



# **Douglas Partners**

***Geotechnics • Environment • Groundwater***

*Integrated Practical Solutions*

## **REPORT**

**on**

## **PRELIMINARY ENVIRONMENTAL SITE ASSESSMENT**

**102-128 BRIENS ROAD  
NORTHMEAD**

***Prepared for***  
**COCA-COLA AMATIL**

***Project No.43650***  
***February 2006***



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## EXECUTIVE SUMMARY

This report details the methodology and results of a Preliminary Environmental Site Assessment Investigation undertaken by Douglas Partners Pty Ltd (DP) at Coca-Cola Amatil, 102-128 Briens Road, Northmead. The investigation was commissioned by Burns Bridge Services Pty Ltd on behalf of Coca-Cola Amatil.

The objectives of the investigations were to provide an assessment for the potential for soil and groundwater contamination and to assess the general suitability of the site for the proposed commercial development.

The assessment focuses on the proposed area of re-development comprising areas currently occupied by finance, merchandising/equipment services, car park and open storage space located at the central eastern portion of the Coca-Cola site (subject site). The subject site covers a rectangular area of approximately 3.3 ha and is fully operational at the time of investigation. Proposed re-development comprises the demolition of existing buildings and construction of a warehouse facility. The subject site location is presented in Drawing 1, Appendix A.

Previous assessments undertaken at the subject site include an *Environmental Audit* undertaken by Dames & Moore in 1991.

The current investigation comprised environmental soil sampling and analyses for targeted set of contaminants from 20 test bores. The subsurface soil/filling conditions encountered in the test bores generally comprised sandy clay, clayey sand filling with ironstone gravel and sandstone fragments. Concrete fragments and ash were noted within the filling in Test Bore 12.

Groundwater was not observed during augering and piezometers were noted to be dry after two weeks, suggesting that the depth to groundwater table is likely to be in excess of the vertical extent of investigation, (ie over 5.5 m below the surface level).

Given the proposed commercial re-development, the soil and groundwater results were compared to the criteria given in the Contaminated Sites Guidelines for the NSW Site Auditor Scheme NSW EPA (1998) for commercial or industrial land-use [Column 5 HIL], and Guidelines for Assessing Service Station Sites, NSW EPA (1994).

The analytical results indicated that majority of the samples recorded contaminant concentrations within the adopted site assessment criteria for commercial/industrial sites with the exception of the following exceedances associated with organic contaminants noted in DP Test Bore 14 at:-

- 3.0 m [C6-C9 TPH (350 mg/kg), Toluene (54 mg/kg), Ethyl-benzene (99 mg/kg) and Xylene (265 mg/kg)]; and
- 3.7 m [Toluene (2.2 mg/kg), Ethyl-benzene (9.5 mg/kg) and Xylene (24.5 mg/kg)].

Detectable concentrations of VOCs (mainly benzene compounds) were also noted in DP Test Bore samples 14/3.0 and 14/3.7. As the level of contaminants was 2.5 times the SAC, this location is categorized as a hotspot. The hotspot may be sourced from the former bowser (now removed) previously located upgradient of Test Bore 14. Test bore locations are shown on Drawing 2, Appendix A.

Whilst asbestos materials were not observed, or detected in any of the soil samples analysed, asbestos fibres or fragments of asbestos cement sheeting can be invasive and may remain undetected in areas which are not sampled.

Based on site observations and analytical findings, it is considered that the site is suitable for its continued commercial/industrial land use subject to:-

- further assessment incorporating test pitting in the (filled) southern portion of the site (upon clearing of dense vegetation) to verify the nature of the substrate including the presence of asbestos;
- sampling of stockpile materials (upon clearing of dense vegetation); and

- further characterization of the degree and extent of the benzene hotspot at Test Bore 14, followed by removal (if appropriate) and validation by a suitably qualified environmental consultant.

It should be noted that due to site access constraints, the number of sampling locations undertaken does not meet the minimum sampling points for site characterisation. To meet the requirements of the NSW EPA Sampling Design Guidelines (1996) then additional 23 test locations (ie. total of 45 locations) would be required for a site of 3.3 ha.

As the current assessment does not include a hazardous building material inspection, it is recommended that a hazardous building materials inspection be undertaken by an environmental consultant prior to conducting demolition at the site. A concurrent preliminary geotechnical assessment of the site also by DP is reported separately.

## Glossary of Terms

|                                  |                                                                                                                                           |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| As                               | arsenic                                                                                                                                   |
| B(a)P                            | benzo(a)pyrene (a polycyclic aromatic hydrocarbon compound)                                                                               |
| BTEX                             | benzene, toluene, ethyl benzene, total xylenes (monocyclic aromatic hydrocarbons)                                                         |
| Cd                               | cadmium                                                                                                                                   |
| Cr                               | chromium (total)                                                                                                                          |
| Cr(III)                          | chromium with oxidation state III (stable in normal environments)                                                                         |
| Cr(VI)                           | chromium with oxidation state VI (typically not stable in normal environments)                                                            |
| Cu                               | copper                                                                                                                                    |
| C <sub>6</sub> –C <sub>9</sub>   | light hydrocarbon chain groups                                                                                                            |
| C <sub>10</sub> –C <sub>14</sub> | medium hydrocarbon chain groups                                                                                                           |
| C <sub>15</sub> –C <sub>28</sub> | heavy hydrocarbon chain groups                                                                                                            |
| C <sub>29</sub> –C <sub>36</sub> | heavy hydrocarbon chain groups                                                                                                            |
| DEC                              | Department of Environment and Conservation                                                                                                |
| DIPNR                            | Department of Infrastructure, Planning and Natural Resources                                                                              |
| DNR                              | Department of Natural Resources                                                                                                           |
| DP                               | Douglas Partners Pty Ltd                                                                                                                  |
| EPA                              | Environmental Protection Authority                                                                                                        |
| GW                               | groundwater                                                                                                                               |
| ha                               | hectares                                                                                                                                  |
| HIL                              | NSW EPA Contaminated Sites: <i>Guidelines for the NSW Site Auditors Scheme</i> , 1998. Health-based investigation levels (Columns 1 to 4) |
| Hg                               | mercury                                                                                                                                   |
| m                                | metres                                                                                                                                    |
| mg/kg                            | milligrams per kilogram (or parts per million)                                                                                            |
| NATA                             | National Association of Testing Authorities                                                                                               |
| Ni                               | nickel                                                                                                                                    |
| NSW                              | New South Wales                                                                                                                           |
| OCP                              | organochlorine pesticides                                                                                                                 |
| PAH                              | polycyclic aromatic hydrocarbon                                                                                                           |
| Pb                               | lead                                                                                                                                      |
| PCB                              | polychlorinated biphenyls                                                                                                                 |

|       |                                   |
|-------|-----------------------------------|
| PID   | photoionisation detector          |
| TPH   | total petroleum hydrocarbons      |
| TOPIC | total photoionisable compounds    |
| VOC   | Volatile Chlorinated Hydrocarbons |
| Zn    | zinc                              |

## TABLE OF CONTENTS

---

|                                                                | <b>Page</b> |
|----------------------------------------------------------------|-------------|
| 1. INTRODUCTION                                                | 1           |
| 1.1 Background                                                 | 1           |
| 1.2 Previous Investigations                                    | 2           |
| 2. SCOPE OF WORKS                                              | 3           |
| 3. SITE IDENTIFICATION AND HISTORY                             | 4           |
| 3.1 Site Identification                                        | 4           |
| 3.2 Site History                                               | 4           |
| 3.2.1 Historical Title Deeds Search                            | 4           |
| 3.2.2 Council Records                                          | 5           |
| 3.2.3 Aerial Photographs                                       | 5           |
| 3.2.4 Regulatory Notices Search                                | 5           |
| 3.2.5 WorkCover Records                                        | 6           |
| 4. GEOLOGY AND HYDROGEOLOGY                                    | 7           |
| 5. SITE DESCRIPTION                                            | 8           |
| 5.1 Site Observations                                          | 8           |
| 5.2 Proposed Development                                       | 9           |
| 6. POTENTIAL FOR CONTAMINATION                                 | 10          |
| 7. FIELD WORK                                                  | 11          |
| 7.1 Sampling Procedures                                        | 11          |
| 7.1.1 Piezometer Installation and Groundwater Sampling Methods | 11          |
| 7.1.2 Soil Sampling Procedures and Rationale                   | 11          |
| 7.2 Data Quality Objectives                                    | 12          |
| 7.3 Field QA and Quality Control                               | 12          |
| 8. SITE ASSESSMENT CRITERIA                                    | 13          |
| 9. RESULTS                                                     | 13          |
| 9.1 Field Observations                                         | 13          |
| 9.2 Analytical Rationale and Regime                            | 14          |
| 9.3 Field Testing Results                                      | 16          |
| 9.4 Laboratory Results                                         | 16          |

## TABLE OF CONTENTS

---

|                                | <b>Page</b> |
|--------------------------------|-------------|
| 10. DISCUSSION AND CONCLUSIONS | 19          |
| 11. LIMITATIONS OF THIS REPORT | 21          |

APPENDIX A - Site Drawings

APPENDIX B - Site Photographs, Council 149 Certificates, Site History Search  
and Groundwater Bore Information

APPENDIX C - Test Pit, Test Bore Log Results and Notes Relating to this Report

APPENDIX D - Results of Laboratory Tests

APPENDIX E - Quality Assurance/Quality Control Results

PF:jljb  
Project No.43650  
17 February 2006

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**REPORT ON**  
**PRELIMINARY ENVIRONMENTAL SITE ASSESSMENT**  
**COCA-COLA AMATIL**  
**102-128 BRIENS ROAD, NORTHMEAD**

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**1. INTRODUCTION**

**1.1 Background**

This report details the methodology and results of a Preliminary Environmental Site Assessment undertaken by Douglas Partners Pty Ltd (DP) at Coca-Cola Amatil, 102-128 Briens Road, Northmead. The investigation was commissioned by Burns Bridge Services Pty Ltd on behalf of Coca-Cola Amatil.

The (subject) site covers a rectangular area of approximately 3.3 ha and was fully operational at the time of investigation. It is understood that the proposed re-development also involves the demolition of existing buildings and the construction of a new warehouse facility.

The assessment focuses on the proposed re-development areas currently occupied by the finance office, merchandising/equipment services, a car park and an open storage space located at the central eastern portion of the site.

The aims of the preliminary assessment were to:-

- investigate the potential for on-site soil and groundwater contamination; and
- provide a preliminary opinion on the suitability of the site for the proposed commercial re-development.

A concurrent geotechnical assessment of the site was also performed by DP and is reported separately in a report entitled *Report on Preliminary Geotechnical Assessment*, dated February 2006.

## **1.2 Previous Investigations**

Previous environmental assessment was undertaken by Dames and Moore (D & M), in August 1991 as outlined in their report entitled *Environmental Audit of Coca Cola Bottlers Facility, Northmead, NSW*. A desktop and walkover inspection by Dames & Moore indicated two areas of potential concern, namely; soils surrounding the underground diesel tank, and the asbestos bearing fill areas adjacent to Toongabbie Creek and on the vacant property east of the warehouse (ie. open storage space, south of the subject site).

Dames & Moore recommended that the integrity of the tank and associated fittings in relation to leaks be investigated to evaluate if soil and/or groundwater contamination has occurred. The location of the underground diesel tank was not however identified in the Dames & Moore report.

A total of 11 test pits were excavated by D & M within the filled area to evaluate the potential for asbestos and/or other environmental concerns. Eleven soil samples were analysed for arsenic, chromium, and lead as well as asbestos. Subsoil material encountered comprised light brown silty clay and grey white clay filling comprising bricks wood, wire, glass, sand, gravel concrete. Fibre board materials were found in two of the test pits. Depth of filling material ranged from 0.5 m to 2.8 m. Natural material underlying the area of investigation comprised red and grey mottled clays.

All soil samples tested by D & M recorded low concentrations of metals and asbestos was not detected within the soil samples. However, chrysotile asbestos was positively identified in two fibre board samples.

Dames & Moore concluded that the extent of the asbestos bearing fibre cement board was likely to be limited to the eastern and possibly southern portions of the site, but that the volume of the asbestos bearing material on the site was unknown.

## 2. CURRENT SCOPE OF WORKS

The scope of the current Preliminary Environmental Site Assessment by DP was as follows:-

- Review site history information (including title deeds records, aerial photographs, WorkCover Search information, available EPA records and results of groundwater bore searches);
- Drill 20 test bores with a Bobcat mounted drill rig with a solid flight auger attachment on-site to nominal depths of 3 m. Extend three of the test bores to 5.5 m for installation of groundwater piezometers;
- Collection of samples of soil/filling (including QA/QC samples) from the test bores at regular depth intervals of 0.5 m, 1.5 m and at 3.0 m or prior refusal. 10% QA/QC replicate soil samples were collected/analysed;
- Screen all soil samples with a calibrated photoionisation detector (PID) to detect the likely presence of volatile organic compounds;
- Conduct laboratory analysis on 25 selected soil samples at a NATA accredited analytical laboratory for the contaminants of concern:-
  - Heavy metals (As, Cd, Cr, Cu, Pb, Hg, Ni, Zn);
  - Total Petroleum Hydrocarbons (TPH);
  - Monocyclic Aromatic Hydrocarbons (Benzene, Toluene, Ethylbenzene and Xylene – BTEX);
  - Polycyclic Aromatic Hydrocarbons (PAH);
  - Organochlorine Pesticides (OCP);

- Polychlorinated Biphenyls (PCB);
  - Phenols; and
  - Asbestos
- Provision of a Preliminary Environmental Site Assessment Report which summarises the findings of the soil analyses performed on the site, and the suitability of the site for its proposed warehouse development.

### **3. SITE IDENTIFICATION AND HISTORY**

#### **3.1 Site Identification**

The subject site is part of the Coca-Cola Amatil located on 102-128 Briens Road, Northmead. The site is generally rectangular in shape and is bounded by Briens Road to the north and Toongabbie Creek to the south. The subject site is currently identified as Lot 110 in DP 800504 and southeastern part of Lot 111 in DP 800504, in the Parish of St John and County of Cumberland. The subject site covers an approximate area of 3.3 ha. The local government authority is Parramatta City Council.

A site plan and locality map is included as Drawing 1, **Appendix A**.

#### **3.2 Site History**

A site historical information review was conducted, comprising a review of aerial photographs, a historical title deed search by Peter S. Hopley Pty Limited, Legal Searchers for approximately the past 100 years, and a review of available council records.

##### **3.2.1 Historical Title Deeds Search**

According to the title deeds, the subject site was under farmland/rural residential use prior 1968. The site was thereafter occupied by commercial/industrial entities until the present day. The title deed search results for the site are included in **Appendix B**.

### 3.2.2 Council Records

The subject site is located within the Parramatta City Council and is zoned Employment 4. The subject site is not reported to be affected by matters arising under the Contaminated Land Management Act, 1997. The land is however 'affected by a 100 year average recurrence interval flood' and this situation would be taken into consideration in determination of development applications. The Section 149 Planning Certificate is shown at **Appendix B**.

### 3.2.3 Aerial Photographs

The aerial photographs, taken in 1930, show the site to be vacant with rectangular areas of cultivation. Surrounding land appears to be used for similar purposes.

The 1951 aerial photographs show various sheds along the north-western part of the subject site. A roadway runs from north to south. Earthworks activities are apparent in the southern portion of the site (ie. adjacent to Toongabbie Creek).

The 1970 aerial photograph shows a large rectangular building in the north part of the site. A rectangular building, which appears to be a long container/shed, was noted in the centre of the site. The remaining portions of the site were vacant.

A review of the 1991 and 1994 aerial photographs indicated no changes in relation to site layout at the subject site since 1970. Vegetation at the southern boundary of the site was noted to be denser after 1970.

The site layout in the aerial photograph taken in 2002 appears consistent with the current layout of the site. Surrounding land uses in 2002 were generally similar with those observed during the current inspection.

### 3.2.4 Regulatory Notices Search

A search of the NSW EPA website on 18 January 2006 indicates that:

- no licences or notices have been issued for the site under the Protection of the Environment Operations Act, 1997; and

- no notices or orders to investigate or remediate the site are reported to have been issued for the site under the Contaminated Land Management Act, 1997.

### 3.2.5 WorkCover Records

A search for dangerous goods licences with NSW WorkCover was conducted for Coca-Cola Amatil 102-128 Briens Road, Northmead. Search results comprised records of the list of dangerous goods stored throughout the Coca-Cola premises. The majority of the records show various solutions (eg. ethanol, sodium hydroxide, hydrochloric acid etc) stored in the manufacturing areas of the site (ie. 128 Briens Road), and a record summary was provided for 102 Briens Road. WorkCover has not located any records specific to the subject site (ie. the area under investigation). As such, WorkCover search documentation is not attached to this report.

For the purposes of providing background information, WorkCover records revealed that three fuel tanks from the manufacturing part of the site were decommissioned and removed off-site in 1995 and 1996. One 43,000L underground tank (contents unknown) was removed from 102 Briens Road in November 2000. These tank locations were noted to be outside of the area of current investigation.

### 3.2.6 Anecdotal Information

Discussion with site personnel indicated that the northern portion of the site was previously owned by Sara Lee, and the adjacent site to the east was formerly owned by Australian Pharmaceutical Industries (API). A fuel bowser was previously located on the north-western boundary of API (ie. to the east of warehouse and maintenance centre) and has since been removed (see Photo 1 in **Appendix B**).

#### 4. GEOLOGY AND HYDROGEOLOGY

Reference to the Penrith 1:100 000 Geological Series Sheet indicates that the site is underlain by Hawkesbury Sandstone comprising medium to very coarse grained quartz sandstone, minor laminated mudstone and siltstone lenses. The field investigations for the current assessment encountered varying filling material underlain by natural silty sandy clay, generally confirming the geological mapping. Parts of the site were noted to have been filled and levelled with obvious drops in site levels along the Briens Road entrance and the eastern boundary of the subject site, suggesting possible cut and fill operations.

A stormwater drain runs along the western boundary of the subject site. Based on the local topography, the inferred groundwater and stormwater flow is southerly towards Toongabbie Creek. Stormwater runoff would be expected to infiltrate into the soils or be collected at drains located around the site.

The site is not covered by the series of Acid Sulphate Soils Risk Maps issued by the Department of Land and Water Conservation (DLWC, 1997).

A groundwater bore search was requested from the Department of Natural Resources (DNR), previously Department of Infrastructure, Planning and Natural Resources (DIPNR). The search indicated the presence of 10 registered bores within 4.25 km surrounding the site. Work summaries from the bore search indicated that the authorised and intended purposes of the groundwater bores were for domestic, irrigation, recreational, waste disposal, industrial and monitoring purposes.

Free groundwater was not encountered whilst augering. Nevertheless, as part of the field investigations, groundwater piezometers were installed in Test Bores 1, 3 and 7 to depth of 5.5 m to check for slow seepage recovery into the wells. None was observed after a period of two weeks following drilling. Test bore locations are shown on the site plan in **Appendix A** and test bore reports are shown in **Appendix C**.

## 5. SITE DESCRIPTION

### 5.1 Site Observations

The subject site can be segregated into four sections:-

- Northwestern corner - small vacant land fronting Briens Road;
- Northern portion - offices and workshops;
- Centre portion – car parking
- Southern portion – open space storage.

#### North-western Corner

The north-western corner of the subject site is located between Briens Road and the auditorium and training rooms and currently comprises vacant grassland. This part of the site falls south-easterly towards the stormwater pipe running along the eastern fence. Access to this part of the site is through the gate house located near the Coca-Cola administration building.

#### Northern Portion

The majority of the northern portion of the site is sealed with building footprints and concrete pavements/driveways with the exception of garden/landscaped areas along the northern and eastern perimeter of this portion (Photos 2 and 3 in **Appendix B**).

The 1-2 storey brick building fronting Briens Road is occupied by the Finance office. This office is attached to the Merchandising/Equipment Services workshop and Warehouse and Maintenance Centre. The workshop was noted to be sealed with concrete. Asbestos gutters were noted on the exterior of the warehouse and maintenance centre (see Photo 4 in **Appendix B**). The concrete and asphalt pavements were observed to be in good condition.

Numerous containers, a large metal shed and Coca-Cola vending machines are stored at the southern part of this portion of the site. A gas cylinder was noted to be chained to the fence surrounding the vending machine storage area. The cylinder appears to be used for refuelling forklifts (Photo 5, **Appendix B**).

### Centre Portion

The centre portion of the site is covered with bituminous pavement and is used for car parking, with the exception of the eastern and western perimeter of the site which is covered in grass/vegetation (Photos 6 to 8, **Appendix B**). The pavements were observed to be in good condition. No plant stress was noted in the unpaved areas.

### Southern Portion

Southern portion of the site is a flat, fenced open area used for storage of old vending machines, fridges and machine parts. The eastern, southern and western perimeter of this portion of the site is heavily vegetated. The remaining portions of the storage area are unsealed and covered with roadbase gravel. Minor stockpiles were noted within the thick vegetated areas. Minor surface oil stains were observed in the centre part of this portion of the site (Photos 9 and 10, **Appendix B**).

No evidence of aboveground storage tanks (ASTs) or underground storage tanks (USTs), such as dip/fill points or vent pipes, were noted on site. In general, no major signs of environmental concern were noted within the area.

A site location and layout plan is presented in Drawing 1 in **Appendix A**. Drawing 2, **Appendix A** shows the location of test bores drilled on-site.

## **5.2 Proposed Development**

The proposed development will comprise the demolition of the existing buildings and the construction of a new warehouse facility covering the majority of the site. New entrance and driveways will also be constructed in the northern portion of the site (fronting Briens Road). No bulk excavation is anticipated.

### 5.3 Adjacent Site Use

The surrounding land usage is as follows:-

- North – Briens Road, Industrial
- South – Toongabbie Creek;
- East – Coca-Cola warehouse; and,
- West – Coca-Cola manufacturing/bottling plant.

Due to the nature of the activities and former land uses conducted on adjacent areas and the observed topography of the site, it is considered that some potential exists for migration of contamination onto, or under, the subject site.

## 6. POTENTIAL FOR CONTAMINATION

On the basis of the results of the previous investigation by Dames & Moore in 1991, and taking into consideration the site history and DP's own site inspection, the anticipated contaminants of concern were deemed to include:

- heavy metals;
- asbestos;
- TPH;
- BTEX;
- PAH;
- OCPs;
- PCBs; and
- Phenols.

Soil samples were therefore analysed for the targeted range of chemical contaminants.

## 7. FIELD WORK

### 7.1 Sampling Procedures

#### 7.1.1 Piezometer Installation

Piezometers were installed in Test Bores 1, 3 and 7 to depths of 5.5 m. Installation was conducted using a Bobcat mounted drill rig. Following completion of drilling, 50 mm diameter acid washed class 18 PVC casing and machine slotted well screen was installed. The wells were completed with a gravel pack extending to 0.5 m below the depth of sandstone, and a bentonite plug of 1.0 m thickness, and backfilled with drill returns to the surface. The piezometers were extended to 0.5 m above the ground surface. Piezometer construction details are presented in **Appendix C**.

#### 7.1.2 Soil Sampling Procedures and Rationale

Environmental sampling was performed according to standard operating procedures outlined in the *DP Field Procedures Manual*. All sampling data was recorded on DP chain of custody sheets. The general soil sampling procedure comprised:-

- soil samples were collected with disposable gloves from auger returns for all test bores. The gloves were disposed off after each sampling event. This was conducted to minimise the risk of cross contamination;
- transfer of samples into laboratory-prepared glass jars, and capping immediately with teflon lined lids;
- collection of 10% replicate samples for QA/QC purposes;
- labelling of sample containers with individual and unique identification, including project number, sample location and sample depth; and
- placement of the sample jars and replicate sample bags into a cooled, insulated and sealed container for transport to the laboratory.

Envirolab Services, a laboratory certified by the NATA, was employed to conduct the sample analysis. The laboratory is required to carry out routine in-house QC procedures.

## 7.2 Data Quality Objectives

The table below summarises data quality objectives (DQOs) and the procedures designed to enable DQO achievement.

**Table 1 - Quality Assurance/Quality Control Objectives (QA/QC) & Indicators**

| DQO                                              | Data Quality Indicators                                                                                                                                                                             | DQO Achieved |
|--------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| Documentation completeness                       | Completion of field and laboratory chain of custody documentation, completion of record of samples sheets. ( <b>Appendix D</b> )                                                                    | Yes          |
| Data comparability                               | Use of NATA certified laboratory, use of consistent sampling technique. ( <i>Section 7, Appendix D</i> )                                                                                            | Yes          |
| Data representativity                            | Sampling from the test bores at regular depths, or at depths commensurate with identified contamination in order to obtain a representative number of samples from the site. ( <i>Section 9.2</i> ) | Yes          |
| Precision and accuracy for sampling and analysis | Achievement of acceptable relative percentage difference (RPD) for replicate analysis and laboratory QC criteria. ( <b>Appendix D</b> )                                                             | Yes          |

As indicated above, the QA/QC Objectives for sampling and analysis were achieved and the quality of the data satisfactorily meets the objectives of the current assessment.

## 7.3 Field QA and Quality Control

The field QC procedures for sampling as prescribed in Douglas Partners *Field Procedures Manual* were followed at all times during the assessment. Field QC sampling comprised replicate sampling, at a rate of approximately one replicate sample for every ten samples. The comparative results of analysis are summarised in **Appendix D**.

### 7.3.1 Laboratory QA/QC

The analytical laboratory is certified by the National Association of Testing Authorities (NATA) and is required to conduct in-house QA/QC procedures. These are normally incorporated into every analytical run and include reagent blanks, spike recovery, surrogate recovery and duplicate samples. These results are included in the laboratory reports in **Appendix D**.

The results of RPD analysis are shown in **Appendix E**, with the full laboratory reports included in **Appendix D**.

## 8. SITE ASSESSMENT CRITERIA

As the proposed development comprises a new warehouse facility, the relevant assessment criteria include guidelines endorsed by the NSW EPA (currently part of the Department of Environment and Conservation (DEC) as follows:-

- NSW EPA (1998). *Contaminated Sites Guidelines for the NSW Site Auditor Scheme*, Health-Based Investigation Levels for Commercial or Industrial Sites (Column 4 HIL); and
- NSW EPA (1994). *Contaminated Sites Guidelines for Assessing Service Station Sites*, Threshold Concentration for Sensitive Site Land-use in respect to TRH and BTEX (as no other comprehensive health-based criteria are endorsed by DEC).

These guidelines are also consistent with the National Environment Protection Measure (NEPM), *Assessment of Site Contamination, Schedule B(1) Health-Based Investigation Levels D for commercial/industrial sites*. For ease of reference, Column 4 HIL is used throughout this report.

## 9. RESULTS

### 9.1 Field Observations

Details of the sub-surface conditions encountered during the course of the investigation are included in the Test Bore Report Sheets together with notes describing the classification methods and descriptive terms (**Appendix C**).

The conditions encountered in the test bores generally comprised shallow filling at the northern portion of the site with increasing filling depth towards the southern portion. Filling material generally comprised sandy clay, clayey sand filling with ironstone gravel and sandstone fragments.

Concrete fragments and ash were noted within the filling in Test Bore 12. The depth of filling varies from a minimum of 0.1 m in Test Bore 18, to depths in excess of 3.0 m in Test Bores 2 and 5. The natural material underlying the fill sequence comprises silty sandy clay, clayey sand and sandstone.

Strong hydrocarbon odours were noted within the light grey white sand in Test Bore 14 from 2.0 m depth. This coincides with a slightly elevated PID reading of 46 ppm from the same horizon.

Fibre cement sheets/fragments were not observed in drill returns during the current assessment, but were reported in the earlier assessment by D & M.

Free groundwater was not observed during augering or subsequently following piezometer installation. Test bores were given approximately 2 weeks to recharge and remained dry suggesting that the depth to groundwater table is likely to be well in excess of the vertical extent of investigation, (ie over 5.5 m below the surface level).

## **9.2 Analytical Rationale and Regime**

Given the preliminary nature of the current assessment, the Test Bores were placed in a rough grid pattern around the proposed re-development area in order to evaluate the potential for site contamination.

Test Bores 1 to 7 was placed at the southern portion of the site with an attempt to evaluate the potential for chemical and asbestos contamination in this area.

Due to the heavy vegetation at the eastern, southern and western perimeter of the southern portion of the site, soil sampling from the stockpiles (located within the nearby vegetated area) was not undertaken. Test Bores 8 to 20 were placed in the central portion to evaluate potential for contamination due to current and previous site uses.

A total of 3 groundwater piezometers were installed to a depth of 5.5 m at the southern portion of the site with an attempt to intercept groundwater and to evaluate the potential for groundwater contamination. However, no groundwater or seepage was observed, and the bores remained dry for a period of at least two weeks following construction.

Table 2 presents the sampling and analytical rationale and scheme designed based on site observations and previous analytical results.

**Table 2 - Analytical Scheme**

| Sample ID  | Metals | TPH/BTEX | PAH | OCP/PCB | Phenols | Asbestos | VOC |
|------------|--------|----------|-----|---------|---------|----------|-----|
| 1/0.5      | ✓      | ✓        | ✓   | ✓       | ✓       | ✓        | -   |
| 1/3.0      | ✓      | -        | -   | -       | -       | -        | -   |
| 2/0.5      | ✓      | ✓        | ✓   | ✓       | -       | -        | -   |
| 3/0.5      | ✓      | ✓        | ✓   | ✓       | ✓       | ✓        | -   |
| 3/1.5      | ✓      | -        | -   | -       | -       | -        | -   |
| 4/0.5      | ✓      | ✓        | ✓   | ✓       | ✓       | ✓        | -   |
| 5/0.5      | ✓      | -        | -   | -       | -       | ✓        | -   |
| 6/0.5      | ✓      | ✓        | ✓   | ✓       | ✓       | -        | -   |
| 7/0.5      | ✓      | -        | -   | -       | -       | -        | -   |
| 8/0.5      | ✓      | -        | -   | -       | -       | -        | -   |
| 9/0.5      | ✓      | -        | -   | -       | -       | -        | -   |
| 10/0.5     | ✓      | -        | -   | -       | -       | -        | -   |
| 11/0.5     | ✓      | ✓        | ✓   | ✓       | ✓       | ✓        | -   |
| 12/0.5     | ✓      | -        | -   | -       | -       | -        | -   |
| 13/0.5     | ✓      | ✓        | ✓   | ✓       | ✓       | -        | -   |
| 14/0.5     | ✓      | -        | -   | -       | -       | -        | -   |
| 14/3.0     | ✓      | ✓        | ✓   | ✓       | ✓       | -        | ✓   |
| 14/3.7     | ✓      | ✓        | ✓   | ✓       | ✓       | -        | ✓   |
| 15/0.5     | ✓      | ✓        | ✓   | ✓       | ✓       | -        | -   |
| 16/0.5     | ✓      | -        | -   | -       | -       | -        | -   |
| 17/0.5     | ✓      | ✓        | ✓   | ✓       | ✓       | -        | -   |
| 18/0.5     | ✓      | -        | ✓   | -       | -       | -        | -   |
| 19/0.5     | ✓      | ✓        | ✓   | ✓       | ✓       | ✓        | -   |
| 20/0.5     | ✓      | -        | -   | -       | -       | -        | -   |
| BD1/201205 | ✓      | -        | -   | -       | -       | -        | -   |

BD1/201205 Denotes field replicate of sample 1/0.5

It is considered that the current assessment provides an appropriate sampling program for preliminary evaluation of the site condition with respect to soil contamination potential and its likely suitability for its proposed commercial/industrial use. Sampling locations are shown on **Drawing 2 in Appendix A.**

### **9.3 Field Testing Results**

Replicate soil samples collected in plastic bags were allowed to equilibrate under ambient temperatures before screening for Total Photoionisable Compounds (TOPIC) using a calibrated Photoionisation Detector (PID). TOPIC results are shown on Test Bore Reports in **Appendix C.**

Generally the results were < 1 ppm, but PID readings of up to 46 ppm were detected in Test Bore 14 at 3.0 m depth coinciding with hydrocarbon odour observed in white sand at this horizon. This material could represent bedding sand from a former tank pit or fuel line location.

### **9.4 Laboratory Results**

The results of laboratory analysis for inorganic and organic contaminants (see **Appendix D**) in the soil samples are summarised in the Table 3.

**Table 3 – Results of Laboratory Analysis for Soil**  
**(All results in mg/kg unless otherwise stated)**

| Test Bore/Depth | Heavy Metals |     |        |      |      |      |      |       | PAHs  |               | TRH   |             | Benzene | Toluene | Ethyl-Benzene | Xylene | Total PCB | Total OCP <sup>^</sup> | Total Phenols | Asbestos |
|-----------------|--------------|-----|--------|------|------|------|------|-------|-------|---------------|-------|-------------|---------|---------|---------------|--------|-----------|------------------------|---------------|----------|
|                 | As           | Cd  | Cr~    | Cu   | Pb   | Hg   | Ni   | Zn    | B(a)P | Total +ve PAH | C6-C9 | +ve C10-C36 |         |         |               |        |           |                        |               |          |
| 1/0.5           | <4           | <1  | 13     | 8.6  | 14   | <0.1 | 4    | 11    | <0.05 | 0             | <25   | <250        | <1      | <1      | <1            | <3     | <0.9      | <0.1                   | <0.5          | ND       |
| 1/3.0           | 5.8          | <1  | 16     | 11   | 260  | <0.1 | 5    | 24    | -     | -             | -     | -           | -       | -       | -             | -      | -         | -                      | -             | -        |
| 2/0.5           | <4           | <1  | 13     | 22   | 10   | <0.1 | 4    | 18    | -     | -             | -     | -           | -       | -       | -             | -      | -         | -                      | -             | -        |
| 3/0.5           | <4           | <1  | 18     | 15   | 14   | <0.1 | 5    | 23    | <0.05 | 0             | <25   | <250        | <1      | <1      | <1            | <3     | <0.9      | <0.1                   | <0.5          | ND       |
| 3/1.5           | 6.7          | <1  | 12     | 19   | 25   | <0.1 | 4    | 21    | -     | -             | -     | -           | -       | -       | -             | -      | -         | -                      | -             | -        |
| 4/0.5           | <4           | <1  | 14     | 6.1  | 10   | <0.1 | 3    | 12    | <0.05 | 0             | <25   | <250        | <1      | <1      | <1            | <3     | <0.9      | <0.1                   | <0.5          | ND       |
| 5/0.5           | <4           | <1  | 8.3    | 2.4  | 7    | <0.1 | 1    | 7     | -     | -             | -     | -           | -       | -       | -             | -      | -         | -                      | -             | ND       |
| 6/0.5           | <4           | <1  | 12     | 6.1  | 10   | <0.1 | 4    | 14    | <0.05 | 0             | <25   | <250        | <1      | <1      | <1            | <3     | <0.9      | <0.1                   | <0.5          | -        |
| 7/0.5           | <4           | <1  | 12     | 3.8  | 9    | <0.1 | 2    | 15    | -     | -             | -     | -           | -       | -       | -             | -      | -         | -                      | -             | -        |
| 8/0.5           | <4           | <1  | 9.1    | 2.8  | 8    | <0.1 | 1    | 7     | -     | -             | -     | -           | -       | -       | -             | -      | -         | -                      | -             | -        |
| 9/0.5           | <4           | <1  | 10     | 7.9  | 19   | <0.1 | 7    | 39    | -     | -             | -     | -           | -       | -       | -             | -      | -         | -                      | -             | -        |
| 10/0.5          | <4           | <1  | 14     | 6.1  | 13   | <0.1 | 4    | 23    | -     | -             | -     | -           | -       | -       | -             | -      | -         | -                      | -             | -        |
| 11/0.5          | <4           | <1  | 11     | 8.4  | 36   | <0.1 | 3    | 16    | <0.05 | 0             | <25   | <250        | <1      | <1      | <1            | <3     | <0.9      | <0.1                   | <0.5          | ND       |
| 12/0.5          | <4           | <1  | 30     | 52   | 14   | <0.1 | 43   | 41    | -     | -             | -     | -           | -       | -       | -             | -      | -         | -                      | -             | -        |
| 13/0.5          | 7.8          | <1  | 17     | 20   | 23   | <0.1 | 5    | 33    | <0.05 | 0             | <25   | <250        | <1      | <1      | <1            | <3     | <0.9      | <0.1                   | <0.5          | -        |
| 14/0.5          | 5.3          | <1  | 18     | 13   | 34   | <0.1 | 5    | 110   | -     | -             | -     | -           | -       | -       | -             | -      | -         | -                      | -             | -        |
| 14/3.0          | <4           | <1  | 15     | 5.7  | 9    | <0.1 | 2    | 22    | 0.4   | 25.3          | 350   | 240         | <1      | 54      | 99            | 265    | <0.9      | <0.1                   | <0.5          | -        |
| 14/3.7          | <4           | <1  | 5.6    | 1.1  | 3    | <0.1 | <1   | 1     | <0.05 | 0             | 58    | <250        | <1      | 2.2     | 9.5           | 24.5   | <0.9      | <0.1                   | <0.5          | -        |
| 15/0.5          | 13           | <1  | 25     | 16   | 32   | <0.1 | 5    | 25    | <0.05 | 0             | <25   | <250        | <1      | <1      | <1            | <3     | <0.9      | <0.1                   | <0.5          | -        |
| 16/0.5          | <4           | <1  | 16     | 5.1  | 16   | <0.1 | 4    | 5     | -     | -             | -     | -           | -       | -       | -             | -      | -         | -                      | -             | -        |
| 17/0.5          | 4.6          | <1  | 27     | 3.0  | 18   | <0.1 | 4    | 7     | <0.05 | 0             | <25   | <250        | <1      | <1      | <1            | <3     | <0.9      | <0.1                   | <0.5          | -        |
| 18/0.5          | <4           | <1  | 33     | 1.0  | 14   | <0.1 | 8    | 5     | <0.05 | 0             | -     | -           | -       | -       | -             | -      | -         | -                      | -             | -        |
| 19/0.5          | 6.2          | <1  | 21     | 4.2  | 18   | <0.1 | 5    | 20    | <0.05 | 0             | <25   | <250        | <1      | <1      | <1            | <3     | <0.9      | <0.1                   | <0.5          | ND       |
| 20/0.5          | <4           | <1  | 5.5    | 1.1  | 8    | <0.1 | 1    | 4     | -     | -             | -     | -           | -       | -       | -             | -      | -         | -                      | -             | -        |
| BD1/201205      | <4           | <1  | 8.4    | 3.5  | 10   | <0.1 | 3    | 7     | -     | -             | -     | -           | -       | -       | -             | -      | -         | -                      | -             | -        |
| SAC             | 500          | 100 | 600000 | 5000 | 1500 | 75   | 3000 | 35000 | 5     | 100           | 65    | 1000        | 1       | 1.4     | 3.1           | 14     | 50        | 50/250/1000/50         | 42500         | NAG      |

**Notes:**

- ~ All Chromium are assumed to exist in the stable Cr(III) oxidation state, as Cr(VI) will be too reactive and unstable under the normal environment.  
 ^ Denotes Aldrin+Dieldrin/Chlordane/DDD+DDE+DDT/Heptachlor

|             |                                                                                                                                                          |
|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| BD1/201205  | Denotes field replicate of sample 1/0.5                                                                                                                  |
| -           | Not Tested                                                                                                                                               |
| ND          | No asbestos detected                                                                                                                                     |
| NAG         | No asbestos present in soil on the ground surface (Correspondence from NSW EPA Director of Contaminated Sites to Accredited Site Auditors)               |
| SAC         | Site Assessment Criteria adopted from Guidelines 1 and 2 below.                                                                                          |
| Guideline 1 | NSW EPA Contaminated Sites: <i>Guidelines for the NSW Site Auditor Scheme</i> (1998). Health-Based Investigation Levels for commercial/industrial sites; |
| Guideline 2 | NSW EPA (1994) Contaminated Sites. <i>Guidelines for Assessing Service Station Sites</i>                                                                 |
| <b>BOLD</b> | Exceedance with respect to SAC                                                                                                                           |
| <b>BOLD</b> | Contaminant concentration is 2.5 times SAC                                                                                                               |

## 10. DISCUSSION AND CONCLUSIONS

The analytical results presented in Table 3 indicated that majority of the samples recorded contaminant concentrations were within the adopted site assessment criteria for commercial/industrial sites with the exception of the following exceedances associated with organic contaminants noted in:-

- DP Test Bore 14 at 3.0 m [C6-C9 TPH (350 mg/kg), Toluene (54 mg/kg), Ethyl-benzene (99 mg/kg) and Xylene (265 mg/kg)]; and
- DP Test Bore 14 at 3.7 m [Toluene (2.2 mg/kg), Ethyl-benzene (9.5 mg/kg) and Xylene (24.5 mg/kg)].

Detectable concentrations of VOCs (mainly benzene compounds) were also noted in samples from Test Bores 14/3.0 and 14/3.7 depth, coinciding with hydrocarbon odours at slightly elevated PID readings of 46 ppm.

As the concentrations of TPH C6-C9, Toluene, Ethyl-benzene and Xylene at this location are in excess of 2.5 times of the adopted site assessment criteria, this location is categorised as a 'hotspot'.

Discussions with site personnel indicated that a former bowser was located upgradient on the adjacent site with respect to Test Bore 14 and as the hydrocarbon odour was also noted from 2.0 m depth, it is likely that the contaminants were sourced from the former bowser or related UST.

Reported levels of the heavy metals arsenic, chromium, lead and asbestos contaminants in soils from the current round of assessment were similar to levels reported in the previous assessment by D & M. However, fibro cement sheets/fragments were not observed during the current investigation.

Whilst asbestos materials were not observed and detected in any of the soil samples analysed by DP, asbestos fibres or fragments of asbestos cement sheeting can be introduced or be

variably distributed in filling and may remain undetected in areas which are not sampled. Furthermore, as no records are available to demonstrate that the previously identified asbestos cement materials were removed/remediated between 1991 and the current assessment, it is considered that the potential for asbestos contamination still remains (particularly in the southern portion of the site).

Based on site observations and analytical findings, it is considered that the site is suitable for its continued commercial/industrial land use subject to:-

- further assessment incorporating test pitting at the southern portion of the site (upon clearing of dense vegetation) to verify the nature of the filling and in particular any asbestos content;
- sampling and assessment of stockpile materials (upon clearing of dense vegetation); and
- further assessment and characterization of the degree and extent of benzene (and hydro carbon hotspot around Test Bore 14, followed by removal (if appropriate) and validation by a suitably qualified environmental consultant.

It should be noted that due to site access constraints, the number of sampling locations undertaken does not meet the minimum sampling points required to meet the requirements of the NSW EPA Sampling Design Guidelines (1996) for a site of 3.3 ha, which would involve testing at a further 23 locations.

As the current assessment does not include a hazardous building material inspection, it is recommended that a hazardous building materials inspection be undertaken by an environmental consultant prior to conducting demolition at the site. The inspection should identify areas of potential concern and would form the basis of a hazardous material register such that appropriate procedures will be put in place to ensure that demolition works would be undertaken in a manner where materials would protect the site users to exposure as well as not contaminating the ground at and surrounding the site.

## 11. LIMITATIONS OF THIS REPORT

The scope of the site assessment activities and consulting services undertaken by DP were limited to those detailed in our proposal dated 28 November 2005 and accepted by Burns Bridge Services Pty Limited on behalf of Coca-Cola Amatil Pty Ltd.

DP's assessment is necessarily based upon the result of a limited site investigation and the restricted program of surface and subsurface sampling, screening and laboratory testing which was set out in the proposal. DP cannot provide unqualified warranties nor assumes any liability for site conditions not observed, or accessible, during the time of the investigations.

Despite all reasonable care and diligence, the ground conditions encountered and concentrations of contaminants measured may not be representative of conditions between the locations sampled and investigated. In addition, site characteristics may change at any time in response to variations in natural conditions, chemical reactions and other events, e.g. groundwater movement and or spillages of contaminating substances. These changes may occur subsequent to DP's investigations and assessment.

This report, its associated documentation and the information herein have been prepared solely for the use of Coca-Cola Amatil Pty Ltd. Any reliance assumed by third parties on this report shall be at such parties' own risk. Any ensuing liability resulting from use of the report by third parties cannot be transferred to DP.

