - MGT 100A							
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	
Method Blank							
BTEX USEPA 8260 - MGT 350A Monocyclic Aromatic Hydrocarbons and MGT 100A							
Benzene	mg/L	< 0.001			0.001	Pass	
Toluene	mg/L	< 0.001			0.001	Pass	
Ethylbenzene	mg/L	< 0.001			0.001	Pass	
o-Xylene	mg/L	< 0.001			0.001	Pass	
m&p-Xylenes	mg/L	< 0.002			0.002	Pass	
Xylenes - Total	mg/L	< 0.003			0.003	Pass	
Method Blank							
Total Recoverable Hydrocarbons - Draft 2010 NEPM Fractions LM-LTM-ORG2010							
Naphthalene	mg/L	< 0.02			0.02	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							
Organochlorine Pesticides USEPA 8081 Organochlorine Pesticides							
4.4'-DDD	mg/L	< 0.0001			0.0001	Pass	
4.4'-DDE	mg/L	< 0.0001			0.0001	Pass	
4.4'-DDT	mg/L	< 0.0001			0.0001	Pass	
a-BHC	mg/L	< 0.0001			0.0001	Pass	
Aldrin	mg/L	< 0.0001			0.0001	Pass	
b-BHC	mg/L	< 0.0001			0.0001	Pass	
Chlordane	mg/L	< 0.001			0.001	Pass	
d-BHC	mg/L	< 0.0001			0.0001	Pass	
Dieldrin	mg/L	< 0.0001			0.0001	Pass	
Endosulfan I	mg/L	< 0.0001			0.0001	Pass	
Endosulfan II	mg/L	< 0.0001			0.0001	Pass	
Endosulfan sulphate	mg/L	< 0.0001			0.0001	Pass	
Endrin	mg/L	< 0.0001			0.0001	Pass	
Endrin aldehyde	mg/L	< 0.0001			0.0001	Pass	
Endrin ketone	mg/L	< 0.0001			0.0001	Pass	
g-BHC (Lindane)	mg/L	< 0.0001			0.0001	Pass	
Heptachlor	mg/L	< 0.0001			0.0001	Pass	
Heptachlor epoxide	mg/L	< 0.0001			0.0001	Pass	
Hexachlorobenzene	mg/L	< 0.0001			0.0001	Pass	
Methoxychlor	mg/L	< 0.0001			0.0001	Pass	
Toxaphene	mg/L	< 0.001			0.001	Pass	
Method Blank							
Polychlorinated Biphenyls USEPA 8082 Polychlorinated Biphenyls							
Aroclor-1016	mg/L	< 0.001			0.001	Pass	
Aroclor-1221	mg/L	< 0.001			0.001	Pass	
Aroclor-1232	mg/L	< 0.001			0.001	Pass	
Aroclor-1242	mg/L	< 0.001			0.001	Pass	
Aroclor-1248	mg/L	< 0.001			0.001	Pass	
Aroclor-1254	mg/L	< 0.001			0.001	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Aroclor-1260	mg/L	< 0.001			0.001	Pass	
Total PCB	mg/L	< 0.001			0.001	Pass	
Method Blank							
Ammonia (as N)	mg/L	< 0.01			0.01	Pass	
Nitrate (as N)	mg/L	< 0.02			0.02	Pass	
Nitrite (as N)	mg/L	< 0.02			0.02	Pass	
Total Dissolved Solids	mg/L	< 10			10	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions TRH C6-C36 - MGT 100A							
TRH C6-C9	%	100			70-130	Pass	
TRH C10-C14	%	99			70-130	Pass	
LCS - % Recovery							
BTEX USEPA 8260 - MGT 350A Monocyclic Aromatic Hydrocarbons and MGT 100A							
Benzene	%	119			70-130	Pass	
Toluene	%	92			70-130	Pass	
Ethylbenzene	%	93			70-130	Pass	
m&p-Xylenes	%	98			70-130	Pass	
Xylenes - Total	%	98			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - Draft 2010 NEPM Fractions LM-LTM-ORG2010							
TRH C6-C10	%	100			70-130	Pass	
TRH >C10-C16	%	101			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides USEPA 8081 Organochlorine Pesticides							
4.4'-DDD	%	98			70-130	Pass	
4.4'-DDE	%	84			70-130	Pass	
4.4'-DDT	%	86			70-130	Pass	
a-BHC	%	85			70-130	Pass	
Aldrin	%	76			70-130	Pass	
b-BHC	%	79			70-130	Pass	
d-BHC	%	93			70-130	Pass	
Dieldrin	%	87			70-130	Pass	
Endosulfan I	%	82			70-130	Pass	
Endosulfan II	%	85			70-130	Pass	
Endosulfan sulphate	%	89			70-130	Pass	
Endrin	%	90			70-130	Pass	
Endrin aldehyde	%	70			70-130	Pass	
Endrin ketone	%	89			70-130	Pass	
g-BHC (Lindane)	%	83			70-130	Pass	
Heptachlor	%	86			70-130	Pass	
Heptachlor epoxide	%	84			70-130	Pass	
Hexachlorobenzene	%	77			70-130	Pass	
Methoxychlor	%	74			70-130	Pass	
LCS - % Recovery							
Ammonia (as N)	%	104			70-130	Pass	
Nitrate (as N)	%	108			70-130	Pass	
Nitrite (as N)	%	102			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C6-C9	M13-Fe18030	NCP	%	103			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
TRH C10-C14	M13-Fe17544	NCP	%	87			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	M13-Fe18030	NCP	%	122			70-130	Pass	
Toluene	M13-Fe18030	NCP	%	97			70-130	Pass	
Ethylbenzene	M13-Fe18030	NCP	%	98			70-130	Pass	
o-Xylene	M13-Fe18030	NCP	%	102			70-130	Pass	
m&p-Xylenes	M13-Fe18030	NCP	%	102			70-130	Pass	
Xylenes - Total	M13-Fe18030	NCP	%	102			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - Draft 2010 NEPM Fractions				Result 1					
TRH C6-C10	M13-Fe18030	NCP	%	103			70-130	Pass	
TRH >C10-C16	M13-Fe17544	NCP	%	88			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
4.4'-DDD	M13-Fe17802	NCP	%	109			70-130	Pass	
4.4'-DDE	M13-Fe17802	NCP	%	106			70-130	Pass	
4.4'-DDT	M13-Fe17802	NCP	%	120			70-130	Pass	
a-BHC	M13-Fe17802	NCP	%	109			70-130	Pass	
Aldrin	M13-Fe17802	NCP	%	102			70-130	Pass	
b-BHC	M13-Fe17802	NCP	%	102			70-130	Pass	
d-BHC	M13-Fe17802	NCP	%	112			70-130	Pass	
Dieldrin	M13-Fe17802	NCP	%	117			70-130	Pass	
Endosulfan I	M13-Fe17802	NCP	%	109			70-130	Pass	
Endosulfan II	M13-Fe17802	NCP	%	118			70-130	Pass	
Endosulfan sulphate	M13-Fe17802	NCP	%	129			70-130	Pass	
Endrin	M13-Fe17802	NCP	%	124			70-130	Pass	
Endrin aldehyde	M13-Fe17802	NCP	%	101			70-130	Pass	
Endrin ketone	M13-Fe17802	NCP	%	102			70-130	Pass	
g-BHC (Lindane)	M13-Fe17802	NCP	%	113			70-130	Pass	
Heptachlor	M13-Fe17802	NCP	%	117			70-130	Pass	
Heptachlor epoxide	M13-Fe17802	NCP	%	108			70-130	Pass	
Hexachlorobenzene	M13-Fe17802	NCP	%	102			70-130	Pass	
Methoxychlor	M13-Fe17802	NCP	%	115			70-130	Pass	
Spike - % Recovery									
				Result 1					
Ammonia (as N)	M13-Fe16566	NCP	%	108			70-130	Pass	
Nitrate (as N)	M13-Fe16566	NCP	%	105			70-130	Pass	
Nitrite (as N)	M13-Fe16566	NCP	%	103			70-130	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C6-C9	M13-Fe17544	NCP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
TRH C10-C14	M13-Fe16235	NCP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
TRH C15-C28	M13-Fe16235	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
TRH C29-C36	M13-Fe16235	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	M13-Fe17544	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Toluene	M13-Fe17544	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Ethylbenzene	M13-Fe17544	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
o-Xylene	M13-Fe17544	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
m&p-Xylenes	M13-Fe17544	NCP	mg/L	< 0.002	< 0.002	<1	30%	Pass	
Xylenes - Total	M13-Fe17544	NCP	mg/L	< 0.003	< 0.003	<1	30%	Pass	