**DOUGLAS PARTNERS PTY LTD**

Reviewed by:

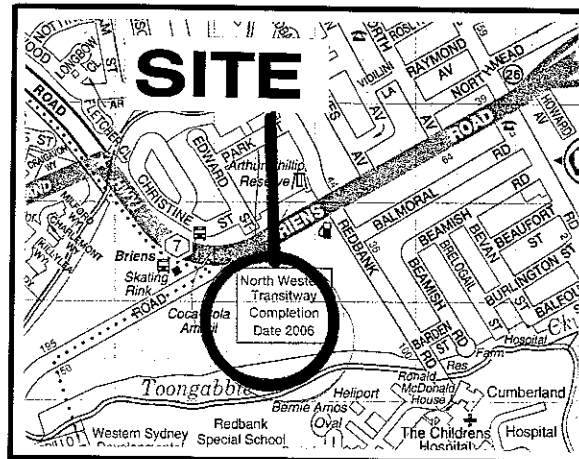
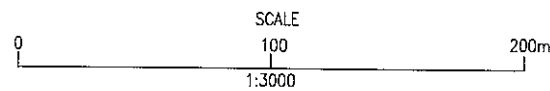
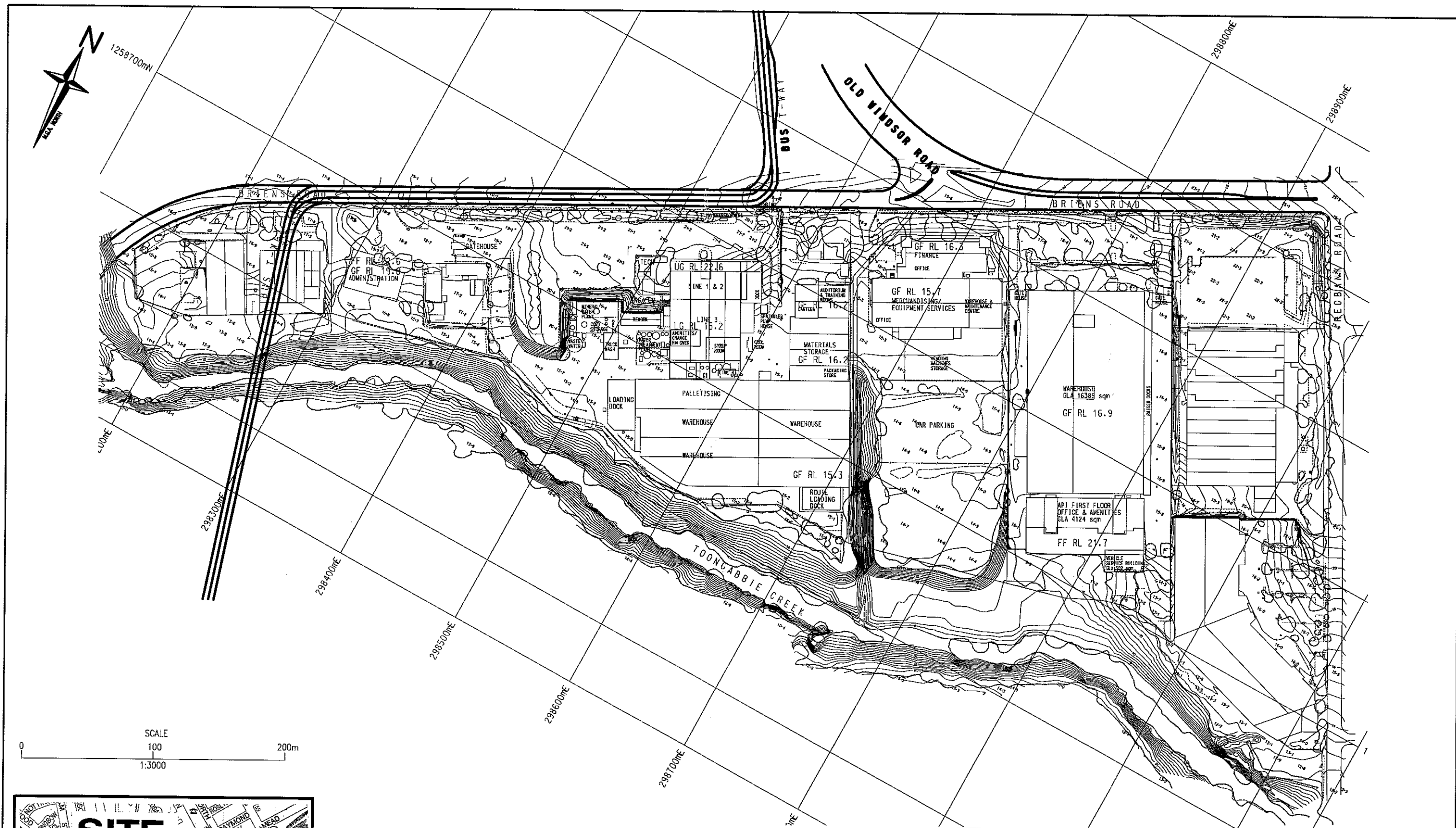
**Polo Foo**  
Environmental Engineer

**J M Nash**  
Principal

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***APPENDIX A***  
***Site Drawings***

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LOCALITY PLAN

Base plan sourced from Coca-Cola Amatil  
"Existing Site" dated 1/4/2005, Dwg No.114415:SK7010 E



**Douglas Partners**  
Geotechnics, Environment, Groundwater

Sydney, Newcastle, Brisbane,  
Melbourne, Perth, Wyong,  
Campbelltown, Townsville  
Cairns, Wollongong, Darwin

TITLE: **Site Plan**  
**Geotechnical & Environmental Site Assessment**  
**102-128 Briens Road**  
**NORTHMEAD**

CLIENT: Coca-Cola Amatil

DRAWN BY: PSCH SCALE: As shown

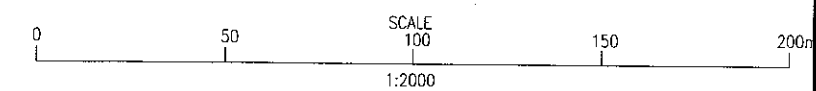
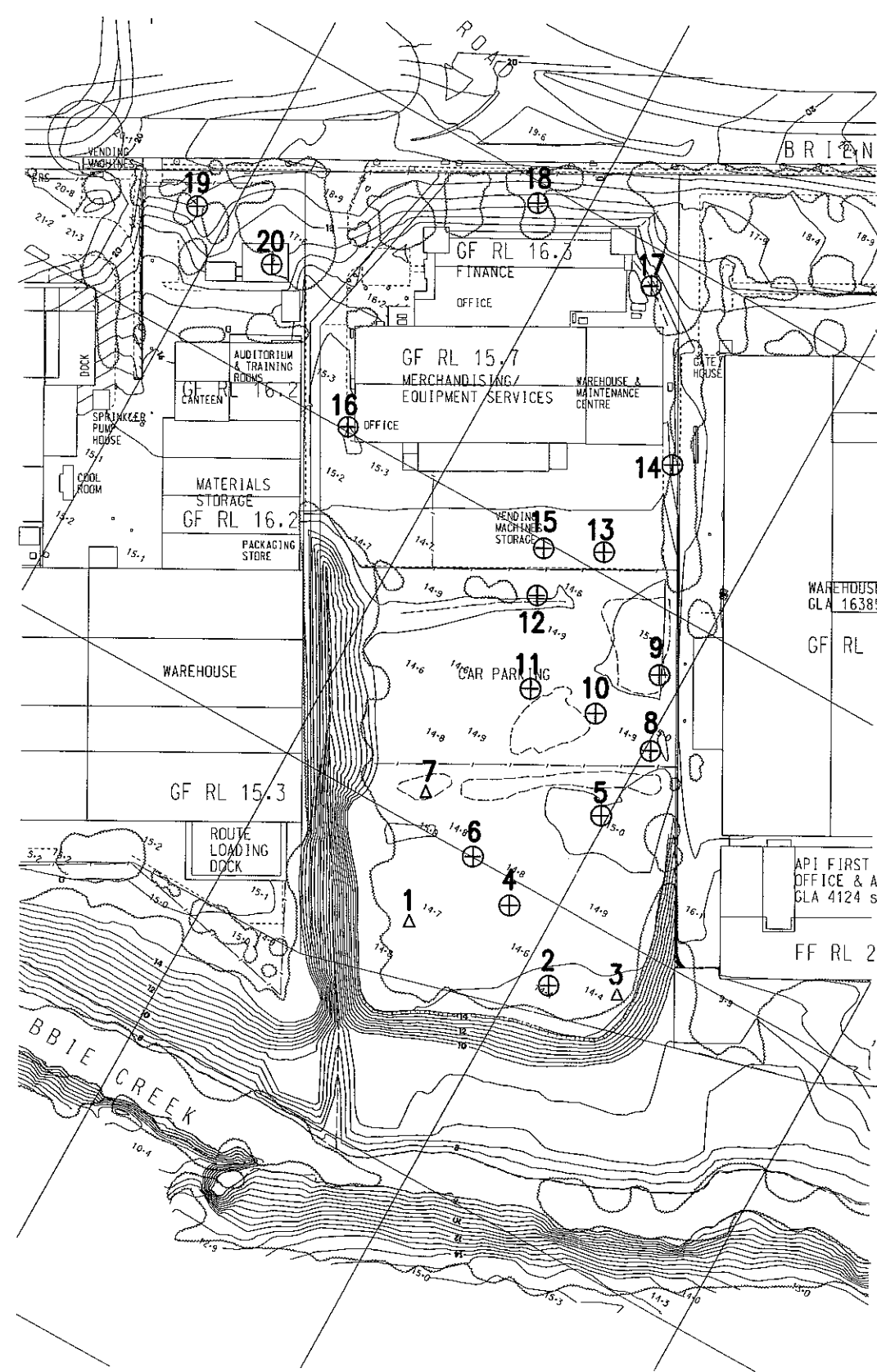
APPROVED BY: *PP*

PROJECT No: 43650

DATE: 17.1.2006

OFFICE: SYDNEY

DRAWING No: 1



**LEGEND**

- ⊕ TEST BORE LOCATION
- △ DYNAMIC CONE PENETROMETER TEST LOCATION

Base plan sourced from Coca-Cola Amatil  
"Existing Site" dated 1/4/2005, Dwg No.114415:SK7010 E

|                                                                                                                             |                 |                                       |                |                                                                                                                    |
|-----------------------------------------------------------------------------------------------------------------------------|-----------------|---------------------------------------|----------------|--------------------------------------------------------------------------------------------------------------------|
|                                        |                 | <b>Douglas Partners</b>               |                | Sydney, Newcastle, Brisbane,<br>Melbourne, Perth, Wyong,<br>Campbelltown, Townsville<br>Cairns, Wollongong, Darwin |
|                                                                                                                             |                 | Geotechnics, Environment, Groundwater |                |                                                                                                                    |
| <b>TITLE:</b><br>Location of Test Bores<br>Geotechnical & Environmental Site Assessment<br>102-128 Briens Road<br>NORTHMEAD |                 |                                       |                |                                                                                                                    |
| CLIENT: Coca-Cola Amatil                                                                                                    |                 |                                       |                |                                                                                                                    |
| DRAWN BY: PSCH                                                                                                              | SCALE: As shown | PROJECT No: 43650                     | OFFICE: SYDNEY |                                                                                                                    |
| APPROVED BY:                           | DATE: 17.1.2006 | DRAWING No: 2                         |                |                                                                                                                    |

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***APPENDIX B***  
***Site Photographs***  
***Council 149 Certificate***  
***Site History Search***  
***Groundwater Bore Information***

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Photo 1: View towards eastern boundary of site



Photo 2: View towards southwest from northeastern corner of site

|                                                                                                                      |                                |                               |                          |
|----------------------------------------------------------------------------------------------------------------------|--------------------------------|-------------------------------|--------------------------|
| <b>Preliminary Environmental Site Assessment</b><br><b>Coca-Cola Amatil, 102-128 Briens Road</b><br><b>Northmead</b> | <b>Project</b><br><b>43650</b> | <b>January</b><br><b>2006</b> | <b>Plate</b><br><b>1</b> |
|----------------------------------------------------------------------------------------------------------------------|--------------------------------|-------------------------------|--------------------------|



Photo 3: View towards the northeastern corner



Photo 4: Panoramic view towards the west. Shows workshop and vending machine storage areas



Photo 5: View towards the south, gas cylinder within the vending machine storage area

|                                                                                                                      |                                |                               |                          |
|----------------------------------------------------------------------------------------------------------------------|--------------------------------|-------------------------------|--------------------------|
| <b>Preliminary Environmental Site Assessment</b><br><b>Coca-Cola Amatil, 102-128 Briens Road</b><br><b>Northmead</b> | <b>Project</b><br><b>43650</b> | <b>January</b><br><b>2006</b> | <b>Plate</b><br><b>2</b> |
|----------------------------------------------------------------------------------------------------------------------|--------------------------------|-------------------------------|--------------------------|



Photo 6: View along eastern boundary



Photo 7: Panoramic view along eastern and southern part of car park



Photo 8: View towards the north of car park

|                                                                                                                      |                                |                               |                          |
|----------------------------------------------------------------------------------------------------------------------|--------------------------------|-------------------------------|--------------------------|
| <b>Preliminary Environmental Site Assessment</b><br><b>Coca-Cola Amatil, 102-128 Briens Road</b><br><b>Northmead</b> | <b>Project</b><br><b>43650</b> | <b>January</b><br><b>2006</b> | <b>Plate</b><br><b>3</b> |
|----------------------------------------------------------------------------------------------------------------------|--------------------------------|-------------------------------|--------------------------|

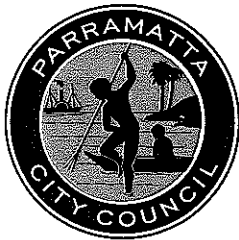


Photo 9: View towards the northwest of open strage area (from southeastern corner)



Photo 10: Panoramic view towards the southeastern corner of the site

|                                                                                                 |                  |                 |            |
|-------------------------------------------------------------------------------------------------|------------------|-----------------|------------|
| Preliminary Environmental Site Assessment<br>Coca-Cola Amatil, 102-128 Briens Road<br>Northmead | Project<br>43650 | January<br>2006 | Plate<br>4 |
|-------------------------------------------------------------------------------------------------|------------------|-----------------|------------|



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2 DEC 2005

## PLANNING CERTIFICATE

### CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979 as amended 1998

**Certificate No:** 2005/4323  
**Fee:** \$100.00  
**Issue Date:** 19 December 2005  
**Receipt No:** 2193371  
**Applicants Ref:** 1900/2080/43650

### APPLICANT

Douglas Partners Pty Ltd  
C/- Ms Polo Foo  
96 Hermitage Road  
WEST RYDE NSW 2114

### DESCRIPTION OF LAND

**Address:** 102-128 Briens Road  
NORTHMEAD NSW 2152  
**Lot Details:** Lot 21 DP 632950 and Lots 110 & 111 DP 800504

### SECTION A

The following Environmental planning instrument to which this certificate relates applies to the land:

**Parramatta Local Environmental Plan 2001 (as amended).**

**Sydney Regional Environmental Plan No.28 – Parramatta (as amended).**

**The land being:**  
Employment 4

The purpose for which development may be carried out with or without development consent or is prohibited in this zone are set out in the table contained in Annexure 'A' to this certificate.

Printed Date: 19 December 2005

**SECTION B**

For the purpose of **Section 149(2)** it is advised that as the date of this certificate the abovementioned land is affected by the matters referred to as follows:

The land is affected by State Environmental Planning Policies and Regional Environmental Plans as detailed in Annexure "B1".

The land is affected by Draft State Environmental Plans in respect of information as detailed in Annexure "B2". This information is provided only to the extent that the Council has been notified by Department of Planning.

Is **AFFECTED** by a Draft Environmental Plan which has been placed on Public Exhibition but has not yet been prescribed –

**DRAFT – Parramatta Local Environmental Plan 2001 (Draft Amendment)**  
(DCP Review 2005).

**DRAFT – Parramatta Local Environmental Plan 2001 Amendment No.3.**

The land **IS AFFECTED** by Parramatta Development Control Plan 2005.

The Parramatta Comprehensive Section 94 Contributions Plan (effective 1 July 2002) applies to this land.

The land is affected by exempt development provisions. (Parramatta Local Environmental Plan 2001, Clause 17).

The land is affected by complying development provisions. (Parramatta Local Environmental Plan 2001 Clause 18).

A person may excavate or fill land with the consent of Council. (Parramatta Local Environmental Plan 2001 Clause 23).

A master plan **IS REQUIRED** for development of land exceeding 5000 sqm and listed in schedule 4. (Parramatta Local Environmental Plan 2001 Clause 30).

The land is not affected by Section 38 or 39 of the Coastal Protection Act 1979.

The land **IS NOT AFFECTED** by road widening or road realignment under:

- (1) Roads Act, 1993.
- (2) Any Environmental Planning Instrument.
- (3) Any Resolution of Council.

The Parramatta Local Environmental Plan 2001 clause 12 provides for acquisition of certain lands by public authorities.



The land is not affected by Section 15 of the Mine Subsidence Compensation Act 1961 proclaiming land to be a Mine Subsidence District.

The land IS NOT in a conservation area.

An item of environmental heritage IS NOT situated on the land.

The land IS NOT bushfire prone land.

The land IS NOT AFFECTED by any of the matters contained in Clause 59(2) of the Contaminated Land Management Act 1997.

The land IS AFFECTED by a Tree Preservation Order.

The Director General with responsibility for the Threatened Species Conservation Act 1995 has not advised Council that the land includes or comprises a critical habitat.

Council has adopted a policy covering the entire City of Parramatta to restrict development of any land by reason of the likelihood of flooding.

Council HAS NOT adopted a policy to restrict the development of the land by reason of the likelihood of land slip, tidal inundation, subsidence or any other risk.

### **SPECIAL NOTES**

Large areas of the local government area of Parramatta have the potential to be affected by acid sulfate soils which become problematic if exposed during excavation or similar activities. The Department of Planning has maps which indicated the potential occurrences of acid-sulfate soils. Prior to undertaking work which involves substantial soil disturbance, you should ascertain the possibility of acid-sulfate soils existing on your property. Enquiries should be made to the Department of Planning.

Applicants for Sections 149 Certificates are advised that Council does not hold sufficient information to fully detail the effect of any encumbrances on the title of the subject land. Further information should be sought from relevant Statutory Departments.

### **SECTION C**

#### **The following additional information is issued under Section 149(5)**

Pursuant to S149(5) the Council supplies information as set out below on the basis that the Council takes no responsibility for the accuracy of the information. The information if material should be independently checked by the applicant.



Aboriginal Heritage – low sensitivity – limited potential to contain items of Aboriginal heritage. Contact Council's Customer Service/Duty Planner (02) 9806 5000 for more information.

The land is affected by a 100 year Average Recurrence Interval flood as indicated by Council's current flooding information. As such Council is required to take that into account when determining any development application made in respect of the land.

Further information is available at the Design Services Section within Council's Technical Services Unit.

Additional advice should be also sought from an appropriately qualified person as to the extents and potential hazards associated with the likely flooding of the land. The names of qualified persons maybe obtained from the Institution of Engineers Australia.



## **ANNEXURE 'A'**

Issued pursuant to Section 149 of the Environmental Planning and Assessment Act, 1979.

**NOTE:** This table is an excerpt from LEP 2001, and must be read in conjunction with and subject to the other provisions of that instrument, and the other Environmental Planning Instruments specified in the Certificate and in force at that date.

### **EMPLOYMENT 4 ZONE**

#### **1. Objectives of the Employment 4 Zone**

- (a) to encourage a range of employment enterprises that are compatible with existing land uses within both this zone and surrounding areas, and
- (b) to limit the extent of commercial development in the employment zone so as to ensure the viability of nearby business centres, and
- (c) to retain the predominant role of the City of Parramatta's industrial areas, and
- (d) to facilitate a range of non-industrial land uses that serve the needs of workers and visitors to land within this zone, and
- (e) to enable limited development for commercial premises to enhance viability of land uses within the zone, and
- (f) to encourage high technology and contemporary industrial development opportunities in Rydalmere and Camellia, recognising the size, centrality and transportation linkages of land holdings in this area in accordance with *Sydney Regional Environmental Plan No. 28 – Parramatta*, and
- (g) to ensure that development improves the environmental quality of the City of Parramatta and that industries conform to best practice, environmental and hazard reduction standards, and
- (h) to ensure that development is carried out in a manner which does not detract from the amenity enjoyed by residents in adjoining localities or from the operation of local or regional road systems.

#### **2. Development within the Employment 4 zone**

- (a) Within the Employment 4 zone, development for the purpose of exempt development may be carried out without development consent.
- (b) Within the Employment 4 zone, development for the purpose of the following may be carried out, but only with development consent:

Advertising structures, animal establishments, brothels, car parking spaces, car parking stations, car repair stations, centre based child care centres (which serve the needs of the workforce), commercial premises (which are ancillary to a purpose permissible on the land or which serve the needs of the workforce), depots, drainage, equipment hire centres, high technology industries, home based child care services, hotels, light industries, liquid fuel depots, local shops, materials recycling depots, medical centres, panel beating workshops, places of public worship, portable recycling facilities, public buildings, public transport facilities, public utility installations (other than gas holders and generating works), recreation areas, recreation facilities, remote distribution centres, resource recovery facilities, restaurants, restricted premises, roads, road transport terminals, service stations, telecommunications facilities, transfer stations, vehicle rental centres, veterinary establishments, warehouse or distribution centres, waste facilities, waste processing facilities, Demolition, Subdivision

- (c) Any other development is prohibited within the Employment 4 zone.

**ANNEXURE "B1"**

issued pursuant to Section 149 of the Environmental Planning and Assessment Act 1979.

Note: The following information is supplied in respect of Section 149 and embodies the requirements of Department of Planning Circular No. A2 dated 17 March 1989 and the Ministerial Notification dated 15 December 1986.

- STATE ENVIRONMENTAL PLANNING POLICY NO.1 - Development Standards
- STATE ENVIRONMENTAL PLANNING POLICY NO.4 - Development without Consent and  
Miscellaneous Complying Development
- STATE ENVIRONMENTAL PLANNING POLICY NO.6 - Number of Storeys in a Building
- STATE ENVIRONMENTAL PLANNING POLICY NO.8 - Surplus Public Land
- STATE ENVIRONMENTAL PLANNING POLICY NO.9 - Group Homes
- STATE ENVIRONMENTAL PLANNING POLICY NO.10 - Retention of Low Cost Rental  
Accommodation
- STATE ENVIRONMENTAL PLANNING POLICY NO.11 - Traffic Generating Developments
- STATE ENVIRONMENTAL PLANNING POLICY NO.16 - Tertiary Institutions
- STATE ENVIRONMENTAL PLANNING POLICY NO.19 - Bushland in Urban Areas
- STATE ENVIRONMENTAL PLANNING POLICY NO.21 - Caravan Parks
- STATE ENVIRONMENTAL PLANNING POLICY NO.22 - Shops and Commercial Premises
- STATE ENVIRONMENTAL PLANNING POLICY NO.32 - Urban Consolidation (Redevelopment  
of Urban Land)
- STATE ENVIRONMENTAL PLANNING POLICY NO.33 - Hazardous and Offensive Development
- STATE ENVIRONMENTAL PLANNING POLICY NO.35 - Maintenance Dredging of Tidal  
Waterways
- STATE ENVIRONMENTAL PLANNING POLICY NO.37 - Continued Mines and Extractive  
Industries
- STATE ENVIRONMENTAL PLANNING POLICY NO.48 - Major Putrescible Landfill Sites
- STATE ENVIRONMENTAL PLANNING POLICY NO.55 - Remediation of Land
- STATE ENVIRONMENTAL PLANNING POLICY NO.56 - Sydney Harbour Foreshores and  
Tributaries
- STATE ENVIRONMENTAL PLANNING POLICY NO.60 - Exempt and Complying Development
- STATE ENVIRONMENTAL PLANNING POLICY NO.63 - Major Transport Projects
- STATE ENVIRONMENTAL PLANNING POLICY NO.64 - Advertising and Signage
- STATE ENVIRONMENTAL PLANNING POLICY NO.65 - Design Quality of Residential  
Flat Development.
- STATE ENVIRONMENTAL PLANNING POLICY NO.70 - Affordable Housing (Revised  
Schemes)



STATE ENVIRONMENTAL PLANNING POLICY – Seniors Living 2004

STATE ENVIRONMENTAL PLANNING POLICY – (Building Sustainability Index: BASIX) 2004

STATE ENVIRONMENTAL PLANNING POLICY – (State Significant Development) 2005

SYDNEY REGIONAL ENVIRONMENTAL PLAN NO.7 - Multi-Unit Housing Surplus  
Government Sites

SYDNEY REGIONAL ENVIRONMENTAL PLAN NO.9 (No.2) - Extractive Industries

SYDNEY REGIONAL ENVIRONMENTAL PLAN NO.18 – Public Transport Corridors

SYDNEY REGIONAL ENVIRONMENTAL PLAN NO.22 - Parramatta River

SYDNEY REGIONAL ENVIRONMENTAL PLAN NO.24 - Homebush Bay Area

SYDNEY REGIONAL ENVIRONMENTAL PLAN NO.28 - Parramatta

**ANNEXURE "B2"**

issued pursuant to Section 149 of the Environmental Planning and Assessment Act 1979.

The following information is supplied in respect of Section 149 and embodies the requirements of Department of Environment and Planning Circular No.120 dated 6 January 1987 and the Ministerial Notification dated 15 December 1986;

**DRAFT STATE ENVIRONMENTAL PLANNING POLICY**  
**Subdivision**

This draft policy helps to complete the transfer of subdivision control to the planning system. It defines the subdivision and introduces the requirement that consent be obtained for

"subdivision where not covered by an existing environmental planning instrument":  
and  
"subdivision works".

**DRAFT STATE ENVIRONMENTAL PLANNING POLICY NO. 66**  
**Integration of Land Use and Transport**

This draft policy aims to better integrate land use and transport planning at the local level by putting in place provisions to guide the preparation of draft local environmental plans, the adoption of development control plans and master plans and the consideration of development applications.

N.B. All enquiries as to the application of Draft, State and Regional Environmental Planning Policies should be directed to The Department of Planning – 23-33 Bridge Street Sydney NSW 2000.

John Neish

General Manager per  Date 19 December 2005

ACN: 093 398 611  
ABN: 61 093 412 474

**Peter S. Hopley Pty Limited**  
**Legal Searchers**

1 Boronia Avenue  
Mount Annan , NSW , 2567  
Mobile: 0412 199 304  
Fax 9233 4590 (Attn Box 29)

**SUMMARY AS TO OWNERS.**

**Property: 102-128 Briens Road, Northmead**

**Description: - Lot 21 D.P. 632950 also Lots 110 & 111 D.P. 800504**

**As regards Lot 21 D.P. 632950**

|            |                                                                                                                                                                                                                      |                  |
|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| 28.02.1922 | Bernard Koen ( <i>Farmer</i> )                                                                                                                                                                                       | Vol 3286 Fol 170 |
| 28.06.1922 | Johanna Koen ( <i>Widow</i> )<br>( <i>We have not investigated the Transmission Application</i> )                                                                                                                    | Vol 3286 Fol 170 |
| 02.01.1940 | Raymond Michael Bowcock ( <i>Builder</i> )                                                                                                                                                                           | Vol 9418 Fol 30  |
| 22.04.1968 | James Bowcock ( <i>Company Director</i> )<br>Roger Benjamin Box ( <i>Company Director</i> )<br>Denis Bernard Moloney ( <i>Company Director</i> )<br>( <i>We have not investigated the Transmission Application</i> ) | Vol 9418 Fol 30  |
| 17.09.1969 | Artcraft Printing Company Pty Limited                                                                                                                                                                                | Vol 9418 Fol 30  |
| 10.04.1981 | Property Estates Pty Limited                                                                                                                                                                                         | Vol 9418 Fol 30  |
| 25.02.1981 | Australian Pharmaceutical Industries Limited                                                                                                                                                                         | 21/632950        |
| 13.04.1999 | # Coca-Cola Amatil (Aust) Pty Limited                                                                                                                                                                                | 21/632950        |

**# Current Registered Proprietor**

ACN: 093 398 611  
ABN: 61 093 412 474

**Peter S. Hopley Pty Limited**  
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**As regards Lot 110 D.P. 800504**

|              |                                                                                                                                                                                                                      |                  |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| 27.03.1926 ? | Margaret Ellen Brien ( <i>Widow</i> )                                                                                                                                                                                | Vol 3846 Fol 106 |
| 05.03.1926   | William Thomas Startin ( <i>Farmer</i> )                                                                                                                                                                             | Vol 3846 Fol 106 |
| 19.05.1926   | George Angus David Campbell ( <i>Builder</i> )                                                                                                                                                                       | Vol 3846 Fol 106 |
| 05.06.1930   | Raymond Michael Bowcock ( <i>Builder</i> )                                                                                                                                                                           | Vol 3846 Fol 106 |
| 22.04.1968   | James Bowcock ( <i>Company Director</i> )<br>Roger Benjamin Box ( <i>Company Director</i> )<br>Denis Bernard Moloney ( <i>Company Director</i> )<br>( <i>We have not investigated the Transmission Application</i> ) | Vol 3846 Fol 106 |
| 24.09.1969   | Playtex Pty Limited                                                                                                                                                                                                  | 110/800504       |
| 26.10.1993   | Sara Lee Personal Products (Australia) Pty Limited                                                                                                                                                                   | 110/800504       |
| 28.04.1999   | # Coca-Cola Amatil (Aust) Pty Limited                                                                                                                                                                                | 110/800504       |

**# Current Registered Proprietor**

**As regards Lot 111 D.P. 800504**

**As to that part highlighted light green on D.P. 800504**

|              |                                       |                  |
|--------------|---------------------------------------|------------------|
| 27.03.1926 ? | Margaret Ellen Brien ( <i>Widow</i> ) | Vol 3846 Fol 106 |
|--------------|---------------------------------------|------------------|

ACN: 093 398 611  
ABN: 61 093 412 474

**Peter S. Hopley Pty Limited**  
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1 Boronia Avenue  
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Mobile: 0412 199 304  
Fax 9233 4590 (Attn Box 29)

|            |                                                                                                                                                                                                                      |                  |
|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| 05.03.1926 | William Thomas Startin ( <i>Farmer</i> )                                                                                                                                                                             | Vol 3846 Fol 106 |
| 19.05.1926 | George Angus David Campbell ( <i>Builder</i> )                                                                                                                                                                       | Vol 3846 Fol 106 |
| 05.06.1930 | Raymond Michael Bowcock ( <i>Builder</i> )                                                                                                                                                                           | Vol 3846 Fol 106 |
| 22.04.1968 | James Bowcock ( <i>Company Director</i> )<br>Roger Benjamin Box ( <i>Company Director</i> )<br>Denis Bernard Moloney ( <i>Company Director</i> )<br>( <i>We have not investigated the Transmission Application</i> ) | Vol 3846 Fol 106 |
| 24.09.1969 | Playtex Pty Limited                                                                                                                                                                                                  | 111/800504       |
| 23.03.1990 | Beverage Bottlers (N.S.W.) Pty Limited                                                                                                                                                                               | 111/800504       |
| 03.02.2000 | # Coca-Cola Amatil (Aust) Pty Limited                                                                                                                                                                                | 111/800504       |

**# Current Registered Proprietor**

As to that part highlighted orange on D.P. 800504

|            |                                                                                                      |                  |
|------------|------------------------------------------------------------------------------------------------------|------------------|
| 04.08.1915 | Edward Beedell ( <i>Orchardist</i> )                                                                 | Vol 24 Fol 71    |
| 21.12.1949 | Albert Beedell ( <i>Farmer</i> )<br>( <i>We have not investigated the Transmission Application</i> ) | Vol 24 Fol 71    |
| 01.05.1950 | Alice Beedell ( <i>Widow</i> )                                                                       | Vol 24 Fol 71    |
| 01.05.1950 | Percy Roy Beedell ( <i>Gentleman</i> )                                                               | Vol 6351 Fol 195 |
| 24.05.1954 | John Clifford Lee ( <i>Estate Agent</i> )                                                            | Vol 6351 Fol 195 |
| 03.04.1962 | Fler Company and Staff (N.S.W.) Pty Limited                                                          | Vol 9594 Fol 236 |

ACN: 093 398 611  
ABN: 61 093 412 474

**Peter S. Hopley Pty Limited**  
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|            |                                        |                  |
|------------|----------------------------------------|------------------|
| 31.05.1972 | Gerrard Company of Australasia Limited | Vol 9594 Fol 236 |
| 20.05.1981 | Local Government Superannuation Board  | Vol 9594 Fol 236 |
| 06.05.1987 | Southern Cross Beverages Pty Limited   | 111/800504       |
| 23.03.1990 | Beverage Bottlers (N.S.W.) Pty Limited | 111/800504       |
| 03.02.2000 | # Coca-Cola Amatil (Aust) Pty Limited  | 111/800504       |

**# Current Registered Proprietor**

As to that part highlighted dark green on D.P. 800504

|            |                                                                                                      |                   |
|------------|------------------------------------------------------------------------------------------------------|-------------------|
| 04.08.1915 | Edward Beedell ( <i>Orchardist</i> )                                                                 | Vol 24 Fol 71     |
| 21.12.1949 | Albert Beedell ( <i>Farmer</i> )<br>( <i>We have not investigated the Transmission Application</i> ) | Vol 24 Fol 71     |
| 01.05.1950 | Alice Beedell ( <i>Widow</i> )                                                                       | Vol 24 Fol 71     |
| 01.05.1950 | Cecil Frederick Beedell ( <i>Farmer</i> )                                                            | Vol 6351 Fol 196  |
| 18.06.1962 | Geigy (Australasia) Pty Limited                                                                      | Vol 6351 Fol 196  |
| 09.04.1965 | Big Sister Foods Limited<br>( <i>Now Reckitt &amp; Colman Australia Limited</i> )                    | Vol 6351 Fol 196  |
| 28.08.1969 | Coca-Cola Export Corporation                                                                         | Vol 13727 Fol 136 |
| 01.04.1985 | Southern Cross Beverages Pty Limited                                                                 | 111/800504        |
| 23.03.1990 | Beverage Bottlers (N.S.W.) Pty Limited                                                               | 111/800504        |

ACN: 093 398 611  
ABN: 61 093 412 474

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Fax 9233 4590 (Attn Box 29)

03.02.2000      # Coca-Cola Amatil (Aust) Pty Limited      111/800504

**# Current Registered Proprietor**

As to that part highlighted blue on D.P. 800504

|            |                                                                                                      |                   |
|------------|------------------------------------------------------------------------------------------------------|-------------------|
| 04.08.1915 | Edward Beedell ( <i>Orchardist</i> )                                                                 | Vol 5010 Fol 230  |
| 21.12.1949 | Albert Beedell ( <i>Farmer</i> )<br>( <i>We have not investigated the Transmission Application</i> ) | Vol 5010 Fol 230  |
| 01.05.1950 | Alice Beedell ( <i>Widow</i> )                                                                       | Vol 5010 Fol 230  |
| 01.05.1950 | Cecil Frederick Beedell ( <i>Farmer</i> )                                                            | Vol 6351 Fol 196  |
| 18.06.1962 | Geigy (Australasia) Pty Limited                                                                      | Vol 6351 Fol 196  |
| 09.04.1965 | Big Sister Foods Limited<br>( <i>Now Reckitt &amp; Colman Australia Limited</i> )                    | Vol 6351 Fol 196  |
| 28.08.1969 | Coca-Cola Export Corporation                                                                         | Vol 13727 Fol 136 |
| 01.04.1985 | Southern Cross Beverages Pty Limited                                                                 | 111/800504        |
| 23.03.1990 | Beverage Bottlers (N.S.W.) Pty Limited                                                               | 111/800504        |
| 03.02.2000 | # Coca-Cola Amatil (Aust) Pty Limited                                                                | 111/800504        |

**# Current Registered Proprietor**

ACN: 093 398 611  
ABN: 61 093 412 474

**Peter S. Hopley Pty Limited**  
**Legal Searchers**

1 Boronia Avenue  
Mount Annan , NSW , 2567  
Mobile: 0412 199 304  
Fax 9233 4590 (Attn Box 29)

As to that part highlighted pink on D.P. 800504

|            |                                                                                                      |                   |
|------------|------------------------------------------------------------------------------------------------------|-------------------|
| 04.08.1915 | Edward Beedell ( <i>Orchardist</i> )                                                                 | Vol 5010 Fol 230  |
| 21.12.1949 | Albert Beedell ( <i>Farmer</i> )<br>( <i>We have not investigated the Transmission Application</i> ) | Vol 5010 Fol 230  |
| 01.05.1950 | Alice Beedell ( <i>Widow</i> )                                                                       | Vol 5010 Fol 230  |
| 01.05.1950 | Frank Beedell ( <i>Farmer</i> )                                                                      | Vol 6351 Fol 200  |
| 18.06.1962 | Geigy (Australasia) Pty Limited                                                                      | Vol 6351 Fol 200  |
| 09.04.1965 | Big Sister Foods Limited<br>( <i>Now Reckitt &amp; Colman Australia Limited</i> )                    | Vol 6351 Fol 200  |
| 28.08.1969 | Coca-Cola Export Corporation                                                                         | Vol 13727 Fol 136 |
| 01.04.1985 | Southern Cross Beverages Pty Limited                                                                 | 111/800504        |
| 23.03.1990 | Beverage Bottlers (N.S.W.) Pty Limited                                                               | 111/800504        |
| 03.02.2000 | # Coca-Cola Amatil (Aust) Pty Limited                                                                | 111/800504        |

**# Current Registered Proprietor**

As to that part highlighted red on D.P. 800504

|            |                                      |                  |
|------------|--------------------------------------|------------------|
| 04.08.1915 | Edward Beedell ( <i>Orchardist</i> ) | Vol 3639 Fol 200 |
| 25.11.1938 | Frank Beedell ( <i>Farmer</i> )      | Vol 5010 Fol 231 |

ACN: 093 398 611  
ABN: 61 093 412 474

**Peter S. Hopley Pty Limited**  
**Legal Searchers**

1 Boronia Avenue  
Mount Annan , NSW , 2567  
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Fax 9233 4590 (Attn Box 29)

|            |                                                                                 |                   |
|------------|---------------------------------------------------------------------------------|-------------------|
| 18.06.1962 | Geigy (Australasia) Pty Limited                                                 | Vol 5010 Fol 231  |
| 09.04.1965 | Big Sister Foods Limited<br><i>(Now Reckitt &amp; Colman Australia Limited)</i> | Vol 5010 Fol 231  |
| 28.08.1969 | Coca-Cola Export Corporation                                                    | Vol 13727 Fol 136 |
| 01.04.1985 | Southern Cross Beverages Pty Limited                                            | 111/800504        |
| 23.03.1990 | Beverage Bottlers (N.S.W.) Pty Limited                                          | 111/800504        |
| 03.02.2000 | # Coca-Cola Amatil (Aust) Pty Limited                                           | 111/800504        |

**# Current Registered Proprietor**

As to that part batched green on D.P. 800504

|            |                                                                                                      |                  |
|------------|------------------------------------------------------------------------------------------------------|------------------|
| 04.08.1915 | Edward Beedell <i>(Orchardist)</i>                                                                   | Vol 973 Fol 129  |
| 15.08.1924 | William john Stacey <i>(Carter)</i>                                                                  | Vol 3639 Fol 244 |
| 04.02.1926 | Walter Le Mottee <i>(Farmer)</i>                                                                     | Vol 3639 Fol 244 |
| 24.08.1932 | George Le Mottee <i>(Gardener)</i><br><i>(We have not investigated the Transmission Application)</i> | Vol 3639 Fol 244 |
| 26.09.1938 | Louise Le Mottee <i>(Widow)</i><br><i>(We have not investigated the Transmission Application)</i>    | Vol 3639 Fol 244 |
| 11.11.1938 | Peter McCourt <i>(Retired)</i>                                                                       | Vol 3639 Fol 244 |
| 02.03.1940 | Ronald Radford Bolton <i>(Moulder)</i>                                                               | Vol 3639 Fol 244 |

ACN: 093 398 611  
ABN: 61 093 412 474

**Peter S. Hopley Pty Limited**  
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Mobile: 0412 199 304  
Fax 9233 4590 (Attn Box 29)

|            |                                                                                   |                   |
|------------|-----------------------------------------------------------------------------------|-------------------|
| 14.10.1942 | Noel Arthur Hopmeier ( <i>Machinist</i> )                                         | Vol 3639 Fol 244  |
| 04.03.1964 | Geigy (Australasia) Pty Limited                                                   | Vol 3639 Fol 244  |
| 09.04.1965 | Big Sister Foods Limited<br>( <i>Now Reckitt &amp; Colman Australia Limited</i> ) | Vol 3639 Fol 244  |
| 28.08.1969 | Coca-Cola Export Corporation                                                      | Vol 13727 Fol 136 |
| 01.04.1985 | Southern Cross Beverages Pty Limited                                              | 111/800504        |
| 23.03.1990 | Beverage Bottlers (N.S.W.) Pty Limited                                            | 111/800504        |
| 03.02.2000 | # Coca-Cola Amatil (Aust) Pty Limited                                             | 111/800504        |

**# Current Registered Proprietor**

As to that part hatched orange on D.P. 800504

|            |                                                                                                       |                |
|------------|-------------------------------------------------------------------------------------------------------|----------------|
| 09.08.1867 | Bernard Koen ( <i>Laborer</i> )                                                                       | Vol 49 Fol 6   |
| 28.06.1922 | Johanna McGregor ( <i>Widow</i> )<br>( <i>We have not investigated the Transmission Application</i> ) | Vol 49 Fol 6   |
| 23.05.1923 | Frederick Samuel Soames                                                                               | Vol 49 Fol 6   |
| 23.05.1923 | Thomas Butler ( <i>Farmer</i> )                                                                       | Vol 49 Fol 6   |
| 05.02.1924 | William Stacey ( <i>Farmer</i> )                                                                      | Vol 49 Fol 6   |
| 21.07.1927 | Helen Carlson Campbell Coster ( <i>Widow</i> )                                                        | Vol 6778 Fol 6 |
| 10.07.1956 | Salvatore Raciti ( <i>Labourer</i> )                                                                  | Vol 6778 Fol 6 |

ACN: 093 398 611  
ABN: 61 093 412 474

**Peter S. Hopley Pty Limited**  
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Fax 9233 4590 (Attn Box 29)

|            |                                                                      |                   |
|------------|----------------------------------------------------------------------|-------------------|
| 14.01.1964 | Geigy (Australasia) Pty Limited                                      | Vol 6778 Fol 6    |
| 09.04.1965 | Big Sister Foods Limited<br>(Now Reckitt & Colman Australia Limited) | Vol 6778 Fol 6    |
| 28.08.1969 | Coca-Cola Export Corporation                                         | Vol 13727 Fol 136 |
| 01.04.1985 | Southern Cross Beverages Pty Limited                                 | 111/800504        |
| 23.03.1990 | Beverage Bottlers (N.S.W.) Pty Limited                               | 111/800504        |
| 03.02.2000 | # Coca-Cola Amatil (Aust) Pty Limited                                | 111/800504        |

**# Current Registered Proprietor**

**Cadastral Records Enquiry Report**

Box : 29

Locality : NORTHMEAD

Requested Parcel : Lot 111 DP 800504

LGA : PARRAMATTA

Parish : ST JOHN

Identified Parcel : Lot 111 DP 800504

County : CUMBERLAND



**Sequences and sets only.**

Wm. J. Dwyer  
SECRETARY  
JAN 18 1867

### Council Clerk's Certificate

[illegible]

have been complied with by the applicant in relation to the

Surveillance No. 52-14264-1  
Date May 13, 1963  
(Signature) *W. J. ...*

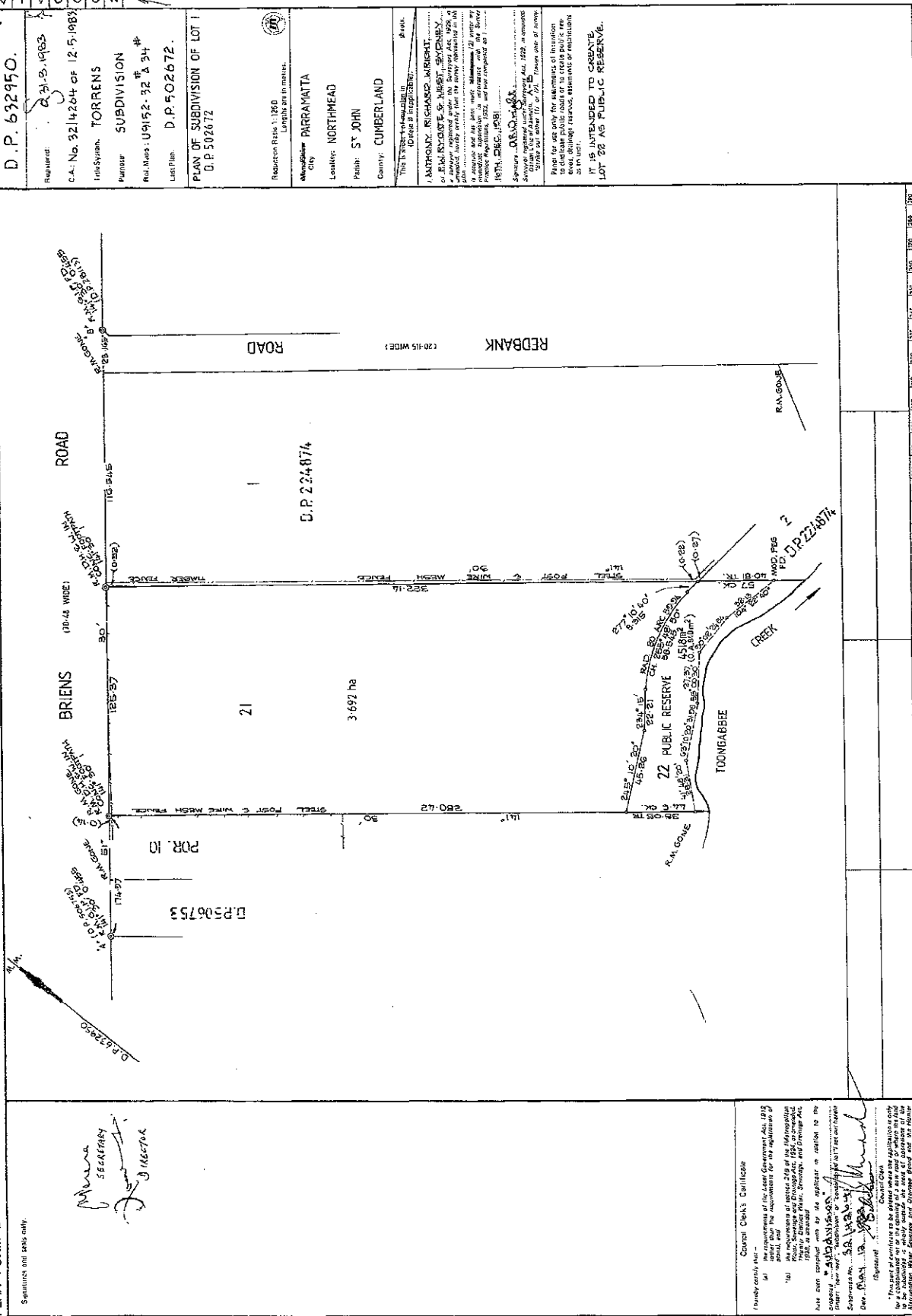
\* From part of certificate to be issued when the application is only for a contemplated use or the opening of a new road or where the land to be rezoned is wholly outside the area of collection of the Metropolitan Water Sewerage and Drainage Board and the Metropolitan Water Board.  
 F23016 is nonalterable.

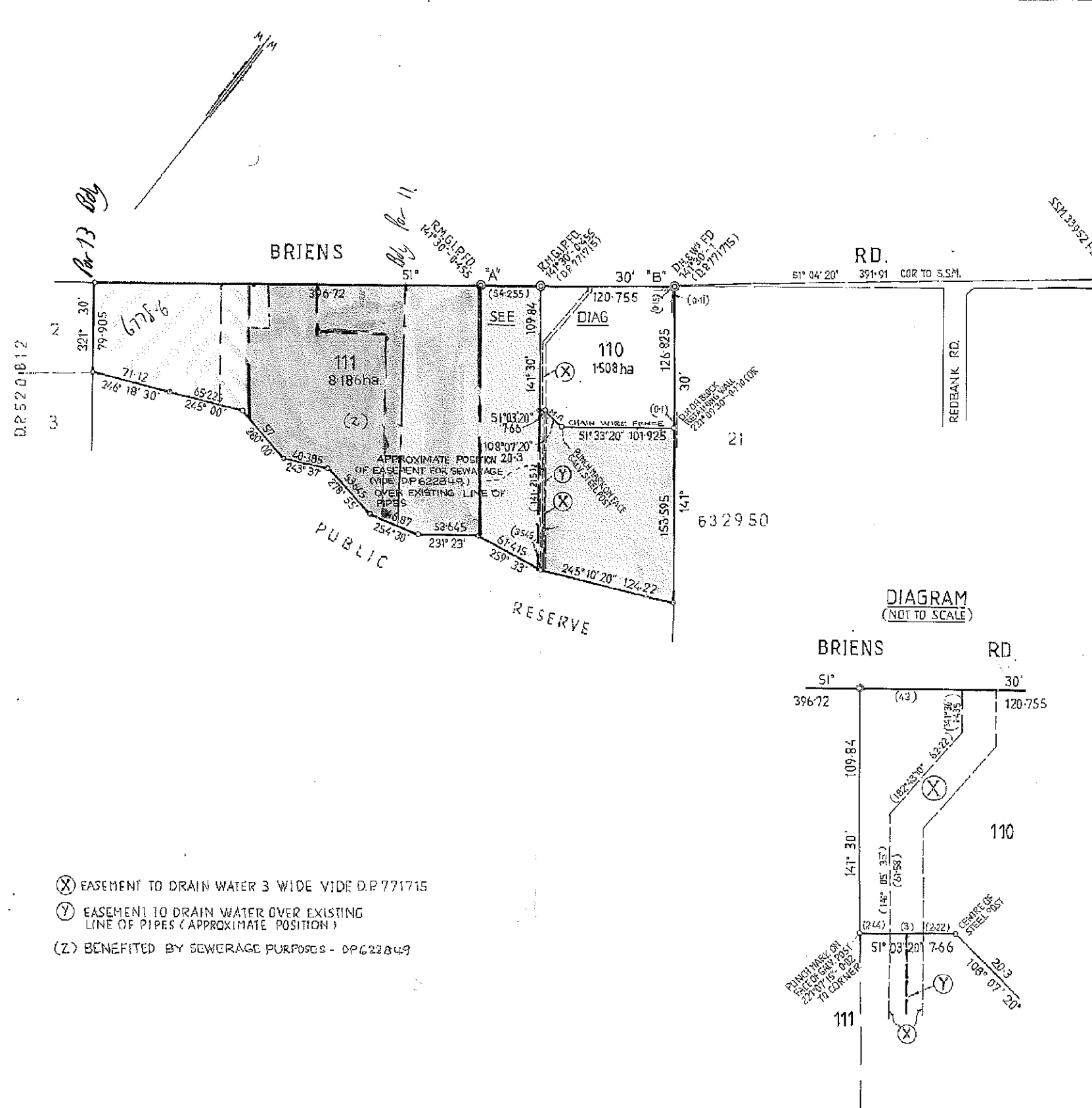
M.P.R. 3 YEARS (1987)

**WARNING: CREASING OR FOLDING WILL LEAD TO REJECTION**

I, Bruce Richard Davies, Under Secretary for Lands and Registrar General for New South Wales, certify that this negative is a photograph made as a permanent record of a document in my custody this day.

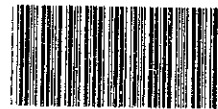
1st September, 1983



| PLAN FORM 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  | Plan Drawing only to appear in this space                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  | OFFICE USE ONLY                                                                                                                                                                                                                                                                                                                        |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| SIGNATURE AND SEALS ONLY.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  | DP.800504                                                                                                                                                                                                                                                                                                                              |  |
| The COMMON SEAL OF PLAYTEX (PTY) LIMITED WAS HEREUNTO AFFIXED IN ACCORDANCE WITH ITS ARTICLES OF ASSOCIATION IN THE PRESENCE OF:<br><br>Jim Holcomb<br>DIRECTOR<br><br>Common Seal<br>PLAYTEX (PTY) LIMITED                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  | Registered: 14-2-1990<br>CA: No. 32/5169 OF 18-1-1990<br>Title System: TORRENS<br>Purpose: SUBDIVISION<br>Ref. Map: U9152-32, 33, 34<br>Last Plan: DP771715, DP748112                                                                                                                                                                  |  |
| The COMMON SEAL OF SOUTHERN CROSS BEVERAGES PTY LIMITED WAS HEREUNTO AFFIXED IN ACCORDANCE WITH ITS ARTICLES OF ASSOCIATION IN THE PRESENCE OF:<br><br>Common Seal<br>SOUTHERN CROSS BEVERAGES PTY LIMITED                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  | PLAN<br>OF SUBDIVISION OF<br>LOT 10 D.P.771715 &<br>LOT 101 D.P.748112                                                                                                                                                                                                                                                                 |  |
| SIGNED in my presence<br>by the Attorney or Solicitor or other person authorised by the Attorney or Solicitor to sign this plan in accordance with the provisions of the Surveyors Act, 1920, as amended, and in accordance with the provisions of the Surveyors Act, 1920, as amended, and in accordance with the provisions of the Surveyors Act, 1920, as amended.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  | Lengths are in metres. Reduction Ratio 1: 2500                                                                                                                                                                                                                                                                                         |  |
| Crown Lands Office Approval<br>PLAN APPROVED: Authorised Officer<br>Land District: ...<br>Paper No.: ...<br>Field Book: ...                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  | Municipality: PARRAMATTA<br>Locality: NORTHMEAD<br>Parish: ST. JOHN<br>County: CUMBERLAND                                                                                                                                                                                                                                              |  |
| Council Clerk's Certificate<br>I hereby certify that:<br>(a) the requirements of the Local Government Act, 1919 (other than the requirements for the registration of plans), and<br>(b) the requirements of section 349 of the Metropolitan Water, Sewerage and Drainage Act, 1904, as amended, and the Hunter District Water, Sewerage and Drainage Act, 1908, as amended<br>have been complied with by the applicant in relation to the proposed Subdivision.<br>Subdivision No. 22/5169<br>Date 18.11.1990<br>(Signature) [Signature]<br>Council Clerk<br>Council File No. 22/5169<br><br>*This part of certificate to be deleted where the application is only for a consolidated lot or the opening of a new road or where the land to be subdivided is wholly outside the areas of operations of the Metropolitan Water, Sewerage and Drainage Board and the Hunter District Water Board.<br>† Delete if inapplicable. |  | This is sheet 1 of my plan in sheets.<br>(Delete if inapplicable).<br>WILLIAM LAWRENCE REIN<br>COLWELL LARCOMBE & REIN 108 BATHURST ST SYDNEY<br>a surveyor registered under the Surveyors Act, 1920, as amended, hereby certify that the survey represented in this plan OF LOT 10, LOT 101 HAS BEEN COMPLETED.<br>is accurate and has been made in accordance with the Surveyors Act, 1920, as amended, and in accordance with the provisions of the Surveyors Act, 1920, as amended, and in accordance with the provisions of the Surveyors Act, 1920, as amended.<br>Signature [Signature]<br>Surveyor registered under Surveyors Act, 1920, as amended.<br>Deputy Clerk of Survey.<br>Plans used in preparation of survey/compilation.<br>D.P.748112, D.P.771715<br>D.P.520812, D.P.632950 |  |                                                                                                                                                                                                                                                                                                                                        |  |
| SURVEYOR'S REFERENCE: P998/89179                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  | WARNING: CREASING OR FOLDING WILL LEAD TO REJECTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  | PANEL FOR USE ONLY for statements of intention to dedicate public roads or to create public reserves, drainage reserves, easements or restrictions as to user.<br><br>PURSUANT TO SEC 98B OF THE CONVEYANCING ACT 1919-1964 IT IS INTENDED TO CREATE:<br>1) EASEMENT TO DRAIN WATER OVER EXISTING LINE OF PIPES (APPROXIMATE POSITION) |  |

AMENDMENTS MADE IN LTO AT SURVEYOR'S REQUEST

|                                                  |  |                                                                                                                                              |  |
|--------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------------------|--|
| 10 20 30 40 50 60 70 Table of mm 110 120 130 140 |  | This negative is a photograph made as a permanent record of a document in the custody of the Registrar General this day. 16th FEBRUARY, 1990 |  |
|--------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------------------|--|



9418

M

NEW SOUTH WALES

(For Grant and title reference  
prior to first edition see  
Deposited Plan.)

Vol. 9418 Fol. 30



1st Edition issued 23-4-1963

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

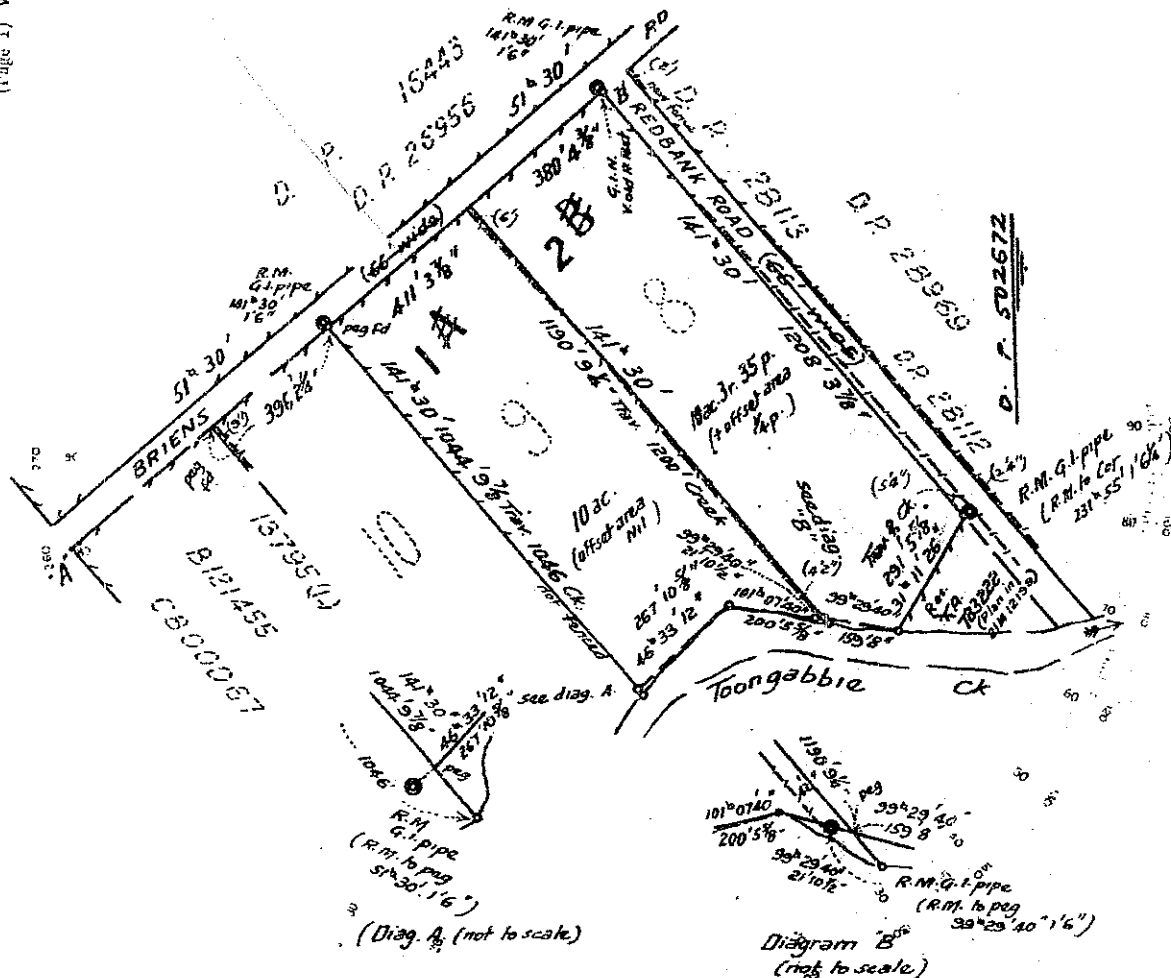
Witness

*B. Bailey*

*Jan Watson*  
Registrar-General.



## PLAN SHOWING LOCATION OF LAND



## ESTATE AND LAND REFERRED TO

Estate in Fee Simple in lot  
St. John and County of Cumberland.

in Deposited Plan 502672 in the City of Parramatta Parish of

## FIRST SCHEDULE (Continued overleaf)

RAYMOND-MICHAEL BOWCOCK, of Ashfield, Builder.

*Jan Watson*  
Registrar General

## SECOND SCHEDULE (Continued overleaf)

1. Reservations and conditions, if any, contained in the Crown Grant(s) referred to in the said Deposited Plan.

*Jan Watson*  
Registrar General

WARNING: THIS DOCUMENT MUST NOT BE REMOVED FROM THE LAND TITLES OFFICE.

PERSONS ARE CAUTIONED AGAINST ALTERING OR ADDING TO THIS CERTIFICATE OR ANY NOTIFICATION HEREON

9418 Fol. 30  
(Page 1) Vol.

FIRST SCHEDULE (continued)

| REGISTERED PROPRIETOR                                                                                                                                                                                                                                                                                                             | INSTRUMENT |         |            | ENTERED    | Signature of Registrar-General |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|---------|------------|------------|--------------------------------|
|                                                                                                                                                                                                                                                                                                                                   | NATURE     | NUMBER  | DATE       |            |                                |
| James Bonwell of Blenheim, Company Director, Regis Benjamin Box of Napier, Company Director and Cecil Bennett of Blenheim, Company Director, all of the same address, and their joint and several executors, administrators and assigns, by their solicitors, Messrs. J. H. & J. H. Bonwell & Co., Chartered Accountants, Napier. | Transfer   | 171608  | 22-11-1968 | 19-1-1969  | James Bonwell                  |
|                                                                                                                                                                                                                                                                                                                                   | Transfer   | 1584088 | 11-9-1969  | 11-10-1969 | James Bonwell                  |
|                                                                                                                                                                                                                                                                                                                                   | Transfer   | 1717667 | ---        | 10-4-1980  | James Bonwell                  |
|                                                                                                                                                                                                                                                                                                                                   | Transfer   | S319495 | ---        | 25-2-1981  | James Bonwell                  |
| Property Estates Pty. Limited<br>Australian Pharmaceutical Industries Limited                                                                                                                                                                                                                                                     |            |         |            |            |                                |

271608 11/11  
- 9/11  
1584088  
1584088  
1584088

N791526444  
P741534844  
P834384444  
Q45337444

SECOND SCHEDULE (continued)

| PARTICULARS                                                                                                                                                                                                                                                                                                                       | INSTRUMENT |         |            | ENTERED    | Signature of Registrar-General | CANCELLATION |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|---------|------------|------------|--------------------------------|--------------|
|                                                                                                                                                                                                                                                                                                                                   | NATURE     | NUMBER  | DATE       |            |                                |              |
| James Bonwell of Blenheim, Company Director, Regis Benjamin Box of Napier, Company Director and Cecil Bennett of Blenheim, Company Director, all of the same address, and their joint and several executors, administrators and assigns, by their solicitors, Messrs. J. H. & J. H. Bonwell & Co., Chartered Accountants, Napier. | Transfer   | 171608  | 22-11-1968 | 19-1-1969  | James Bonwell                  | 1584088      |
| James Bonwell of Blenheim, Company Director, Regis Benjamin Box of Napier, Company Director and Cecil Bennett of Blenheim, Company Director, all of the same address, and their joint and several executors, administrators and assigns, by their solicitors, Messrs. J. H. & J. H. Bonwell & Co., Chartered Accountants, Napier. | Transfer   | 1584088 | 11-9-1969  | 11-10-1969 | James Bonwell                  | 1584087      |
| James Bonwell of Blenheim, Company Director, Regis Benjamin Box of Napier, Company Director and Cecil Bennett of Blenheim, Company Director, all of the same address, and their joint and several executors, administrators and assigns, by their solicitors, Messrs. J. H. & J. H. Bonwell & Co., Chartered Accountants, Napier. | Transfer   | 1717667 | ---        | 10-4-1980  | James Bonwell                  | P939854      |
| James Bonwell of Blenheim, Company Director, Regis Benjamin Box of Napier, Company Director and Cecil Bennett of Blenheim, Company Director, all of the same address, and their joint and several executors, administrators and assigns, by their solicitors, Messrs. J. H. & J. H. Bonwell & Co., Chartered Accountants, Napier. | Transfer   | S319495 | ---        | 25-2-1981  | James Bonwell                  | Q48227       |
| James Bonwell of Blenheim, Company Director, Regis Benjamin Box of Napier, Company Director and Cecil Bennett of Blenheim, Company Director, all of the same address, and their joint and several executors, administrators and assigns, by their solicitors, Messrs. J. H. & J. H. Bonwell & Co., Chartered Accountants, Napier. | Transfer   | 171608  | 22-11-1968 | 19-1-1969  | James Bonwell                  | R693398      |
| James Bonwell of Blenheim, Company Director, Regis Benjamin Box of Napier, Company Director and Cecil Bennett of Blenheim, Company Director, all of the same address, and their joint and several executors, administrators and assigns, by their solicitors, Messrs. J. H. & J. H. Bonwell & Co., Chartered Accountants, Napier. | Transfer   | 1584088 | 11-9-1969  | 11-10-1969 | James Bonwell                  | S319494      |
| James Bonwell of Blenheim, Company Director, Regis Benjamin Box of Napier, Company Director and Cecil Bennett of Blenheim, Company Director, all of the same address, and their joint and several executors, administrators and assigns, by their solicitors, Messrs. J. H. & J. H. Bonwell & Co., Chartered Accountants, Napier. | Transfer   | 1717667 | ---        | 10-4-1980  | James Bonwell                  | S319493      |
| James Bonwell of Blenheim, Company Director, Regis Benjamin Box of Napier, Company Director and Cecil Bennett of Blenheim, Company Director, all of the same address, and their joint and several executors, administrators and assigns, by their solicitors, Messrs. J. H. & J. H. Bonwell & Co., Chartered Accountants, Napier. | Transfer   | S319495 | ---        | 25-2-1981  | James Bonwell                  | S319492      |
| James Bonwell of Blenheim, Company Director, Regis Benjamin Box of Napier, Company Director and Cecil Bennett of Blenheim, Company Director, all of the same address, and their joint and several executors, administrators and assigns, by their solicitors, Messrs. J. H. & J. H. Bonwell & Co., Chartered Accountants, Napier. | Transfer   | 171608  | 22-11-1968 | 19-1-1969  | James Bonwell                  | 1584088      |
| James Bonwell of Blenheim, Company Director, Regis Benjamin Box of Napier, Company Director and Cecil Bennett of Blenheim, Company Director, all of the same address, and their joint and several executors, administrators and assigns, by their solicitors, Messrs. J. H. & J. H. Bonwell & Co., Chartered Accountants, Napier. | Transfer   | 1584088 | 11-9-1969  | 11-10-1969 | James Bonwell                  | 1584087      |
| James Bonwell of Blenheim, Company Director, Regis Benjamin Box of Napier, Company Director and Cecil Bennett of Blenheim, Company Director, all of the same address, and their joint and several executors, administrators and assigns, by their solicitors, Messrs. J. H. & J. H. Bonwell & Co., Chartered Accountants, Napier. | Transfer   | 1717667 | ---        | 10-4-1980  | James Bonwell                  | P939854      |
| James Bonwell of Blenheim, Company Director, Regis Benjamin Box of Napier, Company Director and Cecil Bennett of Blenheim, Company Director, all of the same address, and their joint and several executors, administrators and assigns, by their solicitors, Messrs. J. H. & J. H. Bonwell & Co., Chartered Accountants, Napier. | Transfer   | S319495 | ---        | 25-2-1981  | James Bonwell                  | Q48227       |
| James Bonwell of Blenheim, Company Director, Regis Benjamin Box of Napier, Company Director and Cecil Bennett of Blenheim, Company Director, all of the same address, and their joint and several executors, administrators and assigns, by their solicitors, Messrs. J. H. & J. H. Bonwell & Co., Chartered Accountants, Napier. | Transfer   | 171608  | 22-11-1968 | 19-1-1969  | James Bonwell                  | R693398      |
| James Bonwell of Blenheim, Company Director, Regis Benjamin Box of Napier, Company Director and Cecil Bennett of Blenheim, Company Director, all of the same address, and their joint and several executors, administrators and assigns, by their solicitors, Messrs. J. H. & J. H. Bonwell & Co., Chartered Accountants, Napier. | Transfer   | 1584088 | 11-9-1969  | 11-10-1969 | James Bonwell                  | S319494      |
| James Bonwell of Blenheim, Company Director, Regis Benjamin Box of Napier, Company Director and Cecil Bennett of Blenheim, Company Director, all of the same address, and their joint and several executors, administrators and assigns, by their solicitors, Messrs. J. H. & J. H. Bonwell & Co., Chartered Accountants, Napier. | Transfer   | 1717667 | ---        | 10-4-1980  | James Bonwell                  | S319493      |
| James Bonwell of Blenheim, Company Director, Regis Benjamin Box of Napier, Company Director and Cecil Bennett of Blenheim, Company Director, all of the same address, and their joint and several executors, administrators and assigns, by their solicitors, Messrs. J. H. & J. H. Bonwell & Co., Chartered Accountants, Napier. | Transfer   | S319495 | ---        | 25-2-1981  | James Bonwell                  | S319492      |

RECEIVED  
R0793988  
A737687 12/11  
S138 A3 m. R.  
C7221080  
S20046744  
S31949244  
- 304  
- 404  
A-57e  
C72255583  
T537414444  
D7632958

NEW SOUTH WALES

B29

/Req: B090875 /Doc: CT 15119-087  
/Prt: 15-Dec-2005

15119 Fol. 87

First Title : Vol. 24 Fol.69

Prior Title : Vol.9418 Fol.30



**CANCELLED**  
ISSUED

9 1983

I certify that the person named in the First Schedule is the registered proprietor of an estate in fee simple (or such other estate or interest as is set out below) in the land described subject to the recordings appearing in the Second Schedule and to the provisions of the Real Property Act, 1900.

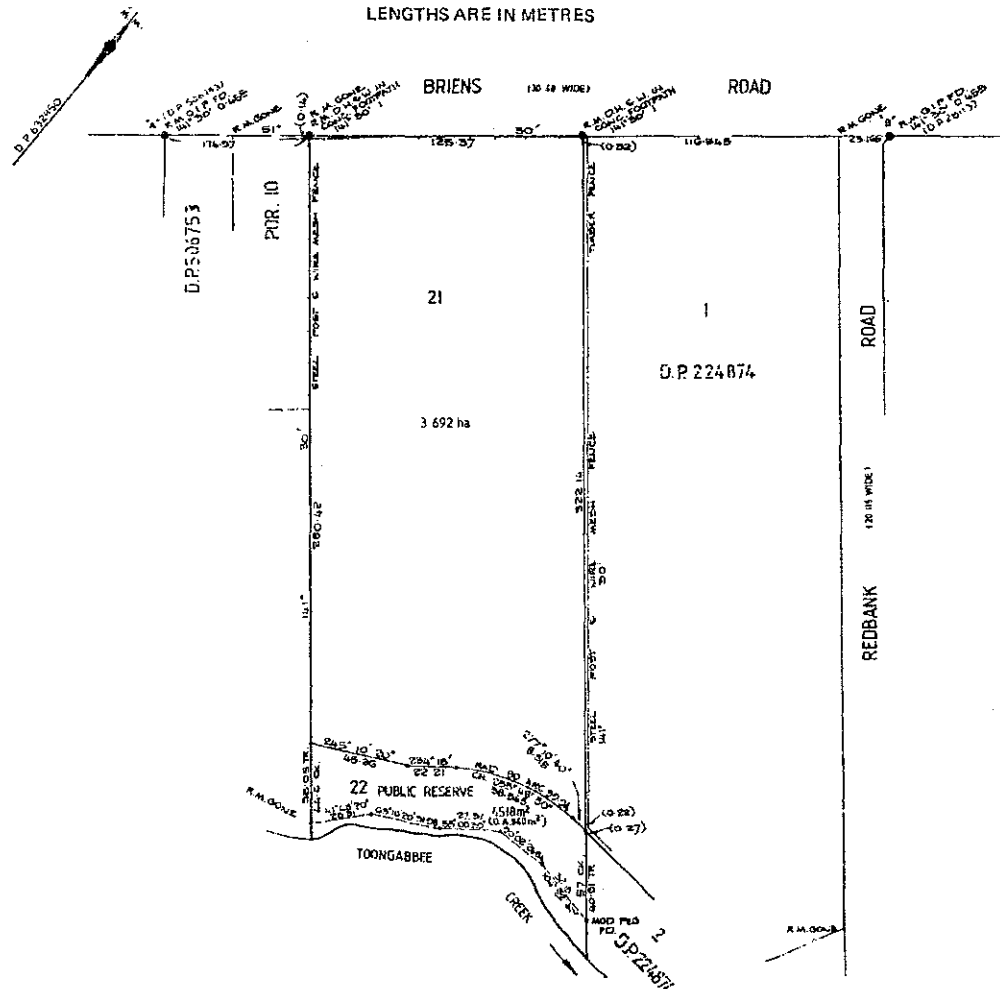
SEE AUTO FOLIO

Registrar General.



PLAN SHOWING LOCATION OF LAND

LENGTHS ARE IN METRES



LAND REFERRED TO

Lot 21 in Deposited Plan 632950 at Northmead in the City of Parramatta Parish of St. John and County of Cumberland.

FIRST SCHEDULE

AUSTRALIAN PHARMACEUTICAL INDUSTRIES LIMITED.

SECOND SCHEDULE

- GRY
1. Reservations and conditions contained in the Crown Grant.
  2. T587414p Restriction as to user.

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

PERSONS ARE CAUTIONED AGAINST ALTERING OR ADDING TO THIS CERTIFICATE OR ANY NOTIFICATION HEREON

(Page 1) Vol. 15119, Fol. 87

FIRST SCHEDULE (continued)  
REGISTERED PROPRIETOR

Registrar General

**CANCELLED**

SEE AUTO FOLIO

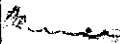
## SECOND SCHEDULE (continued)

PARTICULARS

Registrar General

CANCELLATION

- M T936600 P Mortgage to National Commercial Banking Corporation of Australia Limited.  
Registered 1-2-1984.
- ELIZ W689651 P Transfer - Easement for Support appurtenant to the land within described  
affecting the part of Lot 1 in DP224874 shown 4.5 wide in plan with W689651.  
Registered 13.2.1987.
- ER(3) W789720 P TRANSFER. EASEMENT FOR ELECTRICITY PURPOSES AFFECTING THE PART OF THE LAND WITHIN  
DESCRIBED SHOWN AS PROPOSED EASEMENT FOR ELECTRICITY PURPOSES IN D.P. 117676.  
REGISTERED 7-4-1987.





## NOTATIONS AND UNREGISTERED DEALINGS

793600 MR  
W689651 TC  
W789720 TC

Information Provided Through  
John McLaren & Co  
Ph. 9231-4872 Fax. 9233-6557

# Historical Search

**EziSearch**  
An Approved LPI NSW  
Information Broker

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - HISTORICAL SEARCH  
-----

SEARCH DATE  
-----

19/12/2005 8:47PM

FOLIO: 21/632950  
-----

First Title(s): SEE PRIOR TITLE(S)

Prior Title(s): VOL 15119 FOL 87

| Recorded<br>----- | Number<br>----- | Type of Instrument<br>----- | C.T. Issue<br>-----               |
|-------------------|-----------------|-----------------------------|-----------------------------------|
| 28/3/1988         |                 | TITLE AUTOMATION PROJECT    | LOT RECORDED<br>FOLIO NOT CREATED |
| 22/9/1988         |                 | CONVERTED TO COMPUTER FOLIO | FOLIO CREATED<br>CT NOT ISSUED    |
| 6/5/1998          | 3967541         | DISCHARGE OF MORTGAGE       | EDITION 1                         |
| 13/4/1999         | 5745242         | TRANSFER                    | EDITION 2                         |
| 19/4/1999         | 5758640         | LEASE                       | EDITION 3                         |
| 23/11/1999        | 6303660         | REQUEST                     | EDITION 4                         |

\*\*\* END OF SEARCH \*\*\*

hopley coca M

PRINTED ON 19/12/2005

\* ANY ENTRIES PRECEDED BY AN ASTERISK DO NOT APPEAR ON THE CURRENT EDITION OF TITLE. WARNING: THE INFORMATION APPEARING UNDER NOTATIONS HAS NOT BEEN FORMALLY RECORDED IN THE REGISTER. JOHN MCLAREN & CO CERTIFES THAT THE INFORMATION CONTAINED IN THIS DOCUMENT HAS BEEN PROVIDED ELECTRONICALLY BY THE REGISTRAR-GENERAL IN ACCORDANCE WITH SECTION 96B(2) OF THE REAL PROPERTY ACT, 1900.

Information Provided Through  
John McLaren & Co  
Ph. 9231-4872 Fax. 9233-6557

# Title Search

**EziSearch**  
An Approved LPI NSW  
Information Broker

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - TITLE SEARCH  
-----

FOLIO: 21/632950  
-----

| SEARCH DATE<br>----- | TIME<br>---- | EDITION NO<br>----- | DATE<br>----- |
|----------------------|--------------|---------------------|---------------|
| 19/12/2005           | 8:45 PM      | 4                   | 23/11/1999    |

LAND  
-----

LOT 21 IN DEPOSITED PLAN 632950  
AT NORTHMEAD  
LOCAL GOVERNMENT AREA: PARRAMATTA  
PARISH OF ST JOHN COUNTY OF CUMBERLAND  
TITLE DIAGRAM: DP632950

FIRST SCHEDULE  
-----

COCA-COLA AMATIL (AUST) PTY LIMITED (T 5745242)

SECOND SCHEDULE (4 NOTIFICATIONS)  
-----

1. RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
2. W689651 EASEMENT FOR SUPPORT APPURTENANT TO THE LAND ABOVE  
DESCRIBED AFFECTING THE PART OF LOT 1 IN DP224874 SHOWN  
4.5 WIDE IN W689651
3. W789720 EASEMENT FOR ELECTRICITY PURPOSES AFFECTING THE  
PART(S) SHOWN SO BURDENED IN THE TITLE DIAGRAM
4. 5758640 LEASE TO AUSTRALIAN PHARMACEUTICAL INDUSTRIES  
LIMITED EXPIRES: 11/4/2004. OPTION OF RENEWAL: 2YRS.

NOTATIONS  
-----

UNREGISTERED DEALINGS: NIL

\*\*\* END OF SEARCH \*\*\*

hopley coca M

PRINTED ON 19/12/2005

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FORMALLY RECORDED IN THE REGISTER. JOHN MCLAREN & CO CERTIFIES THAT THE INFORMATION CONTAINED IN THIS DOCUMENT HAS BEEN PROVIDED ELECTRONICALLY BY THE  
REGISTRAR-GENERAL IN ACCORDANCE WITH SECTION 96B(2) OF THE REAL PROPERTY ACT, 1900.

Information Provided Through  
John McLaren & Co  
Ph. 9231-4872 Fax. 9233-6557

# Historical Search

**EziSearch**  
An Approved LPI NSW  
Information Broker

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - HISTORICAL SEARCH

SEARCH DATE

19/12/2005 9:00PM

FOLIO: 10/771715

First Title(s): VOL 24 FOL 70

Prior Title(s): VOL 11336 FOL 47

| Recorded  | Number   | Type of Instrument | C.T. Issue                 |
|-----------|----------|--------------------|----------------------------|
| 26/2/1988 | DP771715 | DEPOSITED PLAN     | FOLIO CREATED<br>EDITION 1 |
| 15/2/1990 | DP800504 | DEPOSITED PLAN     | FOLIO CANCELLED            |

\*\*\* END OF SEARCH \*\*\*

hopley coca M

PRINTED ON 19/12/2005

\* ANY ENTRIES PRECEDED BY AN ASTERISK DO NOT APPEAR ON THE CURRENT EDITION OF TITLE. WARNING: THE INFORMATION APPEARING UNDER NOTATIONS HAS NOT BEEN FORMALLY RECORDED IN THE REGISTER. JOHN MCLAREN & CO CERTIFES THAT THE INFORMATION CONTAINED IN THIS DOCUMENT HAS BEEN PROVIDED ELECTRONICALLY BY THE REGISTRAR-GENERAL IN ACCORDANCE WITH SECTION 96B(2) OF THE REAL PROPERTY ACT, 1900.

**B29**

/Req: B090876 /Doc: CT 11336-047  
/Prt: 15-Dec-2005



NEW SOUTH WALES

1336



Fol. 47

Crown Grant Vol. 24 Fol. 70

Prior Title Vol. 3846 Fol. 106



Edition issued 12-6-1970

L841981

**CANCELLED**

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

Witness

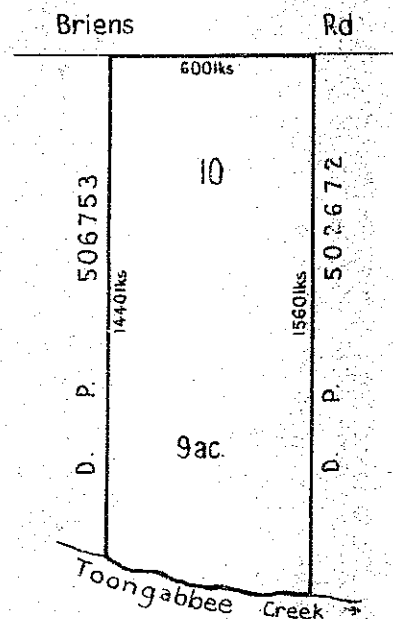
*Barnes*

*Lawton*

Registrar General.



PLAN SHOWING LOCATION OF LAND



L841981 M.C.  
W.

Scale: 4 chains to one inch

ESTATE AND LAND REFERRED TO

Estate in Fee Simple in Portion 10 at Northmead in the City of Parramatta Parish of St. John and County of Cumberland.

FIRST SCHEDULE

PLAYTEX (PTY.) LIMITED.

SECOND SCHEDULE

1. Reservations and conditions, if any, contained in the Crown Grant above referred to.
2. Mortgage No. L841982 to The Commercial Banking Company of Sydney Limited.  
Entered 21-5-1970.

*Lawton*

Registrar General

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

PERSONS ARE CAUTIONED AGAINST ALTERING OR ADDING TO THIS CERTIFICATE OR ANY NOTIFICATION HEREON

C: T. 4711-81

DP 622849.

2516-89

**FIRST SCHEDULE (continued)**

| REGISTERED PROPRIETOR                                                                                                                                                                                                                                                     | NATURE | INSTRUMENT |      | ENTERED | Signature of Registrar-General |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|------------|------|---------|--------------------------------|
|                                                                                                                                                                                                                                                                           |        | NUMBER     | DATE |         |                                |
| <p>DP/ 771 715 Registered 25-2-1988</p> <p>This folio is cancelled as to whole <del>part</del> upon creation of computer folios for lots 10 &amp; 11 in the above mentioned plan.</p>  |        |            |      |         |                                |

## SECOND SCHEDULE (continued)

| INSTRUMENT NUMBER |  | NATURE | DATE | PARTICULARS                                                                                                                                        | ENTERED   | Signature of Registrar-General | CANCELLATION |
|-------------------|--|--------|------|----------------------------------------------------------------------------------------------------------------------------------------------------|-----------|--------------------------------|--------------|
| DP 672849         |  |        |      | Easement for sewerage purposes affecting the part of the land within described shown as burdened in Deposited Plan 672849                          | 25.2.1982 | <i>[Signature]</i>             |              |
| DP 672849         |  |        |      | Restriction as to user<br>INTERESTS CREATED PURSUANT TO SECTION 88A CONVEYANCING ACT, 1919, BY THE REGISTRATION OF DP 717115<br>Registered 25-2-88 | 25.2.1982 | <i>[Signature]</i>             |              |

NOTE: ENTRIES FILED THROUGH AND AUTHENTICATED BY THE SECRETARY GENERAL ARE CANCELLED

Information Provided Through  
John McLaren & Co  
Ph. 9231-4872 Fax. 9233-6557

# Historical Search

**EziSearch**  
An Approved LPI NSW  
Information Broker

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - HISTORICAL SEARCH

SEARCH DATE

19/12/2005 8:59PM

FOLIO: 110/800504

First Title(s): VOL 24 FOL 70      VOL 24 FOL 71  
Prior Title(s): 10/771715

| Recorded   | Number   | Type of Instrument    | C.T. Issue                 |
|------------|----------|-----------------------|----------------------------|
| 15/2/1990  | DP800504 | DEPOSITED PLAN        | FOLIO CREATED<br>EDITION 1 |
| 12/7/1993  | I477593  | DISCHARGE OF MORTGAGE | EDITION 2                  |
| 26/10/1993 | I744865  | TRANSFER              | EDITION 3                  |
| 28/4/1999  | 5780509  | TRANSFER              | EDITION 4                  |

\*\*\* END OF SEARCH \*\*\*

hopley coca M

PRINTED ON 19/12/2005

\* ANY ENTRIES PRECEDED BY AN ASTERISK DO NOT APPEAR ON THE CURRENT EDITION OF TITLE WARNING: THE INFORMATION APPEARING UNDER NOTATIONS HAS NOT BEEN FORMALLY RECORDED IN THE REGISTER. JOHN MCLAREN & CO CERTIFES THAT THE INFORMATION CONTAINED IN THIS DOCUMENT HAS BEEN PROVIDED ELECTRONICALLY BY THE REGISTRAR-GENERAL IN ACCORDANCE WITH SECTION 96B(2) OF THE REAL PROPERTY ACT, 1900.

Licence: 10V/0096/96  
Edition: 9804

# TRANSFER

New South Wales  
Real Property Act 1900

5780509C



## STAMP DUTY

Office of State Revenue use only

①

00\*24

20/254904200 40 0128 449022

N.S.W. STAMP DUTY

## (A) TORRENS TITLE

If appropriate, specify the part or share transferred

110/800504

## (B) LODGED BY

LTO Box

Name, Address or DX and Telephone

CODES

185H

Clayton U3  
Schreibers

Reference (optional):

R. McHugh

T  
TS (\$713)  
TW (Sheriff)

## (C) TRANSFEROR

SARA LEE PERSONAL PRODUCTS (AUSTRALIA) PTY LIMITED  
ACN 052 018 836

## (D)

The transferor acknowledges receipt of the consideration of \$ \$4,524,000 and as regards the land specified above transfers to the transferee an estate in fee simple.

## (E)

Encumbrances (if applicable): 1. 2. 3.

## (F) TRANSFEE

COCA-COLA AMATIL (AUST) PTY LIMITED, ACN 076 594 119

## (G)

TENANCY:

(H) We certify this dealing correct for the purposes of the Real Property Act 1900. DATE: DO NOT DATE  
Signed in my presence by the transferor who is personally known to me.

Signature of witness:

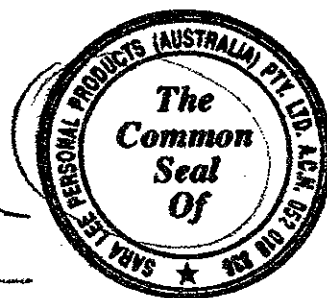
Signature of transferor:

Name of witness:

Address of witness:

*[Signature]*  
\* Director

*[Signature]*  
\* Secretary  
DIRECTOR



Signed in my presence by the transferee who is personally known to me.

Signature of witness:

Signature of transferee:

Name of witness:

Address of witness:

*[Signature]*

If signed on the transferee's behalf by a solicitor or licensed conveyancer, show the signatory's full name and capacity below:

Solicitor for Transferee  
George Livanes

All handwriting must be in block capitals.  
A set of notes on this form (97-01T-2)  
is available from the Land Titles Office.

Page 1 of 1  
number additional pages sequentially

Checked by (LTO use):

*[Signature]*

Information Provided Through  
John McLaren & Co  
Ph. 9231-4872 Fax. 9233-6557

# Title Search

**EziSearch**  
An Approved LPI NSW  
Information Broker

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - TITLE SEARCH

FOLIO: 110/800504

| SEARCH DATE | TIME    | EDITION NO | DATE      |
|-------------|---------|------------|-----------|
| 19/12/2005  | 9:01 PM | 4          | 28/4/1999 |

LAND

LOT 110 IN DEPOSITED PLAN 800504  
AT NORTHMEAD  
LOCAL GOVERNMENT AREA: PARRAMATTA  
PARISH OF ST JOHN COUNTY OF CUMBERLAND  
TITLE DIAGRAM: DP800504

FIRST SCHEDULE

COCA-COLA AMATIL (AUST) PTY LIMITED (T 5780509)

SECOND SCHEDULE (4 NOTIFICATIONS)

1. RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
2. DP622849 RESTRICTION(S) ON THE USE OF LAND
3. EASEMENT(S) AFFECTING THE PART(S) SHOWN SO BURDENED IN THE TITLE  
DIAGRAM CREATED BY:  
DP771715 TO DRAIN WATER 3 WIDE
4. EASEMENT(S) APPURTENANT TO THE LAND ABOVE DESCRIBED CREATED BY:  
DP800504 TO DRAIN WATER OVER EXISTING LINES OF PIPES

NOTATIONS

UNREGISTERED DEALINGS: NIL

\*\*\* END OF SEARCH \*\*\*

hopley coca M

PRINTED ON 19/12/2005

\* ANY ENTRIES PRECEDED BY AN ASTERISK DO NOT APPEAR ON THE CURRENT EDITION OF TITLE. WARNING: THE INFORMATION APPEARING UNDER NOTATIONS HAS NOT BEEN FORMALLY RECORDED IN THE REGISTER. JOHN MCLAREN & CO CERTIFIES THAT THE INFORMATION CONTAINED IN THIS DOCUMENT HAS BEEN PROVIDED ELECTRONICALLY BY THE REGISTRAR-GENERAL IN ACCORDANCE WITH SECTION 96B(2) OF THE REAL PROPERTY ACT, 1900.



RECORDED and ENROLLED in the Registrar General's Office, at Sydney, New South Wales, this  
day of January 1866.

*Twenty of old*  
*W. E. J. J. J. J.*  
Registrar General

No. 15944 TRANSFER DATED 4<sup>th</sup> January 1881  
FROM THE within named George Oakes  
TO Samuel Henry of Parramatta  
PRODUCED & ENTERED 13<sup>th</sup> February 1881 AT 11<sup>th</sup> o'clock in the afternoon  
*at 11 o'clock in the afternoon*  
DEP. REG. GEN.

No. 15915 MORTGAGE DATED 10<sup>th</sup> January 1881  
FROM THE above named Samuel Henry  
TO The Mortgagee George Oakes  
of Parramatta  
PRODUCED & ENTERED 15<sup>th</sup> February 1881 AT 11<sup>th</sup> o'clock in the afternoon  
*at 11 o'clock in the afternoon*  
DEP. REG. GEN.

DISCHARGE OF THE above MORTGAGE NO. 15915  
DATED 15<sup>th</sup> July 1881 PRODUCED & ENTERED 18<sup>th</sup> July 1881 AT 11<sup>th</sup> o'clock in the afternoon  
*at 11 o'clock in the afternoon*  
DEP. REG. GEN.

No. 16003 MORTGAGE DATED 12 May 1890  
FROM THE above named Samuel Henry  
TO The Mortgagee George Oakes  
of Parramatta  
PRODUCED & ENTERED 6 June 1890 AT 11<sup>th</sup> o'clock in the afternoon  
*at 11 o'clock in the afternoon*  
DEP. REG. GEN.

No. 21303 TRANSFER DATED 12 August 1895  
FROM THE above named Samuel Henry  
TO The Mortgagee George Oakes  
of Parramatta  
PRODUCED & ENTERED 13 September 1895 AT 11<sup>th</sup> o'clock in the afternoon  
*at 11 o'clock in the afternoon*  
DEP. REG. GEN.

DISCHARGE OF THE above MORTGAGE NO. 21303  
DATED 13 October 1895 PRODUCED & ENTERED 14 October 1895 AT 11<sup>th</sup> o'clock in the afternoon  
*at 11 o'clock in the afternoon*  
DEP. REG. GEN.

No. 24627 MORTGAGE DATED 19 November 1895  
FROM THE above named Samuel Henry  
TO The Mortgagee George Oakes  
of Parramatta  
PRODUCED & ENTERED 17 December 1895 AT 11<sup>th</sup> o'clock in the afternoon  
*at 11 o'clock in the afternoon*  
DEP. REG. GEN.

No. 192418 APPLICATION BY TRANSMISSION  
Margaret Ellen Brien of Parramatta  
widow  
Proprietors of the Land within described in pursuance of the above  
Application. Produced 5<sup>th</sup> August 1915 AND  
ENTERED 9 September 1915 AT 11<sup>th</sup> o'clock in the afternoon  
*at 11 o'clock in the afternoon*  
DEP. REG. GEN.

No. 192418 MORTGAGE of Mortgage No. 24627 dated 19<sup>th</sup> Nov 1895  
1915<sup>th</sup> 1915<sup>th</sup> 1915<sup>th</sup> 1915<sup>th</sup> 1915<sup>th</sup> 1915<sup>th</sup> 1915<sup>th</sup> 1915<sup>th</sup> 1915<sup>th</sup> 1915<sup>th</sup>  
1915<sup>th</sup> 1915<sup>th</sup> 1915<sup>th</sup> 1915<sup>th</sup> 1915<sup>th</sup> 1915<sup>th</sup> 1915<sup>th</sup> 1915<sup>th</sup> 1915<sup>th</sup> 1915<sup>th</sup>

No. 192418 APPLICATION BY TRANSMISSION  
Margaret Ellen Brien of Parramatta  
widow  
Proprietors of the Land within described in pursuance of the above  
Application. Produced 5<sup>th</sup> August 1915 AND  
ENTERED 9 September 1915 AT 11<sup>th</sup> o'clock in the afternoon  
*at 11 o'clock in the afternoon*  
DEP. REG. GEN.

No. 192418 TRANSFER DATED 4<sup>th</sup> August 1915  
FROM THE above named Margaret Ellen Brien  
TO The Mortgagee George Oakes  
of Parramatta  
PRODUCED & ENTERED 9 September 1915 AT 11<sup>th</sup> o'clock in the afternoon  
*at 11 o'clock in the afternoon*  
DEP. REG. GEN.

No. 135576 APPLICATION BY TRANSMISSION  
Albert Bendall of Northward Farm  
Proprietors of the Land within described in pursuance of the above  
Application. Produced 21<sup>st</sup> December 1949 AND  
ENTERED 23<sup>rd</sup> March 1950 AT 12<sup>th</sup> o'clock in the afternoon  
*at 12 o'clock in the afternoon*  
DEP. REG. GEN.

No. 135577 GAVEAT CALLED 21<sup>st</sup> December 1949  
BY THE REGISTRAR GENERAL 1949  
PRODUCED 21<sup>st</sup> December 1949 AND  
ENTERED 23<sup>rd</sup> March 1950 AT 12<sup>th</sup> o'clock in the afternoon  
*at 12 o'clock in the afternoon*  
DEP. REG. GEN.

The within GAVEAT No. 135577  
DATED 10<sup>th</sup> July 1950  
*at 10 o'clock in the afternoon*  
DEP. REG. GEN.

No. F 24385 Transfer dated 1<sup>st</sup> May 1950  
from the said Albert Bendall to Alice Bendall  
widow, the said Albert Bendall, widow of the land within described  
No. Northward, widow of the land within described  
Produced 16<sup>th</sup> June 1950 and entered 10<sup>th</sup> July  
1950 at 12 o'clock noon.

304 No. F 24387 TRANSFER DATED 1<sup>st</sup> May 1950  
from the said Alice Bendall to Alice Bendall  
widow, the said Alice Bendall, widow of the land within described  
No. Northward, widow of the land within described  
Produced 16<sup>th</sup> June 1950 and entered 10<sup>th</sup> July  
1950 at 12 o'clock noon.

M  
NEW SOUTH WALES  
(For Grant and title reference  
prior to first edition see  
Deposited Plan.)

B29

/Req: B090877 /Doc: CT 09594-236  
/Prt: 15-Dec-2005



09594236

Vol. 9594 Fol. 236

1st Edition Issued 17-12-1963.



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

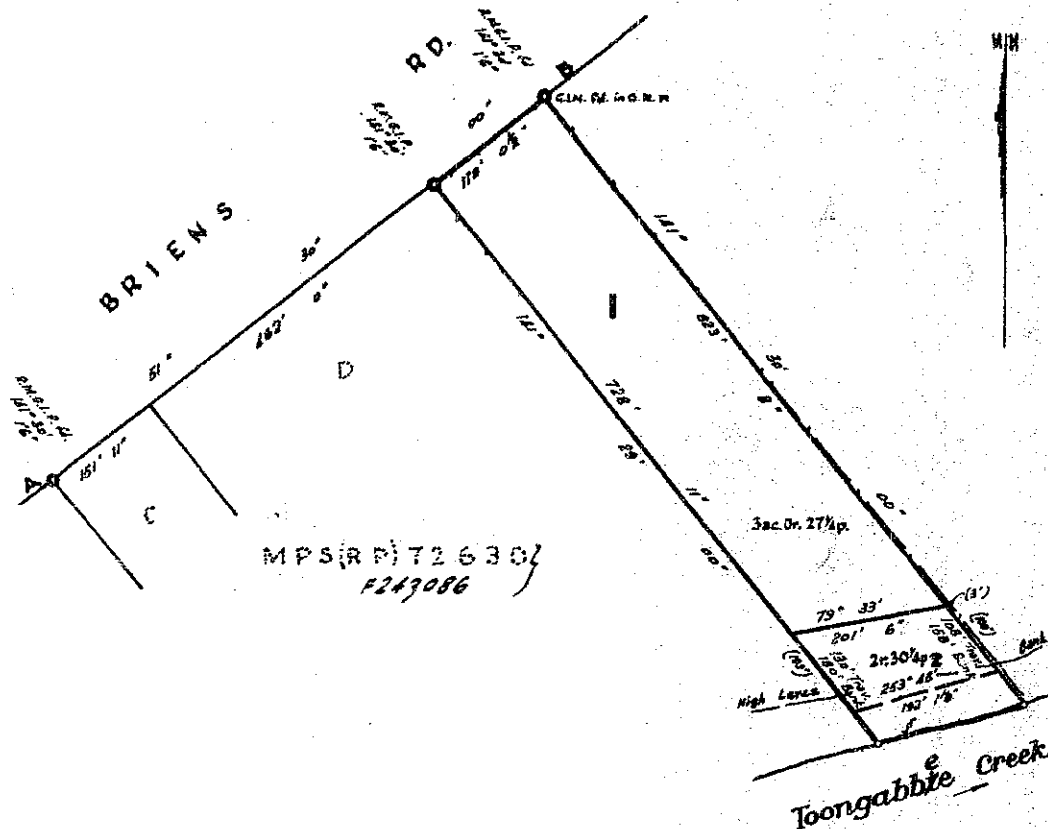
Witness

*B. Bailey*

*Janatson*  
Registrar-General.



PLAN SHOWING LOCATION OF LAND



ESTATE AND LAND REFERRED TO.

Estate in Fee Simple in Lot 1 in Deposited Plan 506753 at Northmead in the City of Parramatta Parish of St. John and County of Cumberland.

FIRST SCHEDULE (Continued overleaf)

~~FLOR COMPANY AND STAFF (N.S.W.) PTY. LIMITED.~~

*Janatson*  
Registrar General.

SECOND SCHEDULE (Continued overleaf)

1. Reservations and conditions, if any, contained in the Crown Grant(s) referred to in the said Deposited Plan.
2. Mortgage No. J337221 to A. H. Z. Pensions (Overseas) Proprietary Limited. Entered 24-3-1963. Discharged 14-7-1964.
3. Mortgage No. J347442 to Australia and New Zealand Bank Limited. Entered 22-7-1963. Discharged 18-1-1973.

*Janatson*  
Registrar General.

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

PERSONS ARE CAUTIONED AGAINST ALTERING OR ADDING TO THIS CERTIFICATE OR ANY NOTIFICATION HEREON

WARNING: THIS DOCUMENT MUST NOT BE REMOVED FROM THE LAND TITLES OFFICE.

FIRST SCHEDULE (continued)

| REGISTERED PROPRIETOR                                                                                                                                                      |          | INSTRUMENT |           | ENTERED | Signature of Registrar-General |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------------|-----------|---------|--------------------------------|
| NATURE                                                                                                                                                                     | NUMBER   | DATE       |           |         |                                |
| Gerard Company of Australia<br>Local Government Superannuation Board by Transfer 2439796<br>Southern Cross Beverages Pty Limited by Transfer W857679. Registered 20-5-1981 | Transfer | 31-5-1972  | 31-7-1972 |         | <i>James</i>                   |
| <p>DP 157 748 112 Registered 24 JUL 1987</p> <p>This folio is cancelled as to whole upon creation of computer folios for lots 101 in the abovementioned plan.</p>          |          |            |           |         |                                |

SECOND SCHEDULE (continued)

| PARTICULARS                                                                                                                              |           | ENTERED   | Signature of Registrar-General | CANCELLATION |         |
|------------------------------------------------------------------------------------------------------------------------------------------|-----------|-----------|--------------------------------|--------------|---------|
| NATURE                                                                                                                                   | NUMBER    | DATE      |                                |              |         |
| Mortgage to 2nd mortgage (1st mortgage) Pty Limited                                                                                      | 15-1-1967 | 15-1-1967 | <i>James</i>                   | Discharged   | M578660 |
| Mortgage to 2nd mortgage (1st mortgage) Pty Limited                                                                                      | 15-1-1967 | 15-1-1967 | <i>James</i>                   | Cancelled    | M578660 |
| Restriction for sewerage purposes appurtenant to the land within described affecting the land shown so burdened in Deposited Plan 622849 | 25-2-1982 | 25-2-1982 | <i>James</i>                   |              |         |
| Restriction as to user                                                                                                                   | 25-2-1982 | 25-2-1982 | <i>James</i>                   |              |         |
| V456810 Lease to Southern Cross Beverages Pty. Limited of 120 Briens Road Northmead Expires 31-5-1987                                    |           |           |                                |              |         |

**Information Provided Through**  
**John McLaren & Co**  
*Ph. 9231-4872 Fax. 9233-6557*

## Historical Search

**EziSearch**  
An Approved LPI *NSW*  
Information Broker

## LAND AND PROPERTY INFORMATION NEW SOUTH WALES - HISTORICAL SEARCH

SEARCH DATE

19/12/2005 9:13PM

FOLIO: 101/748112

First Title(s): VOL 24 FOL 71 VOL 27 FOL 203  
VOL 27 FOL 204  
Prior Title(s): VOL 9594 FOL 236 VOL 13727 FOL 136

| Recorded<br>----- | Number<br>----- | Type of Instrument<br>----- | C.T. Issue<br>-----        |
|-------------------|-----------------|-----------------------------|----------------------------|
| 27/7/1987         | DP748112        | DEPOSITED PLAN              | FOLIO CREATED<br>EDITION 1 |
| 15/2/1990         | DP800504        | DEPOSITED PLAN              | FOLIO CANCELLED            |

\*\*\* END OF SEARCH \*\*\*

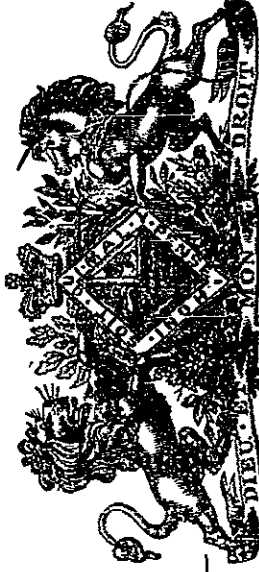
hopley coca M

PRINTED ON 19/12/2005

\* ANY ENTRIES PRECEDED BY AN ASTERISK DO NOT APPEAR ON THE CURRENT EDITION OF TITLE. WARNING: THE INFORMATION APPEARING UNDER NOTATIONS HAS NOT BEEN FORMALLY RECORDED IN THE REGISTER. JOHN MCCLAREN & CO CERTIFIES THAT THE INFORMATION CONTAINED IN THIS DOCUMENT HAS BEEN PROVIDED ELECTRONICALLY BY THE REGISTRAR-GENERAL IN ACCORDANCE WITH SECTION 96B(2) OF THE REAL PROPERTY ACT, 1900

ॐ

# Salvador Masó



[Reference to last Certificate]

[Vol. *Atq* *Polius 7 and 8*]

REGISTER BOOK,

VOL. 973 FOLIO 129

**CANCELLED**

Timothy Buell

Monoy Duck of Theriot's (Farmers) Transferred as to an unincumbered moiety or Half Share moiety of Instrument of Transfer from Laurence Brown numbered Nos 527 and as to the other unincumbered moiety by virtue of Conveyance now incumbered is now the Proprietor of an Estate in See Shingle subject nevertheless to the reservations and conditions, if any, contained in the Grants heretofore referred to; and also subject to such encumbrances and interests as are not depicted herein in That Piece of Land situated near Theriot's in the Parish of St John's and County of Cumberland containing SEVEN ACRES ONE HUNDRED TWENTY TWO PERCHES or thereabouts. Commencing in the South East side of a High Road (One chain wide) at the West end corner of Plot No 11 and bounded thence on the North West by that High Road bearing North Westerly Eight chains to Bernard Hoos Seven acres one rood twenty five perches, on the South West by that High Road bearing North Westerly Six chains twenty five perches to John Acker (Farmer) on the South East by that High Road bearing North Easterly to Plot No 11 aforesaid, and on the North East by that High Road bearing North Westerly Twelve chains to the point of commencement as shown on the plan hereon and thence edged near Plot No 12 originally granted to JAMES DYE by Commission Grant dated the twenty ninth day of November One thousand eight hundred and sixty five Registered in the Land Titles Office Sydney Volume 27 folio 203 and part of Plot No 13 originally granted as aforesaid by Commission Grant dated as aforesaid in the said Office Volume 27 folio 204.

Witness said Grants and delineated in the Public Map of the said Parish deposited in the Office of the Surveyor General.

MEAL 57x

In witness whereof, I have hereunto signed my name and affixed my Seal, this

one thousand eight hundred and ninety

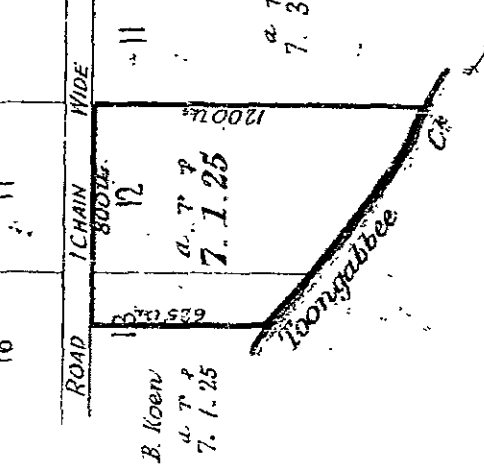
Signed the 30<sup>th</sup> day of August 1890.

1890.

in the presence of



**Registrar General.**



NOTIFICATION REFERRED TO.