Duplicate									
Total Recoverable Hydrocarbons - Draft 2010 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	M13-Fe17544	NCP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
TRH C6-C10	M13-Fe17544	NCP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
TRH >C10-C16	M13-Fe16235	NCP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
TRH >C16-C34	M13-Fe16235	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
TRH >C34-C40	M13-Fe16235	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
4.4'-DDD	M13-Fe17801	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
4.4'-DDE	M13-Fe17801	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
4.4'-DDT	M13-Fe17801	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
a-BHC	M13-Fe17801	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
Aldrin	M13-Fe17801	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
b-BHC	M13-Fe17801	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
Chlordane	M13-Fe17801	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
d-BHC	M13-Fe17801	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
Dieldrin	M13-Fe17801	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
Endosulfan I	M13-Fe17801	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
Endosulfan II	M13-Fe17801	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
Endosulfan sulphate	M13-Fe17801	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
Endrin	M13-Fe17801	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
Endrin aldehyde	M13-Fe17801	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
Endrin ketone	M13-Fe17801	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
g-BHC (Lindane)	M13-Fe17801	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
Heptachlor	M13-Fe17801	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
Heptachlor epoxide	M13-Fe17801	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
Hexachlorobenzene	M13-Fe17801	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
Methoxychlor	M13-Fe17801	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
Toxaphene	M13-Fe17801	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	M13-Fe17801	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Aroclor-1221	M13-Fe17801	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Aroclor-1232	M13-Fe17801	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Aroclor-1242	M13-Fe17801	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Aroclor-1248	M13-Fe17801	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Aroclor-1254	M13-Fe17801	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Aroclor-1260	M13-Fe17801	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Total PCB	M13-Fe17801	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Ammonia (as N)	M13-Fe16566	NCP	mg/L	< 0.01	< 0.01	<1	30%	Pass	
Nitrate (as N)	M13-Fe16566	NCP	mg/L	< 0.02	< 0.02	20	30%	Pass	
Nitrite (as N)	M13-Fe16566	NCP	mg/L	< 0.02	< 0.02	13	30%	Pass	
Total Dissolved Solids	M13-Fe17761	NCP	mg/L	4700	4700	<1	30%	Pass	