NOV 26/30 13.17.15 OFFER DATED 12 August 1935  
 FROM THE ALLOW NAMED *Simothy A. Bruce* 270  
*Simothy Bruce* (number) 10140 *Baranawaka*  
*Guinevere* DEPT OF THE AGRO-INDUSTRIAL  
 PRODUCE & FIBER 13 September 1935  
 AT 11:15 O'CLOCK IN THE AFTER NOON  
*Black & White* RECEIVED

NOV 27 1895  
FROM THE ABOVE NAMED Timothy'Brien (junior)  
To The Bank of New South Wales

PRODUCTION OF THE 17<sup>th</sup> December 1895  
OF THE PART 2 OF THE CASE AFTER DECOR.  
*Capt H. C. L. W. G. GEORGE*



A192718R  
 A192719R  
~~A192720R~~  
 A192721R  
 A192722R

No. A 142718 APPLICATION BY TRANSMISSION  
 Margaret Ellen Brown of  
 Parramatta, widow  
 Proprietary of the land within described in pursuance of the above  
 Application. Produced 5<sup>th</sup> August 1915 and  
 entered 9<sup>th</sup> September 1915  
 at 4 o'clock in the afternoon  
 J. H. Keenan  
 REGISTRAR GENERAL

No. A 142719 DISCHARGE of WITHIN Mortgage  
 No. 246327 dated 30<sup>th</sup> July 1915  
 Produced 5<sup>th</sup> August 1915 and entered  
 at 9<sup>th</sup> September 1915  
 at 4 o'clock in the afternoon  
 J. H. Keenan  
 REGISTRAR GENERAL

No. A 192721 TRANSFER dated 4<sup>th</sup> August 1915  
 from the said Margaret Ellen Brown to  
 Edward Biddell of Parramatta,  
 Orchardist  
 of the land within described  
 Produced and entered 9<sup>th</sup> September 1915  
 at 4 o'clock in the afternoon  
 J. H. Keenan  
 REGISTRAR GENERAL

No. B 127255 TRANSFER dated 28<sup>th</sup> August 1914  
 from the said Edward Biddell to William John Bacey of Parramatta  
 of the land within described  
 Produced and entered 10<sup>th</sup> September 1915  
 at 11 o'clock in the afternoon  
 J. H. Keenan  
 REGISTRAR GENERAL

This Deed is Cancelled and Certificate of Title issued  
 Vol. 3639 Fol. 200 Residue  
 J. H. Keenan  
 Registrar General.  
 B 121456

B 121456/2  
 10-9-15

**B29**

# THE FOLIO

/Req: B090899 /Doc: CT 00049-006  
/Prt: 19-Dec-2005

③

三



Reference to Last Certificate

# REGISTER BOOK

[Vol. XXVII. Folios 204 and 205]

VOL. XX FOLIO 6

Bernard Store, of Haverham, Salore, Transferred under Instructions from James Esq. numbered, 1734, is now the proprietor of an Estate in The Simple Subject nevertheless to the reservation, if any, contained in the Grants heretofore referred to and also subject to such encumbrances laws and interests as are notified herein in Sheet Three of Land situated near Haverham in the Parish of Saint Peter and brother of Humberland containing seven acres one rood and twenty five perches or thereabouts commencing on Longabee brook at the Southern corner of J. and L. Price's seven acres one rood and twenty five perches and bounded on the North East by the South Western boundary of that land bearing North Westerly sea chains twenty five links to a Government Parcel one Chain wide on the North West by that Road bearing South Westerly twelve chains twenty five links to a stream on the South West by that of that stream bearing South Easterly five chains twenty links to Longabee brook aforesaid and on the South East by that brook downwards to the point of commencement as shown in the plan heron and therein edged West being the whole of forty five and part of forty six delineated in the public Map of the said Parish deposited in the office of the Surveyor General originally granted to the said James Esq. by two several several Grants respectively dated the twenty ninth day of November one thousand eight hundred and sixty five Registered in the said Titles Office Volume 1111 folios 204 and 205. 7 1871.

IN witness whereof, I have hereunto signed my  
One thousand eight hundred and sixty *seventy*

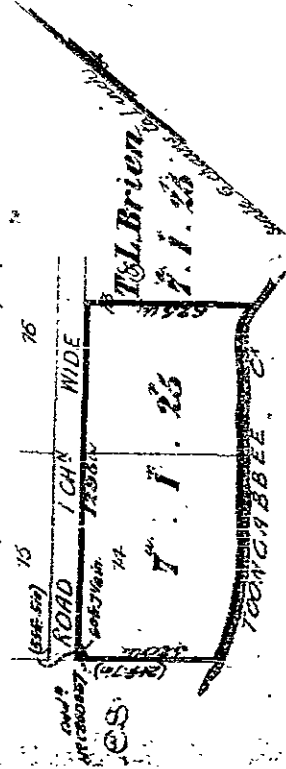
I, this 21<sup>st</sup> day of August

Signed the 7<sup>th</sup> day of August 1867,  
in the presence of  
H. J. M. M. M.

Registrar General.

Subject to Govt. (if any) in Way of Grant -

Wm. W. Wood, Prop. P. O. Box 129, New York



N. A 828157 / Application by transmission  
of Patent No. 1000000 of American  
the registered  
Proprietor of the and within described in pursuance of the above  
Application. Proceeded 28<sup>th</sup> June 1922 and  
entered 28<sup>th</sup> September 1922  
at 11 o'clock in the fore noon.  
*Dr. H. H. H.*  
REGISTRAR GENERAL

No. A 8281518  
 by the Registry General.  
 28th September 1922  
 Date 11  
 to close in the year 1922  
 28th June 1922  
 Produced and entered  
 1  
 RECORDED  
 REGISTRY GENERAL  


As to the residue  
this Deed is cancelled and new Certificate of Title issued  
Vol 6778 Fol. 6  
Vide F689729  
C. Wells  
Registrar General.





Crown Grants Vol.24 Fol. 71  
Vol.27 Fol.203  
Vol.27 Fol.204

Vol.3639 Fol.244 Vol.6351 Fol.200  
Vol.5010 Fol.231 Vol.6778 Fol. 6  
Vol.6351 Fol.196



3727.Fol.136

EDITION ISSUED

10 1978

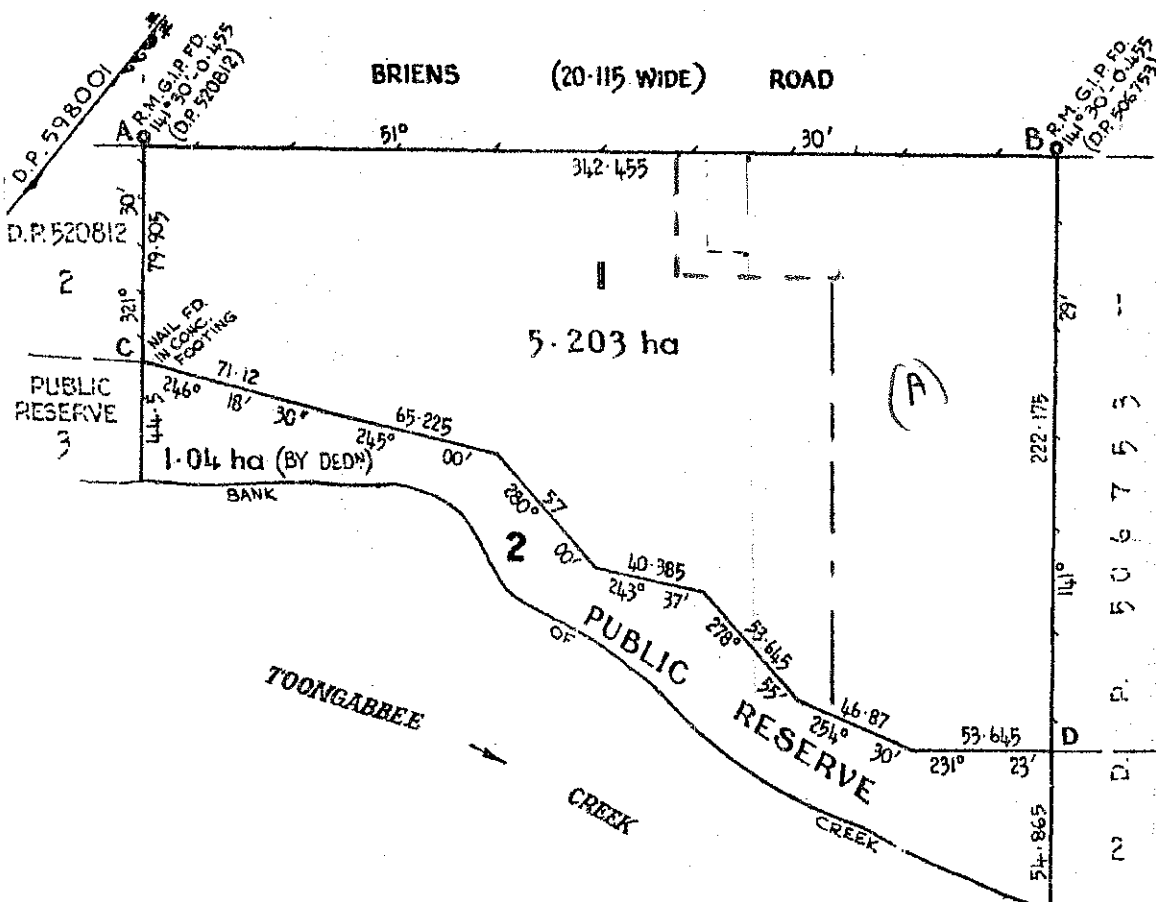
I certify that the person described in the First Schedule is the registered proprietor of the undermentioned estate in the land which is described subject nevertheless to such exceptions encumbrances and interests as are shown in the Second Schedule.

Registrar General.



### PLAN SHOWING LOCATION OF LAND

LENGTHS ARE IN METRES



**WARNING: THIS DOCUMENT MUST NOT BE REMOVED FROM THE REGISTRAR GENERAL'S OFFICE**

## ESTATE AND LAND REFERRED TO

Estate in Fee Simple in Lot 1 in Deposited Plan 598001 at Northmead in the City of Parramatta Parish of St. John and County of Cumberland.

FIRST SCHEDULE

~~THE COGA-UCLA-EXPONENTIAL CORPORATION.~~

## SECOND SCHEDULE

1. Reservations and conditions, if any, contained in the Crown Grants above referred to.



Information Provided Through  
John McLaren & Co  
Ph. 9231-4872 Fax. 9233-6557

# Historical Search

**EziSearch**  
An Approved LPI NSW  
Information Broker

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - HISTORICAL SEARCH

SEARCH DATE

19/12/2005 9:07PM

FOLIO: 111/800504

First Title(s): VOL 24 FOL 70      VOL 24 FOL 71  
                  VOL 27 FOL 203      VOL 27 FOL 205  
Prior Title(s): 101/748112      10/771715

| Recorded  | Number   | Type of Instrument    | C.T. Issue                 |
|-----------|----------|-----------------------|----------------------------|
| 16/2/1990 | DP800504 | DEPOSITED PLAN        | FOLIO CREATED<br>EDITION 1 |
| 23/3/1990 | Y894214  | DISCHARGE OF MORTGAGE |                            |
| 23/3/1990 | Y894215  | TRANSFER              | EDITION 2                  |
| 3/2/2000  | 6534392  | TRANSFER              | EDITION 3                  |

\*\*\* END OF SEARCH \*\*\*

hopley coca M

PRINTED ON 19/12/2005

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Form: 97-01T

Licence: 026CN/0526/96

# TRANSFER

New South Wales

Real Property Act 1900

6534392X



(N.S.W. TREASURY)

1996/97



P16

NO STAMP DUTY IS PAYABLE  
ON THIS INSTRUMENT

Instructions for filling out  
this form are available  
from the Land Titles Office

Office of State Revenue use only

- (A) **LAND TRANSFERRED**  
Show no more than 20 titles.  
If appropriate, specify the  
share or part transferred.

111/800504

- (B) **LODGED BY**

LTO Box

Name, Address or DX and Telephone

19/1

41J

Mallesons Stephen Jaques  
DX 113 Sydney  
(02) 9296 2000

REFERENCE (15 character maximum): 0641533.01 C Mills 03-0042-515

- (C) **TRANSFEROR** BEVERAGE BOTTLERS (NSW) PTY LIMITED (In LIQUIDATION) (ACN 001 614 455)

- (D) acknowledges receipt of the consideration of NIL  
and as regards the land specified above transfers to the transferee an estate in fee simple.

- (E) Encumbrances (if applicable) 1. Not applicable 2. 3.

- (F) **TRANSFEE**

T  
TS  
(s713  
LGA)  
TW  
(Sheriff)

COCA-COLA AMATIL (AUST) PTY LIMITED (ACN 076 594 119)

- (G)

TENANCY:

- (H) We certify this dealing correct for the purposes of the Real Property Act 1900. DATE .....  
Signed in my presence by the transferor who is personally known to me.

SEE ANNEXURE 'A'

Signature of Witness

Name of Witness (BLOCK LETTERS)

Address of Witness

Signature of Transferor

Signed in my presence by the transferee who is personally known to me.

Signature of Witness

Name of Witness (BLOCK LETTERS)

Signature of Transferee

Address of Witness

NB: if signed on the transferee's behalf by a solicitor or licensed conveyancer, show the signatory's full name in block letters.

"A"

THIS IS THE ANNEXURE MARKED "A" REFERRED TO In THE TRANSFER BETWEEN  
BEVERAGE BOTTLERS (NSW) PTY LIMITED (In LIQUIDATION) (ACN 001 614 455) AND  
COCA-COLA AMATIL (AUST) PTY LIMITED (ACN 076 594 119)

THE COMMON SEAL of BEVERAGE )  
BOTTLERS (NSW) PTY LIMITED (In )  
LIQUIDATION) is duly affixed by Peter )  
Damien McCluskey the liquidator:

*Stanley Isaac*  
Signature of authorised person

Office held

*Stanley Isaac*  
Name of authorised person (block letters)

THE COMMON SEAL of COCA-COLA )  
AMATIL (AUST) PTY LIMITED is duly )  
affixed by authority of its directors in the )  
presence of:

*[Signature]*  
Signature of authorised person

*SECRETARY*  
Office held

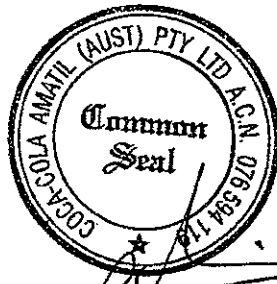
*DAVID ROBERT WILKINSON*  
Name of authorised person (block letters)



Signature of authorised person

*LIQUIDATOR*  
Office held

*P.D. McCluskey*  
Name of authorised person (block letters)



Signature of authorised person

*DAVID ROBERT WILKINSON*  
Office held

*STEFAN CARL MARKUS*  
Name of authorised person (block letters)

FILE  
cont

AUSEARCH PTY LTD  
DX : 315  
SYDNEY NSW

## Certificate of the Registration of a Company

Corporations Law Paragraph 1274 (2) (b)

This is to certify that

**SOUTHERN CROSS BEVERAGES PTY LTD**

**Australian Company Number 001 614 455**

is taken to be registered as a company under the  
Corporations Law of New South Wales.

On the twenty-third day of May 1990 the company changed its name to  
**CCA BEVERAGES (SYDNEY) PTY. LTD.**

On the twenty-ninth day of July 1994 the company changed its name to  
**COCA-COLA AMATIL (NSW) PTY LTD**

On the twenty-seventh day of November 1998 the company changed its name to  
**BEVERAGE BOTTLERS (NSW) PTY LTD**

The company is **limited by shares.**

The company is a **proprietary** company.

The day of commencement of registration is  
**the eighteenth day of July 1978.**

Issued by the  
Australian Securities and Investments Commission  
on this tenth day of January, 2000.



-----  
A delegate of the Australian Securities and Investments Commission

Information Provided Through  
John McLaren & Co  
Ph. 9231-4872 Fax. 9233-6557

# Title Search

**EziSearch**  
An Approved LPI NSW  
Information Broker

## LAND AND PROPERTY INFORMATION NEW SOUTH WALES - TITLE SEARCH

FOLIO: 111/800504

| SEARCH DATE | TIME    | EDITION NO | DATE     |
|-------------|---------|------------|----------|
| 19/12/2005  | 9:08 PM | 3          | 3/2/2000 |

### LAND

LOT 111 IN DEPOSITED PLAN 800504  
AT NORTHMEAD  
LOCAL GOVERNMENT AREA: PARRAMATTA  
PARISH OF ST JOHN COUNTY OF CUMBERLAND  
TITLE DIAGRAM: DP800504

### FIRST SCHEDULE

COCA-COLA AMATIL (AUST) PTY LIMITED (T 6534392)

### SECOND SCHEDULE (4 NOTIFICATIONS)

1. RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
2. DP622849 EASEMENT FOR SEWERAGE PURPOSES APPURTENANT TO THE PART OF THE LAND ABOVE DESCRIBED SHOWN SO BENEFITED AFFECTING THE PART SHOWN SO BURDENED IN THE TITLE DIAGRAM
3. DP622849 RESTRICTION(S) ON THE USE OF LAND
4. EASEMENT(S) AFFECTING THE PART(S) SHOWN SO BURDENED IN THE TITLE DIAGRAM CREATED BY:
  - DP622849 FOR SEWERAGE PURPOSES
  - DP771715 TO DRAIN WATER 3 WIDE
  - DP800504 TO DRAIN WATER OVER EXISTING LINE OF PIPES

### NOTATIONS

UNREGISTERED DEALINGS: NIL

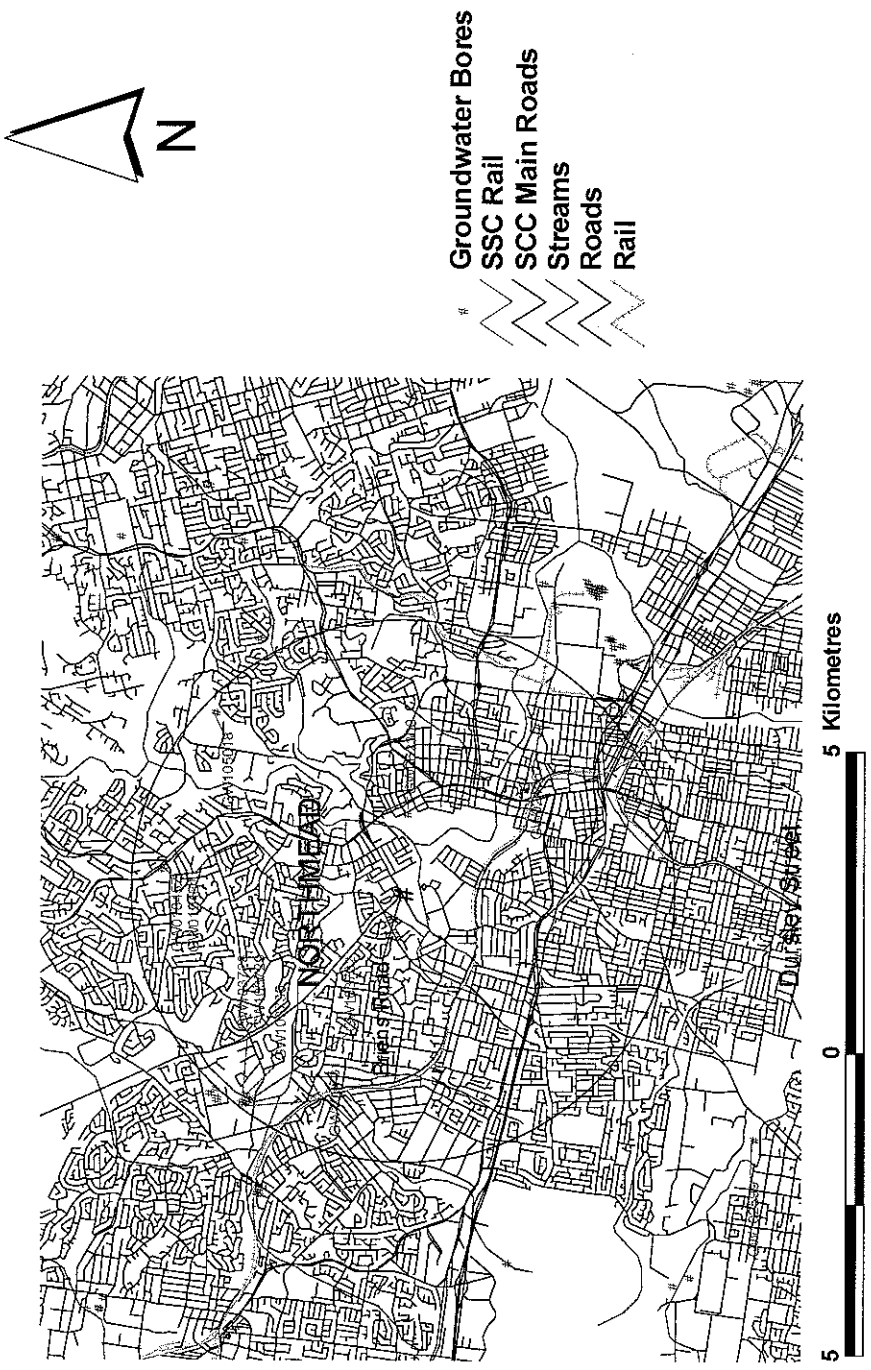
\*\*\* END OF SEARCH \*\*\*

hopley coca M

PRINTED ON 19/12/2005

\* ANY ENTRIES PRECEDED BY AN ASTERISK DO NOT APPEAR ON THE CURRENT EDITION OF TITLE WARNING: THE INFORMATION APPEARING UNDER NOTATIONS HAS NOT BEEN FORMALLY RECORDED IN THE REGISTER JOHN MCLAREN & CO CERTIFIES THAT THE INFORMATION CONTAINED IN THIS DOCUMENT HAS BEEN PROVIDED ELECTRONICALLY BY THE REGISTRAR-GENERAL IN ACCORDANCE WITH SECTION 96B(2) OF THE REAL PROPERTY ACT, 1900.

**Groundwater Bores at a 4.25km radius at Briens Road  
Northmead dated 20/12/2005**



Date/Time :20-Dec-2005 09:25 AM  
 User :STANNER  
 Report :RMGW001D.QRP  
 Executable :S:\G5\PROD32\Ground.exe  
 Exe Date :18-Apr-2005  
 System :Groundwater  
 Database :Edbp



## DEPARTMENT OF NATURAL RESOURCES

### Work Summary

**GW018457**

Converted From HYDSYS

|                                |                 |                                         |                                       |
|--------------------------------|-----------------|-----------------------------------------|---------------------------------------|
| License :10BL010774            |                 | Authorised Purpose(s)<br>WASTE DISPOSAL | Intended Purpose(s)<br>WASTE DISPOSAL |
| Work Type :Bore open thru rock |                 |                                         |                                       |
| Work Status :(Unknown)         |                 |                                         |                                       |
| Construct. Method :Cable Tool  |                 |                                         |                                       |
| Owner Type :Private            |                 |                                         |                                       |
| Commenced Date :               | Final Depth :   | 52.40 m                                 |                                       |
| Completion Date :01-Oct-1959   | Drilled Depth : | 52.40 m                                 |                                       |
| Contractor Name :              |                 |                                         |                                       |
| Driller :                      |                 |                                         |                                       |
| Property : - N/A               |                 | Standing Water Level :                  |                                       |
| GWMA :603 - SYDNEY BASIN       |                 | Salinity :                              | Salty                                 |
| GW Zone : -                    |                 | Yield :                                 |                                       |

### Site Details

|                                                 |                                                      |                                      |                                 |
|-------------------------------------------------|------------------------------------------------------|--------------------------------------|---------------------------------|
| Site Chosen By                                  | County<br>Form A :CUMBERLAND<br>Licensed :CUMBERLAND | Parish<br>CASTLE HILL<br>CASTLE HILL | Portion/Lot DP<br>114<br>PT 144 |
| Region :10 - SYDNEY SOUTH COAST                 |                                                      | CMA Map :9030-2N                     | PROSPECT                        |
| River Basin :213 - SYDNEY COAST - GEORGES RIVER |                                                      | Grid Zone :56/1                      | Scale :1:25,000                 |
| Area / District :                               |                                                      |                                      |                                 |
| Elevation :                                     |                                                      | Northing :6262270                    | Latitude (S) :33° 45' 48"       |
| Elevation Source :(Unknown)                     |                                                      | Easting :313920                      | Longitude (E) :150° 59' 27"     |
| GS Map :0056D4                                  | AMG Zone :56                                         | Coordinate Source :GD.,ACC.MAP       |                                 |

### Construction

Negative depths indicate Above Ground Level;H-Hole;P-Pipe;OD-Outside Diameter;ID-Inside Diameter;C-Cemented;SL-Slot Length;A-Aperture;GS-Grain Size;Q-Quantity

| H | P | Component | Type           | From (m) | To (m) | OD (mm) | ID (mm) | Interval | Details   |
|---|---|-----------|----------------|----------|--------|---------|---------|----------|-----------|
| 1 | 1 | Casing    | Threaded Steel | 0.00     | 6.00   | 152     |         |          | (Unknown) |

### Water Bearing Zones

| From (m) | To (m) | Thickness (m) | WBZ Type  | S.W.L. (m) | D.D.L. (m) | Yield (L/s) | Hole Depth (m) | Duration (hr) | Salinity (mg/L) |
|----------|--------|---------------|-----------|------------|------------|-------------|----------------|---------------|-----------------|
| 19.80    | 52.40  | 32.60         | Fractured |            | 1.20       | 0.32        |                |               | Salty           |

### Drillers Log

| From (m) | To (m) | Thickness(m) | Drillers Description | Geological Material | Comments |
|----------|--------|--------------|----------------------|---------------------|----------|
| 0.00     | 19.81  | 19.81        | Shale Sandy          | Shale               |          |
| 19.81    | 52.42  | 32.61        | Shale Water Supply   |                     |          |

### Pumping Tests - Summaries

| Pumping Test Type        | Date        | Duration (hr) | S.W.L. (m) | D.D.L. (m) | Yield (L/s) | Intake Depth (m) | Test Method | To Measure Water Level | To Measure Discharge | Tested By |
|--------------------------|-------------|---------------|------------|------------|-------------|------------------|-------------|------------------------|----------------------|-----------|
| Single-Rate Pumping Test | 01-Oct-1959 | 24.00         | 1.20       | 9.10       | 0.32        | 24.00            | Jet Pump    |                        |                      |           |

### Pumping Tests - Readings

| Pumping Test Type                       | Date | Time (mins) | S.W.L. (m) | D.D.L. (m) | Yield (L/s) | Intake Depth (m) | Test Method | To Measure Water Level | To Measure Discharge | Tested By |
|-----------------------------------------|------|-------------|------------|------------|-------------|------------------|-------------|------------------------|----------------------|-----------|
| (No Pumping Test Reading Details Found) |      |             |            |            |             |                  |             |                        |                      |           |

### Chemical Treatment

| Treatment                             | Method | Duration | Success |
|---------------------------------------|--------|----------|---------|
| (No Chemical Treatment Details Found) |        |          |         |

### Development

| Method                         | Time Taken | Other Development Method |
|--------------------------------|------------|--------------------------|
| (No Development Details Found) |            |                          |

### Remarks

SITE SEVEN HILLS/WINDSOR RD 2153

\*\*\* End of GW018457 \*\*\*

Warning To Clients: This raw data has been supplied to the Department of Land and Water Conservation (DLWC) by drillers, licensees and other sources. The DLWC does not verify the accuracy of this data. The data is presented for use by you at your own risk. You should consider verifying this data before relying on it. Professional hydrogeological advice should be sought in interpreting and using this data.

# DEPARTMENT OF NATURAL RESOURCES

## Work Summary

GW019461

Converted From HYDSYS

License :10BL010775

Work Type :Bore open thru rock  
Work Status :(Unknown)  
Construct. Method :Cable Tool  
Owner Type :Private

Authorised Purpose(s)  
WASTE DISPOSAL

Intended Purpose(s)  
WASTE DISPOSAL

Commenced Date : Final Depth : 52.40 m  
Completion Date :01-Oct-1959 Drilled Depth : 52.40 m

Contractor Name :  
Driller :

Property : - N/A  
GWMA :603 - SYDNEY BASIN  
GW Zone : -

Standing Water Level :  
Salinity : Salty  
Yield :

### Site Details

Site Chosen By

County  
Form A :CUMBERLAND  
Licensed :CUMBERLAND

Parish  
CASTLE HILL  
CASTLE HILL

Portion/Lot DP  
114  
PT 144

Region :10 - SYDNEY SOUTH COAST  
River Basin :213 - SYDNEY COAST - GEORGES RIVER  
Area / District :

CMA Map :9030-2N  
Grid Zone :56/1  
PROSPECT  
Scale :1:25,000

Elevation :  
Elevation Source :(Unknown)

Northing :6262300  
Easting :313875

Latitude (S) :33° 45' 47"  
Longitude (E) :150° 59' 25"

GS Map :0056D4 AMG Zone :56

Coordinate Source :GD.,ACC.MAP

### Construction

Negative depths indicate Above Ground Level;H-Hole;P-Pipe;OD-Outside Diameter;ID-Inside Diameter;C-Cemented;SL-Slot Length;A-Aperture;GS-Grain Size;Q-Quantity

| H | P | Component | Type           | From (m) | To (m) | OD (mm) | ID (mm) | Interval | Details   |
|---|---|-----------|----------------|----------|--------|---------|---------|----------|-----------|
| 1 | 1 | Casing    | Threaded Steel | 0.00     | 6.00   | 152     |         |          | (Unknown) |

### Water Bearing Zones

| From (m) | To (m) | Thickness (m) | WBZ Type  | S.W.L. (m) | D.D.L. (m) | Yield (L/s) | Hole Depth (m) | Duration (hr) | Salinity (mg/L) |
|----------|--------|---------------|-----------|------------|------------|-------------|----------------|---------------|-----------------|
| 19.80    | 52.40  | 32.60         | Fractured | 1.20       |            | 10.10       |                |               | Salty           |

### Drillers Log

| From (m) | To (m) | Thickness(m) | Drillers Description | Geological Material | Comments |
|----------|--------|--------------|----------------------|---------------------|----------|
| 0.00     | 19.61  | 19.61        | Shale Sandy          |                     |          |
| 19.61    | 52.42  | 32.61        | Shale Water Supply   | Shale               |          |

### Pumping Tests - Summaries

| Pumping Test Type        | Date        | Duration (hr) | S.W.L. (m) | D.D.L. (m) | Yield (L/s) | Intake Depth (m) | Test Method           | To Measure Water Level | To Measure Discharge | Tested By |
|--------------------------|-------------|---------------|------------|------------|-------------|------------------|-----------------------|------------------------|----------------------|-----------|
| Single-Rate Pumping Test | 01-Oct-1959 | 8.00          | 1.20       | 18.20      | 10.10       | 30.00            | Turbine Pump, shaft d |                        |                      |           |

### Pumping Tests - Readings

| Pumping Test Type                       | Date | Time (mins) | S.W.L. (m) | D.D.L. (m) | Yield (L/s) | Intake Depth (m) | Test Method | To Measure Water Level | To Measure Discharge | Tested By |
|-----------------------------------------|------|-------------|------------|------------|-------------|------------------|-------------|------------------------|----------------------|-----------|
| (No Pumping Test Reading Details Found) |      |             |            |            |             |                  |             |                        |                      |           |

### Chemical Treatment

| Treatment                             | Method | Duration | Success |
|---------------------------------------|--------|----------|---------|
| (No Chemical Treatment Details Found) |        |          |         |

### Development

| Method                         | Time Taken | Other Development Method |
|--------------------------------|------------|--------------------------|
| (No Development Details Found) |            |                          |

### Remarks

SITE SEVEN HILLS/WINDSOR RD 2153

\*\*\* End of GW019461 \*\*\*

# DEPARTMENT OF NATURAL RESOURCES

## Work Summary

**GW024667**

*Converted From HYDSYS*

|                              |                 |                                   |                                    |
|------------------------------|-----------------|-----------------------------------|------------------------------------|
| License :10BL019073          |                 | Authorised Purpose(s)<br>DOMESTIC | Intended Purpose(s)<br>GENERAL USE |
| Work Type :Well              |                 |                                   |                                    |
| Work Status :Supply Obtained |                 |                                   |                                    |
| Construct. Method :Hand Dug  |                 |                                   |                                    |
| Owner Type :Private          |                 |                                   |                                    |
| Commenced Date :             | Final Depth :   | 4.50 m                            |                                    |
| Completion Date :01-Oct-1966 | Drilled Depth : | 4.60 m                            |                                    |
| Contractor Name :            |                 |                                   |                                    |
| Driller :                    |                 |                                   |                                    |
| Property : - N/A             |                 | Standing Water Level :            |                                    |
| GWMA :603 - SYDNEY BASIN     |                 | Salinity :                        | Fresh                              |
| GW Zone : -                  |                 | Yield :                           |                                    |

### Site Details

|                                                 |                      |                                |                            |
|-------------------------------------------------|----------------------|--------------------------------|----------------------------|
| Site Chosen By                                  | County               | Parish                         | Portion/Lot DP             |
|                                                 | Form A :CUMBERLAND   | ST JOHN                        | 99999                      |
|                                                 | Licensed :CUMBERLAND | ST JOHN                        | N/A                        |
| Region :10 - SYDNEY SOUTH COAST                 |                      | CMA Map :9130-3N               | PARRAMATTA RIVER           |
| River Basin :213 - SYDNEY COAST - GEORGES RIVER |                      | Grid Zone :56/1                | Scale :1:25,000            |
| Area / District :                               |                      |                                |                            |
| Elevation :                                     |                      | Northing :6256031              | Latitude (S) :33° 49' 12"  |
| Elevation Source :(Unknown)                     |                      | Easting :316267                | Longitude (E) :151° 0' 53" |
| GS Map :0055A4                                  | AMG Zone :56         | Coordinate Source :GD.,PR. MAP |                            |

**Construction** Negative depths indicate Above Ground Level;H-Hole;P-Pipe;OD-Outside Diameter;ID-Inside Diameter;C-Cemented;SL-Slot Length;A-Aperture;GS-Grain Size;Q-Quantity

| H | P | Component | Type              | From (m) | To (m) | OD (mm) | ID (mm) | Interval | Details   |
|---|---|-----------|-------------------|----------|--------|---------|---------|----------|-----------|
| 1 | 1 | Casing    | Concrete Cylinder | -0.60    | -0.60  | 914     |         |          | (Unknown) |

### Water Bearing Zones

| From (m) | To (m) | Thickness (m) | WBZ Type       | S.W.L. (m) | D.D.L. (m) | Yield (L/s) | Hole Depth (m) | Duration (hr) | Salinity (mg/L) |
|----------|--------|---------------|----------------|------------|------------|-------------|----------------|---------------|-----------------|
| 2.40     | 2.40   | 0.00          | Unconsolidated | 2.40       |            |             |                |               | Fresh           |

### Drillers Log

| From (m) | To (m) | Thickness(m) | Drillers Description | Geological Material | Comments |
|----------|--------|--------------|----------------------|---------------------|----------|
| 0.00     | 4.57   | 4.57         | Sand Water Supply    |                     |          |

### Pumping Tests - Summaries

| Pumping Test Type        | Date        | Duration (hr) | S.W.L. (m) | D.D.L. (m) | Yield (L/s) | Intake Depth (m) | Test Method | To Measure Water Level | To Measure Discharge | Tested By |
|--------------------------|-------------|---------------|------------|------------|-------------|------------------|-------------|------------------------|----------------------|-----------|
| Single-Rate Pumping Test | 01-Oct-1966 |               | 2.40       |            |             |                  | (Unknown)   |                        |                      |           |

### Pumping Tests - Readings

| Pumping Test Type                       | Date | Time (mins) | S.W.L. (m) | D.D.L. (m) | Yield (L/s) | Intake Depth (m) | Test Method | To Measure Water Level | To Measure Discharge | Tested By |
|-----------------------------------------|------|-------------|------------|------------|-------------|------------------|-------------|------------------------|----------------------|-----------|
| (No Pumping Test Reading Details Found) |      |             |            |            |             |                  |             |                        |                      |           |

### Chemical Treatment

| Treatment                             | Method | Duration | Success |
|---------------------------------------|--------|----------|---------|
| (No Chemical Treatment Details Found) |        |          |         |

### Development

| Method                         | Time Taken | Other Development Method |
|--------------------------------|------------|--------------------------|
| (No Development Details Found) |            |                          |

### Remarks

SITED 68 HASSALL ST. PARRAMATTA

\*\*\* End of GW024667 \*\*\*

# DEPARTMENT OF NATURAL RESOURCES

## Work Summary

**GW062300**

Converted From HYDSYS

|                                       |                  |                                     |                                   |
|---------------------------------------|------------------|-------------------------------------|-----------------------------------|
| License :10BL137938                   |                  | Authorised Purpose(s)<br>INDUSTRIAL | Intended Purpose(s)<br>INDUSTRIAL |
| Work Type :Bore                       |                  |                                     |                                   |
| Work Status :(Unknown)                |                  |                                     |                                   |
| Construct. Method :Cable Tool         |                  |                                     |                                   |
| Owner Type :Other Govt                |                  |                                     |                                   |
| Commenced Date :                      | Final Depth :    | 100.00 m                            |                                   |
| Completion Date :01-Jul-1988          | Drilled Depth :  | 100.00 m                            |                                   |
| Contractor Name :                     |                  |                                     |                                   |
| Driller :1435                         | ISELT, John Hans |                                     |                                   |
| Property : - PARRAMATTA LINEN SERVICE |                  | Standing Water Level :              |                                   |
| GWMA : -                              |                  | Salinity :                          | Fresh                             |
| GW Zone : -                           |                  | Yield :                             |                                   |

### Site Details

|                                                 |                                                      |                                          |                                                   |
|-------------------------------------------------|------------------------------------------------------|------------------------------------------|---------------------------------------------------|
| Site Chosen By                                  | County<br>Form A :CUMBERLAND<br>Licensed :CUMBERLAND | Parish<br>FIELD OF MARS<br>FIELD OF MARS | Portion/Lot DP<br>L1 DP734689 (99999)<br>2 734689 |
| Region :10 - SYDNEY SOUTH COAST                 |                                                      | CMA Map :9030-2N                         | PROSPECT                                          |
| River Basin :213 - SYDNEY COAST - GEORGES RIVER |                                                      | Grid Zone :56/1                          | Scale :1:25,000                                   |
| Area / District :                               |                                                      |                                          |                                                   |
| Elevation :                                     |                                                      | Northing :6258238                        | Latitude (S) :33° 47' 59"                         |
| Elevation Source :(Unknown)                     |                                                      | Easting :314817                          | Longitude (E) :150° 59' 58"                       |
| GS Map :0056D4                                  | AMG Zone :56                                         | Coordinate Source :GD.,ACC.MAP           |                                                   |

**Construction** Negative depths indicate Above Ground Level;H-Hole;P-Pipe;OD-Outside Diameter;ID-Inside Diameter;C-Cemented;SL-Slot Length;A-Aperture;GS-Grain Size;Q-Quantity

| H | P | Component | Type                     | From (m) | To (m) | OD (mm) | ID (mm) | Interval | Details   |
|---|---|-----------|--------------------------|----------|--------|---------|---------|----------|-----------|
| 1 | 1 | Casing    | P.V.C.                   | -0.30    | 13.70  | 168     |         |          | Cemented  |
| 1 | 1 | Casing    | Pressure Cemented Casing | 0.00     | 13.70  | 168     |         |          | (Unknown) |

### Water Bearing Zones

| From (m) | To (m) | Thickness (m) | WBZ Type     | S.W.L. (m) | D.D.L. (m) | Yield (L/s) | Hole Depth (m) | Duration (hr) | Salinity (mg/L) |
|----------|--------|---------------|--------------|------------|------------|-------------|----------------|---------------|-----------------|
| 26.10    | 26.80  | 0.70          | Consolidated | 18.00      |            | 0.30        |                |               | Fresh           |
| 63.50    | 63.80  | 0.30          | Consolidated | 6.00       |            | 0.95        |                |               | Fresh           |

### Drillers Log

| From (m) | To (m) | Thickness(m) | Drillers Description        | Geological Material | Comments |
|----------|--------|--------------|-----------------------------|---------------------|----------|
| 0.00     | 0.40   | 0.40         | Topsoil                     |                     |          |
| 0.40     | 5.60   | 5.20         | Sandstone Some Layers       | Sandstone           |          |
| 0.40     | 5.60   | 5.20         | Shale Clay                  | Shale               |          |
| 5.60     | 9.50   | 3.90         | Sandstone Yellow            | Sandstone           |          |
| 9.50     | 12.10  | 2.60         | Shale                       | Shale               |          |
| 12.10    | 26.80  | 14.70        | Sandstone Grey Water Supply | Sandstone           |          |
| 26.80    | 37.70  | 10.90        | Sandstone Grey Some Shale   | Sandstone           |          |
| 37.70    | 38.10  | 0.40         | Shale                       | Shale               |          |
| 38.10    | 100.00 | 61.90        | Sandstone Grey Water Supply | Sandstone           |          |

### Pumping Tests - Summaries

| Pumping Test Type        | Date        | Duration (hr) | S.W.L. (m) | D.D.L. (m) | Yield (L/s) | Intake Depth (m) | Test Method        | To Measure Water Level | To Measure Discharge | Tested By |
|--------------------------|-------------|---------------|------------|------------|-------------|------------------|--------------------|------------------------|----------------------|-----------|
| Single-Rate Pumping Test | 04-Jul-1988 | 24.00         | 6.00       | 25.00      | 0.95        | 64.00            | Turbine Pump, Subm |                        |                      |           |

### Pumping Tests - Readings

| Pumping Test Type                       | Date | Time (mins) | S.W.L. (m) | D.D.L. (m) | Yield (L/s) | Intake Depth (m) | Test Method | To Measure Water Level | To Measure Discharge | Tested By |
|-----------------------------------------|------|-------------|------------|------------|-------------|------------------|-------------|------------------------|----------------------|-----------|
| (No Pumping Test Reading Details Found) |      |             |            |            |             |                  |             |                        |                      |           |

### Chemical Treatment

| Treatment                             | Method | Duration | Success |
|---------------------------------------|--------|----------|---------|
| (No Chemical Treatment Details Found) |        |          |         |

### Development

| Method                         | Time Taken | Other Development Method |
|--------------------------------|------------|--------------------------|
| (No Development Details Found) |            |                          |

### Remarks

BORE IS NOT USED AS IRON REMOVAL IS UNECONOMIC -'89

\*\*\* End of GW062300 \*\*\*

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# DEPARTMENT OF NATURAL RESOURCES

## Work Summary

**GW103728**

License :10BL160101

Work Type :Bore

Work Status :(Unknown)

Construct. Method :

Owner Type :

Commenced Date :

Completion Date :22-Jan-2001

Final Depth :

9.00 m

Drilled Depth :

9.00 m

Contractor Name :

Driller :

Property : - TELSTRA

GWMA : -

GW Zone : -

Authorised Purpose(s)

MONITORING BORE

Intended Purpose(s)

MONITORING BORE

Standing Water Level :

Salinity :

Yield :

### Site Details

Site Chosen By

County

Form A :CUMBERLAND

Licensed :CUMBERLAND

Parish

PROSPECT

PROSPECT

Portion/Lot DP

2/776475

2 776475

Region :10 - SYDNEY SOUTH COAST

River Basin :

Area / District :

CMA Map :

Grid Zone :

Scale :

Elevation :

Elevation Source :

Northing :

Easting :

Latitude (S) :

Longitude (E) :

GS Map :

AMG Zone :

Coordinate Source :

### Construction

Negative depths indicate Above Ground Level;H-Hole;P-Pipe;OD-Outside Diameter;ID-Inside Diameter;C-Cemented;SL-Slot Length;A-Aperture;GS-Grain Size;Q-Quantity

| H | P | Component | Type | From (m) | To (m) | OD (mm) | ID (mm) | Interval | Details |
|---|---|-----------|------|----------|--------|---------|---------|----------|---------|
| 1 |   | Hole      | Hole | 0.00     | 9.00   | 100     |         |          |         |

### Water Bearing Zones

| From (m) | To (m) | Thickness (m) | WBZ Type | S.W.L. (m) | D.D.L. (m) | Yield (L/s) | Hole Depth (m) | Duration (hr) | Salinity (mg/L) |
|----------|--------|---------------|----------|------------|------------|-------------|----------------|---------------|-----------------|
|----------|--------|---------------|----------|------------|------------|-------------|----------------|---------------|-----------------|

(No Water Bearing Zone Details Found)

### Drillers Log

| From (m) | To (m) | Thickness(m) | Drillers Description       | Geological Material | Comments |
|----------|--------|--------------|----------------------------|---------------------|----------|
| 0.00     | 0.18   | 0.18         | FILL (SAND), DARK GREY     | Fill                |          |
| 0.18     | 0.50   | 0.32         | FILL (LIGHT CLAY)          | Fill                |          |
| 0.50     | 1.20   | 0.70         | FILL (CLAY LOAM)           | Clay Loam           |          |
| 1.20     | 1.90   | 0.70         | CLAY LOAM                  | Medium              |          |
| 1.90     | 2.50   | 0.60         | MEDIUM CLAY                | Medium              |          |
| 2.50     | 8.00   | 5.50         | MEDIUM CLAY RED            | Medium              |          |
| 8.00     | 9.00   | 1.00         | MEDIUM CLAY, GREY, PLASTIC | Medium              |          |

### Pumping Tests - Summaries

| Pumping Test Type | Date | Duration (hr) | S.W.L. (m) | D.D.L. (m) | Yield (L/s) | Intake Depth (m) | Test Method | To Measure Water Level | To Measure Discharge | Tested By |
|-------------------|------|---------------|------------|------------|-------------|------------------|-------------|------------------------|----------------------|-----------|
|-------------------|------|---------------|------------|------------|-------------|------------------|-------------|------------------------|----------------------|-----------|

(No Pumping Test Summary Details Found)

### Pumping Tests - Readings

| Pumping Test Type | Date | Time (mins) | S.W.L. (m) | D.D.L. (m) | Yield (L/s) | Intake Depth (m) | Test Method | To Measure Water Level | To Measure Discharge | Tested By |
|-------------------|------|-------------|------------|------------|-------------|------------------|-------------|------------------------|----------------------|-----------|
|-------------------|------|-------------|------------|------------|-------------|------------------|-------------|------------------------|----------------------|-----------|

(No Pumping Test Reading Details Found)

### Chemical Treatment

| Treatment | Method | Duration | Success |
|-----------|--------|----------|---------|
|-----------|--------|----------|---------|

(No Chemical Treatment Details Found)

### Development

| Method | Time Taken | Other Development Method |
|--------|------------|--------------------------|
|--------|------------|--------------------------|

(No Development Details Found)

### Remarks

\*\*\* End of GW103728 \*\*\*

Warning To Clients: This raw data has been supplied to the Department of Land and Water Conservation (DLWC) by drillers, licensees and other sources. The DLWC does not verify the accuracy of this data. The data is presented for use by you at your own risk. You should consider verifying this data before relying on it. Professional hydrogeological advice should be sought in interpreting and using this data.

# DEPARTMENT OF NATURAL RESOURCES

## Work Summary

**GW103729**

License :10BL160101

Work Type :Bore  
Work Status :(Unknown)  
Construct. Method :  
Owner Type :

Authorised Purpose(s)  
MONITORING BORE

Intended Purpose(s)  
MONITORING BORE

Commenced Date :  
Completion Date :29-Jan-2001

Final Depth : 10.10 m  
Drilled Depth : 10.10 m

Contractor Name :  
Driller :

Property : - TELSTRA  
GWMA : -  
GW Zone : -

Standing Water Level :  
Salinity :  
Yield :

### Site Details

Site Chosen By

County  
Form A :CUMBERLAND  
Licensed :CUMBERLAND

Parish  
PROSPECT  
PROSPECT

Portion/Lot DP  
2/776475  
2 776475

Region :10 - SYDNEY SOUTH COAST  
River Basin :  
Area / District :

CMA Map :  
Grid Zone :

Scale :

Elevation :  
Elevation Source :

Northing :  
Easting :

Latitude (S) :  
Longitude (E) :

GS Map :

AMG Zone :

Coordinate Source :

### Construction

Negative depths indicate Above Ground Level;H-Hole;P-Pipe;OD-Outside Diameter;ID-Inside Diameter;C-Cemented;SL-Slot Length;A-Aperture;GS-Grain Size;Q-Quantity

| H | P | Component | Type | From (m) | To (m) | OD (mm) | ID (mm) | Interval | Details |
|---|---|-----------|------|----------|--------|---------|---------|----------|---------|
| 1 |   | Hole      | Hole | 0.00     | 10.10  | 100     |         |          |         |

### Water Bearing Zones

| From (m) | To (m) | Thickness (m) | WBZ Type | S.W.L. (m) | D.D.L. (m) | Yield (L/s) | Hole Depth (m) | Duration (hr) | Salinity (mg/L) |
|----------|--------|---------------|----------|------------|------------|-------------|----------------|---------------|-----------------|
|----------|--------|---------------|----------|------------|------------|-------------|----------------|---------------|-----------------|

(No Water Bearing Zone Details Found)

### Drillers Log

| From (m) | To (m) | Thickness(m) | Drillers Description             | Geological Material   | Comments |
|----------|--------|--------------|----------------------------------|-----------------------|----------|
| 0.00     | 0.25   | 0.25         | FILL (SAND)                      | Fill                  |          |
| 0.25     | 0.55   | 0.30         | FILL (MEDIUM CLAY)               | Fill                  |          |
| 0.55     | 0.75   | 0.20         | SILTY CLAY LOAM                  | Silty Clay            |          |
| 0.75     | 2.60   | 1.85         | LIGHT MEDIUM CLAY                | Light Mottled-Spotted |          |
| 2.60     | 3.50   | 0.90         | SANDY CLAY                       | Sandy Clay            |          |
| 3.50     | 3.80   | 0.30         | LIGHT MEDIUM CLAY                | Light Mottled-Spotted |          |
| 3.80     | 7.20   | 3.40         | LIGHT MEDIUM CLAY, REDISH BROWN  | Light Mottled-Spotted |          |
| 7.20     | 10.10  | 2.90         | MEDIUM CLAY GREY /BROWN MOTTLING | Medium                |          |

### Pumping Tests - Summaries

| Pumping Test Type | Date | Duration (hr) | S.W.L. (m) | D.D.L. (m) | Yield (L/s) | Intake Depth (m) | Test Method | To Measure Water Level | To Measure Discharge | Tested By |
|-------------------|------|---------------|------------|------------|-------------|------------------|-------------|------------------------|----------------------|-----------|
|-------------------|------|---------------|------------|------------|-------------|------------------|-------------|------------------------|----------------------|-----------|

(No Pumping Test Summary Details Found)

### Pumping Tests - Readings

| Pumping Test Type | Date | Time (mins) | S.W.L. (m) | D.D.L. (m) | Yield (L/s) | Intake Depth (m) | Test Method | To Measure Water Level | To Measure Discharge | Tested By |
|-------------------|------|-------------|------------|------------|-------------|------------------|-------------|------------------------|----------------------|-----------|
|-------------------|------|-------------|------------|------------|-------------|------------------|-------------|------------------------|----------------------|-----------|

(No Pumping Test Reading Details Found)

### Chemical Treatment

| Treatment | Method | Duration | Success |
|-----------|--------|----------|---------|
|-----------|--------|----------|---------|

(No Chemical Treatment Details Found)

### Development

| Method | Time Taken | Other Development Method |
|--------|------------|--------------------------|
|--------|------------|--------------------------|

(No Development Details Found)

### Remarks

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**DEPARTMENT OF NATURAL RESOURCES**  
**Work Summary**

**GW103729**

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\*\*\* End of GW103729 \*\*\*

# DEPARTMENT OF NATURAL RESOURCES

## Work Summary

**GW103730**

License :10BL160101

Work Type :Bore  
Work Status :(Unknown)  
Construct. Method :  
Owner Type :

Authorised Purpose(s)  
MONITORING BORE

Intended Purpose(s)  
MONITORING BORE

Commenced Date :  
Completion Date :29-Jan-2001

Final Depth : 9.00 m  
Drilled Depth : 9.00 m

Contractor Name :  
Driller :

Property : - TELSTRA  
GWMA : -  
GW Zone : -

Standing Water Level :  
Salinity :  
Yield :

### Site Details

Site Chosen By

County  
Form A :CUMBERLAND  
Licensed :CUMBERLAND

Parish  
PROSPECT  
PROSPECT

Portion/Lot DP  
2/776475  
2 776475

Region :10 - SYDNEY SOUTH COAST  
River Basin :  
Area / District :

CMA Map :  
Grid Zone :

Scale :

Elevation :  
Elevation Source :

Northing :  
Easting :

Latitude (S) :  
Longitude (E) :

GS Map :

AMG Zone :

Coordinate Source :

### Construction

Negative depths indicate Above Ground Level;H-Hole;P-Pipe;OD-Outside Diameter;ID-Inside Diameter;C-Cemented;SL-Slot Length;A-Aperture;GS-Grain Size;Q-Quantity

| H | P | Component | Type | From (m) | To (m) | OD (mm) | ID (mm) | Interval | Details |
|---|---|-----------|------|----------|--------|---------|---------|----------|---------|
| 1 |   | Hole      | Hole | 0.00     | 9.00   | 100     |         |          |         |

### Water Bearing Zones

| From (m) | To (m) | Thickness (m) | WBZ Type | S.W.L. (m) | D.D.L. (m) | Yield (L/s) | Hole Depth (m) | Duration (hr) | Salinity (mg/L) |
|----------|--------|---------------|----------|------------|------------|-------------|----------------|---------------|-----------------|
|----------|--------|---------------|----------|------------|------------|-------------|----------------|---------------|-----------------|

(No Water Bearing Zone Details Found)

### Drillers Log

| From (m) | To (m) | Thickness(m) | Drillers Description       | Geological Material   | Comments |
|----------|--------|--------------|----------------------------|-----------------------|----------|
| 0.00     | 0.80   | 0.80         | FILL: GREY, SHALE          | Fill                  |          |
| 0.80     | 1.90   | 1.10         | FILL (MEDIUM CLAY)         | Light Mottled-Spotted |          |
| 1.90     | 3.30   | 1.40         | LIGHT MEDIUM CLAY          | Sandy Clay            |          |
| 3.30     | 7.20   | 3.90         | SANDY CLAY                 | Medium                |          |
| 7.20     | 9.00   | 1.80         | MEDIUM CLAY: GREY, PLASTIC |                       |          |

### Pumping Tests - Summaries

| Pumping Test Type | Date | Duration (hr) | S.W.L. (m) | D.D.L. (m) | Yield (L/s) | Intake Depth (m) | Test Method | To Measure Water Level | To Measure Discharge | Tested By |
|-------------------|------|---------------|------------|------------|-------------|------------------|-------------|------------------------|----------------------|-----------|
|-------------------|------|---------------|------------|------------|-------------|------------------|-------------|------------------------|----------------------|-----------|

(No Pumping Test Summary Details Found)

### Pumping Tests - Readings

| Pumping Test Type | Date | Time (mins) | S.W.L. (m) | D.D.L. (m) | Yield (L/s) | Intake Depth (m) | Test Method | To Measure Water Level | To Measure Discharge | Tested By |
|-------------------|------|-------------|------------|------------|-------------|------------------|-------------|------------------------|----------------------|-----------|
|-------------------|------|-------------|------------|------------|-------------|------------------|-------------|------------------------|----------------------|-----------|

(No Pumping Test Reading Details Found)

### Chemical Treatment

| Treatment | Method | Duration | Success |
|-----------|--------|----------|---------|
|-----------|--------|----------|---------|

(No Chemical Treatment Details Found)

### Development

| Method | Time Taken | Other Development Method |
|--------|------------|--------------------------|
|--------|------------|--------------------------|

(No Development Details Found)

### Remarks

\*\*\* End of GW103730 \*\*\*

# DEPARTMENT OF NATURAL RESOURCES

## Work Summary

**GW103731**

License :10BL160101

Work Type :Bore  
Work Status :(Unknown)  
Construct. Method :  
Owner Type :

Authorised Purpose(s)  
MONITORING BORE

Intended Purpose(s)  
MONITORING BORE

Commenced Date :  
Completion Date :24-Jan-2001

Final Depth : 9.00 m  
Drilled Depth : 9.00 m

Contractor Name :  
Driller :

Property : - TELSTRA  
GWMA : -  
GW Zone : -

Standing Water Level :  
Salinity :  
Yield :

### Site Details

Site Chosen By

County  
Form A :CUMBERLAND  
Licensed :CUMBERLAND

Parish  
PROSPECT  
PROSPECT

Portion/Lot DP  
2/776475  
2 776475

Region :10 - SYDNEY SOUTH COAST

CMA Map :  
Grid Zone :

Scale :

River Basin :  
Area / District :

Elevation :  
Elevation Source :

Northing :  
Easting :

Latitude (S) :  
Longitude (E) :

GS Map :

AMG Zone :

Coordinate Source :

### Construction

Negative depths indicate Above Ground Level;H-Hole;P-Pipe;OD-Outside Diameter;ID-Inside Diameter;C-Cemented;SL-Slot Length;A-Aperture;GS-Grain Size;Q-Quantity

| H | P | Component | Type | From (m) | To (m) | OD (mm) | ID (mm) | Interval | Details |
|---|---|-----------|------|----------|--------|---------|---------|----------|---------|
| 1 |   | Hole      | Hole | 0.00     | 9.00   | 100     |         |          |         |

### Water Bearing Zones

| From (m) | To (m) | Thickness (m) | WBZ Type | S.W.L. (m) | D.D.L. (m) | Yield (L/s) | Hole Depth (m) | Duration (hr) | Salinity (mg/L) |
|----------|--------|---------------|----------|------------|------------|-------------|----------------|---------------|-----------------|
|----------|--------|---------------|----------|------------|------------|-------------|----------------|---------------|-----------------|

(No Water Bearing Zone Details Found)

### Drillers Log

| From (m) | To (m) | Thickness(m) | Drillers Description                | Geological Material   | Comments |
|----------|--------|--------------|-------------------------------------|-----------------------|----------|
| 0.00     | 0.15   | 0.15         | FILL (SAND) DARK GREY               | Fill                  |          |
| 0.15     | 0.20   | 0.05         | FILL (LIGHT CLAY)                   | Light Mottled-Spotted |          |
| 0.20     | 1.90   | 1.70         | LIGHT MEDIUM CLAY                   | Light Mottled-Spotted |          |
| 1.90     | 3.00   | 1.10         | LIGHT MEDIUM CLAY:ORANGE            | Medium                |          |
| 3.00     | 3.50   | 0.50         | MEDIUM CLAY: GREY                   | Medium                |          |
| 3.50     | 4.30   | 0.80         | MEDIUM CLAY:ORANGE                  | Medium                |          |
| 4.30     | 5.00   | 0.70         | MEDIUM CLAY:GREY PLASTIC            | Medium                |          |
| 5.00     | 7.20   | 2.20         | MEDIUM CLAY:GREY/REDDISH BROWN      | Medium                |          |
| 7.20     | 9.00   | 1.80         | MEDIUM CLAY:REDDISH BROWN/IRONSTONE | Medium                |          |

### Pumping Tests - Summaries

| Pumping Test Type | Date | Duration (hr) | S.W.L. (m) | D.D.L. (m) | Yield (L/s) | Intake Depth (m) | Test Method | To Measure Water Level | To Measure Discharge | Tested By |
|-------------------|------|---------------|------------|------------|-------------|------------------|-------------|------------------------|----------------------|-----------|
|-------------------|------|---------------|------------|------------|-------------|------------------|-------------|------------------------|----------------------|-----------|

(No Pumping Test Summary Details Found)

### Pumping Tests - Readings

| Pumping Test Type | Date | Time (mins) | S.W.L. (m) | D.D.L. (m) | Yield (L/s) | Intake Depth (m) | Test Method | To Measure Water Level | To Measure Discharge | Tested By |
|-------------------|------|-------------|------------|------------|-------------|------------------|-------------|------------------------|----------------------|-----------|
|-------------------|------|-------------|------------|------------|-------------|------------------|-------------|------------------------|----------------------|-----------|

(No Pumping Test Reading Details Found)

### Chemical Treatment

| Treatment | Method | Duration | Success |
|-----------|--------|----------|---------|
|-----------|--------|----------|---------|

(No Chemical Treatment Details Found)

### Development

| Method | Time Taken | Other Development Method |
|--------|------------|--------------------------|
|--------|------------|--------------------------|

(No Development Details Found)

### Remarks

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**DEPARTMENT OF NATURAL RESOURCES**  
**Work Summary**

**GW103731**

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\*\*\* End of GW103731 \*\*\*

# DEPARTMENT OF NATURAL RESOURCES

## Work Summary

**GW103732**

License :10BL160101

Work Type :Bore  
Work Status :(Unknown)  
Construct. Method :  
Owner Type :

Authorised Purpose(s)  
MONITORING BORE

Intended Purpose(s)  
MONITORING BORE

Commenced Date :  
Completion Date :24-Jan-2001

Final Depth : 11.00 m  
Drilled Depth : 11.00 m

Contractor Name :  
Driller :

Property : - TELSTRA  
GWMA : -  
GW Zone : -

Standing Water Level :  
Salinity :  
Yield :

### Site Details

Site Chosen By

County  
Form A :CUMBERLAND  
Licensed :CUMBERLAND

Parish  
PROSPECT  
PROSPECT

Portion/Lot DP  
2/776475  
2 776475

Region :10 - SYDNEY SOUTH COAST  
River Basin :  
Area / District :

CMA Map :  
Grid Zone :

Scale :

Elevation :  
Elevation Source :

Northing :  
Easting :

Latitude (S) :  
Longitude (E) :

GS Map :

AMG Zone :

Coordinate Source :

### Construction

Negative depths indicate Above Ground Level;H-Hole;P-Pipe;OD-Outside Diameter;ID-Inside Diameter;C-Cemented;SL-Slot Length;A-Aperture;GS-Grain Size;Q-Quantity

| H | P | Component | Type | From (m) | To (m) | OD (mm) | ID (mm) | Interval | Details |
|---|---|-----------|------|----------|--------|---------|---------|----------|---------|
| 1 |   | Hole      | Hole | 0.00     | 11.00  | 100     |         |          |         |

### Water Bearing Zones

| From (m) | To (m) | Thickness (m) | WBZ Type | S.W.L. (m) | D.D.L. (m) | Yield (L/s) | Hole Depth (m) | Duration (hr) | Salinity (mg/L) |
|----------|--------|---------------|----------|------------|------------|-------------|----------------|---------------|-----------------|
|----------|--------|---------------|----------|------------|------------|-------------|----------------|---------------|-----------------|

(No Water Bearing Zone Details Found)

### Drillers Log

| From (m) | To (m) | Thickness(m) | Drillers Description                | Geological Material   | Comments |
|----------|--------|--------------|-------------------------------------|-----------------------|----------|
| 0.00     | 0.30   | 0.30         | FILL (LOAM)                         | Fill                  |          |
| 0.30     | 1.90   | 1.60         | FILL (LIGHT CLAY)                   | Light Mottled-Spotted |          |
| 1.90     | 3.30   | 1.40         | LIGHT MEDIUM CLAY:DARK BROWN        | Medium                |          |
| 3.30     | 5.20   | 1.90         | MEDIUM CLAY:REDDISH BROWN           | Medium                |          |
| 5.20     | 7.00   | 1.80         | MEDIUM CLAY:REDDISH BROWN/IRONSTONE | Medium                |          |
| 7.00     | 11.00  | 4.00         | MEDIUM CLAY:DARK BROWN/IRONSTONE    | Medium                |          |

### Pumping Tests - Summaries

| Pumping Test Type | Date | Duration (hr) | S.W.L. (m) | D.D.L. (m) | Yield (L/s) | Intake Depth (m) | Test Method | To Measure Water Level | To Measure Discharge | Tested By |
|-------------------|------|---------------|------------|------------|-------------|------------------|-------------|------------------------|----------------------|-----------|
|-------------------|------|---------------|------------|------------|-------------|------------------|-------------|------------------------|----------------------|-----------|

(No Pumping Test Summary Details Found)

### Pumping Tests - Readings

| Pumping Test Type | Date | Time (mins) | S.W.L. (m) | D.D.L. (m) | Yield (L/s) | Intake Depth (m) | Test Method | To Measure Water Level | To Measure Discharge | Tested By |
|-------------------|------|-------------|------------|------------|-------------|------------------|-------------|------------------------|----------------------|-----------|
|-------------------|------|-------------|------------|------------|-------------|------------------|-------------|------------------------|----------------------|-----------|

(No Pumping Test Reading Details Found)

### Chemical Treatment

| Treatment | Method | Duration | Success |
|-----------|--------|----------|---------|
|-----------|--------|----------|---------|

(No Chemical Treatment Details Found)

### Development

| Method | Time Taken | Other Development Method |
|--------|------------|--------------------------|
|--------|------------|--------------------------|

(No Development Details Found)

### Remarks

\*\*\* End of GW103732 \*\*\*

Warning To Clients: This raw data has been supplied to the Department of Land and Water Conservation (DLWC) by drillers, licensees and other sources. The DLWC does not verify the accuracy of this data. The data is presented for use by you at your own risk. You should consider verifying this data before relying on it. Professional hydrogeological advice should be sought in interpreting and using this data.

# DEPARTMENT OF NATURAL RESOURCES

## Work Summary

**GW105018**

License :10BL162496

Work Type :Bore  
Work Status :Supply Obtained  
Construct. Method :Rotary  
Owner Type :Private

Authorised Purpose(s)  
IRRIGATION  
RECREATION (GROUNDWATER)

Intended Purpose(s)  
IRRIGATION  
RECREATION (GROUNDWATER)

Commenced Date : Final Depth : 240.50 m  
Completion Date :31-Oct-2003 Drilled Depth : 240.50 m

Contractor Name :INTERTECH DRILLING  
Driller :1783 CRUMP, William

Property : - MUIRFIELD GOLF COURSE  
GWMA : -  
GW Zone : -

Standing Water Level : 80.00 m  
Salinity : 3,300.00 mg/L  
Yield : 1.20 L/s

### Site Details

Site Chosen By Client  
County Form A :CUMBERLAND  
Licensed :CUMBERLAND  
Parish FIELD OF MARS  
FIELD OF MARS  
Portion/Lot DP 2 568395  
2 568395  
Region :10 - SYDNEY SOUTH COAST  
River Basin :213 - SYDNEY COAST - GEORGES RIVER  
CMA Map :9130-3N  
Grid Zone :56/1  
PARRAMATTA RIVER  
Scale :1:25,000  
Area / District :  
Elevation : 0.00  
Elevation Source :(Unknown)  
Northing :6261405  
Easting :316444  
Latitude (S) :33° 46' 17"  
Longitude (E) :151° 1' 6"  
GS Map : AMG Zone :56  
Coordinate Source :

### Construction

Negative depths indicate Above Ground Level;H-Hole;P-Pipe;OD-Outside Diameter;ID-Inside Diameter;C-Cemented;SL-Slot Length;A-Aperture;GS-Grain Size;Q-Quantity

| H | P | Component | Type  | From (m) | To (m) | OD (mm) | ID (mm) | Interval | Details                      |
|---|---|-----------|-------|----------|--------|---------|---------|----------|------------------------------|
| 1 |   | Hole      | Hole  | 0.00     | 5.50   | 210     |         |          | Down Hole Hammer             |
| 1 |   | Hole      | Hole  | 5.50     | 150.50 | 158     |         |          | Down Hole Hammer             |
| 1 |   | Hole      | Hole  | 150.50   | 240.50 | 156.5   |         |          | Down Hole Hammer             |
| 1 | 1 | Casing    | Steel | -0.50    | 5.50   | 168.3   | 158.7   |          | C: -1-5.5m; Driven into Hole |

### Water Bearing Zones

| From (m) | To (m) | Thickness(m) | WBZ Type | S.W.L. (m) | D.D.L. (m) | Yield (L/s) | Hole Depth (m) | Duration (hr) | Salinity (mg/L) |
|----------|--------|--------------|----------|------------|------------|-------------|----------------|---------------|-----------------|
| 37.00    | 40.00  | 3.00         |          |            |            | 0.05        | 42.50          | 0.25          | 2480.00         |
| 84.00    | 85.50  | 1.50         |          |            |            | 0.15        | 84.50          | 0.25          | 2420.00         |
| 89.00    | 90.00  | 1.00         |          |            |            | 0.05        | 90.50          | 0.25          | 2350.00         |
| 90.00    | 150.50 | 60.50        |          |            |            | 0.25        |                |               | 2350.00         |
| 153.00   | 156.50 | 3.50         |          |            |            | 0.85        | 162.00         | 0.25          | 3100.00         |
| 177.00   | 181.00 | 4.00         |          |            |            | 0.10        | 186.00         | 0.25          | 3220.00         |

### Drillers Log

| From (m) | To (m) | Thickness(m) | Drillers Description  | Geological Material    | Comments |
|----------|--------|--------------|-----------------------|------------------------|----------|
| 0.00     | 1.00   | 1.00         | LOAM                  | Weathered Rock(Unident |          |
| 1.00     | 6.00   | 5.00         | WEATHERED SANDSTONE   | Sandstone              |          |
| 6.00     | 35.50  | 29.50        | SANDSTONE LIGHT GREY  | Sandstone              |          |
| 35.50    | 37.00  | 1.50         | SANDSTONE DARK GREY   | Sandstone              |          |
| 37.00    | 40.00  | 3.00         | HARD SHALE            | Hard Bands             |          |
| 40.00    | 82.50  | 42.50        | SANDSTONE LIGHT GREY  | Sandstone              |          |
| 82.50    | 84.00  | 1.50         | SANDSTONE QUARTZ      | Sandstone              |          |
| 84.00    | 85.50  | 1.50         | SILTSTONE             | Siltstone              |          |
| 85.50    | 89.00  | 3.50         | SANDSTONE LIGHT GREY  | Sandstone              |          |
| 89.00    | 90.00  | 1.00         | SANDSTONE QUARTZ      | Sandstone              |          |
| 90.00    | 150.50 | 60.50        | SANDSTONE LIGHT GREY  | Sandstone              |          |
| 150.50   | 153.00 | 2.50         | SANDSTONE GREY        | Sandstone              |          |
| 153.00   | 156.50 | 3.50         | SANDSTONE QUARTZ      | Sandstone              |          |
| 156.50   | 161.50 | 5.00         | SANDSTONE GREY        | Sandstone              |          |
| 161.50   | 164.00 | 2.50         | SANDSTONE FINE QUARTZ | Sandstone              |          |
| 164.00   | 177.00 | 13.00        | SANDSTONE LIGHT GREY  | Sandstone              |          |
| 177.00   | 181.00 | 4.00         | SANDSTONE FINE QUARTZ | Sandstone              |          |
| 181.00   | 190.50 | 9.50         | SANDSTONE LIGHT GREY  | Sandstone              |          |
| 190.50   | 194.00 | 3.50         | SANDSTONE DARK BROWN  | Sandstone              |          |
| 194.00   | 240.50 | 46.50        | SANDSTONE GREY        | Sandstone              |          |

### Pumping Tests - Summaries

| Pumping Test Type                       | Date | Duration (hr) | S.W.L. (m) | D.D.L. (m) | Yield (L/s) | Intake Depth (m) | Test Method | To Measure Water Level | To Measure Discharge | Tested By |
|-----------------------------------------|------|---------------|------------|------------|-------------|------------------|-------------|------------------------|----------------------|-----------|
| (No Pumping Test Summary Details Found) |      |               |            |            |             |                  |             |                        |                      |           |

### Pumping Tests - Readings

| Pumping Test Type                       | Date | Time (mins) | S.W.L. (m) | D.D.L. (m) | Yield (L/s) | Intake Depth (m) | Test Method | To Measure Water Level | To Measure Discharge | Tested By |
|-----------------------------------------|------|-------------|------------|------------|-------------|------------------|-------------|------------------------|----------------------|-----------|
| (No Pumping Test Reading Details Found) |      |             |            |            |             |                  |             |                        |                      |           |

Warning To Clients: This raw data has been supplied to the Department of Land and Water Conservation (DLWC) by drillers, licensees and other sources. The DLWC does not verify the accuracy of this data. The data is presented for use by you at your own risk. You should consider verifying this data before relying on it. Professional hydrogeological advice should be sought in interpreting and using this data.

# DEPARTMENT OF NATURAL RESOURCES

## Work Summary

GW105018

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### ***Chemical Treatment***

| Treatment | Method | Duration | Success |
|-----------|--------|----------|---------|
| Chlorine  |        |          |         |

### ***Development***

| Method | Time Taken | Other Development Method |
|--------|------------|--------------------------|
| Air    | 1.00       |                          |

### ***Remarks***

Previous Lic no: 10BL160128 Previous Lic No: 10BL162414

\*\*\* End of GW105018 \*\*\*

\*\*\* End of Report \*\*\*

| Project No | Station No | Pipe No. | Collect Dat | Collect Tirr | Fraction No.  | Determinand                      | Result | Units         | Quality Co | Parent Project No. |
|------------|------------|----------|-------------|--------------|---------------|----------------------------------|--------|---------------|------------|--------------------|
| HISC0001   | GW062300   |          | 4-Jul-88    | 1:00:00      | 1988000083/01 | Zinc as Zn - total               |        | 0.5 mg/L      | U          |                    |
| HISC0001   | GW062300   |          | 4-Jul-88    | 1:00:00      | 1988000083/01 | Manganese as Mn - total          |        | 0.5 mg/L      | U          |                    |
| HISC0001   | GW062300   |          | 4-Jul-88    | 1:00:00      | 1988000083/01 | Iron as Fe - total               |        | 18 mg/L       | U          |                    |
| HISC0001   | GW062300   |          | 4-Jul-88    | 1:00:00      | 1988000083/01 | Sodium as Na - soluble           |        | 77.9997 mg/L  | U          |                    |
| HISC0001   | GW062300   |          | 4-Jul-88    | 1:00:00      | 1988000083/01 | Magnesium as Mg - total          |        | 12 mg/L       | U          |                    |
| HISC0001   | GW062300   |          | 4-Jul-88    | 1:00:00      | 1988000083/01 | Potassium as K - soluble         |        | 3.4 mg/L      | U          |                    |
| HISC0001   | GW062300   |          | 4-Jul-88    | 1:00:00      | 1988000083/01 | Electrical Conductivity @25 C    |        | 600 uS/cm     | U          |                    |
| HISC0001   | GW062300   |          | 4-Jul-88    | 1:00:00      | 1988000083/01 | pH                               |        | 6 pH          | U          |                    |
| HISC0001   | GW062300   |          | 4-Jul-88    | 1:00:00      | 1988000083/01 | Calcium as Ca - total            |        | 12 mg/L       | U          |                    |
| HISC0001   | GW062300   |          | 4-Jul-88    | 1:00:00      | 1988000083/01 | Chloride as Cl                   |        | 150.0016 mg/L | U          |                    |
| HISC0001   | GW062300   |          | 4-Jul-88    | 1:00:00      | 1988000083/01 | Copper as Cu - total             | ND     | mg/L          | U          |                    |
| HISC0001   | GW062300   |          | 4-Jul-88    | 2:00:00      | 1988000084/01 | Zinc as Zn - total               |        | 0.03 mg/L     | U          |                    |
| HISC0001   | GW062300   |          | 4-Jul-88    | 2:00:00      | 1988000084/01 | Manganese as Mn - total          |        | 0.5 mg/L      | U          |                    |
| HISC0001   | GW062300   |          | 4-Jul-88    | 2:00:00      | 1988000084/01 | Iron as Fe - total               |        | 17 mg/L       | U          |                    |
| HISC0001   | GW062300   |          | 4-Jul-88    | 2:00:00      | 1988000084/01 | Sodium as Na - soluble           |        | 140.0008 mg/L | U          |                    |
| HISC0001   | GW062300   |          | 4-Jul-88    | 2:00:00      | 1988000084/01 | Magnesium as Mg - total          |        | 22 mg/L       | U          |                    |
| HISC0001   | GW062300   |          | 4-Jul-88    | 2:00:00      | 1988000084/01 | Potassium as K - soluble         |        | 4.3 mg/L      | U          |                    |
| HISC0001   | GW062300   |          | 4-Jul-88    | 2:00:00      | 1988000084/01 | Electrical Conductivity @25 C    |        | 1060 uS/cm    | U          |                    |
| HISC0001   | GW062300   |          | 4-Jul-88    | 2:00:00      | 1988000084/01 | pH                               |        | 6 pH          | U          |                    |
| HISC0001   | GW062300   |          | 4-Jul-88    | 2:00:00      | 1988000084/01 | Calcium as Ca - total            |        | 31.0001 mg/L  | U          |                    |
| HISC0001   | GW062300   |          | 4-Jul-88    | 2:00:00      | 1988000084/01 | Chloride as Cl                   |        | 269.9994 mg/L | U          |                    |
| HISC0001   | GW062300   |          | 4-Jul-88    | 2:00:00      | 1988000084/01 | Copper as Cu - total             |        | 0.1 mg/L      | U          |                    |
| HISC0001   | GW062300   |          | 5-Jul-88    | 0:00:00      | 1988000085/01 | Magnesium as Mg - total          |        | 31.6 mg/L     | U          |                    |
| HISC0001   | GW062300   |          | 5-Jul-88    | 0:00:00      | 1988000085/01 | pH                               |        | 6.15 pH       | U          |                    |
| HISC0001   | GW062300   |          | 5-Jul-88    | 0:00:00      | 1988000085/01 | Chloride as Cl                   |        | 351.9987 mg/L | U          |                    |
| HISC0001   | GW062300   |          | 5-Jul-88    | 0:00:00      | 1988000085/01 | Nitrate as N                     |        | 0.11 mg/L     | U          |                    |
| HISC0001   | GW062300   |          | 5-Jul-88    | 0:00:00      | 1988000085/01 | Potassium as K - soluble         |        | 4.4998 mg/L   | U          |                    |
| HISC0001   | GW062300   |          | 5-Jul-88    | 0:00:00      | 1988000085/01 | Sodium as Na - soluble           |        | 172.2991 mg/L | U          |                    |
| HISC0001   | GW062300   |          | 5-Jul-88    | 0:00:00      | 1988000085/01 | Sulphate as SO4                  |        | 10.2001 mg/L  | U          |                    |
| HISC0001   | GW062300   |          | 5-Jul-88    | 0:00:00      | 1988000085/01 | Boron as B - total               |        | 0.11 mg/L     | U          |                    |
| HISC0001   | GW062300   |          | 5-Jul-88    | 0:00:00      | 1988000085/01 | Fluoride as F - soluble          |        | 0.23 mg/L     | U          |                    |
| HISC0001   | GW062300   |          | 5-Jul-88    | 0:00:00      | 1988000085/01 | Iron as Fe - total               |        | 1.27 mg/L     | U          |                    |
| HISC0001   | GW062300   |          | 5-Jul-88    | 0:00:00      | 1988000085/01 | Manganese as Mn - total          |        | 0.46 mg/L     | U          |                    |
| HISC0001   | GW062300   |          | 5-Jul-88    | 0:00:00      | 1988000085/01 | Silica as SiO2 - reactive        |        | 9.7 mg/L      | U          |                    |
| HISC0001   | GW062300   |          | 5-Jul-88    | 0:00:00      | 1988000085/01 | Zinc as Zn - total               |        | 0.08 mg/L     | U          |                    |
| HISC0001   | GW062300   |          | 5-Jul-88    | 0:00:00      | 1988000085/01 | Alkalinity as Bicarbonate (HCO3) |        | 137.8984 mg/L | U          |                    |
| HISC0001   | GW062300   |          | 5-Jul-88    | 0:00:00      | 1988000085/01 | Calcium as Ca - total            |        | 45.3 mg/L     | U          |                    |

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***APPENDIX C***  
***Test Bore Log Results and***  
***Notes Relating to this Report***

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# BOREHOLE LOG

CLIENT: Coca-Cola Amatil  
PROJECT: Preliminary Contamination Assessment  
LOCATION: 102-128 Briens Road, Northmead

SURFACE LEVEL: 14.8 RL<sup>^</sup>  
EASTING:  
NORTHING:  
DIP/AZIMUTH: 90°/---

BORE No: 1  
PROJECT No: 43650  
DATE: 20 Dec 05  
SHEET 1 OF 1

| RL   | Depth (m) | Description of Strata                                                                                                                                  | Graphic Log                                                                        | Sampling & In Situ Testing |       |        |                    | Water | Well Construction Details  |
|------|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|----------------------------|-------|--------|--------------------|-------|----------------------------|
|      |           |                                                                                                                                                        |                                                                                    | Type                       | Depth | Sample | Results & Comments |       |                            |
| 14.8 | 0.1       | ROADBASE GRAVEL<br>FILLING - light grey clayey sand filling with some gravel, roots and ironstone gravel<br>- becoming red brown with increasing depth |   | A*                         | 0.5   |        | PID<1ppm           |       | Top cap<br>0.5m stickup    |
| 13.3 | 1.5       |                                                                                                                                                        |   | A                          | 1.5   |        | PID<1ppm           |       | Backfill                   |
| 12.3 | 2.5       | SANDY SILTY CLAY - dark grey sandy silty clay                                                                                                          |   | A                          | 3.0   |        | PID<1ppm           |       | Bentonite                  |
| 10.3 | 4.5       |                                                                                                                                                        |  |                            |       |        |                    |       | Backfilled with gravel     |
| 5.3  | 5.5       | Bore discontinued at 5.5m<br>- target depth reached                                                                                                    |                                                                                    |                            |       |        |                    |       | Machine slotted PVC screen |
|      |           |                                                                                                                                                        |                                                                                    |                            |       |        |                    |       | End cap                    |

RIG: Bobcat

DRILLER: Ellis

LOGGED: Foo

CASING: Uncased

TYPE OF BORING: 100mm diameter solid flight auger

WATER OBSERVATIONS: No free groundwater observed

REMARKS: \*Denotes field replicate sample BD1/201205 taken  
RL<sup>^</sup> interpolated from aerial survey (Drawing No: 114415:SK701E) dated 1st April 2005 by Coca-Cola Amatil

| SAMPLING & IN SITU TESTING LEGEND |                         |     |                                |
|-----------------------------------|-------------------------|-----|--------------------------------|
| A                                 | Auger sample            | pp  | Pocket penetrometer (kPa)      |
| D                                 | Disturbed sample        | PID | Photo ionisation detector      |
| B                                 | Bulk sample             | S   | Standard penetration test      |
| U                                 | Tube sample (x mm dia.) | PL  | Point load strength Is(50) MPa |
| W                                 | Water sample            | V   | Shear Vane (kPa)               |
| C                                 | Core drilling           | Δ   | Water seep                     |
|                                   |                         | ≡   | Water level                    |

| CHECKED   |         |
|-----------|---------|
| Initials: | PF      |
| Date:     | 17/2/06 |



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# BOREHOLE LOG

**CLIENT:** Coca-Cola Amatil  
**PROJECT:** Preliminary Contamination Assessment  
**LOCATION:** 102-128 Briens Road, Northmead

**SURFACE LEVEL:** 14.4 RL<sup>^</sup>  
**EASTING:**  
**NORTHING:**  
**DIP/AZIMUTH:** 90°/--

**BORE No:** 2  
**PROJECT No:** 43650  
**DATE:** 20 Dec 05  
**SHEET 1 OF 1**

| RL   | Depth (m) | Description of Strata                                                                         | Graphic Log                                                                       | Sampling & In Situ Testing |       |        |                    | Water | Well Construction Details |  |
|------|-----------|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------|-------|--------|--------------------|-------|---------------------------|--|
|      |           |                                                                                               |                                                                                   | Type                       | Depth | Sample | Results & Comments |       |                           |  |
| 14.0 | 0.1       | ROADBASE GRAVEL                                                                               |  | A*                         | 0.5   |        | PID<1ppm           |       |                           |  |
| 13.0 | 1.0       | FILLING - grey brown sandy clay filling, with crushed sandstone and shale fragments, rootlets |                                                                                   |                            |       |        |                    |       |                           |  |
| 12.0 | 2.0       | - becoming red brown with increasing depth                                                    |                                                                                   | A                          | 1.5   |        | PID<1ppm           |       |                           |  |
| 11.0 | 3.0       | Bore discontinued at 3.0m<br>- target depth reached                                           |                                                                                   | A                          | 3.0   |        | PID<1ppm           |       |                           |  |
| 10.0 |           |                                                                                               |                                                                                   |                            |       |        |                    |       |                           |  |
| 9.0  |           |                                                                                               |                                                                                   |                            |       |        |                    |       |                           |  |
| 8.0  |           |                                                                                               |                                                                                   |                            |       |        |                    |       |                           |  |
| 7.0  |           |                                                                                               |                                                                                   |                            |       |        |                    |       |                           |  |
| 6.0  |           |                                                                                               |                                                                                   |                            |       |        |                    |       |                           |  |
| 5.0  |           |                                                                                               |                                                                                   |                            |       |        |                    |       |                           |  |
| 4.0  |           |                                                                                               |                                                                                   |                            |       |        |                    |       |                           |  |
| 3.0  |           |                                                                                               |                                                                                   |                            |       |        |                    |       |                           |  |
| 2.0  |           |                                                                                               |                                                                                   |                            |       |        |                    |       |                           |  |
| 1.0  |           |                                                                                               |                                                                                   |                            |       |        |                    |       |                           |  |
| 0.0  |           |                                                                                               |                                                                                   |                            |       |        |                    |       |                           |  |

**RIG:** Bobcat

**DRILLER:** Ellis

**LOGGED:** Foo

**CASING:** Uncased

**TYPE OF BORING:** 100mm diameter solid flight auger

**WATER OBSERVATIONS:** No free groundwater observed

**REMARKS:** \*Denotes field replicate sample BD2/201205 taken

RL<sup>^</sup> interpolated from aerial survey (Drawing No: 114415:SK701E) dated 1st April 2005 by Coca-Cola Amatil

## SAMPLING & IN SITU TESTING LEGEND

|   |                         |     |                                |
|---|-------------------------|-----|--------------------------------|
| A | Auger sample            | pp  | Pocket penetrometer (kPa)      |
| D | Disturbed sample        | PID | Photo ionisation detector      |
| B | Bulk sample             | S   | Standard penetration test      |
| U | Tube sample (x mm dia.) | PL  | Point load strength Is(50) MPa |
| W | Water sample            | V   | Shear Vane (kPa)               |
| C | Core drilling           | Δ   | Water seep                     |
|   |                         | ≡   | Water level                    |

## CHECKED

Initials: PE

Date: 17/2/06



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# BOREHOLE LOG

CLIENT: Coca-Cola Amatil  
PROJECT: Preliminary Contamination Assessment  
LOCATION: 102-128 Briens Road, Northmead

SURFACE LEVEL: 14.4 RL<sup>^</sup>  
EASTING:  
NORTHING:  
DIP/AZIMUTH: 90°/-

BORE No: 3  
PROJECT No: 43650  
DATE: 20 Dec 05  
SHEET 1 OF 1

| RL   | Depth (m) | Description of Strata                                                             | Graphic Log | Sampling & In Situ Testing |       |        |                    | Water | Well Construction Details  |
|------|-----------|-----------------------------------------------------------------------------------|-------------|----------------------------|-------|--------|--------------------|-------|----------------------------|
|      |           |                                                                                   |             | Type                       | Depth | Sample | Results & Comments |       |                            |
| 14.4 | 0.1       | ROADBASE GRAVEL                                                                   |             |                            |       |        |                    |       | Top cap 0.5m stickup       |
|      |           | FILLING - dark grey brown clayey sand filling, with sandstone and shale fragments |             | A                          | 0.5   |        | PID<1ppm           |       | Backfill                   |
| 13.4 | 1.0       | FILLING - orange brown shaly clay filling                                         |             | A                          | 1.5   |        | PID<1ppm           |       | Bentonite                  |
| 12.5 | 2.5       | SANDY CLAY - light grey sandy clay with ironstone gravel (possibly filling)       |             |                            |       |        |                    |       | Backfilled with gravel     |
| 11.5 | 3.0       | SANDY CLAY - brown sandy clay                                                     |             | A                          | 3.0   |        | PID<1ppm           |       | Machine slotted PVC screen |
| 9.5  | 5.5       | Bore discontinued at 5.5m - target depth reached                                  |             | A                          | 5.5   |        | PID<1ppm           |       | End cap                    |

RIG: Bobcat

DRILLER: Ellis

LOGGED: Foo

CASING: Uncased

TYPE OF BORING: 100mm diameter solid flight auger

WATER OBSERVATIONS: No free groundwater observed

REMARKS: RL<sup>^</sup> interpolated from aerial survey (Drawing No: 114415:SK701E) dated 1st April 2005 by Coca-Cola Amatil

| SAMPLING & IN SITU TESTING LEGEND |                         |     |                                |
|-----------------------------------|-------------------------|-----|--------------------------------|
| A                                 | Auger sample            | pp  | Pocket penetrometer (kPa)      |
| D                                 | Disturbed sample        | PID | Photo ionisation detector      |
| B                                 | Bulk sample             | S   | Standard penetration test      |
| U                                 | Tube sample (x mm dia.) | PL  | Point load strength ls(50) MPa |
| W                                 | Water sample            | V   | Shear Vane (kPa)               |
| C                                 | Core drilling           | D   | Water seep                     |
|                                   |                         |     | Water level                    |

| CHECKED   |         |
|-----------|---------|
| Initials: | PF      |
| Date:     | 17/2/06 |



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# BOREHOLE LOG

CLIENT: Coca-Cola Amatil  
PROJECT: Preliminary Contamination Assessment  
LOCATION: 102-128 Briens Road, Northmead

SURFACE LEVEL: 14.8 RL^  
EASTING:  
NORTHING:  
DIP/AZIMUTH: 90°/-

BORE No: 4  
PROJECT No: 43650  
DATE: 20 Dec 05  
SHEET 1 OF 1

| RL   | Depth (m) | Description of Strata                                                             | Graphic Log                                                                       | Sampling & In Situ Testing |       |        |                    | Water | Well Construction Details |  |
|------|-----------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------|-------|--------|--------------------|-------|---------------------------|--|
|      |           |                                                                                   |                                                                                   | Type                       | Depth | Sample | Results & Comments |       |                           |  |
| 14.8 | 0.1       | ROADBASE GRAVEL                                                                   |  | A                          | 0.5   |        | PID<1ppm           |       |                           |  |
| 14.0 | 1.0       | FILLING - dark grey brown clayey sand filling, with sandstone and shale fragments |                                                                                   | A                          | 1.5   |        | PID<1ppm           |       |                           |  |
| 13.0 | 2.5       | FILLING - orange brown shaly clay filling                                         |                                                                                   | A                          | 3.0   |        | PID<1ppm           |       |                           |  |
| 12.5 | 3.0       | SANDY CLAY - light grey sandy clay and ironstone gravel                           |  | A                          | 3.0   |        | PID<1ppm           |       |                           |  |
| 12.0 | 3.0       | Bore discontinued at 3.0m<br>- target depth reached                               |                                                                                   |                            |       |        |                    |       |                           |  |
| 11.5 |           |                                                                                   |                                                                                   |                            |       |        |                    |       |                           |  |
| 11.0 |           |                                                                                   |                                                                                   |                            |       |        |                    |       |                           |  |
| 10.5 |           |                                                                                   |                                                                                   |                            |       |        |                    |       |                           |  |
| 10.0 |           |                                                                                   |                                                                                   |                            |       |        |                    |       |                           |  |
| 9.5  |           |                                                                                   |                                                                                   |                            |       |        |                    |       |                           |  |
| 9.0  |           |                                                                                   |                                                                                   |                            |       |        |                    |       |                           |  |
| 8.5  |           |                                                                                   |                                                                                   |                            |       |        |                    |       |                           |  |
| 8.0  |           |                                                                                   |                                                                                   |                            |       |        |                    |       |                           |  |
| 7.5  |           |                                                                                   |                                                                                   |                            |       |        |                    |       |                           |  |
| 7.0  |           |                                                                                   |                                                                                   |                            |       |        |                    |       |                           |  |
| 6.5  |           |                                                                                   |                                                                                   |                            |       |        |                    |       |                           |  |
| 6.0  |           |                                                                                   |                                                                                   |                            |       |        |                    |       |                           |  |
| 5.5  |           |                                                                                   |                                                                                   |                            |       |        |                    |       |                           |  |
| 5.0  |           |                                                                                   |                                                                                   |                            |       |        |                    |       |                           |  |

RIG: Bobcat

DRILLER: Ellis

LOGGED: Foo

CASING: Uncased

TYPE OF BORING: 100mm diameter solid flight auger

WATER OBSERVATIONS: No free groundwater observed

REMARKS: RL^ interpolated from aerial survey (Drawing No: 114415:SK701E) dated 1st April 2005 by Coca-Cola Amatil

## SAMPLING & IN SITU TESTING LEGEND

|   |                         |     |                                |
|---|-------------------------|-----|--------------------------------|
| A | Auger sample            | pp  | Pocket penetrometer (kPa)      |
| D | Disturbed sample        | PID | Photo ionisation detector      |
| B | Bulk sample             | S   | Standard penetration test      |
| U | Tube sample (x mm dia.) | PL  | Point load strength Is(50) MPa |
| W | Water sample            | V   | Shear Vane (kPa)               |
| C | Core drilling           | ▷   | Water seep                     |
|   |                         | ⊥   | Water level                    |

CHECKED

Initials: PF

Date: 17/2/06



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# BOREHOLE LOG

CLIENT: Coca-Cola Amatil  
PROJECT: Preliminary Contamination Assessment  
LOCATION: 102-128 Briens Road, Northmead

SURFACE LEVEL: 15.0 RL<sup>^</sup>  
EASTING:  
NORTHING:  
DIP/AZIMUTH: 90°/-

BORE No: 5  
PROJECT No: 43650  
DATE: 20 Dec 05  
SHEET 1 OF 1

| RL   | Depth (m) | Description of Strata                                                                         | Graphic Log | Sampling & In Situ Testing |       |        |                    | Water | Well Construction Details |  |
|------|-----------|-----------------------------------------------------------------------------------------------|-------------|----------------------------|-------|--------|--------------------|-------|---------------------------|--|
|      |           |                                                                                               |             | Type                       | Depth | Sample | Results & Comments |       |                           |  |
| 15.0 | 0.1       | ROADBASE GRAVEL                                                                               |             |                            |       |        |                    |       |                           |  |
|      |           | FILLING - orange red brown crushed sandstone filling, with some ironstone gravel and rootlets |             | A                          | 0.5   |        | PID<1ppm           |       |                           |  |
| 14.0 | 1         | - with shale fragments                                                                        |             |                            |       |        |                    |       |                           |  |
|      |           |                                                                                               |             | A                          | 1.5   |        | PID<1ppm           |       |                           |  |
| 13.0 | 2         |                                                                                               |             |                            |       |        |                    |       |                           |  |
|      |           | - moist from 2.5m                                                                             |             |                            |       |        |                    |       |                           |  |
| 12.0 | 3         |                                                                                               |             | A                          | 3.0   |        | PID=5ppm           |       |                           |  |
|      |           | Bore discontinued at 3.0m<br>- target depth reached                                           |             |                            |       |        |                    |       |                           |  |
| 11.0 | 4         |                                                                                               |             |                            |       |        |                    |       |                           |  |
| 10.0 | 5         |                                                                                               |             |                            |       |        |                    |       |                           |  |
| 9.0  | 6         |                                                                                               |             |                            |       |        |                    |       |                           |  |
| 8.0  | 7         |                                                                                               |             |                            |       |        |                    |       |                           |  |
| 7.0  | 8         |                                                                                               |             |                            |       |        |                    |       |                           |  |
| 6.0  | 9         |                                                                                               |             |                            |       |        |                    |       |                           |  |

RIG: Bobcat

DRILLER: Ellis

LOGGED: Foo

CASING: Uncased

TYPE OF BORING: 100mm diameter solid flight auger

WATER OBSERVATIONS: No free groundwater observed

REMARKS: RL<sup>^</sup> interpolated from aerial survey (Drawing No: 114415:SK701E) dated 1st April 2005 by Coca-Cola Amatil

## SAMPLING & IN SITU TESTING LEGEND

|   |                         |     |                                |
|---|-------------------------|-----|--------------------------------|
| A | Auger sample            | pp  | Pocket penetrometer (kPa)      |
| D | Disturbed sample        | PID | Photo ionisation detector      |
| B | Bulk sample             | S   | Standard penetration test      |
| U | Tube sample (x mm dia.) | PL  | Point load strength Is(50) MPa |
| W | Water sample            | V   | Shear Vane (kPa)               |
| C | Core drilling           | >   | Water seep                     |
|   |                         | ≡   | Water level                    |

## CHECKED

Initials: PF

Date: 17/2/06



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# BOREHOLE LOG

CLIENT: Coca-Cola Amatil  
PROJECT: Preliminary Contamination Assessment  
LOCATION: 102-128 Briens Road, Northmead

SURFACE LEVEL: 14.8 RL<sup>^</sup>  
EASTING:  
NORTHING:  
DIP/AZIMUTH: 90°/-

BORE No: 6  
PROJECT No: 43650  
DATE: 20 Dec 05  
SHEET 1 OF 1

| RL   | Depth (m) | Description of Strata                                                                          | Graphic Log                                                                       | Sampling & In Situ Testing |       |        |                    | Water | Well Construction Details |  |
|------|-----------|------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------|-------|--------|--------------------|-------|---------------------------|--|
|      |           |                                                                                                |                                                                                   | Type                       | Depth | Sample | Results & Comments |       |                           |  |
| 14.8 | 0.1       | ROADBASE GRAVEL                                                                                |  | A                          | 0.5   |        | PID<1ppm           |       |                           |  |
| 1    |           | FILLING - orange red brown clayey sand filling, with crushed sandstone fragments and charcoal? |                                                                                   | A                          | 1.5   |        | PID<1ppm           |       |                           |  |
| 2.3  |           | FILLING - dark grey silty clay filling, with a trace of crushed concrete                       |                                                                                   | A                          | 3.0   |        | PID=2ppm           |       |                           |  |
| 3.0  |           | Bore discontinued at 3.0m<br>- target depth reached                                            |                                                                                   |                            |       |        |                    |       |                           |  |
| 4    |           |                                                                                                |                                                                                   |                            |       |        |                    |       |                           |  |
| 5    |           |                                                                                                |                                                                                   |                            |       |        |                    |       |                           |  |
| 6    |           |                                                                                                |                                                                                   |                            |       |        |                    |       |                           |  |
| 7    |           |                                                                                                |                                                                                   |                            |       |        |                    |       |                           |  |
| 8    |           |                                                                                                |                                                                                   |                            |       |        |                    |       |                           |  |
| 9    |           |                                                                                                |                                                                                   |                            |       |        |                    |       |                           |  |

RIG: Bobcat

DRILLER: Ellis

LOGGED: Foo

CASING: Uncased

TYPE OF BORING: 100mm diameter solid flight auger

WATER OBSERVATIONS: No free groundwater observed

REMARKS: RL<sup>^</sup> interpolated from aerial survey (Drawing No: 114415:SK701E) dated 1st April 2005 by Coca-Cola Amatil

| SAMPLING & IN SITU TESTING LEGEND |                         |     |                                |
|-----------------------------------|-------------------------|-----|--------------------------------|
| A                                 | Auger sample            | pp  | Pocket penetrometer (kPa)      |
| D                                 | Disturbed sample        | PID | Photo ionisation detector      |
| B                                 | Bulk sample             | S   | Standard penetration test      |
| U                                 | Tube sample (x mm dia.) | PL  | Point load strength Is(50) MPa |
| W                                 | Water sample            | V   | Shear Vane (kPa)               |
| C                                 | Core drilling           | ▷   | Water seep                     |
|                                   |                         | ≡   | Water level                    |

| CHECKED             |
|---------------------|
| Initials: <i>RF</i> |
| Date: 17/2/06       |



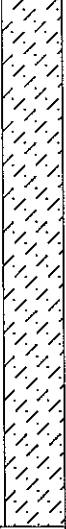
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# BOREHOLE LOG

CLIENT: Coca-Cola Amatil  
PROJECT: Preliminary Contamination Assessment  
LOCATION: 102-128 Briens Road, Northmead

SURFACE LEVEL: 15.0 RL<sup>A</sup>  
EASTING:  
NORTHING:  
DIP/AZIMUTH: 90°/-

BORE No: 7  
PROJECT No: 43650  
DATE: 20 Dec 05  
SHEET 1 OF 1

| RL   | Depth (m) | Description of Strata                                                                                                             | Graphic Log                                                                        | Sampling & In Situ Testing |       |        |                    | Water | Well Construction Details  |
|------|-----------|-----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|----------------------------|-------|--------|--------------------|-------|----------------------------|
|      |           |                                                                                                                                   |                                                                                    | Type                       | Depth | Sample | Results & Comments |       |                            |
| 15.0 | 0.1       | ROADBASE GRAVEL<br>FILLING - orange, light grey brown clayey sand filling, with crushed sandstone fragments                       |   | A*                         | 0.5   |        | PID<1ppm           |       | Top cap<br>0.5m stickup    |
| 14.0 | 1.3       | FILLING - orange brown clay filling, with some crushed sandstone and ironstone                                                    |                                                                                    | A                          | 1.5   |        | PID<1ppm           |       | Backfill                   |
| 13.0 | 2.0       | CLAYEY SAND - grey mottled orange clayey sand<br><br>- becoming red mottled grey clayey sand with ironstone with increasing depth |  | A                          | 3.0   |        | PID<1ppm           |       | Bentonite                  |
| 12.0 |           |                                                                                                                                   |                                                                                    |                            |       |        |                    |       | Backfilled with gravel     |
| 11.0 |           |                                                                                                                                   |                                                                                    |                            |       |        |                    |       | Machine slotted PVC screen |
| 10.0 |           |                                                                                                                                   |                                                                                    |                            |       |        |                    |       |                            |
| 9.0  |           |                                                                                                                                   |                                                                                    |                            |       |        |                    |       |                            |
| 8.0  |           |                                                                                                                                   |                                                                                    |                            |       |        |                    |       |                            |
| 7.0  |           |                                                                                                                                   |                                                                                    |                            |       |        |                    |       |                            |
| 6.0  |           |                                                                                                                                   |                                                                                    |                            |       |        |                    |       |                            |
| 5.5  | 5.5       | Bore discontinued at 5.5m<br>- target depth reached                                                                               |                                                                                    |                            |       |        |                    |       | End cap                    |
| 4.0  |           |                                                                                                                                   |                                                                                    |                            |       |        |                    |       |                            |
| 3.0  |           |                                                                                                                                   |                                                                                    |                            |       |        |                    |       |                            |
| 2.0  |           |                                                                                                                                   |                                                                                    |                            |       |        |                    |       |                            |
| 1.0  |           |                                                                                                                                   |                                                                                    |                            |       |        |                    |       |                            |
| 0.0  |           |                                                                                                                                   |                                                                                    |                            |       |        |                    |       |                            |