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Organic samples had Teflon liners	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.

Authorised By

Natalie Krasselt	Client Services
Stacey Jenkins	Senior Analyst-Organic (VIC)
Carroll Lee	Senior Analyst-Volatile (VIC)
Huong Le	Senior Analyst-Inorganic (VIC)

Glenn Jackson

Laboratory Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

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

Uncertainty data is available on request

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ABN 80 078 004 798
NCSI Certified Quality System ISO 9001

Certificate of Analysis

CLIENT:	MAB	CERTIFICATE NO	2189202A-2792
CLIENT ADDRESS:		DATE SAMPLED:	Unknown
TELEPHONE:		DATE RECEIVED:	25/02/2013
FAX / E-MAIL:	.	DATE ANALYSED:	26/02/2013
CONTACT:	.		
LOCATION:	Lindunvale, cnr Mt Ridley and Mickleham Rds, Mickleham	SAMPLED BY:	Samuel O'Connor

TEST METHOD: Qualitative identification of asbestos types in bulk samples at Parsons Brinckerhoff Melbourne Laboratory by polarised light microscopy, including dispersion staining techniques using Parsons Brinckerhoff in-house method No.1, AS4964 (2004) and NATA accreditation No.15295. This document is issued in accordance with NATA's accreditation requirements. Accredited for compliance with ISO/IEC:17025.

Lab Number	Sample Id	Sample Description	Sample Dimensions	Identification Type
13/00127/001	TP01A/190213/0.1	Soil	86 g	NAD at reporting limit of 0.1g/kg, OF
13/00127/002	TP03A/200213/0.1	Soil	27 g	NAD at reporting limit of 0.1g/kg, OF
13/00127/003	TP09/2190213/0.1	Soil	60 g	NAD at reporting limit of 0.1g/kg, OF
13/00127/004	TP20A/210213/0.1	Soil	89 g	NAD at reporting limit of 0.1g/kg, OF
13/00127/005	TP32A/210213/0.1	Soil	61 g	NAD at reporting limit of 0.1g/kg, OF

LEGEND:
NAD - No Asbestos Detected
CH - Chrysotile Asbestos Detected
A - Amosite Asbestos Detected
C - Crocidolite Asbestos Detected
UMF - Unknown Mineral Fibres Detected
SMF - Synthetic Mineral Fibres Detected
OF - Organic Fibres Detected
Hand picked refers to small discrete amounts of asbestos distributed unevenly in a large body of non asbestos material.

NATA
ACCREDITED FOR TECHNICAL COMPETENCE

Approved Identifier
Name: David Hughes

Approved Signatory
Name: David Hughes

AUTHORISATION DATE
26/02/2013

Notes:
If no asbestos is detected in vinyl tiles, mastics, sealants, epoxy resins and ore samples then confirmation by another independent analytical technique is advised due to the nature of the samples.

The results contained within this report relate only to the sample(s) submitted for testing. PB accepts no responsibility for the initial collection, packaging or transportation of samples submitted by external persons. NATA does not accredit sampling. This document may not be reproduced except in full.