RIG: Bobcat

DRILLER: Ellis

LOGGED: Foo

CASING: Uncased

TYPE OF BORING: 100mm diameter solid flight auger

WATER OBSERVATIONS: No free groundwater observed

REMARKS: \*Denotes field replicate sample BD3/201205 taken  
RL<sup>A</sup> interpolated from aerial survey (Drawing No: 114415:SK701E) dated 1st April 2005 by Coca-Cola Amatil

| SAMPLING & IN SITU TESTING LEGEND |                         |     |                                |
|-----------------------------------|-------------------------|-----|--------------------------------|
| A                                 | Auger sample            | pp  | Pocket penetrometer (kPa)      |
| D                                 | Disturbed sample        | PID | Photo ionisation detector      |
| B                                 | Bulk sample             | S   | Standard penetration test      |
| U                                 | Tube sample (x mm dia.) | PL  | Point load strength Is(50) MPa |
| W                                 | Water sample            | V   | Shear Vane (kPa)               |
| C                                 | Core drilling           | >   | Water seep      Water level    |

|               |
|---------------|
| CHECKED       |
| Initials: PF  |
| Date: 17/2/06 |



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# BOREHOLE LOG

CLIENT: Coca-Cola Amatil  
PROJECT: Preliminary Contamination Assessment  
LOCATION: 102-128 Briens Road, Northmead

SURFACE LEVEL: 15.0 RL<sup>^</sup>  
EASTING:  
NORTHING:  
DIP/AZIMUTH: 90°/--

BORE No: 8  
PROJECT No: 43650  
DATE: 20 Dec 05  
SHEET 1 OF 1

| RL   | Depth (m) | Description of Strata                                      | Graphic Log                                                                       | Sampling & In Situ Testing |       |        |                    | Water | Well Construction Details |  |
|------|-----------|------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------|-------|--------|--------------------|-------|---------------------------|--|
|      |           |                                                            |                                                                                   | Type                       | Depth | Sample | Results & Comments |       |                           |  |
| 15.0 |           | FILLING - red grey sand filling                            |  | A                          | 0.5   |        | PID<1ppm           |       |                           |  |
| 14.0 | 1.0       | FILLING - dark grey orange brown silty clay filling, moist |  | A                          | 1.5   |        | PID<1ppm           |       |                           |  |
| 13.0 | 2.0       |                                                            |                                                                                   |                            |       |        |                    |       |                           |  |
| 12.4 | 2.4       | - with shale fragment at 2.3m                              |                                                                                   |                            |       |        |                    |       |                           |  |
| 12.0 |           | SANDY CLAY - yellow mottled grey sandy clay with some silt |  |                            |       |        |                    |       |                           |  |
| 11.0 | 3.0       | Bore discontinued at 3.0m<br>- target depth reached        |                                                                                   | A                          | 3.0   |        | PID<1ppm           |       |                           |  |
| 10.0 |           |                                                            |                                                                                   |                            |       |        |                    |       |                           |  |
| 9.0  |           |                                                            |                                                                                   |                            |       |        |                    |       |                           |  |
| 8.0  |           |                                                            |                                                                                   |                            |       |        |                    |       |                           |  |
| 7.0  |           |                                                            |                                                                                   |                            |       |        |                    |       |                           |  |
| 6.0  |           |                                                            |                                                                                   |                            |       |        |                    |       |                           |  |
| 5.0  |           |                                                            |                                                                                   |                            |       |        |                    |       |                           |  |
| 4.0  |           |                                                            |                                                                                   |                            |       |        |                    |       |                           |  |
| 3.0  |           |                                                            |                                                                                   |                            |       |        |                    |       |                           |  |
| 2.0  |           |                                                            |                                                                                   |                            |       |        |                    |       |                           |  |
| 1.0  |           |                                                            |                                                                                   |                            |       |        |                    |       |                           |  |
| 0.0  |           |                                                            |                                                                                   |                            |       |        |                    |       |                           |  |

RIG: Bobcat

DRILLER: Ellis

LOGGED: Foo

CASING: Uncased

TYPE OF BORING: 100mm diameter solid flight auger

WATER OBSERVATIONS: No free groundwater observed

REMARKS: RL<sup>^</sup> interpolated from aerial survey (Drawing No: 114415:SK701E) dated 1st April 2005 by Coca-Cola Amatil

## SAMPLING & IN SITU TESTING LEGEND

|   |                         |     |                                |
|---|-------------------------|-----|--------------------------------|
| A | Auger sample            | pp  | Pocket penetrometer (kPa)      |
| D | Disturbed sample        | PID | Photo ionisation detector      |
| B | Bulk sample             | S   | Standard penetration test      |
| U | Tube sample (x mm dia.) | PL  | Point load strength Is(50) MPa |
| W | Water sample            | V   | Shear Vane (kPa)               |
| C | Core drilling           | Δ   | Water seep                     |
|   |                         | ≡   | Water level                    |

## CHECKED

Initials: DF

Date: 11/2/06



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# BOREHOLE LOG

**CLIENT:** Coca-Cola Amatil  
**PROJECT:** Preliminary Contamination Assessment  
**LOCATION:** 102-128 Briens Road, Northmead

**SURFACE LEVEL:** 15.0 RL<sup>^</sup>  
**EASTING:**  
**NORTHING:**  
**DIP/AZIMUTH:** 90°/-

**BORE No:** 9  
**PROJECT No:** 43650  
**DATE:** 20 Dec 05  
**SHEET 1 OF 1**

| RL   | Depth (m) | Description of Strata                                                                           | Graphic Log                                                                       | Sampling & In Situ Testing |       |        |                    | Water | Well Construction Details |  |
|------|-----------|-------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------|-------|--------|--------------------|-------|---------------------------|--|
|      |           |                                                                                                 |                                                                                   | Type                       | Depth | Sample | Results & Comments |       |                           |  |
| 15.0 | 0.0       | FILLING - grey brown clayey sand filling, with ironstone gravel and crushed sandstone fragments |  | A                          | 0.5   |        | PID<1ppm           |       |                           |  |
| 14.0 | 1.0       | SANDY CLAY - red mottled orange and grey sandy clay with ironstone gravel                       |  | A                          | 1.5   |        | PID<1ppm           |       |                           |  |
| 12.0 | 3.0       | Bore discontinued at 3.0m - target depth reached                                                |                                                                                   | A                          | 3.0   |        | PID<1ppm           |       |                           |  |
| 11.0 | 4.0       |                                                                                                 |                                                                                   |                            |       |        |                    |       |                           |  |
| 10.0 | 5.0       |                                                                                                 |                                                                                   |                            |       |        |                    |       |                           |  |
| 9.0  | 6.0       |                                                                                                 |                                                                                   |                            |       |        |                    |       |                           |  |
| 8.0  | 7.0       |                                                                                                 |                                                                                   |                            |       |        |                    |       |                           |  |
| 7.0  | 8.0       |                                                                                                 |                                                                                   |                            |       |        |                    |       |                           |  |
| 6.0  | 9.0       |                                                                                                 |                                                                                   |                            |       |        |                    |       |                           |  |

**RIG:** Bobcat

**DRILLER:** Ellis

**LOGGED:** Foo

**CASING:** Uncased

**TYPE OF BORING:** 100mm diameter solid flight auger

**WATER OBSERVATIONS:** No free groundwater observed

**REMARKS:** RL<sup>^</sup> interpolated from aerial survey (Drawing No: 114415:SK701E) dated 1st April 2005 by Coca-Cola Amatil

| SAMPLING & IN SITU TESTING LEGEND |                         |     |                                |
|-----------------------------------|-------------------------|-----|--------------------------------|
| A                                 | Auger sample            | pp  | Pocket penetrometer (kPa)      |
| D                                 | Disturbed sample        | PID | Photo ionisation detector      |
| B                                 | Bulk sample             | S   | Standard penetration test      |
| U                                 | Tube sample (x mm dia.) | PL  | Point load strength Is(50) MPa |
| W                                 | Water sample            | V   | Shear Vane (kPa)               |
| C                                 | Core drilling           | Δ   | Water seep                     |
|                                   |                         | ≡   | Water level                    |

| CHECKED       |
|---------------|
| Initials: PF  |
| Date: 07/2/06 |



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# BOREHOLE LOG

**CLIENT:** Coca-Cola Amatil  
**PROJECT:** Preliminary Contamination Assessment  
**LOCATION:** 102-128 Briens Road, Northmead

**SURFACE LEVEL:** 14.9 RL<sup>^</sup>  
**EASTING:**  
**NORTHING:**  
**DIP/AZIMUTH:** 90°/-

**BORE No:** 10  
**PROJECT No:** 43650  
**DATE:** 20 Dec 05  
**SHEET 1 OF 1**

| RL | Depth (m) | Description of Strata                               | Graphic Log | Sampling & In Situ Testing |       |        |                    | Water | Well Construction Details |  |
|----|-----------|-----------------------------------------------------|-------------|----------------------------|-------|--------|--------------------|-------|---------------------------|--|
|    |           |                                                     |             | Type                       | Depth | Sample | Results & Comments |       |                           |  |
|    | 0.1       | ASPHALT                                             |             |                            |       |        |                    |       |                           |  |
|    |           | FILLING - yellow grey brown clayey sand filling     |             |                            |       |        |                    |       |                           |  |
|    | 0.5       | FILLING - grey brown clayey sand filling            |             | A                          | 0.5   |        | PID<1ppm           |       |                           |  |
|    | 1.2       | - with timber at 1.1m                               |             |                            |       |        |                    |       |                           |  |
|    |           | SANDY CLAY - grey mottled orange red sandy clay     |             | A                          | 1.5   |        | PID<1ppm           |       |                           |  |
|    | 3.0       | Bore discontinued at 3.0m<br>- target depth reached |             | A                          | 3.0   |        | PID<1ppm           |       |                           |  |

**RIG:** Bobcat

**DRILLER:** Ellis

**LOGGED:** Foo

**CASING:** Uncased

**TYPE OF BORING:** 100mm diameter solid flight auger

**WATER OBSERVATIONS:** No free groundwater observed

**REMARKS:** RL<sup>^</sup> interpolated from aerial survey (Drawing No: 114415:SK701E) dated 1st April 2005 by Coca-Cola Amatil

## SAMPLING & IN SITU TESTING LEGEND

|   |                         |     |                                |
|---|-------------------------|-----|--------------------------------|
| A | Auger sample            | pp  | Pocket penetrometer (kPa)      |
| D | Disturbed sample        | PID | Photo ionisation detector      |
| B | Bulk sample             | S   | Standard penetration test      |
| U | Tube sample (x mm dia.) | PL  | Point load strength Is(50) MPa |
| W | Water sample            | V   | Shear Vane (kPa)               |
| C | Core drilling           | ▷   | Water seep                     |
|   |                         | ≡   | Water level                    |

## CHECKED

Initials: PF

Date: 17/12/06



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# BOREHOLE LOG

CLIENT: Coca-Cola Amatil  
PROJECT: Preliminary Contamination Assessment  
LOCATION: 102-128 Briens Road, Northmead

SURFACE LEVEL: 14.9 RL<sup>^</sup>  
EASTING:  
NORTHING:  
DIP/AZIMUTH: 90°/-

BORE No: 11  
PROJECT No: 43650  
DATE: 20 Dec 05  
SHEET 1 OF 1

| RL | Depth (m) | Description of Strata                               | Graphic Log | Sampling & In Situ Testing |       |        |                    | Water | Well Construction Details |  |
|----|-----------|-----------------------------------------------------|-------------|----------------------------|-------|--------|--------------------|-------|---------------------------|--|
|    |           |                                                     |             | Type                       | Depth | Sample | Results & Comments |       |                           |  |
|    | 0.1       | ASPHALT                                             |             |                            |       |        |                    |       |                           |  |
|    |           | FILLING - yellow grey brown clayey sand filling     |             | A                          | 0.5   |        | PID<1ppm           |       |                           |  |
|    | 1.2       | SANDY CLAY - orange yellow mottled grey sandy clay  |             | A                          | 1.5   |        | PID<1ppm           |       |                           |  |
|    | 3.0       | Bore discontinued at 3.0m<br>- target depth reached |             | A                          | 3.0   |        | PID<1ppm           |       |                           |  |

RIG: Bobcat

DRILLER: Ellis

LOGGED: Foo

CASING: Uncased

TYPE OF BORING: 100mm diameter solid flight auger

WATER OBSERVATIONS: No free groundwater observed

REMARKS: RL<sup>^</sup> interpolated from aerial survey (Drawing No: 114415:SK701E) dated 1st April 2005 by Coca-Cola Amatil

## SAMPLING & IN SITU TESTING LEGEND

|   |                         |     |                                |
|---|-------------------------|-----|--------------------------------|
| A | Auger sample            | pp  | Pocket penetrometer (kPa)      |
| D | Disturbed sample        | PID | Photo ionisation detector      |
| B | Bulk sample             | S   | Standard penetration test      |
| U | Tube sample (x mm dia.) | PL  | Point load strength Is(50) MPa |
| W | Water sample            | V   | Shear Vane (kPa)               |
| C | Core drilling           | ▷   | Water seep      ☹ Water level  |

CHECKED

Initials: PE

Date: 17/2/06



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# BOREHOLE LOG

CLIENT: Coca-Cola Amatil  
PROJECT: Preliminary Contamination Assessment  
LOCATION: 102-128 Briens Road, Northmead

SURFACE LEVEL: 14.6 RL<sup>^</sup>  
EASTING:  
NORTHING:  
DIP/AZIMUTH: 90°/--

BORE No: 12  
PROJECT No: 43650  
DATE: 20 Dec 05  
SHEET 1 OF 1

| RL   | Depth (m) | Description of Strata                                                                | Graphic Log | Sampling & In Situ Testing |       |        |                    | Water | Well Construction Details |  |
|------|-----------|--------------------------------------------------------------------------------------|-------------|----------------------------|-------|--------|--------------------|-------|---------------------------|--|
|      |           |                                                                                      |             | Type                       | Depth | Sample | Results & Comments |       |                           |  |
| 14.6 | 0.1       | ASPHALT                                                                              |             | A                          | 0.0   |        | PID<1ppm           |       |                           |  |
|      |           | FILLING - dark grey brown clayey sand filling, with some ash and concrete fragments  |             |                            | 0.5   |        |                    |       |                           |  |
| 13.5 | 1.0       | FILLING - dark grey brown sandy clay/clayey sand filling, with some ironstone gravel |             | A                          | 1.5   |        | PID<1ppm           |       |                           |  |
| 12.5 | 2.0       | SANDY CLAY - yellow orange brown sandy clay with ironstone gravel                    |             |                            |       |        |                    |       |                           |  |
| 11.5 | 3.0       | Bore discontinued at 3.0m - target depth reached                                     |             | A                          | 3.0   |        | PID<1ppm           |       |                           |  |
| 11.0 |           |                                                                                      |             |                            |       |        |                    |       |                           |  |
| 10.5 |           |                                                                                      |             |                            |       |        |                    |       |                           |  |
| 10.0 |           |                                                                                      |             |                            |       |        |                    |       |                           |  |
| 9.5  |           |                                                                                      |             |                            |       |        |                    |       |                           |  |
| 9.0  |           |                                                                                      |             |                            |       |        |                    |       |                           |  |
| 8.5  |           |                                                                                      |             |                            |       |        |                    |       |                           |  |
| 8.0  |           |                                                                                      |             |                            |       |        |                    |       |                           |  |
| 7.5  |           |                                                                                      |             |                            |       |        |                    |       |                           |  |
| 7.0  |           |                                                                                      |             |                            |       |        |                    |       |                           |  |
| 6.5  |           |                                                                                      |             |                            |       |        |                    |       |                           |  |
| 6.0  |           |                                                                                      |             |                            |       |        |                    |       |                           |  |
| 5.5  |           |                                                                                      |             |                            |       |        |                    |       |                           |  |
| 5.0  |           |                                                                                      |             |                            |       |        |                    |       |                           |  |
| 4.5  |           |                                                                                      |             |                            |       |        |                    |       |                           |  |
| 4.0  |           |                                                                                      |             |                            |       |        |                    |       |                           |  |
| 3.5  |           |                                                                                      |             |                            |       |        |                    |       |                           |  |
| 3.0  |           |                                                                                      |             |                            |       |        |                    |       |                           |  |
| 2.5  |           |                                                                                      |             |                            |       |        |                    |       |                           |  |
| 2.0  |           |                                                                                      |             |                            |       |        |                    |       |                           |  |
| 1.5  |           |                                                                                      |             |                            |       |        |                    |       |                           |  |
| 1.0  |           |                                                                                      |             |                            |       |        |                    |       |                           |  |
| 0.5  |           |                                                                                      |             |                            |       |        |                    |       |                           |  |

RIG: Bobcat

DRILLER: Ellis

LOGGED: Foo

CASING: Uncased

TYPE OF BORING: 100mm diameter solid flight auger

WATER OBSERVATIONS: No free groundwater observed

REMARKS: RL<sup>^</sup> interpolated from aerial survey (Drawing No: 114415:SK701E) dated 1st April 2005 by Coca-Cola Amatil

| SAMPLING & IN SITU TESTING LEGEND |                         |     |                                |
|-----------------------------------|-------------------------|-----|--------------------------------|
| A                                 | Auger sample            | pp  | Pocket penetrometer (kPa)      |
| D                                 | Disturbed sample        | PID | Photo ionisation detector      |
| B                                 | Bulk sample             | S   | Standard penetration test      |
| U                                 | Tube sample (x mm dia.) | PL  | Point load strength Is(50) MPa |
| W                                 | Water sample            | V   | Shear Vane (kPa)               |
| C                                 | Core drilling           | Δ   | Water seep                     |
|                                   |                         | ☼   | Water level                    |

| CHECKED       |
|---------------|
| Initials: PF  |
| Date: 27/2/06 |



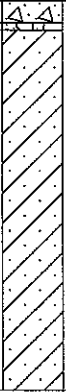
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# BOREHOLE LOG

**CLIENT:** Coca-Cola Amatil  
**PROJECT:** Preliminary Contamination Assessment  
**LOCATION:** 102-128 Briens Road, Northmead

**SURFACE LEVEL:** 14.7 RL<sup>^</sup>  
**EASTING:**  
**NORTHING:**  
**DIP/AZIMUTH:** 90°/-

**BORE No:** 13  
**PROJECT No:** 43650  
**DATE:** 21 Dec 05  
**SHEET** 1 OF 1

| RL | Depth (m) | Description of Strata                                                      | Graphic Log                                                                       | Sampling & In Situ Testing |       |        |                    | Water | Well Construction Details |  |
|----|-----------|----------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------|-------|--------|--------------------|-------|---------------------------|--|
|    |           |                                                                            |                                                                                   | Type                       | Depth | Sample | Results & Comments |       |                           |  |
|    | 0.15      | CONCRETE                                                                   |  |                            |       |        |                    |       |                           |  |
|    | 0.2       | ROADBASE GRAVEL                                                            |                                                                                   |                            |       |        |                    |       |                           |  |
|    |           | SANDY CLAY - yellow mottled red grey sandy clay with ironstone gravel      |                                                                                   | A                          | 0.5   |        | PID=4ppm           |       |                           |  |
|    | 1         |                                                                            |                                                                                   | A                          | 1.5   |        | PID<1ppm           |       |                           |  |
|    | 2         |                                                                            |                                                                                   |                            |       |        |                    |       |                           |  |
|    | 2.6       | Bore discontinued at 2.6m<br>- auger refusal on rock, target depth reached |                                                                                   | A                          | 3.0   |        | PID<1ppm           |       |                           |  |
|    | 3         |                                                                            |                                                                                   |                            |       |        |                    |       |                           |  |
|    | 4         |                                                                            |                                                                                   |                            |       |        |                    |       |                           |  |
|    | 5         |                                                                            |                                                                                   |                            |       |        |                    |       |                           |  |
|    | 6         |                                                                            |                                                                                   |                            |       |        |                    |       |                           |  |
|    | 7         |                                                                            |                                                                                   |                            |       |        |                    |       |                           |  |
|    | 8         |                                                                            |                                                                                   |                            |       |        |                    |       |                           |  |
|    | 9         |                                                                            |                                                                                   |                            |       |        |                    |       |                           |  |

**RIG:** Bobcat

**DRILLER:** Ellis

**LOGGED:** Foo

**CASING:** Uncased

**TYPE OF BORING:** 100mm diameter solid flight auger

**WATER OBSERVATIONS:** No free groundwater observed

**REMARKS:** RL<sup>^</sup> interpolated from aerial survey (Drawing No: 114415:SK701E) dated 1st April 2005 by Coca-Cola Amatil

| SAMPLING & IN SITU TESTING LEGEND |                         |     |                                |
|-----------------------------------|-------------------------|-----|--------------------------------|
| A                                 | Auger sample            | pp  | Pocket penetrometer (kPa)      |
| D                                 | Disturbed sample        | PID | Photo ionisation detector      |
| B                                 | Bulk sample             | S   | Standard penetration test      |
| U                                 | Tube sample (x mm dia.) | PL  | Point load strength Is(50) MPa |
| W                                 | Water sample            | V   | Shear Vane (kPa)               |
| C                                 | Core drilling           | Δ   | Water seep                     |
|                                   |                         | ≡   | Water level                    |

| CHECKED             |
|---------------------|
| Initials: <i>FE</i> |
| Date: 17/2/06       |



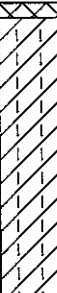
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# BOREHOLE LOG

CLIENT: Coca-Cola Amatil  
PROJECT: Preliminary Contamination Assessment  
LOCATION: 102-128 Briens Road, Northmead

SURFACE LEVEL: 16.0 RL<sup>^</sup>  
EASTING:  
NORTHING:  
DIP/AZIMUTH: 90°/-

BORE No: 14  
PROJECT No: 43650  
DATE: 21 Dec 05  
SHEET 1 OF 1

| RL   | Depth (m) | Description of Strata                                                                                                                                                       | Graphic Log                                                                       | Sampling & In Situ Testing |       |        |                    | Water | Well Construction Details |  |
|------|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------|-------|--------|--------------------|-------|---------------------------|--|
|      |           |                                                                                                                                                                             |                                                                                   | Type                       | Depth | Sample | Results & Comments |       |                           |  |
| 16.0 | 0.1       | FILLING - yellow brown silty clay filling with rootlets<br>SILTY CLAY - yellow brown silty clay<br><br>- becoming yellow mottled red brown silty clay with increasing depth |  | A                          | 0.5   |        | PID<1ppm           |       |                           |  |
| 15.0 | 1.0       |                                                                                                                                                                             |                                                                                   | A*                         | 1.5   |        | PID=8ppm           |       |                           |  |
| 14.0 | 2.0       | SANDSTONE - light grey white sandstone, with hydrocarbon odour                                                                                                              |  | A                          | 3.0   |        | PID=46ppm          |       |                           |  |
| 13.0 | 3.0       |                                                                                                                                                                             |                                                                                   | A                          | 3.7   |        | PID=48ppm          |       |                           |  |
| 12.0 | 4.0       | Bore discontinued at 3.7m<br>- auger refusal on rock                                                                                                                        |                                                                                   |                            |       |        |                    |       |                           |  |
| 11.0 | 5.0       |                                                                                                                                                                             |                                                                                   |                            |       |        |                    |       |                           |  |
| 10.0 | 6.0       |                                                                                                                                                                             |                                                                                   |                            |       |        |                    |       |                           |  |
| 9.0  | 7.0       |                                                                                                                                                                             |                                                                                   |                            |       |        |                    |       |                           |  |
| 8.0  | 8.0       |                                                                                                                                                                             |                                                                                   |                            |       |        |                    |       |                           |  |
| 7.0  | 9.0       |                                                                                                                                                                             |                                                                                   |                            |       |        |                    |       |                           |  |

RIG: Bobcat

DRILLER: Ellis

LOGGED: Foo

CASING: Uncased

TYPE OF BORING: 100mm diameter solid flight auger

WATER OBSERVATIONS: No free groundwater observed

REMARKS: \*Denotes field replicate sample BD taken  
RL<sup>^</sup> interpolated from aerial survey (Drawing No: 114415:SK701E) dated 1st April 2005 by Coca-Cola Amatil

## SAMPLING & IN SITU TESTING LEGEND

|   |                         |     |                                |
|---|-------------------------|-----|--------------------------------|
| A | Auger sample            | pp  | Pocket penetrometer (kPa)      |
| D | Disturbed sample        | PID | Photo ionisation detector      |
| B | Bulk sample             | S   | Standard penetration test      |
| U | Tube sample (x mm dia.) | PL  | Point load strength is(50) MPa |
| W | Water sample            | V   | Shear Vane (kPa)               |
| C | Core drilling           | Δ   | Water seep                     |
|   |                         | ≡   | Water level                    |

## CHECKED

Initials: PF

Date: 17/2/06



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# BOREHOLE LOG

CLIENT: Coca-Cola Amatil  
PROJECT: Preliminary Contamination Assessment  
LOCATION: 102-128 Briens Road, Northmead

SURFACE LEVEL: 14.7 RL<sup>^</sup>  
EASTING:  
NORTHING:  
DIP/AZIMUTH: 90°/—

BORE No: 15  
PROJECT No: 43650  
DATE: 21 Dec 05  
SHEET 1 OF 1

| RL  | Depth (m) | Description of Strata                               | Graphic Log | Sampling & In Situ Testing |       |        |                    | Water | Well Construction Details |  |
|-----|-----------|-----------------------------------------------------|-------------|----------------------------|-------|--------|--------------------|-------|---------------------------|--|
|     |           |                                                     |             | Type                       | Depth | Sample | Results & Comments |       |                           |  |
| 0.1 | 0.15      | CONCRETE                                            |             |                            |       |        |                    |       |                           |  |
|     |           | ROADBASE GRAVEL                                     |             |                            |       |        |                    |       |                           |  |
|     |           | SANDY CLAY - orange yellow mottled red sandy clay   |             | A                          | 0.5   |        | PID=3ppm           |       |                           |  |
|     |           |                                                     |             | A                          | 1.5   |        | PID<1ppm           |       |                           |  |
|     |           |                                                     |             | A                          | 3.0   |        | PID<1ppm           |       |                           |  |
|     | 3.0       | Bore discontinued at 3.0m<br>- target depth reached |             |                            |       |        |                    |       |                           |  |

RIG: Bobcat

DRILLER: Ellis

LOGGED: Foo

CASING: Uncased

TYPE OF BORING: 100mm diameter solid flight auger

WATER OBSERVATIONS: No free groundwater observed

REMARKS: RL<sup>^</sup> interpolated from aerial survey (Drawing No: 114415:SK701E) dated 1st April 2005 by Coca-Cola Amatil

## SAMPLING & IN SITU TESTING LEGEND

|   |                         |     |                                |
|---|-------------------------|-----|--------------------------------|
| A | Auger sample            | pp  | Pocket penetrometer (kPa)      |
| D | Disturbed sample        | PID | Photo ionisation detector      |
| B | Bulk sample             | S   | Standard penetration test      |
| U | Tube sample (x mm dia.) | PL  | Point load strength Is(50) MPa |
| W | Water sample            | V   | Shear Vane (kPa)               |
| C | Core drilling           | Δ   | Water seep                     |
|   |                         | ≡   | Water level                    |

## CHECKED

Initials: RF  
Date: 17/2/06



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# BOREHOLE LOG

CLIENT: Coca-Cola Amatil  
PROJECT: Preliminary Contamination Assessment  
LOCATION: 102-128 Briens Road, Northmead

SURFACE LEVEL: 15.3 RL<sup>^</sup>  
EASTING:  
NORTHING:  
DIP/AZIMUTH: 90°/--

BORE No: 16  
PROJECT No: 43650  
DATE: 21 Dec 05  
SHEET 1 OF 1

| RL    | Depth (m) | Description of Strata                                        | Graphic Log | Sampling & In Situ Testing |       |        |                    | Water | Well Construction Details |  |
|-------|-----------|--------------------------------------------------------------|-------------|----------------------------|-------|--------|--------------------|-------|---------------------------|--|
|       |           |                                                              |             | Type                       | Depth | Sample | Results & Comments |       |                           |  |
| 15.3  | 0.12      | CONCRETE                                                     |             |                            |       |        |                    |       |                           |  |
| 15.15 | 0.15      | ROADBASE GRAVEL                                              |             |                            |       |        |                    |       |                           |  |
|       |           | SILTY CLAY - grey mottled yellow silty clay                  |             | A                          | 0.5   |        | PID=5ppm           |       |                           |  |
|       |           | - becoming red mottled grey silty clay with increasing depth |             |                            |       |        |                    |       |                           |  |
|       |           |                                                              |             | A                          | 1.5   |        | PID<1ppm           |       |                           |  |
|       | 2.0       | SILTY SANDY CLAY - red mottled grey silty sandy clay         |             |                            |       |        |                    |       |                           |  |
|       |           |                                                              |             | A                          | 3.0   |        | PID<1ppm           |       |                           |  |
|       | 3.0       | Bore discontinued at 3.0m<br>- target depth reached          |             |                            |       |        |                    |       |                           |  |

RIG: Bobcat

DRILLER: Ellis

LOGGED: Foo

CASING: Uncased

TYPE OF BORING: 100mm diameter solid flight auger

WATER OBSERVATIONS: No free groundwater observed

REMARKS: RL<sup>^</sup> interpolated from aerial survey (Drawing No: 114415:SK701E) dated 1st April 2005 by Coca-Cola Amatil

## SAMPLING & IN SITU TESTING LEGEND

|   |                         |     |                                |
|---|-------------------------|-----|--------------------------------|
| A | Auger sample            | pp  | Pocket penetrometer (kPa)      |
| D | Disturbed sample        | PID | Photo ionisation detector      |
| B | Bulk sample             | S   | Standard penetration test      |
| U | Tube sample (x mm dia.) | PL  | Point load strength Is(50) MPa |
| W | Water sample            | V   | Shear Vane (kPa)               |
| C | Core drilling           | >   | Water seep                     |
|   |                         | ≡   | Water level                    |

## CHECKED

Initials: PF

Date: 21/12/05



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# BOREHOLE LOG

**CLIENT:** Coca-Cola Amatil  
**PROJECT:** Preliminary Contamination Assessment  
**LOCATION:** 102-128 Briens Road, Northmead

**SURFACE LEVEL:** 16.0 RL<sup>^</sup>  
**EASTING:**  
**NORTHING:**  
**DIP/AZIMUTH:** 90°/-

**BORE No:** 17  
**PROJECT No:** 43650  
**DATE:** 21 Dec 05  
**SHEET** 1 OF 1

| RL | Depth (m) | Description of Strata                                  | Graphic Log | Sampling & In Situ Testing |       |        |                    | Water | Well Construction Details |  |
|----|-----------|--------------------------------------------------------|-------------|----------------------------|-------|--------|--------------------|-------|---------------------------|--|
|    |           |                                                        |             | Type                       | Depth | Sample | Results & Comments |       |                           |  |
| 16 | 0.1       | FILLING - yellow grey silty sand filling               |             | A                          | 0.5   |        | PID<1ppm           |       |                           |  |
|    |           | SILTY SANDY CLAY - red mottled grey silty sandy clay   |             |                            |       |        |                    |       |                           |  |
|    |           | - becoming grey silty sandy clay with increasing depth |             |                            |       |        |                    |       |                           |  |
| 15 | 1         |                                                        |             |                            |       |        |                    |       |                           |  |
| 16 | 1.6       | SANDSTONE - grey white sandstone                       |             | A                          | 1.5   |        | PID<1ppm           |       |                           |  |
| 14 | 1.8       | Bore discontinued at 1.8m<br>- auger refusal on rock   |             | A                          | 1.8   |        | PID<1ppm           |       |                           |  |
| 13 | 2         |                                                        |             |                            |       |        |                    |       |                           |  |
| 12 | 3         |                                                        |             |                            |       |        |                    |       |                           |  |
| 11 | 4         |                                                        |             |                            |       |        |                    |       |                           |  |
| 10 | 5         |                                                        |             |                            |       |        |                    |       |                           |  |
| 9  | 6         |                                                        |             |                            |       |        |                    |       |                           |  |
| 8  | 7         |                                                        |             |                            |       |        |                    |       |                           |  |
| 7  | 8         |                                                        |             |                            |       |        |                    |       |                           |  |
| 6  | 9         |                                                        |             |                            |       |        |                    |       |                           |  |

**RIG:** Bobcat

**DRILLER:** Ellis

**LOGGED:** Lobo

**CASING:** Uncased

**TYPE OF BORING:** 100mm diameter solid flight auger

**WATER OBSERVATIONS:** No free groundwater observed

**REMARKS:** \*Denotes field replicate sample BD2/211205 taken  
 RL<sup>^</sup> interpolated from aerial survey (Drawing No: 114415:SK701E) dated 1st April 2005 by Coca-Cola Amatil

| SAMPLING & IN SITU TESTING LEGEND |                         |     |                                |
|-----------------------------------|-------------------------|-----|--------------------------------|
| A                                 | Auger sample            | pp  | Pocket penetrometer (kPa)      |
| D                                 | Disturbed sample        | PID | Photo ionisation detector      |
| B                                 | Bulk sample             | S   | Standard penetration test      |
| U                                 | Tube sample (x mm dia.) | PL  | Point load strength Is(50) MPa |
| W                                 | Water sample            | V   | Shear Vane (kPa)               |
| C                                 | Core drilling           | Δ   | Water seep                     |
|                                   |                         | ≡   | Water level                    |

|              |
|--------------|
| CHECKED      |
| Initials: PF |
| Date: 7/2/06 |



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# BOREHOLE LOG

CLIENT: Coca-Cola Amatil  
PROJECT: Preliminary Contamination Assessment  
LOCATION: 102-128 Briens Road, Northmead

SURFACE LEVEL: 18.0 RL<sup>^</sup>  
EASTING:  
NORTHING:  
DIP/AZIMUTH: 90°/--

BORE No: 18  
PROJECT No: 43650  
DATE: 21 Dec 05  
SHEET 1 OF 1

| RL | Depth (m) | Description of Strata                                                     | Graphic Log | Sampling & In Situ Testing |       |        |                    | Water | Well Construction Details |  |
|----|-----------|---------------------------------------------------------------------------|-------------|----------------------------|-------|--------|--------------------|-------|---------------------------|--|
|    |           |                                                                           |             | Type                       | Depth | Sample | Results & Comments |       |                           |  |
| 18 | 0.1       | FILLING - yellow grey silty sand filling with rootlets                    |             | A                          | 0.5   |        | PID<1ppm           |       |                           |  |
| 17 | 1         | SILTY SANDY CLAY - yellow orange grey silty sandy clay                    |             |                            |       |        |                    |       |                           |  |
|    |           | - becoming yellow orange grey red silty clayey sand with increasing depth |             | A                          | 1.5   |        | PID<1ppm           |       |                           |  |
| 16 | 1.8       | SANDSTONE - white sandstone                                               |             |                            |       |        |                    |       |                           |  |
| 15 | 2.1       | Bore discontinued at 2.1m<br>- auger refusal on rock                      |             |                            |       |        |                    |       |                           |  |
| 14 |           |                                                                           |             | A                          | 3.0   |        | PID<1ppm           |       |                           |  |
| 13 |           |                                                                           |             |                            |       |        |                    |       |                           |  |
| 12 |           |                                                                           |             |                            |       |        |                    |       |                           |  |
| 11 |           |                                                                           |             |                            |       |        |                    |       |                           |  |
| 10 |           |                                                                           |             |                            |       |        |                    |       |                           |  |
| 9  |           |                                                                           |             |                            |       |        |                    |       |                           |  |

RIG: Bobcat

DRILLER: Ellis

LOGGED: Foo

CASING: Uncased

TYPE OF BORING: 100mm diameter solid flight auger

WATER OBSERVATIONS: No free groundwater observed

REMARKS: RL<sup>^</sup> interpolated from aerial survey (Drawing No: 114415:SK701E) dated 1st April 2005 by Coca-Cola Amatil

## SAMPLING & IN SITU TESTING LEGEND

|   |                         |     |                                |
|---|-------------------------|-----|--------------------------------|
| A | Auger sample            | pp  | Pocket penetrometer (kPa)      |
| D | Disturbed sample        | PID | Photo ionisation detector      |
| B | Bulk sample             | S   | Standard penetration test      |
| U | Tube sample (x mm dia.) | PL  | Point load strength Is(50) MPa |
| W | Water sample            | V   | Shear Vane (kPa)               |
| C | Core drilling           | D   | Water seep                     |
|   |                         | W   | Water level                    |

## CHECKED

Initials: PF

Date: 17/2/06



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# BOREHOLE LOG

CLIENT: Coca-Cola Amatil  
PROJECT: Preliminary Contamination Assessment  
LOCATION: 102-128 Briens Road, Northmead

SURFACE LEVEL: 19.0 RL<sup>^</sup>  
EASTING:  
NORTHING:  
DIP/AZIMUTH: 90°/—

BORE No: 19  
PROJECT No: 43650  
DATE: 21 Dec 05  
SHEET 1 OF 1

| RL | Depth (m) | Description of Strata                                                                     | Graphic Log                                                                       | Sampling & In Situ Testing |       |        |                    | Water | Well Construction Details |  |
|----|-----------|-------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------|-------|--------|--------------------|-------|---------------------------|--|
|    |           |                                                                                           |                                                                                   | Type                       | Depth | Sample | Results & Comments |       |                           |  |
| 19 |           | FILLING - brown clayey sandy silt filling, with traces of crushed sandstone and ironstone |  | A                          | 0.5   |        | PID<1ppm           |       |                           |  |
| 18 | 1         | - light blue plastic at 1.0m                                                              |                                                                                   | A                          | 1.5   |        | PID<1ppm           |       |                           |  |
| 17 | 1.8       | CLAYEY SANDY SILT - grey mottled yellow clayey sandy silt (probably siltstone)            |                                                                                   | A                          | 2.0   |        | PID<1ppm           |       |                           |  |
|    | 2.0       | Bore discontinued at 2.0m<br>- auger refusal on rock                                      |  |                            |       |        |                    |       |                           |  |
| 16 | 3         |                                                                                           |                                                                                   |                            |       |        |                    |       |                           |  |
| 15 | 4         |                                                                                           |                                                                                   |                            |       |        |                    |       |                           |  |
| 14 | 5         |                                                                                           |                                                                                   |                            |       |        |                    |       |                           |  |
| 13 | 6         |                                                                                           |                                                                                   |                            |       |        |                    |       |                           |  |
| 12 | 7         |                                                                                           |                                                                                   |                            |       |        |                    |       |                           |  |
| 11 | 8         |                                                                                           |                                                                                   |                            |       |        |                    |       |                           |  |
| 10 | 9         |                                                                                           |                                                                                   |                            |       |        |                    |       |                           |  |

RIG: Bobcat

DRILLER: Ellis

LOGGED: Foo

CASING: Uncased

TYPE OF BORING: 100mm diameter solid flight auger

WATER OBSERVATIONS: No free groundwater observed

REMARKS: RL<sup>^</sup> interpolated from aerial survey (Drawing No: 114415:SK701E) dated 1st April 2005 by Coca-Cola Amatil

## SAMPLING & IN SITU TESTING LEGEND

|   |                         |     |                                |
|---|-------------------------|-----|--------------------------------|
| A | Auger sample            | pp  | Pocket penetrometer (kPa)      |
| D | Disturbed sample        | PID | Photo ionisation detector      |
| B | Bulk sample             | S   | Standard penetration test      |
| U | Tube sample (x mm dia.) | PL  | Point load strength Is(50) MPa |
| W | Water sample            | V   | Shear Vane (kPa)               |
| C | Core drilling           | Δ   | Water seep                     |
|   |                         | ≡   | Water level                    |

CHECKED

Initials: PF

Date: 17/2/06



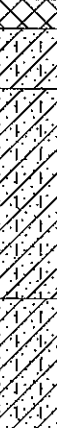
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# BOREHOLE LOG

CLIENT: Coca-Cola Amatil  
PROJECT: Preliminary Contamination Assessment  
LOCATION: 102-128 Briens Road, Northmead

SURFACE LEVEL: 17.6 RL<sup>^</sup>  
EASTING:  
NORTHING:  
DIP/AZIMUTH: 90°/--

BORE No: 20  
PROJECT No: 43650  
DATE: 21 Dec 05  
SHEET 1 OF 1

| RL   | Depth (m) | Description of Strata                                                              | Graphic Log                                                                       | Sampling & In Situ Testing |       |        |                    | Water | Well Construction Details |  |
|------|-----------|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------|-------|--------|--------------------|-------|---------------------------|--|
|      |           |                                                                                    |                                                                                   | Type                       | Depth | Sample | Results & Comments |       |                           |  |
| 17.6 | 0.2       | FILLING - brown clayey sandy silt filling (possibly natural)                       |  | A                          | 0.5   |        | PID<1ppm           |       |                           |  |
|      |           | CLAYEY SANDY SILT - brown clayey sandy silt                                        |                                                                                   |                            |       |        |                    |       |                           |  |
| 1    | 0.6       | SILTY SANDY CLAY - red mottled grey silty sandy clay, with trace of some ironstone |                                                                                   | A                          | 1.5   |        | PID<1ppm           |       |                           |  |
| 2    | 2.0       | SILTY SANDY CLAY - grey mottled yellow red silty sandy clay (possible siltstone)   |                                                                                   |                            |       |        |                    |       |                           |  |
| 3    | 2.9       | Bore discontinued at 2.9m<br>- auger refusal on rock                               |                                                                                   | A                          | 2.9   |        | PID<1ppm           |       |                           |  |
| 4    |           |                                                                                    |                                                                                   |                            |       |        |                    |       |                           |  |
| 5    |           |                                                                                    |                                                                                   |                            |       |        |                    |       |                           |  |
| 6    |           |                                                                                    |                                                                                   |                            |       |        |                    |       |                           |  |
| 7    |           |                                                                                    |                                                                                   |                            |       |        |                    |       |                           |  |
| 8    |           |                                                                                    |                                                                                   |                            |       |        |                    |       |                           |  |
| 9    |           |                                                                                    |                                                                                   |                            |       |        |                    |       |                           |  |
| 10   |           |                                                                                    |                                                                                   |                            |       |        |                    |       |                           |  |
| 11   |           |                                                                                    |                                                                                   |                            |       |        |                    |       |                           |  |
| 12   |           |                                                                                    |                                                                                   |                            |       |        |                    |       |                           |  |
| 13   |           |                                                                                    |                                                                                   |                            |       |        |                    |       |                           |  |
| 14   |           |                                                                                    |                                                                                   |                            |       |        |                    |       |                           |  |
| 15   |           |                                                                                    |                                                                                   |                            |       |        |                    |       |                           |  |
| 16   |           |                                                                                    |                                                                                   |                            |       |        |                    |       |                           |  |
| 17   |           |                                                                                    |                                                                                   |                            |       |        |                    |       |                           |  |

RIG: Bobcat

DRILLER: Ellis

LOGGED: Foo

CASING: Uncased

TYPE OF BORING: 100mm diameter solid flight auger

WATER OBSERVATIONS: No free groundwater observed

REMARKS: RL<sup>^</sup> interpolated from aerial survey (Drawing No: 114415:SK701E) dated 1st April 2005 by Coca-Cola Amatil

| SAMPLING & IN SITU TESTING LEGEND |                         |     |                                |
|-----------------------------------|-------------------------|-----|--------------------------------|
| A                                 | Auger sample            | pp  | Pocket penetrometer (kPa)      |
| D                                 | Disturbed sample        | PID | Photo ionisation detector      |
| B                                 | Bulk sample             | S   | Standard penetration test      |
| U                                 | Tube sample (x mm dia.) | PL  | Point load strength Is(50) MPa |
| W                                 | Water sample            | V   | Shear Vane (kPa)               |
| C                                 | Core drilling           | Δ   | Water seep                     |
|                                   |                         | ≡   | Water level                    |

|                     |
|---------------------|
| CHECKED             |
| Initials: <i>PE</i> |
| Date: 17/12/06      |



**Douglas Partners**  
Geotechnics • Environment • Groundwater

# GRAPHIC SYMBOLS FOR SOIL & ROCK

## SOIL

|  |                     |
|--|---------------------|
|  | BITUMINOUS CONCRETE |
|  | CONCRETE            |
|  | TOPSOIL             |
|  | FILLING             |
|  | PEAT                |
|  | CLAY                |
|  | SILTY CLAY          |
|  | SANDY CLAY          |
|  | GRAVELLY CLAY       |
|  | SHALY CLAY          |
|  | SILT                |
|  | CLAYEY SILT         |
|  | SANDY SILT          |
|  | SAND                |
|  | CLAYEY SAND         |
|  | SILTY SAND          |
|  | GRAVEL              |
|  | SANDY GRAVEL        |
|  | COBBLES/BOULDERS    |
|  | TALUS               |

## SEAMS

|  |            |
|--|------------|
|  | SEAM >10mm |
|  | SEAM <10mm |

## SEDIMENTARY ROCK

|  |                            |
|--|----------------------------|
|  | BOULDER CONGLOMERATE       |
|  | CONGLOMERATE               |
|  | CONGLOMERATIC SANDSTONE    |
|  | SANDSTONE FINE GRAINED     |
|  | SANDSTONE COARSE GRAINED   |
|  | SILTSTONE                  |
|  | LAMINITE                   |
|  | MUDSTONE, CLAYSTONE, SHALE |
|  | COAL                       |
|  | LIMESTONE                  |

## METAMORPHIC ROCK

|  |                         |
|--|-------------------------|
|  | SLATE, PHYLLITE, SCHIST |
|  | GNEISS                  |
|  | QUARTZITE               |

## IGNEOUS ROCK

|  |                  |
|--|------------------|
|  | GRANITE          |
|  | DOLERITE, BASALT |
|  | TUFF             |
|  | PORPHYRY         |



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Geotechnics, Environment, Groundwater

## NOTES RELATING TO THIS REPORT

### Introduction

These notes have been provided to amplify the geotechnical report in regard to classification methods, specialist field procedures and certain matters relating to the Discussion and Comments section. Not all, of course, are necessarily relevant to all reports.

Geotechnical reports are based on information gained from limited subsurface test boring and sampling, supplemented by knowledge of local geology and experience. For this reason, they must be regarded as interpretive rather than factual documents, limited to some extent by the scope of information on which they rely.

### Description and Classification Methods

The methods of description and classification of soils and rocks used in this report are based on Australian Standard 1726, Geotechnical Site Investigations Code. In general, descriptions cover the following properties - strength or density, colour, structure, soil or rock type and inclusions.

Soil types are described according to the predominating particle size, qualified by the grading of other particles present (eg. sandy clay) on the following bases:

| Soil Classification | Particle Size      |
|---------------------|--------------------|
| Clay                | less than 0.002 mm |
| Silt                | 0.002 to 0.06 mm   |
| Sand                | 0.06 to 2.00 mm    |
| Gravel              | 2.00 to 60.00 mm   |

Cohesive soils are classified on the basis of strength either by laboratory testing or engineering examination. The strength terms are defined as follows.

| Classification | Undrained Shear Strength kPa |
|----------------|------------------------------|
| Very soft      | less than 12                 |
| Soft           | 12—25                        |
| Firm           | 25—50                        |
| Stiff          | 50—100                       |
| Very stiff     | 100—200                      |
| Hard           | Greater than 200             |

Non-cohesive soils are classified on the basis of relative density, generally from the results of standard penetration tests (SPT) or Dutch cone penetrometer tests (CPT) as below:

| Relative Density | SPT "N" Value (blows/300 mm) | CPT Cone Value ( $q_c$ — MPa) |
|------------------|------------------------------|-------------------------------|
| Very loose       | less than 5                  | less than 2                   |
| Loose            | 5—10                         | 2—5                           |
| Medium dense     | 10—30                        | 5—15                          |
| Dense            | 30—50                        | 15—25                         |
| Very dense       | greater than 50              | greater than 25               |

Rock types are classified by their geological names. Where relevant, further information regarding rock classification is given on the following sheet.

### Sampling

Sampling is carried out during drilling to allow engineering examination (and laboratory testing where required) of the soil or rock.

Disturbed samples taken during drilling provide information on colour, type, inclusions and, depending upon the degree of disturbance, some information on strength and structure.

Undisturbed samples are taken by pushing a thin-walled sample tube into the soil and withdrawing with a sample of the soil in a relatively undisturbed state. Such samples yield information on structure and strength, and are necessary for laboratory determination of shear strength and compressibility. Undisturbed sampling is generally effective only in cohesive soils.

Details of the type and method of sampling are given in the report.

### Drilling Methods.

The following is a brief summary of drilling methods currently adopted by the Company and some comments on their use and application.

**Test Pits** — these are excavated with a backhoe or a tracked excavator, allowing close examination of the in-situ soils if it is safe to descent into the pit. The depth of penetration is limited to about 3 m for a backhoe and up to 6 m for an excavator. A potential disadvantage is the disturbance caused by the excavation.

**Large Diameter Auger (eg. Pengo)** — the hole is advanced by a rotating plate or short spiral auger, generally 300 mm or larger in diameter. The cuttings are returned to the surface at intervals (generally of not more than 0.5 m) and are disturbed but usually unchanged in moisture content. Identification of soil strata is generally much more reliable than with continuous spiral flight augers, and is usually supplemented by occasional undisturbed tube sampling.

**Continuous Sample Drilling** — the hole is advanced by pushing a 100 mm diameter socket into the ground and withdrawing it at intervals to extrude the sample. This is the most reliable method of drilling in soils, since moisture content is unchanged and soil structure, strength, etc. is only marginally affected.

**Continuous Spiral Flight Augers** — the hole is advanced using 90—115 mm diameter continuous spiral flight augers which are withdrawn at intervals to allow sampling or in-situ testing. This is a relatively economical means of drilling in clays and in sands above the water

table. Samples are returned to the surface, or may be collected after withdrawal of the auger flights, but they are very disturbed and may be contaminated. Information from the drilling (as distinct from specific sampling by SPTs or undisturbed samples) is of relatively lower reliability, due to remoulding, contamination or softening of samples by ground water.

**Non-core Rotary Drilling** — the hole is advanced by a rotary bit, with water being pumped down the drill rods and returned up the annulus, carrying the drill cuttings. Only major changes in stratification can be determined from the cuttings, together with some information from 'feel' and rate of penetration.

**Rotary Mud Drilling** — similar to rotary drilling, but using drilling mud as a circulating fluid. The mud tends to mask the cuttings and reliable identification is again only possible from separate intact sampling (eg. from SPT).

**Continuous Core Drilling** — a continuous core sample is obtained using a diamond-tipped core barrel, usually 50 mm internal diameter. Provided full core recovery is achieved (which is not always possible in very weak rocks and granular soils), this technique provides a very reliable (but relatively expensive) method of investigation.

## Standard Penetration Tests

Standard penetration tests (abbreviated as SPT) are used mainly in non-cohesive soils, but occasionally also in cohesive soils as a means of determining density or strength and also of obtaining a relatively undisturbed sample. The test procedure is described in Australian Standard 1289, "Methods of Testing Soils for Engineering Purposes" — Test 6.3.1.

The test is carried out in a borehole by driving a 50 mm diameter split sample tube under the impact of a 63 kg hammer with a free fall of 760 mm. It is normal for the tube to be driven in three successive 150 mm increments and the 'N' value is taken as the number of blows for the last 300 mm. In dense sands, very hard clays or weak rock, the full 450 mm penetration may not be practicable and the test is discontinued.

The test results are reported in the following form.

- In the case where full penetration is obtained with successive blow counts for each 150 mm of say 4, 6 and 7  
as 4, 6, 7  
N = 13
- In the case where the test is discontinued short of full penetration, say after 15 blows for the first 150 mm and 30 blows for the next 40 mm  
as 15, 30/40 mm.

The results of the tests can be related empirically to the engineering properties of the soil.

Occasionally, the test method is used to obtain samples in 50 mm diameter thin walled sample tubes in clays. In such circumstances, the test results are shown on the borelogs in brackets.

## Cone Penetrometer Testing and Interpretation

Cone penetrometer testing (sometimes referred to as Dutch cone — abbreviated as CPT) described in this report has been carried out using an electrical friction cone penetrometer. The test is described in Australian Standard 1289, Test 6.4.1.

In the tests, a 35 mm diameter rod with a cone-tipped end is pushed continuously into the soil, the reaction being provided by a specially designed truck or rig which is fitted with an hydraulic ram system. Measurements are made of the end bearing resistance on the cone and the friction resistance on a separate 130 mm long sleeve, immediately behind the cone. Transducers in the tip of the assembly are connected by electrical wires passing through the centre of the push rods to an amplifier and recorder unit mounted on the control truck.

As penetration occurs (at a rate of approximately 20 mm per second) the information is plotted on a computer screen and at the end of the test is stored on the computer for later plotting of the results.

The information provided on the plotted results comprises: —

- Cone resistance — the actual end bearing force divided by the cross sectional area of the cone — expressed in MPa.
- Sleeve friction — the frictional force on the sleeve divided by the surface area — expressed in kPa.
- Friction ratio — the ratio of sleeve friction to cone resistance, expressed in percent.

There are two scales available for measurement of cone resistance. The lower scale (0—5 MPa) is used in very soft soils where increased sensitivity is required and is shown in the graphs as a dotted line. The main scale (0—50 MPa) is less sensitive and is shown as a full line.

The ratios of the sleeve friction to cone resistance will vary with the type of soil encountered, with higher relative friction in clays than in sands. Friction ratios of 1%—2% are commonly encountered in sands and very soft clays rising to 4%—10% in stiff clays.

In sands, the relationship between cone resistance and SPT value is commonly in the range:—

$$q_c \text{ (MPa)} = (0.4 \text{ to } 0.6) N \text{ (blows per 300 mm)}$$

In clays, the relationship between undrained shear strength and cone resistance is commonly in the range:—

$$q_c = (12 \text{ to } 18) c_u$$

Interpretation of CPT values can also be made to allow estimation of modulus or compressibility values to allow calculation of foundation settlements.

Inferred stratification as shown on the attached reports is assessed from the cone and friction traces and from experience and information from nearby boreholes, etc. This information is presented for general guidance, but must be regarded as being to some extent interpretive. The test method provides a continuous profile of engineering properties, and where precise information on soil classification is required, direct drilling and sampling may be preferable.

## Hand Penetrometers

Hand penetrometer tests are carried out by driving a rod into the ground with a falling weight hammer and measuring the blows for successive 150 mm increments of penetration. Normally, there is a depth limitation of 1.2 m but this may be extended in certain conditions by the use of extension rods.

Two relatively similar tests are used.

- Perth sand penetrometer — a 16 mm diameter flat-ended rod is driven with a 9 kg hammer, dropping 600 mm (AS 1289, Test 6.3.3). This test was developed for testing the density of sands (originating in Perth) and is mainly used in granular soils and filling.
- Cone penetrometer (sometimes known as the Scala Penetrometer) — a 16 mm rod with a 20 mm diameter cone end is driven with a 9 kg hammer dropping 510 mm (AS 1289, Test 6.3.2). The test was developed initially for pavement subgrade investigations, and published correlations of the test results with California bearing ratio have been published by various Road Authorities.

## Laboratory Testing

Laboratory testing is carried out in accordance with Australian Standard 1289 "Methods of Testing Soil for Engineering Purposes". Details of the test procedure used are given on the individual report forms.

## Bore Logs

The bore logs presented herein are an engineering and/or geological interpretation of the subsurface conditions, and their reliability will depend to some extent on frequency of sampling and the method of drilling. Ideally, continuous undisturbed sampling or core drilling will provide the most reliable assessment, but this is not always practicable, or possible to justify on economic grounds. In any case, the boreholes represent only a very small sample of the total subsurface profile.

Interpretation of the information and its application to design and construction should therefore take into account the spacing of boreholes, the frequency of sampling and the possibility of other than 'straight line' variations between the boreholes.

## Ground Water

Where ground water levels are measured in boreholes, there are several potential problems;

- In low permeability soils, ground water although present, may enter the hole slowly or perhaps not at all during the time it is left open.
- A localised perched water table may lead to an erroneous indication of the true water table.
- Water table levels will vary from time to time with seasons or recent weather changes. They may not be

the same at the time of construction as are indicated in the report.

- The use of water or mud as a drilling fluid will mask any ground water inflow. Water has to be blown out of the hole and drilling mud must first be washed out of the hole if water observations are to be made.

More reliable measurements can be made by installing standpipes which are read at intervals over several days, or perhaps weeks for low permeability soils. Piezometers, sealed in a particular stratum, may be advisable in low permeability soils or where there may be interference from a perched water table.

## Engineering Reports

Engineering reports are prepared by qualified personnel and are based on the information obtained and on current engineering standards of interpretation and analysis. Where the report has been prepared for a specific design proposal (eg. a three storey building), the information and interpretation may not be relevant if the design proposal is changed (eg. to a twenty storey building). If this happens, the Company will be pleased to review the report and the sufficiency of the investigation work.

Every care is taken with the report as it relates to interpretation of subsurface condition, discussion of geotechnical aspects and recommendations or suggestions for design and construction. However, the Company cannot always anticipate or assume responsibility for:

- unexpected variations in ground conditions — the potential for this will depend partly on bore spacing and sampling frequency
- changes in policy or interpretation of policy by statutory authorities
- the actions of contractors responding to commercial pressures.

If these occur, the Company will be pleased to assist with investigation or advice to resolve the matter.

## Site Anomalies

In the event that conditions encountered on site during construction appear to vary from those which were expected from the information contained in the report, the Company requests that it immediately be notified. Most problems are much more readily resolved when conditions are exposed than at some later stage, well after the event.

## Reproduction of Information for Contractual Purposes

Attention is drawn to the document "Guidelines for the Provision of Geotechnical Information in Tender Documents", published by the Institution of Engineers, Australia. Where information obtained from this investigation is provided for tendering purposes, it is recommended that all information, including the written report and discussion, be made available. In circumstances where the discussion or comments section

is not relevant to the contractual situation, it may be appropriate to prepare a specially edited document. The Company would be pleased to assist in this regard and/or to make additional report copies available for contract purposes at a nominal charge.

### **Site Inspection**

The Company will always be pleased to provide engineering inspection services for geotechnical aspects of work to which this report is related. This could range from a site visit to confirm that conditions exposed are as expected, to full time engineering presence on site.

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***APPENDIX D***  
***Results of Laboratory Tests***

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## Envirolab Services Pty Ltd

ABN 37 112 535 645

54 Frenchs Rd Willoughby NSW 2068

ph 02 9958 5801 fax 02 9958 5803

email: tnotaras@envirolabservices.com.au

### **CERTIFICATE OF ANALYSIS 05/3367**

**Client:**

**Douglas Partners**

96 Hermitage Rd

West Ryde

NSW 2114

**Attention:** Polo Foo

**Sample log in details:**

Your Reference:

**43650, Northmead**

No. of samples:

25 Soils

Date samples received:

21/12/05

Date completed instructions received:

21/12/05

**Analysis Details:**

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

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

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

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

**Report Details:**

Date results requested by:

3/01/06

Date of Preliminary Report:

Not Issued

Issue Date:

30/12/05

NATA accreditation number 2901. This document shall not be reproduced except in full.

This document is issued in accordance with NATA's accreditation requirements.

Accredited for compliance with ISO/IEC 17025.

**Tests not covered by NATA are denoted with \*.**

**Results Approved By:**

Tania Notaras

Manager

Envirolab Reference: 05/3367

Revision No: R 00



| VOC's in soil<br>Our Reference:<br>Your Reference<br>Type of sample | UNITS<br>-----<br>----- | 05/3367-16<br>14/3.0<br>Soil | 05/3367-17<br>14/3.7<br>Soil |
|---------------------------------------------------------------------|-------------------------|------------------------------|------------------------------|
| Date extracted                                                      | --                      | 22/12/2005                   | 22/12/2005                   |
| Date analysed                                                       | --                      | 25/12/2005                   | 25/12/2005                   |
| Dichlorodifluoromethane*                                            | mg/kg                   | <10                          | <10                          |
| Chloromethane*                                                      | mg/kg                   | <10                          | <10                          |
| Vinyl Chloride*                                                     | mg/kg                   | <10                          | <10                          |
| Bromomethane*                                                       | mg/kg                   | <10                          | <10                          |
| Chloroethane*                                                       | mg/kg                   | <10                          | <10                          |
| Trichlorofluoromethane*                                             | mg/kg                   | <10                          | <10                          |
| 1,1-Dichloroethene                                                  | mg/kg                   | <1.0                         | <1.0                         |
| trans-1,2-dichloroethene                                            | mg/kg                   | <1.0                         | <1.0                         |
| 1,1-dichloroethane                                                  | mg/kg                   | <1.0                         | <1.0                         |
| cis-1,2-dichloroethene                                              | mg/kg                   | <1.0                         | <1.0                         |
| bromochloromethane                                                  | mg/kg                   | <1.0                         | <1.0                         |
| chloroform                                                          | mg/kg                   | <1.0                         | <1.0                         |
| 2,2-dichloropropane                                                 | mg/kg                   | <1.0                         | <1.0                         |
| 1,2-dichloroethane                                                  | mg/kg                   | <1.0                         | <1.0                         |
| 1,1,1-trichloroethane                                               | mg/kg                   | <1.0                         | <1.0                         |
| 1,1-dichloropropene                                                 | mg/kg                   | <1.0                         | <1.0                         |
| carbon tetrachloride                                                | mg/kg                   | <1.0                         | <1.0                         |
| Benzene                                                             | mg/kg                   | <1.0                         | <1.0                         |
| dibromomethane                                                      | mg/kg                   | <1.0                         | <1.0                         |
| trichloroethene                                                     | mg/kg                   | <1.0                         | <1.0                         |
| bromodichloromethane                                                | mg/kg                   | <1.0                         | <1.0                         |
| trans-1,3-dichloropropene*                                          | mg/kg                   | <1.0                         | <1.0                         |
| cis-1,3-dichloropropene*                                            | mg/kg                   | <1.0                         | <1.0                         |
| 1,1,2-trichloroethane                                               | mg/kg                   | <1.0                         | <1.0                         |
| Toluene                                                             | mg/kg                   | 54                           | 2.2                          |
| 1,3-dichloropropane                                                 | mg/kg                   | <1.0                         | <1.0                         |
| dibromochloromethane                                                | mg/kg                   | <1.0                         | <1.0                         |
| 1,2-dibromomethane                                                  | mg/kg                   | <1.0                         | <1.0                         |
| tetrachloroethene                                                   | mg/kg                   | <1.0                         | <1.0                         |
| 1,1,1,2-tetrachloroethane                                           | mg/kg                   | <1.0                         | <1.0                         |
| chlorobenzene                                                       | mg/kg                   | <1.0                         | <1.0                         |
| Ethylbenzene                                                        | mg/kg                   | 99                           | 9.5                          |
| bromoform                                                           | mg/kg                   | <1.0                         | <1.0                         |
| m + p-Xylene                                                        | mg/kg                   | 200                          | 19                           |
| styrene                                                             | mg/kg                   | <1.0                         | <1.0                         |
| 1,1,2,2-tetrachloroethane                                           | mg/kg                   | <1.0                         | <1.0                         |
| o-Xylene                                                            | mg/kg                   | 65                           | 5.2                          |
| 1,2,3-trichloropropane*                                             | mg/kg                   | <1.0                         | <1.0                         |
| isopropylbenzene                                                    | mg/kg                   | 1.6                          | <1.0                         |

| VOC's in soil<br>Our Reference:<br>Your Reference<br>Type of sample | UNITS<br>-----<br>----- | 05/3367-16<br>14/3.0<br>Soil | 05/3367-17<br>14/3.7<br>Soil |
|---------------------------------------------------------------------|-------------------------|------------------------------|------------------------------|
| bromobenzene                                                        | mg/kg                   | <1.0                         | <1.0                         |
| n-propyl benzene                                                    | mg/kg                   | 10                           | <1.0                         |
| 2-chlorotoluene                                                     | mg/kg                   | <1.0                         | <1.0                         |
| 4-chlorotoluene                                                     | mg/kg                   | <1.0                         | <1.0                         |
| 1,3,5-trimethyl benzene                                             | mg/kg                   | 32                           | 1.7                          |
| tert-butyl benzene                                                  | mg/kg                   | <1.0                         | <1.0                         |
| 1,2,4-trimethyl benzene                                             | mg/kg                   | 120                          | 9.0                          |
| 1,3-dichlorobenzene                                                 | mg/kg                   | <1.0                         | <1.0                         |
| sec-butyl benzene                                                   | mg/kg                   | <1.0                         | <1.0                         |
| 1,4-dichlorobenzene                                                 | mg/kg                   | <1.0                         | <1.0                         |
| 4-isopropyl toluene                                                 | mg/kg                   | <1.0                         | <1.0                         |
| 1,2-dichlorobenzene                                                 | mg/kg                   | <1.0                         | <1.0                         |
| n-butyl benzene                                                     | mg/kg                   | 6.2                          | <1.0                         |
| 1,2-dibromo-3-chloropropane                                         | mg/kg                   | <1.0                         | <1.0                         |
| 1,2,4-trichlorobenzene                                              | mg/kg                   | <1.0                         | <1.0                         |
| naphthalene                                                         | mg/kg                   | 34                           | 2.3                          |
| hexachlorobutadiene                                                 | mg/kg                   | <1.0                         | <1.0                         |
| 1,2,3-trichlorobenzene                                              | mg/kg                   | <1.0                         | <1.0                         |
| Surrogate Dibromofluorometha                                        | %                       | 68                           | 89                           |
| Surrogate aaa-Trifluorotoluene                                      | %                       | 67                           | 118                          |
| Surrogate Toluene-d8                                                | %                       | 138                          | 104                          |
| Surrogate 4-Bromofluorobenzene                                      | %                       | 112                          | 111                          |

| vTPH & BTEX in Soil<br>Our Reference:<br>Your Reference<br>Type of sample | UNITS<br>-----<br>----- | 05/3367-1<br>1/0.5<br>Soil | 05/3367-4<br>3/0.5<br>Soil | 05/3367-6<br>4/0.5<br>Soil | 05/3367-7<br>6/0.5<br>Soil | 05/3367-12<br>11/0.5<br>Soil |
|---------------------------------------------------------------------------|-------------------------|----------------------------|----------------------------|----------------------------|----------------------------|------------------------------|
| Date extracted                                                            | --                      | 22/12/2005                 | 22/12/2005                 | 22/12/2005                 | 22/12/2005                 | 22/12/2005                   |
| Date analysed                                                             | --                      | 24/12/2005                 | 24/12/2005                 | 24/12/2005                 | 24/12/2005                 | 24/12/2005                   |
| vTPH C <sub>6</sub> - C <sub>9</sub>                                      | mg/kg                   | <25                        | <25                        | <25                        | <25                        | <25                          |
| Benzene                                                                   | mg/kg                   | <1.0                       | <1.0                       | <1.0                       | <1.0                       | <1.0                         |
| Toluene                                                                   | mg/kg                   | <1.0                       | <1.0                       | <1.0                       | <1.0                       | <1.0                         |
| Ethylbenzene                                                              | mg/kg                   | <1.0                       | <1.0                       | <1.0                       | <1.0                       | <1.0                         |
| m + p-Xylene                                                              | mg/kg                   | <2.0                       | <2.0                       | <2.0                       | <2.0                       | <2.0                         |
| o-Xylene                                                                  | mg/kg                   | <1.0                       | <1.0                       | <1.0                       | <1.0                       | <1.0                         |
| Surrogate aaa-Trifluorotoluene                                            | %                       | 115                        | 105                        | 113                        | 76                         | 121                          |

| vTPH & BTEX in Soil<br>Our Reference:<br>Your Reference<br>Type of sample | UNITS<br>-----<br>----- | 05/3367-14<br>13/0.5<br>Soil | 05/3367-16<br>14/3.0<br>Soil | 05/3367-17<br>14/3.7<br>Soil | 05/3367-18<br>15/0.5<br>Soil | 05/3367-20<br>17/0.5<br>Soil |
|---------------------------------------------------------------------------|-------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| Date extracted                                                            | --                      | 22/12/2005                   | 22/12/2005                   | 22/12/2005                   | 22/12/2005                   | 22/12/2005                   |
| Date analysed                                                             | --                      | 24/12/2005                   | 24/12/2005                   | 24/12/2005                   | 24/12/2005                   | 24/12/2005                   |
| vTPH C <sub>6</sub> - C <sub>9</sub>                                      | mg/kg                   | <25                          | 350                          | 58                           | <25                          | <25                          |
| Benzene                                                                   | mg/kg                   | <1.0                         | <1.0                         | <1.0                         | <1.0                         | <1.0                         |
| Toluene                                                                   | mg/kg                   | <1.0                         | 54                           | 2.2                          | <1.0                         | <1.0                         |
| Ethylbenzene                                                              | mg/kg                   | <1.0                         | 99                           | 9.5                          | <1.0                         | <1.0                         |
| m + p-Xylene                                                              | mg/kg                   | <2.0                         | 200                          | 19                           | <2.0                         | <2.0                         |
| o-Xylene                                                                  | mg/kg                   | <1.0                         | 65                           | 5.2                          | <1.0                         | <1.0                         |
| Surrogate aaa-Trifluorotoluene                                            | %                       | 106                          | 67                           | 118                          | 98                           | 94                           |

| vTPH & BTEX in Soil<br>Our Reference:<br>Your Reference<br>Type of sample | UNITS<br>-----<br>----- | 05/3367-22<br>19/0.5<br>Soil |
|---------------------------------------------------------------------------|-------------------------|------------------------------|
| Date extracted                                                            | --                      | 22/12/2005                   |
| Date analysed                                                             | --                      | 24/12/2005                   |
| vTPH C <sub>6</sub> - C <sub>9</sub>                                      | mg/kg                   | <25                          |
| Benzene                                                                   | mg/kg                   | <1.0                         |
| Toluene                                                                   | mg/kg                   | <1.0                         |
| Ethylbenzene                                                              | mg/kg                   | <1.0                         |
| m + p-Xylene                                                              | mg/kg                   | <2.0                         |
| o-Xylene                                                                  | mg/kg                   | <1.0                         |
| Surrogate aaa-Trifluorotoluene                                            | %                       | 83                           |

|                        |       |            |            |            |            |            |
|------------------------|-------|------------|------------|------------|------------|------------|
| sTPH in Soil (C10-C36) |       |            |            |            |            |            |
| Our Reference:         | UNITS | 05/3367-1  | 05/3367-4  | 05/3367-6  | 05/3367-7  | 05/3367-12 |
| Your Reference         | ----- | 1/0.5      | 3/0.5      | 4/0.5      | 6/0.5      | 11/0.5     |
| Type of sample         | ----- | Soil       | Soil       | Soil       | Soil       | Soil       |
| Date extracted         | --    | 22/12/2005 | 22/12/2005 | 22/12/2005 | 22/12/2005 | 22/12/2005 |
| Date analysed          | --    | 23/12/2005 | 23/12/2005 | 23/12/2005 | 23/12/2005 | 23/12/2005 |
| TPH C10 - C14          | mg/kg | <50        | <50        | <50        | <50        | <50        |
| TPH C15 - C28          | mg/kg | <100       | <100       | <100       | <100       | <100       |
| TPH C29 - C36          | mg/kg | <100       | <100       | <100       | <100       | <100       |
| Surrogate o-Terphenyl  | %     | 97         | 115        | 102        | 97         | 97         |

|                        |       |            |            |            |            |            |
|------------------------|-------|------------|------------|------------|------------|------------|
| sTPH in Soil (C10-C36) |       |            |            |            |            |            |
| Our Reference:         | UNITS | 05/3367-14 | 05/3367-16 | 05/3367-17 | 05/3367-18 | 05/3367-20 |
| Your Reference         | ----- | 13/0.5     | 14/3.0     | 14/3.7     | 15/0.5     | 17/0.5     |
| Type of sample         | ----- | Soil       | Soil       | Soil       | Soil       | Soil       |
| Date extracted         | --    | 22/12/2005 | 22/12/2005 | 22/12/2005 | 22/12/2005 | 22/12/2005 |
| Date analysed          | --    | 23/12/2005 | 23/12/2005 | 23/12/2005 | 23/12/2005 | 23/12/2005 |
| TPH C10 - C14          | mg/kg | <50        | 240        | <50        | <50        | <50        |
| TPH C15 - C28          | mg/kg | <100       | <100       | <100       | <100       | <100       |
| TPH C29 - C36          | mg/kg | <100       | <100       | <100       | <100       | <100       |
| Surrogate o-Terphenyl  | %     | 92         | 99         | 99         | 100        | 101        |

|                        |       |            |
|------------------------|-------|------------|
| sTPH in Soil (C10-C36) |       |            |
| Our Reference:         | UNITS | 05/3367-22 |
| Your Reference         | ----- | 19/0.5     |
| Type of sample         | ----- | Soil       |
| Date extracted         | --    | 22/12/2005 |
| Date analysed          | --    | 23/12/2005 |
| TPH C10 - C14          | mg/kg | <50        |
| TPH C15 - C28          | mg/kg | <100       |
| TPH C29 - C36          | mg/kg | <100       |
| Surrogate o-Terphenyl  | %     | 101        |

| PAHs in Soil<br>Our Reference:<br>Your Reference<br>Type of sample | UNITS<br>-----<br>----- | 05/3367-1<br>1/0.5<br>Soil | 05/3367-4<br>3/0.5<br>Soil | 05/3367-6<br>4/0.5<br>Soil | 05/3367-7<br>6/0.5<br>Soil | 05/3367-12<br>11/0.5<br>Soil |
|--------------------------------------------------------------------|-------------------------|----------------------------|----------------------------|----------------------------|----------------------------|------------------------------|
| Date extracted                                                     | --                      | 22/12/2005                 | 22/12/2005                 | 22/12/2005                 | 22/12/2005                 | 22/12/2005                   |
| Date analysed                                                      | --                      | 23/12/2005                 | 23/12/2005                 | 23/12/2005                 | 23/12/2005                 | 23/12/2005                   |
| Naphthalene                                                        | mg/kg                   | <0.10                      | <0.10                      | <0.10                      | <0.10                      | <0.10                        |
| Acenaphthylene                                                     | mg/kg                   | <0.10                      | <0.10                      | <0.10                      | <0.10                      | <0.10                        |
| Acenaphthene                                                       | mg/kg                   | <0.10                      | <0.10                      | <0.10                      | <0.10                      | <0.10                        |
| Fluorene                                                           | mg/kg                   | <0.10                      | <0.10                      | <0.10                      | <0.10                      | <0.10                        |
| Phenanthrene                                                       | mg/kg                   | <0.10                      | <0.10                      | <0.10                      | <0.10                      | <0.10                        |
| Anthracene                                                         | mg/kg                   | <0.10                      | <0.10                      | <0.10                      | <0.10                      | <0.10                        |
| Fluoranthene                                                       | mg/kg                   | <0.10                      | <0.10                      | <0.10                      | <0.10                      | <0.10                        |
| Pyrene                                                             | mg/kg                   | <0.10                      | <0.10                      | <0.10                      | <0.10                      | <0.10                        |
| Benzo(a)anthracene                                                 | mg/kg                   | <0.10                      | <0.10                      | <0.10                      | <0.10                      | <0.10                        |
| Chrysene                                                           | mg/kg                   | <0.10                      | <0.10                      | <0.10                      | <0.10                      | <0.10                        |
| Benzo(b,k)fluoranthene                                             | mg/kg                   | <0.20                      | <0.20                      | <0.20                      | <0.20                      | <0.20                        |
| Benzo(a)pyrene                                                     | mg/kg                   | <0.050                     | <0.050                     | <0.050                     | <0.050                     | <0.050                       |
| Indeno(1,2,3-c,d)pyrene                                            | mg/kg                   | <0.10                      | <0.10                      | <0.10                      | <0.10                      | <0.10                        |
| Dibenzo(a,h)anthracene                                             | mg/kg                   | <0.10                      | <0.10                      | <0.10                      | <0.10                      | <0.10                        |
| Benzo(g,h,i)perylene                                               | mg/kg                   | <0.10                      | <0.10                      | <0.10                      | <0.10                      | <0.10                        |
| Surrogate p-Terphenyl-d14                                          | %                       | 100                        | 96                         | 102                        | 102                        | 97                           |

| PAHs in Soil<br>Our Reference:<br>Your Reference<br>Type of sample | UNITS<br>-----<br>----- | 05/3367-14<br>13/0.5<br>Soil | 05/3367-16<br>14/3.0<br>Soil | 05/3367-17<br>14/3.7<br>Soil | 05/3367-18<br>15/0.5<br>Soil | 05/3367-20<br>17/0.5<br>Soil |
|--------------------------------------------------------------------|-------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| Date extracted                                                     | --                      | 22/12/2005                   | 22/12/2005                   | 22/12/2005                   | 22/12/2005                   | 22/12/2005                   |
| Date analysed                                                      | --                      | 23/12/2005                   | 23/12/2005                   | 23/12/2005                   | 23/12/2005                   | 23/12/2005                   |
| Naphthalene                                                        | mg/kg                   | <0.10                        | 10                           | <0.10                        | <0.10                        | <0.10                        |
| Acenaphthylene                                                     | mg/kg                   | <0.10                        | <0.10                        | <0.10                        | <0.10                        | <0.10                        |
| Acenaphthene                                                       | mg/kg                   | <0.10                        | 3.0                          | 0.10                         | <0.10                        | <0.10                        |
| Fluorene                                                           | mg/kg                   | <0.10                        | 2.1                          | 0.10                         | <0.10                        | <0.10                        |
| Phenanthrene                                                       | mg/kg                   | <0.10                        | 2.5                          | 0.20                         | <0.10                        | <0.10                        |
| Anthracene                                                         | mg/kg                   | <0.10                        | 0.40                         | <0.10                        | <0.10                        | <0.10                        |
| Fluoranthene                                                       | mg/kg                   | <0.10                        | 2.1                          | 0.10                         | <0.10                        | <0.10                        |
| Pyrene                                                             | mg/kg                   | <0.10                        | 1.6                          | 0.10                         | <0.10                        | <0.10                        |
| Benzo(a)anthracene                                                 | mg/kg                   | <0.10                        | 0.80                         | <0.10                        | <0.10                        | <0.10                        |
| Chrysene                                                           | mg/kg                   | <0.10                        | 1.0                          | 0.10                         | <0.10                        | <0.10                        |
| Benzo(b,k)fluoranthene                                             | mg/kg                   | <0.20                        | 1.1                          | <0.20                        | <0.20                        | <0.20                        |
| Benzo(a)pyrene                                                     | mg/kg                   | <0.050                       | 0.40                         | <0.050                       | <0.050                       | <0.050                       |
| Indeno(1,2,3-c,d)pyrene                                            | mg/kg                   | <0.10                        | 0.20                         | <0.10                        | <0.10                        | <0.10                        |
| Dibenzo(a,h)anthracene                                             | mg/kg                   | <0.10                        | <0.10                        | <0.10                        | <0.10                        | <0.10                        |
| Benzo(g,h,i)perylene                                               | mg/kg                   | <0.10                        | 0.10                         | <0.10                        | <0.10                        | <0.10                        |
| Surrogate p-Terphenyl-d14                                          | %                       | 99                           | 98                           | 102                          | 97                           | 105                          |



| PAHs in Soil<br>Our Reference:<br>Your Reference<br>Type of sample | UNITS<br>-----<br>----- | 05/3367-21<br>18/0.5<br>Soil | 05/3367-22<br>19/0.5<br>Soil |
|--------------------------------------------------------------------|-------------------------|------------------------------|------------------------------|
| Date extracted                                                     | --                      | 22/12/2005                   | 22/12/2005                   |
| Date analysed                                                      | --                      | 23/12/2005                   | 23/12/2005                   |
| Naphthalene                                                        | mg/kg                   | <0.10                        | <0.10                        |
| Acenaphthylene                                                     | mg/kg                   | <0.10                        | <0.10                        |
| Acenaphthene                                                       | mg/kg                   | <0.10                        | <0.10                        |
| Fluorene                                                           | mg/kg                   | <0.10                        | <0.10                        |
| Phenanthrene                                                       | mg/kg                   | <0.10                        | <0.10                        |
| Anthracene                                                         | mg/kg                   | <0.10                        | <0.10                        |
| Fluoranthene                                                       | mg/kg                   | <0.10                        | <0.10                        |
| Pyrene                                                             | mg/kg                   | <0.10                        | <0.10                        |
| Benzo(a)anthracene                                                 | mg/kg                   | <0.10                        | <0.10                        |
| Chrysene                                                           | mg/kg                   | <0.10                        | <0.10                        |
| Benzo(b,k)fluoranthene                                             | mg/kg                   | <0.20                        | <0.20                        |
| Benzo(a)pyrene                                                     | mg/kg                   | <0.050                       | <0.050                       |
| Indeno(1,2,3-c,d)pyrene                                            | mg/kg                   | <0.10                        | <0.10                        |
| Dibenzo(a,h)anthracene                                             | mg/kg                   | <0.10                        | <0.10                        |
| Benzo(g,h,i)perylene                                               | mg/kg                   | <0.10                        | <0.10                        |
| Surrogate p-Terphenyl-d <sub>14</sub>                              | %                       | 93                           | 100                          |

| Organochlorine Pesticides in soil |       |            |            |            |            |            |
|-----------------------------------|-------|------------|------------|------------|------------|------------|
| Our Reference:                    | UNITS | 05/3367-1  | 05/3367-4  | 05/3367-6  | 05/3367-7  | 05/3367-12 |
| Your Reference                    | ----- | 1/0.5      | 3/0.5      | 4/0.5      | 6/0.5      | 11/0.5     |
| Type of sample                    | ----- | Soil       | Soil       | Soil       | Soil       | Soil       |
| Date extracted                    | --    | 22/12/2005 | 22/12/2005 | 22/12/2005 | 22/12/2005 | 22/12/2005 |
| Date analysed                     | --    | 23/12/2005 | 23/12/2005 | 23/12/2005 | 23/12/2005 | 23/12/2005 |
| HCB                               | mg/kg | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       |
| alpha-BHC                         | mg/kg | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       |
| gamma-BHC                         | mg/kg | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       |
| beta-BHC                          | mg/kg | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       |
| Heptachlor                        | mg/kg | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       |
| delta-BHC                         | mg/kg | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       |
| Aldrin                            | mg/kg | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       |
| Heptachlor Epoxide                | mg/kg | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       |
| gamma-Chlordane                   | mg/kg | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       |
| alpha-chlordane                   | mg/kg | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       |
| Endosulfan I                      | mg/kg | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       |
| pp-DDE                            | mg/kg | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       |
| Dieldrin                          | mg/kg | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       |
| Endrin                            | mg/kg | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       |
| pp-DDD                            | mg/kg | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       |
| Endosulfan II                     | mg/kg | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       |
| pp-DDT                            | mg/kg | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       |
| Endrin Aldehyde                   | mg/kg | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       |
| Endosulfan Sulphate               | mg/kg | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       |
| Methoxychlor                      | mg/kg | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       |
| Surrogate TCLMX                   | %     | 100        | 113        | 113        | 112        | 99         |

| Organochlorine Pesticides in soil |       |            |            |            |            |            |
|-----------------------------------|-------|------------|------------|------------|------------|------------|
| Our Reference:                    | UNITS | 05/3367-14 | 05/3367-16 | 05/3367-17 | 05/3367-18 | 05/3367-20 |
| Your Reference                    | ----- | 13/0.5     | 14/3.0     | 14/3.7     | 15/0.5     | 17/0.5     |
| Type of sample                    | ----- | Soil       | Soil       | Soil       | Soil       | Soil       |
| Date extracted                    | --    | 22/12/2005 | 22/12/2005 | 22/12/2005 | 22/12/2005 | 22/12/2005 |
| Date analysed                     | --    | 23/12/2005 | 23/12/2005 | 23/12/2005 | 23/12/2005 | 23/12/2005 |
| HCB                               | mg/kg | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       |
| alpha-BHC                         | mg/kg | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       |
| gamma-BHC                         | mg/kg | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       |
| beta-BHC                          | mg/kg | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       |
| Heptachlor                        | mg/kg | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       |
| delta-BHC                         | mg/kg | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       |
| Aldrin                            | mg/kg | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       |
| Heptachlor Epoxide                | mg/kg | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       |
| gamma-Chlordane                   | mg/kg | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       |
| alpha-chlordane                   | mg/kg | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       |
| Endosulfan I                      | mg/kg | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       |
| pp-DDE                            | mg/kg | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       |
| Dieldrin                          | mg/kg | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       |
| Endrin                            | mg/kg | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       |
| pp-DDD                            | mg/kg | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       |
| Endosulfan II                     | mg/kg | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       |
| pp-DDT                            | mg/kg | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       |
| Endrin Aldehyde                   | mg/kg | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       |
| Endosulfan Sulphate               | mg/kg | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       |
| Methoxychlor                      | mg/kg | <0.1       | <0.1       | <0.1       | <0.1       | <0.1       |
| Surrogate TCLMX                   | %     | 116        | 110        | 97         | 99         | 103        |

| Organochlorine Pesticides in soil | UNITS | 05/3367-22 |
|-----------------------------------|-------|------------|
| Our Reference:                    | ----- | 19/0.5     |
| Your Reference                    | ----- | Soil       |
| Type of sample                    |       |            |
| Date extracted                    | --    | 22/12/2005 |
| Date analysed                     | --    | 23/12/2005 |
| HCB                               | mg/kg | <0.1       |
| alpha-BHC                         | mg/kg | <0.1       |
| gamma-BHC                         | mg/kg | <0.1       |
| beta-BHC                          | mg/kg | <0.1       |
| Heptachlor                        | mg/kg | <0.1       |
| delta-BHC                         | mg/kg | <0.1       |
| Aldrin                            | mg/kg | <0.1       |
| Heptachlor Epoxide                | mg/kg | <0.1       |
| gamma-Chlordane                   | mg/kg | <0.1       |
| alpha-chlordane                   | mg/kg | <0.1       |
| Endosulfan I                      | mg/kg | <0.1       |
| pp-DDE                            | mg/kg | <0.1       |
| Dieldrin                          | mg/kg | <0.1       |
| Endrin                            | mg/kg | <0.1       |
| pp-DDD                            | mg/kg | <0.1       |
| Endosulfan II                     | mg/kg | <0.1       |
| pp-DDT                            | mg/kg | <0.1       |
| Endrin Aldehyde                   | mg/kg | <0.1       |
| Endosulfan Sulphate               | mg/kg | <0.1       |
| Methoxychlor                      | mg/kg | <0.1       |
| Surrogate TCLMX                   | %     | 99         |

| PCBs in Soil<br>Our Reference:<br>Your Reference<br>Type of sample | UNITS<br>-----<br>----- | 05/3367-1<br>1/0.5<br>Soil | 05/3367-4<br>3/0.5<br>Soil | 05/3367-6<br>4/0.5<br>Soil | 05/3367-7<br>6/0.5<br>Soil | 05/3367-12<br>11/0.5<br>Soil |
|--------------------------------------------------------------------|-------------------------|----------------------------|----------------------------|----------------------------|----------------------------|------------------------------|
| Date extracted                                                     | --                      | 22/12/2005                 | 22/12/2005                 | 22/12/2005                 | 22/12/2005                 | 22/12/2005                   |
| Date analysed                                                      | --                      | 23/12/2005                 | 23/12/2005                 | 23/12/2005                 | 23/12/2005                 | 23/12/2005                   |
| Arochlor 1016                                                      | mg/kg                   | <0.1                       | <0.1                       | <0.1                       | <0.1                       | <0.1                         |
| Arochlor 1232                                                      | mg/kg                   | <0.1                       | <0.1                       | <0.1                       | <0.1                       | <0.1                         |
| Arochlor 1242                                                      | mg/kg                   | <0.1                       | <0.1                       | <0.1                       | <0.1                       | <0.1                         |
| Arochlor 1248                                                      | mg/kg                   | <0.1                       | <0.1                       | <0.1                       | <0.1                       | <0.1                         |
| Arochlor 1254                                                      | mg/kg                   | <0.1                       | <0.1                       | <0.1                       | <0.1                       | <0.1                         |
| Arochlor 1260                                                      | mg/kg                   | <0.1                       | <0.1                       | <0.1                       | <0.1                       | <0.1                         |
| Surrogate TCLMX                                                    | %                       | 100                        | 113                        | 113                        | 112                        | 99                           |

| PCBs in Soil<br>Our Reference:<br>Your Reference<br>Type of sample | UNITS<br>-----<br>----- | 05/3367-14<br>13/0.5<br>Soil | 05/3367-16<br>14/3.0<br>Soil | 05/3367-17<br>14/3.7<br>Soil | 05/3367-18<br>15/0.5<br>Soil | 05/3367-20<br>17/0.5<br>Soil |
|--------------------------------------------------------------------|-------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| Date extracted                                                     | --                      | 22/12/2005                   | 22/12/2005                   | 22/12/2005                   | 22/12/2005                   | 22/12/2005                   |
| Date analysed                                                      | --                      | 23/12/2005                   | 23/12/2005                   | 23/12/2005                   | 23/12/2005                   | 23/12/2005                   |
| Arochlor 1016                                                      | mg/kg                   | <0.1                         | <0.1                         | <0.1                         | <0.1                         | <0.1                         |
| Arochlor 1232                                                      | mg/kg                   | <0.1                         | <0.1                         | <0.1                         | <0.1                         | <0.1                         |
| Arochlor 1242                                                      | mg/kg                   | <0.1                         | <0.1                         | <0.1                         | <0.1                         | <0.1                         |
| Arochlor 1248                                                      | mg/kg                   | <0.1                         | <0.1                         | <0.1                         | <0.1                         | <0.1                         |
| Arochlor 1254                                                      | mg/kg                   | <0.1                         | <0.1                         | <0.1                         | <0.1                         | <0.1                         |
| Arochlor 1260                                                      | mg/kg                   | <0.1                         | <0.1                         | <0.1                         | <0.1                         | <0.1                         |
| Surrogate TCLMX                                                    | %                       | 116                          | 110                          | 97                           | 99                           | 103                          |

| PCBs in Soil<br>Our Reference:<br>Your Reference<br>Type of sample | UNITS<br>-----<br>----- | 05/3367-22<br>19/0.5<br>Soil |
|--------------------------------------------------------------------|-------------------------|------------------------------|
| Date extracted                                                     | --                      | 22/12/2005                   |
| Date analysed                                                      | --                      | 23/12/2005                   |
| Arochlor 1016                                                      | mg/kg                   | <0.1                         |
| Arochlor 1232                                                      | mg/kg                   | <0.1                         |
| Arochlor 1242                                                      | mg/kg                   | <0.1                         |
| Arochlor 1248                                                      | mg/kg                   | <0.1                         |
| Arochlor 1254                                                      | mg/kg                   | <0.1                         |
| Arochlor 1260                                                      | mg/kg                   | <0.1                         |
| Surrogate TCLMX                                                    | %                       | 99                           |

|                             |       |           |           |           |           |            |
|-----------------------------|-------|-----------|-----------|-----------|-----------|------------|
| Total Phenolics in Soil     | UNITS | 05/3367-1 | 05/3367-4 | 05/3367-6 | 05/3367-7 | 05/3367-12 |
| Our Reference:              | ----- | 1/0.5     | 3/0.5     | 4/0.5     | 6/0.5     | 11/0.5     |
| Your Reference              | ----- | Soil      | Soil      | Soil      | Soil      | Soil       |
| Type of sample              |       |           |           |           |           |            |
| Total Phenolics (as Phenol) | mg/kg | <5.0      | <5.0      | <5.0      | <5.0      | <5.0       |

|                             |       |            |            |            |            |            |
|-----------------------------|-------|------------|------------|------------|------------|------------|
| Total Phenolics in Soil     | UNITS | 05/3367-14 | 05/3367-16 | 05/3367-17 | 05/3367-18 | 05/3367-20 |
| Our Reference:              | ----- | 13/0.5     | 14/3.0     | 14/3.7     | 15/0.5     | 17/0.5     |
| Your Reference              | ----- | Soil       | Soil       | Soil       | Soil       | Soil       |
| Type of sample              |       |            |            |            |            |            |
| Total Phenolics (as Phenol) | mg/kg | <5.0       | <5.0       | <5.0       | <5.0       | <5.0       |

|                             |       |            |
|-----------------------------|-------|------------|
| Total Phenolics in Soil     | UNITS | 05/3367-22 |
| Our Reference:              | ----- | 19/0.5     |
| Your Reference              | ----- | Soil       |
| Type of sample              |       |            |
| Total Phenolics (as Phenol) | mg/kg | <5.0       |

| Acid Extractable metals in soil | UNITS | 05/3367-1 | 05/3367-2 | 05/3367-3 | 05/3367-4 | 05/3367-5 |
|---------------------------------|-------|-----------|-----------|-----------|-----------|-----------|
| Our Reference:                  | ----- | 1/0.5     | 1/3.0     | 2/0.5     | 3/0.5     | 3/1.5     |
| Your Reference                  | ----- | Soil      | Soil      | Soil      | Soil      | Soil      |
| Type of sample                  |       |           |           |           |           |           |
| Arsenic                         | mg/kg | <4.0      | 5.8       | <4.0      | <4.0      | 6.7       |
| Cadmium                         | mg/kg | <1.0      | <1.0      | <1.0      | <1.0      | <1.0      |
| Chromium                        | mg/kg | 13        | 16        | 13        | 18        | 12        |
| Copper                          | mg/kg | 8.6       | 11        | 22        | 15        | 19        |
| Lead                            | mg/kg | 14        | 260       | 10        | 14        | 25        |
| Mercury                         | mg/kg | <0.10     | <0.10     | <0.10     | <0.10     | <0.10     |
| Nickel                          | mg/kg | 4         | 5         | 4         | 5         | 4         |
| Zinc                            | mg/kg | 11        | 24        | 18        | 23        | 21        |

| Acid Extractable metals in soil | UNITS | 05/3367-6 | 05/3367-7 | 05/3367-8 | 05/3367-9 | 05/3367-10 |
|---------------------------------|-------|-----------|-----------|-----------|-----------|------------|
| Our Reference:                  | ----- | 4/0.5     | 6/0.5     | 7/0.5     | 8/0.5     | 9/0.5      |
| Your Reference                  | ----- | Soil      | Soil      | Soil      | Soil      | Soil       |
| Type of sample                  |       |           |           |           |           |            |
| Arsenic                         | mg/kg | <4.0      | <4.0      | <4.0      | <4.0      | <4.0       |
| Cadmium                         | mg/kg | <1.0      | <1.0      | <1.0      | <1.0      | <1.0       |
| Chromium                        | mg/kg | 14        | 12        | 12        | 9.1       | 10         |
| Copper                          | mg/kg | 6.1       | 6.1       | 3.8       | 2.8       | 7.9        |
| Lead                            | mg/kg | 10        | 10        | 9         | 8         | 19         |
| Mercury                         | mg/kg | <0.10     | <0.10     | <0.10     | <0.10     | <0.10      |
| Nickel                          | mg/kg | 3         | 4         | 2         | 1         | 7          |
| Zinc                            | mg/kg | 12        | 14        | 15        | 7         | 39         |

| Acid Extractable metals in soil | UNITS | 05/3367-11 | 05/3367-12 | 05/3367-13 | 05/3367-14 | 05/3367-15 |
|---------------------------------|-------|------------|------------|------------|------------|------------|
| Our Reference:                  | ----- | 10/0.5     | 11/0.5     | 12/0.5     | 13/0.5     | 14/0.5     |
| Your Reference                  | ----- | Soil       | Soil       | Soil       | Soil       | Soil       |
| Type of sample                  |       |            |            |            |            |            |
| Arsenic                         | mg/kg | <4.0       | <4.0       | <4.0       | 7.8        | 5.3        |
| Cadmium                         | mg/kg | <1.0       | <1.0       | <1.0       | <1.0       | <1.0       |
| Chromium                        | mg/kg | 14         | 11         | 30         | 17         | 18         |
| Copper                          | mg/kg | 6.1        | 8.4        | 52         | 20         | 13         |
| Lead                            | mg/kg | 13         | 36         | 14         | 23         | 34         |
| Mercury                         | mg/kg | <0.10      | <0.10      | <0.10      | <0.10      | <0.10      |
| Nickel                          | mg/kg | 4          | 3          | 43         | 5          | 5          |
| Zinc                            | mg/kg | 23         | 16         | 41         | 33         | 110        |

| Acid Extractable metals in soil | UNITS | 05/3367-16 | 05/3367-17 | 05/3367-18 | 05/3367-19 | 05/3367-20 |
|---------------------------------|-------|------------|------------|------------|------------|------------|
| Our Reference:                  | ----- | 14/3.0     | 14/3.7     | 15/0.5     | 16/0.5     | 17/0.5     |
| Your Reference                  | ----- | Soil       | Soil       | Soil       | Soil       | Soil       |
| Type of sample                  |       |            |            |            |            |            |
| Arsenic                         | mg/kg | <4.0       | <4.0       | 13         | <4.0       | 4.6        |
| Cadmium                         | mg/kg | <1.0       | <1.0       | <1.0       | <1.0       | <1.0       |
| Chromium                        | mg/kg | 15         | 5.6        | 25         | 16         | 27         |
| Copper                          | mg/kg | 5.7        | 1.1        | 16         | 5.1        | 3.0        |
| Lead                            | mg/kg | 9          | 3          | 32         | 16         | 18         |
| Mercury                         | mg/kg | <0.10      | <0.10      | <0.10      | <0.10      | <0.10      |
| Nickel                          | mg/kg | 2          | <1         | 5          | 4          | 4          |
| Zinc                            | mg/kg | 22         | 1          | 26         | 5          | 7          |

| Acid Extractable metals in soil | UNITS | 05/3367-21 | 05/3367-22 | 05/3367-23 | 05/3367-24   | 05/3367-25 |
|---------------------------------|-------|------------|------------|------------|--------------|------------|
| Our Reference:                  | ----- | 18/0.5     | 19/0.5     | 20/0.5     | BD1 / 201205 | 5/0.5      |
| Your Reference                  | ----- | Soil       | Soil       | Soil       | Soil         | Soil       |
| Type of sample                  |       |            |            |            |              |            |
| Arsenic                         | mg/kg | <4.0       | 6.2        | <4.0       | <4.0         | <4.0       |
| Cadmium                         | mg/kg | <1.0       | <1.0       | <1.0       | <1.0         | <1.0       |
| Chromium                        | mg/kg | 33         | 21         | 5.5        | 8.4          | 8.3        |
| Copper                          | mg/kg | 1.0        | 4.2        | 1.1        | 3.5          | 2.4        |
| Lead                            | mg/kg | 14         | 18         | 8          | 10           | 7          |
| Mercury                         | mg/kg | <0.10      | <0.10      | <0.10      | <0.10        | <0.10      |
| Nickel                          | mg/kg | 8          | 5          | 1          | 3            | 1          |
| Zinc                            | mg/kg | 5          | 20         | 4          | 7            | 7          |

|                |       |           |           |           |           |           |
|----------------|-------|-----------|-----------|-----------|-----------|-----------|
| Moisture       |       |           |           |           |           |           |
| Our Reference: | UNITS | 05/3367-1 | 05/3367-2 | 05/3367-3 | 05/3367-4 | 05/3367-5 |
| Your Reference | ----- | 1/0.5     | 1/3.0     | 2/0.5     | 3/0.5     | 3/1.5     |
| Type of sample | ----- | Soil      | Soil      | Soil      | Soil      | Soil      |
| Moisture       | %     | 13        | 16        | 13        | 14        | 19        |

|                |       |           |           |           |           |            |
|----------------|-------|-----------|-----------|-----------|-----------|------------|
| Moisture       |       |           |           |           |           |            |
| Our Reference: | UNITS | 05/3367-6 | 05/3367-7 | 05/3367-8 | 05/3367-9 | 05/3367-10 |
| Your Reference | ----- | 4/0.5     | 6/0.5     | 7/0.5     | 8/0.5     | 9/0.5      |
| Type of sample | ----- | Soil      | Soil      | Soil      | Soil      | Soil       |
| Moisture       | %     | 6.4       | 8.2       | 8.6       | 10        | 11         |

|                |       |            |            |            |            |            |
|----------------|-------|------------|------------|------------|------------|------------|
| Moisture       |       |            |            |            |            |            |
| Our Reference: | UNITS | 05/3367-11 | 05/3367-12 | 05/3367-13 | 05/3367-14 | 05/3367-15 |
| Your Reference | ----- | 10/0.5     | 11/0.5     | 12/0.5     | 13/0.5     | 14/0.5     |
| Type of sample | ----- | Soil       | Soil       | Soil       | Soil       | Soil       |
| Moisture       | %     | 9.5        | 11         | 11         | 17         | 13         |