Appendix J

Photographs

Figure 1a. Plan of photograph locations

Figure 1b. Photograph locations, 2040 Mickleham Rd

Figure 1c. Photograph locations, 1990 Mickleham Rd

Photograph 01 – View between poultry and vehicle storage sheds, 2040 Mickleham Rd (facing NE)

Photograph 02 - Poultry shed and feed silo at 2040 Mickleham Rd (facing NW)

Photograph 03 - Dairy buildings at 2040 Mickleham Rd (facing NE)

Photograph 04 – Land adjacent to dairy buildings, 2040 Mickleham Rd (facing SW)

Photograph 05 – View from within the main dairy building, 2040 Mickleham Rd

Photograph 06 – Septic tank adjacent to house at 2040 Mickleham Rd (facing SW)

Photograph 07 – Second septic tank adjacent to house at 2040 Mickleham Rd (facing NE)

Photograph 08 - Open well adjacent to septic tank, 2040 Mickleham Rd (facing east)

Photograph 09 – View down open well adjacent to septic tank, 2040 Mickleham Rd

Photograph 10 – Fuel tank located near dairy buildings at 2040 Mickleham Rd (facing SE)

Photograph 11 – Fuel tank between poultry and vehicle storage sheds, 2040 Mickleham Rd (facing NE)

Photograph 12 – Bore with electric pump located at 2040 Mickleham Rd (facing SW)

Photograph 13 – Bore with electric pump located at 2040 Mickleham Rd

Photograph 14 – Bore hole located in dairy building at 2040 Mickleham Rd

Photograph 15 - Bore hole in dairy building surrounded by oil-stained dirt

Photograph 16 – Inside vehicle storage shed at 2040 Mickleham Rd (facing NE)

Photograph 17 – Some oil staining on ground inside vehicle storage shed at 2040 Mickleham Rd

Photograph 18 – Farm equipment stored in shed at 2040 Mickleham Rd

Photograph 19 – Farm equipment and fertiliser stored in shed, 2040 Mickleham Rd (facing NW)

Photograph 20 – Granular Urea fertiliser stored in shed, 2040 Mickleham Rd

Photograph 21 – Chemical storage shed with asbestos cement sheet walls, 2040 Mickleham Rd (facing north)

Photograph 22 - Chemical storage shed with containers of waste oil and glyphosate

Photograph 23 – Waste pile with scrap wood and metal, 2040 Mickleham Rd (facing east)

Photograph 24 – Waste pile with scrap metal at 2040 Mickleham Rd (facing east)

Photograph 25 – Waste pile with tyres, empty drums and chemical containers, 2040 Mickleham Rd (facing south)

Photograph 26 – Waste pile with empty drums and chemical containers, 2040 Mickleham Rd (facing south)

Photograph 27 – View from outside western boundary of the site along the powerline easement forming the northern boundary (facing east)

Photograph 28 – Small fenced area outside of the dairy at 2040 Mickleham Rd (facing SE)

Photograph 29 – Paddock south of the dairy where manure washed into after milking (facing south)

Photograph 30 – View from outside eastern boundary of site (facing north)

Photograph 31 – Dam located near the central eastern boundary of the site (facing SW)

Photograph 32 – House located on site at 1990 Mickleham Rd (facing NE)

Photograph 33 – Carport at rear of house at 1990 Mickleham Rd (facing NW)

Photograph 34 – Trail of green grass from septic to eastern fence at 1990 Mickleham Rd (facing NW)

Photograph 35 – Trail of green grass ending at vegetable garden adjacent to the eastern fence of property at 1990 Mickleham Rd (facing NE)

Photograph 36 – View across site from near the central eastern boundary (facing NW)

Photograph 37 – Dam adjacent to the central western boundary of the site (facing SE)

Photograph 38 – Property with old bluestone house on site at 1960 Mickleham Rd (facing SW)

Photograph 39 – Small sheds located on property at 1960 Mickleham Rd (facing east)

Photograph 40 – Olive grove across Mickleham Rd from the central western boundary of the site (facing NW)

Photograph 41 – Poultry farm located at the north western corner of the intersection of Mickleham and Mt Ridley Roads, opposite the south-western boundary of the site (facing west)

Photograph 42 – Primary School located across Mt Ridley Rd from the south-western boundary of the site (facing SW)

Photograph 43 – Primary school on the south eastern corner of the intersection of Mt Ridley and Mickleham Roads (facing SW)

Photograph 44 – Tennis Club located on Mt Ridley Rd opposite the southern boundary of the site immediately adjacent to the eastern boundary of the primary school (facing south)

Photograph 45 – Land being developed for residential properties on the southern side of Mt Ridley Rd, south of the site (facing SW)