|                |       |            |            |            |            |            |
|----------------|-------|------------|------------|------------|------------|------------|
| Moisture       |       |            |            |            |            |            |
| Our Reference: | UNITS | 05/3367-16 | 05/3367-17 | 05/3367-18 | 05/3367-19 | 05/3367-20 |
| Your Reference | ----- | 14/3.0     | 14/3.7     | 15/0.5     | 16/0.5     | 17/0.5     |
| Type of sample | ----- | Soil       | Soil       | Soil       | Soil       | Soil       |
| Moisture       | %     | 8.7        | 6.9        | 13         | 16         | 11         |

|                |       |            |            |            |              |            |
|----------------|-------|------------|------------|------------|--------------|------------|
| Moisture       |       |            |            |            |              |            |
| Our Reference: | UNITS | 05/3367-21 | 05/3367-22 | 05/3367-23 | 05/3367-24   | 05/3367-25 |
| Your Reference | ----- | 18/0.5     | 19/0.5     | 20/0.5     | BD1 / 201205 | 5/0.5      |
| Type of sample | ----- | Soil       | Soil       | Soil       | Soil         | Soil       |
| Moisture       | %     | 14         | 8.7        | 4.6        | 15           | 8.6        |

|                                                                           |                         |                                |                                |                                |                                |                                |
|---------------------------------------------------------------------------|-------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| Asbestos ID - soils<br>Our Reference:<br>Your Reference<br>Type of sample | UNITS<br>-----<br>----- | 05/3367-1<br>1/0.5<br>Soil     | 05/3367-4<br>3/0.5<br>Soil     | 05/3367-6<br>4/0.5<br>Soil     | 05/3367-12<br>11/0.5<br>Soil   | 05/3367-22<br>19/0.5<br>Soil   |
| Sample Description                                                        |                         | 20g soil & rocks               | 20g soil & rocks               | 20g soil & rocks               | 20g soil & rocks               | 20g soil & rocks               |
| Asbestos ID in soil                                                       |                         | No asbestos detected           | No asbestos detected           | No asbestos detected           | No asbestos detected           | No asbestos detected           |
| Trace Analysis                                                            |                         | Respirable fibres not detected | Respirable fibres not detected | Respirable fibres not detected | Respirable fibres not detected | Respirable fibres not detected |

|                                                                           |                         |                                |
|---------------------------------------------------------------------------|-------------------------|--------------------------------|
| Asbestos ID - soils<br>Our Reference:<br>Your Reference<br>Type of sample | UNITS<br>-----<br>----- | 05/3367-25<br>5/0.5<br>Soil    |
| Sample Description                                                        |                         | 20g sandstone                  |
| Asbestos ID in soil                                                       |                         | No asbestos detected           |
| Trace Analysis                                                            |                         | Respirable fibres not detected |

| Metals in TCLP extract<br>Our Reference:<br>Your Reference<br>Type of sample | UNITS<br>-----<br>----- | 05/3367-1<br>1/0.5<br>Soil | 05/3367-4<br>3/0.5<br>Soil | 05/3367-6<br>4/0.5<br>Soil | 05/3367-12<br>11/0.5<br>Soil |
|------------------------------------------------------------------------------|-------------------------|----------------------------|----------------------------|----------------------------|------------------------------|
| pH of soil for fluid# determ.                                                | pH units                | 6.90                       | 7.00                       | 6.60                       | 6.80                         |
| pH of soil for fluid # determ. (acid)                                        | pH units                | 2.30                       | 2.30                       | 2.30                       | 2.20                         |
| Extraction fluid used                                                        |                         | 1                          | 1                          | 1                          | 1                            |
| pH of final Leachate                                                         | pH units                | 4.90                       | 4.90                       | 5.00                       | 5.00                         |
| Arsenic                                                                      | mg/L                    | <0.05                      | <0.05                      | <0.05                      | <0.05                        |
| Cadmium                                                                      | mg/L                    | <0.01                      | <0.01                      | <0.01                      | <0.01                        |
| Chromium                                                                     | mg/L                    | <0.01                      | <0.01                      | <0.01                      | <0.01                        |
| Lead                                                                         | mg/L                    | <0.03                      | 0.03                       | 0.03                       | 0.16                         |
| Mercury                                                                      | mg/L                    | <0.0005                    | <0.0005                    | <0.0005                    | <0.0005                      |
| Nickel                                                                       | mg/L                    | 0.03                       | 0.03                       | 0.03                       | 0.03                         |

| PAHs in TCLP (USEPA 1311) |       |            |            |            |            |
|---------------------------|-------|------------|------------|------------|------------|
| Our Reference:            | UNITS | 05/3367-1  | 05/3367-4  | 05/3367-6  | 05/3367-12 |
| Your Reference            | ----- | 1/0.5      | 3/0.5      | 4/0.5      | 11/0.5     |
| Type of sample            | ----- | Soil       | Soil       | Soil       | Soil       |
| Date extracted            | --    | 23/12/2005 | 23/12/2005 | 23/12/2005 | 23/12/2005 |
| Date analysed             | --    | 23/12/2005 | 23/12/2005 | 23/12/2005 | 23/12/2005 |
| Naphthalene               | µg/L  | <1         | <1         | <1         | <1         |
| Acenaphthylene            | µg/L  | <1         | <1         | <1         | <1         |
| Acenaphthene              | µg/L  | <1         | <1         | <1         | <1         |
| Fluorene                  | µg/L  | <1         | <1         | <1         | <1         |
| Phenanthrene              | µg/L  | <1         | 1.8        | <1         | 2.3        |
| Anthracene                | µg/L  | <1         | <1         | <1         | <1         |
| Fluoranthene              | µg/L  | <1         | <1         | <1         | <1         |
| Pyrene                    | µg/L  | <1         | <1         | <1         | <1         |
| Benzo(a)anthracene        | µg/L  | <1         | <1         | <1         | <1         |
| Chrysene                  | µg/L  | <1         | <1         | <1         | <1         |
| Benzo(b)fluoranthene      | µg/L  | <2         | <2         | <2         | <2         |
| Benzo(a)pyrene            | µg/L  | <1         | <1         | <1         | <1         |
| Indeno(1,2,3-c,d)pyrene   | µg/L  | <1         | <1         | <1         | <1         |
| Dibenzo(a,h)anthracene    | µg/L  | <1         | <1         | <1         | <1         |
| Benzo(g,h,i)perylene      | µg/L  | <1         | <1         | <1         | <1         |
| Surrogate p-Terphenyl-d14 | %     | 126        | 128        | 96         | 129        |

| Method ID | Methodology Summary                                                                                                                                                     |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| GC.14     | Soil samples extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS.                                                                  |
| GC.16     | Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. |
| GC.3      | Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID.                                                         |
| GC.12     | Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS.                                                          |
| GC-5      | Soil samples are extracted with hexane/acetone and waters with dichloromethane and analysed by GC with dual ECD's.                                                      |
| GC-6      | Soil samples are extracted with hexane/acetone and waters with dichloromethane and analysed by GC-ECD.                                                                  |
| LAB.30    | Total Phenolics - determined colorimetrically following distillation.                                                                                                   |
| Metals.20 | Determination of various metals by ICP-AES.                                                                                                                             |
| Metals.21 | Determination of Mercury by Cold Vapour AAS.                                                                                                                            |
| LAB.8     | Moisture content determined by heating at 105 deg C for a minimum of 4 hours.                                                                                           |
| ASB.1     | Qualitative identification of asbestos type fibres in bulk using Polarised Light Microscopy and Dispersion Staining Techniques.                                         |
| EXTRACT.7 | Toxicity Characteristic Leaching Procedure (TCLP).                                                                                                                      |

| QUALITY CONTROL            | UNITS | PQL | METHOD | Blank | Duplicate Sm# | Duplicate results         | Spike Sm# | Spike % Recovery |
|----------------------------|-------|-----|--------|-------|---------------|---------------------------|-----------|------------------|
| VOC's in soil              |       |     |        |       |               | Base II Duplicate II %RPD |           |                  |
| Dichlorodifluoromethane*   | mg/kg | 10  | GC.14  | <10   | [NT]          | [NT]                      | LCS       | [NT]             |
| Chloromethane*             | mg/kg | 10  | GC.14  | <10   | [NT]          | [NT]                      | LCS       | [NT]             |
| Vinyl Chloride*            | mg/kg | 10  | GC.14  | <10   | [NT]          | [NT]                      | LCS       | [NT]             |
| Bromomethane*              | mg/kg | 10  | GC.14  | <10   | [NT]          | [NT]                      | LCS       | [NT]             |
| Chloroethane*              | mg/kg | 10  | GC.14  | <10   | [NT]          | [NT]                      | LCS       | [NT]             |
| Trichlorofluoromethane*    | mg/kg | 10  | GC.14  | <10   | [NT]          | [NT]                      | LCS       | [NT]             |
| 1,1-Dichloroethene         | mg/kg | 1   | GC.14  | <1.0  | [NT]          | [NT]                      | LCS       | [NT]             |
| trans-1,2-dichloroethene   | mg/kg | 1   | GC.14  | <1.0  | [NT]          | [NT]                      | LCS       | [NT]             |
| 1,1-dichloroethane         | mg/kg | 1   | GC.14  | <1.0  | [NT]          | [NT]                      | LCS       | 95%              |
| cis-1,2-dichloroethene     | mg/kg | 1   | GC.14  | <1.0  | [NT]          | [NT]                      | LCS       | [NT]             |
| bromochloromethane         | mg/kg | 1   | GC.14  | <1.0  | [NT]          | [NT]                      | LCS       | [NT]             |
| chloroform                 | mg/kg | 1   | GC.14  | <1.0  | [NT]          | [NT]                      | LCS       | 102%             |
| 2,2-dichloropropane        | mg/kg | 1   | GC.14  | <1.0  | [NT]          | [NT]                      | LCS       | [NT]             |
| 1,2-dichloroethane         | mg/kg | 1   | GC.14  | <1.0  | [NT]          | [NT]                      | LCS       | 85%              |
| 1,1,1-trichloroethane      | mg/kg | 1   | GC.14  | <1.0  | [NT]          | [NT]                      | LCS       | 88%              |
| 1,1-dichloropropene        | mg/kg | 1   | GC.14  | <1.0  | [NT]          | [NT]                      | LCS       | [NT]             |
| carbon tetrachloride       | mg/kg | 1   | GC.14  | <1.0  | [NT]          | [NT]                      | LCS       | [NT]             |
| Benzene                    | mg/kg | 1   | GC.14  | <1.0  | [NT]          | [NT]                      | LCS       | [NT]             |
| dibromomethane             | mg/kg | 1   | GC.14  | <1.0  | [NT]          | [NT]                      | LCS       | [NT]             |
| trichloroethene            | mg/kg | 1   | GC.14  | <1.0  | [NT]          | [NT]                      | LCS       | 85%              |
| bromodichloromethane       | mg/kg | 1   | GC.14  | <1.0  | [NT]          | [NT]                      | LCS       | 114%             |
| trans-1,3-dichloropropene* | mg/kg | 1   | GC.14  | <1.0  | [NT]          | [NT]                      | LCS       | [NT]             |
| cis-1,3-dichloropropene*   | mg/kg | 1   | GC.14  | <1.0  | [NT]          | [NT]                      | LCS       | [NT]             |
| 1,1,2-trichloroethane      | mg/kg | 1   | GC.14  | <1.0  | [NT]          | [NT]                      | LCS       | [NT]             |
| Toluene                    | mg/kg | 1   | GC.14  | <1.0  | [NT]          | [NT]                      | LCS       | [NT]             |
| 1,3-dichloropropane        | mg/kg | 1   | GC.14  | <1.0  | [NT]          | [NT]                      | LCS       | [NT]             |
| dibromochloromethane       | mg/kg | 1   | GC.14  | <1.0  | [NT]          | [NT]                      | LCS       | 103%             |
| 1,2-dibromomethane         | mg/kg | 1   | GC.14  | <1.0  | [NT]          | [NT]                      | LCS       | [NT]             |
| tetrachloroethene          | mg/kg | 1   | GC.14  | <1.0  | [NT]          | [NT]                      | LCS       | 97%              |
| 1,1,1,2-tetrachloroethane  | mg/kg | 1   | GC.14  | <1.0  | [NT]          | [NT]                      | LCS       | [NT]             |
| chlorobenzene              | mg/kg | 1   | GC.14  | <1.0  | [NT]          | [NT]                      | LCS       | [NT]             |
| Ethylbenzene               | mg/kg | 1   | GC.14  | <1.0  | [NT]          | [NT]                      | LCS       | [NT]             |
| bromoform                  | mg/kg | 1   | GC.14  | <1.0  | [NT]          | [NT]                      | LCS       | [NT]             |
| m + p-Xylene               | mg/kg | 2   | GC.14  | <2.0  | [NT]          | [NT]                      | LCS       | [NT]             |
| styrene                    | mg/kg | 1   | GC.14  | <1.0  | [NT]          | [NT]                      | LCS       | [NT]             |
| 1,1,2,2-tetrachloroethane  | mg/kg | 1   | GC.14  | <1.0  | [NT]          | [NT]                      | LCS       | [NT]             |
| o-Xylene                   | mg/kg | 1   | GC.14  | <1.0  | [NT]          | [NT]                      | LCS       | [NT]             |
| 1,2,3-trichloropropane*    | mg/kg | 1   | GC.14  | <1.0  | [NT]          | [NT]                      | LCS       | [NT]             |
| isopropylbenzene           | mg/kg | 1   | GC.14  | <1.0  | [NT]          | [NT]                      | LCS       | [NT]             |
| bromobenzene               | mg/kg | 1   | GC.14  | <1.0  | [NT]          | [NT]                      | LCS       | [NT]             |
| n-propyl benzene           | mg/kg | 1   | GC.14  | <1.0  | [NT]          | [NT]                      | LCS       | [NT]             |



| QUALITY CONTROL                       | UNITS | PQL | METHOD | Blank | Duplicate Sm# | Duplicate results         | Spike Sm# | Spike % Recovery |
|---------------------------------------|-------|-----|--------|-------|---------------|---------------------------|-----------|------------------|
| VOC's in soil                         |       |     |        |       |               | Base II Duplicate II %RPD |           |                  |
| 2-chlorotoluene                       | mg/kg | 1   | GC.14  | <1.0  | [NT]          | [NT]                      | LCS       | [NT]             |
| 4-chlorotoluene                       | mg/kg | 1   | GC.14  | <1.0  | [NT]          | [NT]                      | LCS       | [NT]             |
| 1,3,5-trimethyl benzene               | mg/kg | 1   | GC.14  | <1.0  | [NT]          | [NT]                      | LCS       | [NT]             |
| tert-butyl benzene                    | mg/kg | 1   | GC.14  | <1.0  | [NT]          | [NT]                      | LCS       | [NT]             |
| 1,2,4-trimethyl benzene               | mg/kg | 1   | GC.14  | <1.0  | [NT]          | [NT]                      | LCS       | [NT]             |
| 1,3-dichlorobenzene                   | mg/kg | 1   | GC.14  | <1.0  | [NT]          | [NT]                      | LCS       | [NT]             |
| sec-butyl benzene                     | mg/kg | 1   | GC.14  | <1.0  | [NT]          | [NT]                      | LCS       | [NT]             |
| 1,4-dichlorobenzene                   | mg/kg | 1   | GC.14  | <1.0  | [NT]          | [NT]                      | LCS       | [NT]             |
| 4-isopropyl toluene                   | mg/kg | 1   | GC.14  | <1.0  | [NT]          | [NT]                      | LCS       | [NT]             |
| 1,2-dichlorobenzene                   | mg/kg | 1   | GC.14  | <1.0  | [NT]          | [NT]                      | LCS       | [NT]             |
| n-butyl benzene                       | mg/kg | 1   | GC.14  | <1.0  | [NT]          | [NT]                      | LCS       | [NT]             |
| 1,2-dibromo-3-chloropropane           | mg/kg | 1   | GC.14  | <1.0  | [NT]          | [NT]                      | LCS       | [NT]             |
| 1,2,4-trichlorobenzene                | mg/kg | 1   | GC.14  | <1.0  | [NT]          | [NT]                      | LCS       | [NT]             |
| napthalene                            | mg/kg | 1   | GC.14  | <1.0  | [NT]          | [NT]                      | LCS       | [NT]             |
| hexachlorobutadiene                   | mg/kg | 1   | GC.14  | <1.0  | [NT]          | [NT]                      | LCS       | [NT]             |
| 1,2,3-trichlorobenzene                | mg/kg | 1   | GC.14  | <1.0  | [NT]          | [NT]                      | LCS       | [NT]             |
| QUALITY CONTROL                       | UNITS | PQL | METHOD | Blank | Duplicate Sm# | Duplicate results         | Spike Sm# | Spike % Recovery |
| vTPH & BTEX in Soil                   |       |     |        |       |               | Base II Duplicate II %RPD |           |                  |
| vTPH C <sub>6</sub> - C <sub>9</sub>  | mg/kg | 25  | GC.16  | <25   | 05/3367-1     | <25    <25                | LCS       | 122%             |
| Benzene                               | mg/kg | 1   | GC.14  | <1.0  | 05/3367-1     | <1.0    <1.0              | LCS       | 137%             |
| Toluene                               | mg/kg | 1   | GC.14  | <1.0  | 05/3367-1     | <1.0    <1.0              | LCS       | 100%             |
| Ethylbenzene                          | mg/kg | 1   | GC.14  | <1.0  | 05/3367-1     | <1.0    <1.0              | LCS       | 124%             |
| m + p-Xylene                          | mg/kg | 2   | GC.14  | <2.0  | 05/3367-1     | <2.0    <2.0              | LCS       | 129%             |
| o-Xylene                              | mg/kg | 1   | GC.14  | <1.0  | 05/3367-1     | <1.0    <1.0              | LCS       | 120%             |
| QUALITY CONTROL                       | UNITS | PQL | METHOD | Blank | Duplicate Sm# | Duplicate results         | Spike Sm# | Spike % Recovery |
| sTPH in Soil (C10-C36)                |       |     |        |       |               | Base II Duplicate II %RPD |           |                  |
| TPH C <sub>10</sub> - C <sub>14</sub> | mg/kg | 50  | GC.3   | <50   | 05/3367-1     | <50    <50                | LCS       | 60%              |
| TPH C <sub>15</sub> - C <sub>28</sub> | mg/kg | 100 | GC.3   | <100  | 05/3367-1     | <100    <100              | LCS       | 84%              |
| TPH C <sub>29</sub> - C <sub>36</sub> | mg/kg | 100 | GC.3   | <100  | 05/3367-1     | <100    <100              | LCS       | 89%              |
| QUALITY CONTROL                       | UNITS | PQL | METHOD | Blank | Duplicate Sm# | Duplicate results         | Spike Sm# | Spike % Recovery |
| PAHs in Soil                          |       |     |        |       |               | Base II Duplicate II %RPD |           |                  |
| Naphthalene                           | mg/kg | 0.1 | GC.12  | <0.10 | 05/3367-1     | <0.10    <0.10            | LCS       | 103%             |
| Acenaphthylene                        | mg/kg | 0.1 | GC.12  | <0.10 | 05/3367-1     | <0.10    <0.10            | LCS       | [NT]             |
| Acenaphthene                          | mg/kg | 0.1 | GC.12  | <0.10 | 05/3367-1     | <0.10    <0.10            | LCS       | [NT]             |
| Fluorene                              | mg/kg | 0.1 | GC.12  | <0.10 | 05/3367-1     | <0.10    <0.10            | LCS       | 103%             |
| Phenanthrene                          | mg/kg | 0.1 | GC.12  | <0.10 | 05/3367-1     | <0.10    <0.10            | LCS       | 107%             |
| Anthracene                            | mg/kg | 0.1 | GC.12  | <0.10 | 05/3367-1     | <0.10    <0.10            | LCS       | [NT]             |
| Fluoranthene                          | mg/kg | 0.1 | GC.12  | <0.10 | 05/3367-1     | <0.10    <0.10            | LCS       | 105%             |
| Pyrene                                | mg/kg | 0.1 | GC.12  | <0.10 | 05/3367-1     | <0.10    <0.10            | LCS       | 104%             |

| QUALITY CONTROL                   | UNITS | PQL  | METHOD | Blank  | Duplicate Sm# | Duplicate results         | Spike Sm# | Spike % Recover |
|-----------------------------------|-------|------|--------|--------|---------------|---------------------------|-----------|-----------------|
| PAHs in Soil                      |       |      |        |        |               | Base II Duplicate II %RPD |           |                 |
| Benzo(a)anthracene                | mg/kg | 0.1  | GC.12  | <0.10  | 05/3367-1     | <0.10    <0.10            | LCS       | [NT]            |
| Chrysene                          | mg/kg | 0.1  | GC.12  | <0.10  | 05/3367-1     | <0.10    <0.10            | LCS       | 105%            |
| Benzo(b,k)fluoranthene            | mg/kg | 0.2  | GC.12  | <0.20  | 05/3367-1     | <0.20    <0.20            | LCS       | [NT]            |
| Benzo(a)pyrene                    | mg/kg | 0.05 | GC.12  | <0.050 | 05/3367-1     | <0.050    <0.050          | LCS       | 99%             |
| Indeno(1,2,3-c,d)pyrene           | mg/kg | 0.1  | GC.12  | <0.10  | 05/3367-1     | <0.10    <0.10            | LCS       | [NT]            |
| Dibenzo(a,h)anthracene            | mg/kg | 0.1  | GC.12  | <0.10  | 05/3367-1     | <0.10    <0.10            | LCS       | [NT]            |
| Benzo(g,h,i)perylene              | mg/kg | 0.1  | GC.12  | <0.10  | 05/3367-1     | <0.10    <0.10            | LCS       | [NT]            |
| QUALITY CONTROL                   | UNITS | PQL  | METHOD | Blank  | Duplicate Sm# | Duplicate results         | Spike Sm# | Spike % Recover |
| Organochlorine Pesticides in soil |       |      |        |        |               | Base II Duplicate II %RPD |           |                 |
| HCB                               | mg/kg | 0.1  | GC-5   | <0.1   | 05/3367-1     | <0.1    <0.1              | LCS       | [NT]            |
| alpha-BHC                         | mg/kg | 0.1  | GC-5   | <0.1   | 05/3367-1     | <0.1    <0.1              | LCS       | 83%             |
| gamma-BHC                         | mg/kg | 0.1  | GC-5   | <0.1   | 05/3367-1     | <0.1    <0.1              | LCS       | [NT]            |
| beta-BHC                          | mg/kg | 0.1  | GC-5   | <0.1   | 05/3367-1     | <0.1    <0.1              | LCS       | 86%             |
| Heptachlor                        | mg/kg | 0.1  | GC-5   | <0.1   | 05/3367-1     | <0.1    <0.1              | LCS       | 76%             |
| delta-BHC                         | mg/kg | 0.1  | GC-5   | <0.1   | 05/3367-1     | <0.1    <0.1              | LCS       | [NT]            |
| Aldrin                            | mg/kg | 0.1  | GC-5   | <0.1   | 05/3367-1     | <0.1    <0.1              | LCS       | 82%             |
| Heptachlor Epoxide                | mg/kg | 0.1  | GC-5   | <0.1   | 05/3367-1     | <0.1    <0.1              | LCS       | 81%             |
| gamma-Chlordane                   | mg/kg | 0.1  | GC-5   | <0.1   | 05/3367-1     | <0.1    <0.1              | LCS       | [NT]            |
| alpha-chlordane                   | mg/kg | 0.1  | GC-5   | <0.1   | 05/3367-1     | <0.1    <0.1              | LCS       | [NT]            |
| Endosulfan I                      | mg/kg | 0.1  | GC-5   | <0.1   | 05/3367-1     | <0.1    <0.1              | LCS       | [NT]            |
| pp-DDE                            | mg/kg | 0.1  | GC-5   | <0.1   | 05/3367-1     | <0.1    <0.1              | LCS       | 78%             |
| Dieldrin                          | mg/kg | 0.1  | GC-5   | <0.1   | 05/3367-1     | <0.1    <0.1              | LCS       | 86%             |
| Endrin                            | mg/kg | 0.1  | GC-5   | <0.1   | 05/3367-1     | <0.1    <0.1              | LCS       | 81%             |
| pp-DDD                            | mg/kg | 0.1  | GC-5   | <0.1   | 05/3367-1     | <0.1    <0.1              | LCS       | 88%             |
| Endosulfan II                     | mg/kg | 0.1  | GC-5   | <0.1   | 05/3367-1     | <0.1    <0.1              | LCS       | [NT]            |
| pp-DDT                            | mg/kg | 0.1  | GC-5   | <0.1   | 05/3367-1     | <0.1    <0.1              | LCS       | [NT]            |
| Endrin Aldehyde                   | mg/kg | 0.1  | GC-5   | <0.1   | 05/3367-1     | <0.1    <0.1              | LCS       | [NT]            |
| Endosulfan Sulphate               | mg/kg | 0.1  | GC-5   | <0.1   | 05/3367-1     | <0.1    <0.1              | LCS       | 82%             |
| Methoxychlor                      | mg/kg | 0.1  | GC-5   | <0.1   | 05/3367-1     | <0.1    <0.1              | LCS       | [NT]            |

| QUALITY CONTROL                 | UNITS | PQL    | METHOD    | Blank   | Duplicate Sm# | Duplicate results         | Spike Sm# | Spike % Recovery |
|---------------------------------|-------|--------|-----------|---------|---------------|---------------------------|-----------|------------------|
| PCBs in Soil                    |       |        |           |         |               | Base II Duplicate II %RPD |           |                  |
| Arochlor 1016                   | mg/kg | 0.1    | GC-6      | <0.1    | 05/3367-1     | <0.1    <0.1              | LCS       | [NT]             |
| Arochlor 1232                   | mg/kg | 0.1    | GC-6      | <0.1    | 05/3367-1     | <0.1    <0.1              | LCS       | [NT]             |
| Arochlor 1242                   | mg/kg | 0.1    | GC-6      | <0.1    | 05/3367-1     | <0.1    <0.1              | LCS       | [NT]             |
| Arochlor 1248                   | mg/kg | 0.1    | GC-6      | <0.1    | 05/3367-1     | <0.1    <0.1              | LCS       | [NT]             |
| Arochlor 1254                   | mg/kg | 0.1    | GC-6      | <0.1    | 05/3367-1     | <0.1    <0.1              | LCS       | 106%             |
| Arochlor 1260                   | mg/kg | 0.1    | GC-6      | <0.1    | 05/3367-1     | <0.1    <0.1              | LCS       | [NT]             |
| QUALITY CONTROL                 | UNITS | PQL    | METHOD    | Blank   | Duplicate Sm# | Duplicate results         | Spike Sm# | Spike % Recovery |
| Total Phenolics in Soil         |       |        |           |         |               | Base II Duplicate II %RPD |           |                  |
| Total Phenolics (as Phenol)     | mg/kg | 5      | LAB.30    | <5.0    | 05/3367-17    | <5.0    <5.0              | LCS       | 94%              |
| QUALITY CONTROL                 | UNITS | PQL    | METHOD    | Blank   | Duplicate Sm# | Duplicate results         | Spike Sm# | Spike % Recovery |
| Acid Extractable metals in soil |       |        |           |         |               | Base II Duplicate II %RPD |           |                  |
| Arsenic                         | mg/kg | 4      | Metals.20 | <4.0    | 05/3367-3     | <4.0    <4.0              | AGAL-10   | 109%             |
| Cadmium                         | mg/kg | 1      | Metals.20 | <1.0    | 05/3367-3     | <1.0    <1.0              | AGAL-10   | 99%              |
| Chromium                        | mg/kg | 1      | Metals.20 | <1.0    | 05/3367-3     | 13    13    RPD: 0        | AGAL-10   | 104%             |
| Copper                          | mg/kg | 1      | Metals.20 | <1.0    | 05/3367-3     | 22    22    RPD: 0        | AGAL-10   | 102%             |
| Lead                            | mg/kg | 1      | Metals.20 | <1      | 05/3367-3     | 10    11    RPD: 10       | AGAL-10   | 106%             |
| Mercury                         | mg/kg | 0.1    | Metals.21 | <0.10   | 05/3367-3     | <0.10    <0.10            | AGAL-10   | 99%              |
| Nickel                          | mg/kg | 1      | Metals.20 | <1      | 05/3367-3     | 4    4    RPD: 0          | AGAL-10   | 106%             |
| Zinc                            | mg/kg | 1      | Metals.20 | <1      | 05/3367-3     | 18    20    RPD: 11       | AGAL-10   | 95%              |
| QUALITY CONTROL                 | UNITS | PQL    | METHOD    | Blank   | Duplicate Sm# | Duplicate results         | Spike Sm# | Spike % Recovery |
| Metals in TCLP extract          |       |        |           |         |               | Base II Duplicate II %RPD |           |                  |
| Arsenic                         | mg/L  | 0.05   | Metals.20 | <0.05   | [NT]          | [NT]                      | LCS       | 103%             |
| Cadmium                         | mg/L  | 0.01   | Metals.20 | <0.01   | [NT]          | [NT]                      | LCS       | 104%             |
| Chromium                        | mg/L  | 0.01   | Metals.20 | <0.01   | [NT]          | [NT]                      | LCS       | 97%              |
| Lead                            | mg/L  | 0.03   | Metals.20 | <0.03   | [NT]          | [NT]                      | LCS       | 91%              |
| Mercury                         | mg/L  | 0.0005 | Metals.21 | <0.0005 | [NT]          | [NT]                      | LCS       | 99%              |
| Nickel                          | mg/L  | 0.02   | Metals.20 | <0.02   | [NT]          | [NT]                      | LCS       | 93%              |
| QUALITY CONTROL                 | UNITS | PQL    | METHOD    | Blank   | Duplicate Sm# | Duplicate results         | Spike Sm# | Spike % Recovery |
| PAHs in TCLP (USEPA 1311)       |       |        |           |         |               | Base II Duplicate II %RPD |           |                  |
| Naphthalene                     | µg/L  | 1      | GC.12     | <1      | [NT]          | [NT]                      | LCS       | 91%              |
| Acenaphthylene                  | µg/L  | 1      | GC.12     | <1      | [NT]          | [NT]                      | LCS       | [NT]             |
| Acenaphthene                    | µg/L  | 1      | GC.12     | <1      | [NT]          | [NT]                      | LCS       | [NT]             |
| Fluorene                        | µg/L  | 1      | GC.12     | <1      | [NT]          | [NT]                      | LCS       | 76%              |
| Phenanthrene                    | µg/L  | 1      | GC.12     | <1      | [NT]          | [NT]                      | LCS       | 78%              |
| Anthracene                      | µg/L  | 1      | GC.12     | <1      | [NT]          | [NT]                      | LCS       | [NT]             |
| Fluoranthene                    | µg/L  | 1      | GC.12     | <1      | [NT]          | [NT]                      | LCS       | 79%              |

| QUALITY CONTROL           | UNITS | PQL | METHOD | Blank | Duplicate Sm# | Duplicate results         | Spike Sm# | Spike % Recovery |
|---------------------------|-------|-----|--------|-------|---------------|---------------------------|-----------|------------------|
| PAHs in TCLP (USEPA 1311) |       |     |        |       |               | Base    Duplicate    %RPD |           |                  |
| Pyrene                    | µg/L  | 1   | GC.12  | <1    | [NT]          | [NT]                      | LCS       | 77%              |
| Benzo(a)anthracene        | µg/L  | 1   | GC.12  | <1    | [NT]          | [NT]                      | LCS       | [NT]             |
| Chrysene                  | µg/L  | 1   | GC.12  | <1    | [NT]          | [NT]                      | LCS       | 78%              |
| Benzo(b)fluoranthene      | µg/L  | 2   | GC.12  | <2    | [NT]          | [NT]                      | LCS       | [NT]             |
| Benzo(a)pyrene            | µg/L  | 1   | GC.12  | <1    | [NT]          | [NT]                      | LCS       | 70%              |
| Indeno(1,2,3-c,d)pyrene   | µg/L  | 1   | GC.12  | <1    | [NT]          | [NT]                      | LCS       | [NT]             |
| Dibenzo(a,h)anthracene    | µg/L  | 1   | GC.12  | <1    | [NT]          | [NT]                      | LCS       | [NT]             |
| Benzo(g,h,i)perylene      | µg/L  | 1   | GC.12  | <1    | [NT]          | [NT]                      | LCS       | [NT]             |

| QUALITY CONTROL         | UNITS | Dup. Sm# | Duplicate               | Spike Sm# | Matrix Spike % Recovery |
|-------------------------|-------|----------|-------------------------|-----------|-------------------------|
| vTPH & BTEX in Soil     |       |          | Base + Duplicate + %RPD |           |                         |
| vTPH C6 - C9            | mg/kg | [NT]     | [NT]                    | 05/3367-4 | 108%                    |
| Benzene                 | mg/kg | [NT]     | [NT]                    | 05/3367-4 | 96%                     |
| Toluene                 | mg/kg | [NT]     | [NT]                    | 05/3367-4 | 96%                     |
| Ethylbenzene            | mg/kg | [NT]     | [NT]                    | 05/3367-4 | 114%                    |
| m + p-Xylene            | mg/kg | [NT]     | [NT]                    | 05/3367-4 | 122%                    |
| o-Xylene                | mg/kg | [NT]     | [NT]                    | 05/3367-4 | 111%                    |
| QUALITY CONTROL         | UNITS | Dup. Sm# | Duplicate               | Spike Sm# | Matrix Spike % Recovery |
| PAHs in Soil            |       |          | Base + Duplicate + %RPD |           |                         |
| Naphthalene             | mg/kg | [NT]     | [NT]                    | 05/3367-4 | 100%                    |
| Acenaphthylene          | mg/kg | [NT]     | [NT]                    | 05/3367-4 | [NT]                    |
| Acenaphthene            | mg/kg | [NT]     | [NT]                    | 05/3367-4 | [NT]                    |
| Fluorene                | mg/kg | [NT]     | [NT]                    | 05/3367-4 | 102%                    |
| Phenanthrene            | mg/kg | [NT]     | [NT]                    | 05/3367-4 | 103%                    |
| Anthracene              | mg/kg | [NT]     | [NT]                    | 05/3367-4 | [NT]                    |
| Fluoranthene            | mg/kg | [NT]     | [NT]                    | 05/3367-4 | 103%                    |
| Pyrene                  | mg/kg | [NT]     | [NT]                    | 05/3367-4 | 100%                    |
| Benzo(a)anthracene      | mg/kg | [NT]     | [NT]                    | 05/3367-4 | [NT]                    |
| Chrysene                | mg/kg | [NT]     | [NT]                    | 05/3367-4 | 97%                     |
| Benzo(b,k)fluoranthene  | mg/kg | [NT]     | [NT]                    | 05/3367-4 | [NT]                    |
| Benzo(a)pyrene          | mg/kg | [NT]     | [NT]                    | 05/3367-4 | 92%                     |
| Indeno(1,2,3-c,d)pyrene | mg/kg | [NT]     | [NT]                    | 05/3367-4 | [NT]                    |
| Dibenzo(a,h)anthracene  | mg/kg | [NT]     | [NT]                    | 05/3367-4 | [NT]                    |
| Benzo(g,h,i)perylene    | mg/kg | [NT]     | [NT]                    | 05/3367-4 | [NT]                    |

| QUALITY CONTROL                   | UNITS | Dup. Sm# | Duplicate               | Spike Sm# | Matrix Spike % Recovery |
|-----------------------------------|-------|----------|-------------------------|-----------|-------------------------|
| Organochlorine Pesticides in soil |       |          | Base + Duplicate + %RPD |           |                         |
| HCB                               | mg/kg | [NT]     | [NT]                    | 05/3367-4 | [NT]                    |
| alpha-BHC                         | mg/kg | [NT]     | [NT]                    | 05/3367-4 | 92%                     |
| gamma-BHC                         | mg/kg | [NT]     | [NT]                    | 05/3367-4 | [NT]                    |
| beta-BHC                          | mg/kg | [NT]     | [NT]                    | 05/3367-4 | 92%                     |
| Heptachlor                        | mg/kg | [NT]     | [NT]                    | 05/3367-4 | 89%                     |
| delta-BHC                         | mg/kg | [NT]     | [NT]                    | 05/3367-4 | [NT]                    |
| Aldrin                            | mg/kg | [NT]     | [NT]                    | 05/3367-4 | 87%                     |
| Heptachlor Epoxide                | mg/kg | [NT]     | [NT]                    | 05/3367-4 | 86%                     |
| gamma-Chlordane                   | mg/kg | [NT]     | [NT]                    | 05/3367-4 | [NT]                    |
| alpha-chlordane                   | mg/kg | [NT]     | [NT]                    | 05/3367-4 | [NT]                    |
| Endosulfan I                      | mg/kg | [NT]     | [NT]                    | 05/3367-4 | [NT]                    |
| pp-DDE                            | mg/kg | [NT]     | [NT]                    | 05/3367-4 | 98%                     |
| Dieldrin                          | mg/kg | [NT]     | [NT]                    | 05/3367-4 | 89%                     |
| Endrin                            | mg/kg | [NT]     | [NT]                    | 05/3367-4 | 66%                     |
| pp-DDD                            | mg/kg | [NT]     | [NT]                    | 05/3367-4 | 87%                     |
| Endosulfan II                     | mg/kg | [NT]     | [NT]                    | 05/3367-4 | [NT]                    |
| pp-DDT                            | mg/kg | [NT]     | [NT]                    | 05/3367-4 | [NT]                    |
| Endrin Aldehyde                   | mg/kg | [NT]     | [NT]                    | 05/3367-4 | [NT]                    |
| Endosulfan Sulphate               | mg/kg | [NT]     | [NT]                    | 05/3367-4 | 80%                     |
| Methoxychlor                      | mg/kg | [NT]     | [NT]                    | 05/3367-4 | [NT]                    |

| QUALITY CONTROL                 | UNITS | Dup. Sm#   | Duplicate               | Spike Sm#  | Matrix Spike % Recovery |
|---------------------------------|-------|------------|-------------------------|------------|-------------------------|
| PCBs in Soil                    |       |            | Base + Duplicate + %RPD |            |                         |
| Arochlor 1016                   | mg/kg | [NT]       | [NT]                    | 05/3367-4  | [NT]                    |
| Arochlor 1232                   | mg/kg | [NT]       | [NT]                    | 05/3367-4  | [NT]                    |
| Arochlor 1242                   | mg/kg | [NT]       | [NT]                    | 05/3367-4  | [NT]                    |
| Arochlor 1248                   | mg/kg | [NT]       | [NT]                    | 05/3367-4  | [NT]                    |
| Arochlor 1254                   | mg/kg | [NT]       | [NT]                    | 05/3367-4  | 114%                    |
| Arochlor 1260                   | mg/kg | [NT]       | [NT]                    | 05/3367-4  | [NT]                    |
| QUALITY CONTROL                 | UNITS | Dup. Sm#   | Duplicate               | Spike Sm#  | Matrix Spike % Recovery |
| Acid Extractable metals in soil |       |            | Base + Duplicate + %RPD |            |                         |
| Arsenic                         | mg/kg | 05/3367-13 | <4.0    <4.0            | 05/3367-3  | 107%                    |
| Cadmium                         | mg/kg | 05/3367-13 | <1.0    <1.0            | 05/3367-3  | 100%                    |
| Chromium                        | mg/kg | 05/3367-13 | 30    34    RPD: 12     | 05/3367-3  | 113%                    |
| Copper                          | mg/kg | 05/3367-13 | 52    31    RPD: 51     | 05/3367-3  | 125%                    |
| Lead                            | mg/kg | 05/3367-13 | 14    17    RPD: 19     | 05/3367-3  | 103%                    |
| Mercury                         | mg/kg | 05/3367-13 | <0.10    <0.10          | 05/3367-3  | 75%                     |
| Nickel                          | mg/kg | 05/3367-13 | 43    40    RPD: 7      | 05/3367-3  | 104%                    |
| Zinc                            | mg/kg | 05/3367-13 | 41    45    RPD: 9      | 05/3367-3  | 115%                    |
| QUALITY CONTROL                 | UNITS | Dup. Sm#   | Duplicate               | Spike Sm#  | Matrix Spike % Recovery |
| Acid Extractable metals in soil |       |            | Base + Duplicate + %RPD |            |                         |
| Arsenic                         | mg/kg | 05/3367-23 | <4.0    <4.0            | 05/3367-23 | 111%                    |
| Cadmium                         | mg/kg | 05/3367-23 | <1.0    <1.0            | 05/3367-23 | 100%                    |
| Chromium                        | mg/kg | 05/3367-23 | 5.5    5.5    RPD: 0    | 05/3367-23 | 155 %                   |
| Copper                          | mg/kg | 05/3367-23 | 1.1    1.2    RPD: 9    | 05/3367-23 | 111%                    |
| Lead                            | mg/kg | 05/3367-23 | 8    8    RPD: 0        | 05/3367-23 | 104%                    |
| Mercury                         | mg/kg | 05/3367-23 | <0.10    <0.10          | 05/3367-23 | 92%                     |
| Nickel                          | mg/kg | 05/3367-23 | 1    1    RPD: 0        | 05/3367-23 | 102%                    |
| Zinc                            | mg/kg | 05/3367-23 | 4    4    RPD: 0        | 05/3367-23 | 96%                     |

**Report Comments:**

# Trace Elements: high spike recovery has been obtained for Chromium for sample 23. This is may due to sample heterogeneity. However, an acceptable recovery has been obtained for the Reference Material (AGAL-10).

INS: Insufficient sample for this test

NR: Not requested

<: Less than

NA: Test not required

NT: Not tested

PQL: Practical Quantitation Limit

>: Greater than

**Quality Control Definitions**

LCS: Laboratory Control Sample

RPD: Relative Percent Difference

**Blank:** This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.

**Duplicate:** This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.

**Matrix Spike:** A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.

**LCS (Laboratory Control Sample):** This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.

**Surrogate Spike:** Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

**Laboratory Acceptance Criteria:**

Duplicates: <5xPQL - any RPD is acceptable; >5xPQL - 0-50% RPD is acceptable.

Matrix Spikes and LCS: Generally 70-130% for inorganics/metals & 60-140% for organics is acceptable.



## **EnviroLab Services Pty Ltd**

ABN 37 112 535 645

54 Frenchs Rd Willoughby NSW 2068

ph 02 9958 5801 fax 02 9958 5803

email: tnotaras@envirolabservices.com.au

### **SAMPLE RECEIPT ADVICE**

**Client:**

Douglas Partners  
96 Hermitage Rd  
West Ryde NSW 2114

ph: 02 9809 0666

Fax: 02 9809 4095

Attention: Polo Foo

**Sample log in details:**

Your reference:

**43650, Northmead**

EnviroLab Reference:

**05/3367**

Date received:

**21/12/05**

Date results expected to be reported:

**3/01/06**

Samples received in appropriate condition for analysis:

YES

Turnaround time requested:

Standard

Temperature on receipt

Cool

Cooling Method:

Ice Pack

Completed documentation received:

YES

**Comments:**

Samples will be held for 1 month for water samples and 2 months for soil samples from date of receipt of samples.

**Contact details:**

Please direct any queries to Tania Notaras

ph: 02 9958 5801 fax: 02 9958 5803

email: tnotaras@envirolabservices.com.au

## CHAIN OF CUSTODY DESPATCH SHEET

Project Name: Norvumead  
Project No: 43650  
DP Contact Person: Yolo Gao  
Prior Storage: ESKY fridge / shelved (circle)

To: Envirolab Services Pty Ltd  
54 Frenchs Road  
WILLOUGHBY NSW 2068  
Ph: 9958 5801 Fax: 9958 5803  
Attn: Tania Notaras

| Sample ID | Sample Type<br>S-soil:<br>W-water | Lab ID | Inorganics |      |      |      |      |       |      | Organics |                            |              |              |      |       |                           | Notes |
|-----------|-----------------------------------|--------|------------|------|------|------|------|-------|------|----------|----------------------------|--------------|--------------|------|-------|---------------------------|-------|
|           |                                   |        | As         | Cd   | Cr   | Cu   | Pb   | Hg    | Zn   | Ni       | Total /<br>GS/MS<br>Phenol | BTEX/<br>TPH | OCs/<br>PCBs | PAHs | Other | TCLP                      |       |
| 1105      | 1 S                               |        | ✓          | ✓    | ✓    | ✓    | ✓    | ✓     | ✓    | ✓        | ✓                          | ✓            | ✓            | ✓    | ✓     | PAH<br>As, Cd, Pb, Ni, Hg | ✓     |
| 1130      | 2                                 |        | ✓          | ✓    | ✓    | ✓    | ✓    | ✓     | ✓    | ✓        | ✓                          | ✓            | ✓            | ✓    | ✓     | ✓                         |       |
| 2105      | 3                                 |        | ✓          | ✓    | ✓    | ✓    | ✓    | ✓     | ✓    | ✓        | ✓                          | ✓            | ✓            | ✓    | ✓     | ✓                         |       |
| 3105      | 4                                 |        | ✓          | ✓    | ✓    | ✓    | ✓    | ✓     | ✓    | ✓        | ✓                          | ✓            | ✓            | ✓    | ✓     | ✓                         |       |
| 3115      | 5                                 |        | ✓          | ✓    | ✓    | ✓    | ✓    | ✓     | ✓    | ✓        | ✓                          | ✓            | ✓            | ✓    | ✓     | ✓                         |       |
| 4105      | 6                                 |        | ✓          | ✓    | ✓    | ✓    | ✓    | ✓     | ✓    | ✓        | ✓                          | ✓            | ✓            | ✓    | ✓     | ✓                         |       |
| 6105      | 7                                 |        | ✓          | ✓    | ✓    | ✓    | ✓    | ✓     | ✓    | ✓        | ✓                          | ✓            | ✓            | ✓    | ✓     | ✓                         |       |
| 7105      | 8                                 |        | ✓          | ✓    | ✓    | ✓    | ✓    | ✓     | ✓    | ✓        | ✓                          | ✓            | ✓            | ✓    | ✓     | ✓                         |       |
| 8105      | 9                                 |        | ✓          | ✓    | ✓    | ✓    | ✓    | ✓     | ✓    | ✓        | ✓                          | ✓            | ✓            | ✓    | ✓     | ✓                         |       |
| 9105      | 10                                |        | ✓          | ✓    | ✓    | ✓    | ✓    | ✓     | ✓    | ✓        | ✓                          | ✓            | ✓            | ✓    | ✓     | ✓                         |       |
| 10105     | 11                                |        | ✓          | ✓    | ✓    | ✓    | ✓    | ✓     | ✓    | ✓        | ✓                          | ✓            | ✓            | ✓    | ✓     | ✓                         |       |
| PQL (S)   | mg/kg                             |        | 0.05       | 1    | 5    | 3    | 5    | 0.01  | 5    | 0.5*     | *                          | *            | *            | *    | *     | *                         |       |
| PQL (W)   | mg/L                              |        | 0.001      | 0.01 | 0.05 | 0.03 | 0.05 | 0.005 | 0.01 | 0.05*    | *                          | *            | *            | *    | *     | *                         |       |

PQL = practical quantitation limit, \*As per Laboratory Method

Detection Limit

Send results to:

Douglas Partners Pty Ltd

Address: 96 Hermitage Road

West Ryde NSW 2114

Fax: 9809 4095

**SAMPLES RECEIVED**

Please sign and date to acknowledge receipt of samples and return by fax

Signature: *[Signature]*

Date: 21/12/05

Lab Ref: 3360

Date relinquished: 21/12/05

Total number of samples in container: 25

Results required by: 21/12/05

Relinquished by: *[Signature]*

Rev 1/November 2003



**Douglas Partners**  
Geotechnics - Environment - Groundwater

# CHAIN OF CUSTODY DESPATCH SHEET

243

Project Name: .....  
Project No: .....  
DP Contact Person: .....  
Prior Storage: esky / fridge / shelved (circle) .....

To: Envirolab Services Pty Ltd  
54 Frenchs Road  
WILLOUGHBY NSW 2068  
Ph: 9958 5801 Fax: 9958 5803  
Attn: Tania Notaras

| Atth: Iania Notarias |                                    |        |            |    |    |    |    |      |    |      |                            |              |                      |      |       |       |
|----------------------|------------------------------------|--------|------------|----|----|----|----|------|----|------|----------------------------|--------------|----------------------|------|-------|-------|
| Sample ID            | Sample Type<br>S-soil :<br>W-water | Lab ID | Inorganics |    |    |    |    |      |    |      | Organics                   |              |                      |      | Notes |       |
|                      |                                    |        | As         | Cd | Cr | Cu | Pb | Hg   | Zn | Ni   | Total /<br>GSIMS<br>Phenol | BTEX/<br>TPH | OCs/<br>OPs/<br>PCBs | PAHs |       | Other |
| 11/05                | 25                                 |        | ✓          | ✓  | ✓  | ✓  | ✓  | ✓    | ✓  | ✓    | ✓                          | ✓            | ✓                    | ✓    | ✓     | VOC   |
| 12/05                | 3                                  |        | ✓          | ✓  | ✓  | ✓  | ✓  | ✓    | ✓  | ✓    | ✓                          | ✓            | ✓                    | ✓    | ✓     |       |
| 13/05                | 4                                  |        | ✓          | ✓  | ✓  | ✓  | ✓  | ✓    | ✓  | ✓    | ✓                          | ✓            | ✓                    | ✓    | ✓     |       |
| 14/05                | 5                                  |        | ✓          | ✓  | ✓  | ✓  | ✓  | ✓    | ✓  | ✓    | ✓                          | ✓            | ✓                    | ✓    | ✓     |       |
| 14/30                | 6                                  |        | ✓          | ✓  | ✓  | ✓  | ✓  | ✓    | ✓  | ✓    | ✓                          | ✓            | ✓                    | ✓    | ✓     | ✓     |
| 14/37                | 7                                  |        | ✓          | ✓  | ✓  | ✓  | ✓  | ✓    | ✓  | ✓    | ✓                          | ✓            | ✓                    | ✓    | ✓     | ✓     |
| 15/05                | 8                                  |        | ✓          | ✓  | ✓  | ✓  | ✓  | ✓    | ✓  | ✓    | ✓                          | ✓            | ✓                    | ✓    | ✓     |       |
| 16/05                | 9                                  |        | ✓          | ✓  | ✓  | ✓  | ✓  | ✓    | ✓  | ✓    | ✓                          | ✓            | ✓                    | ✓    | ✓     |       |
| 17/05                | 20                                 |        | ✓          | ✓  | ✓  | ✓  | ✓  | ✓    | ✓  | ✓    | ✓                          | ✓            | ✓                    | ✓    | ✓     |       |
| 18/05                | 21                                 |        | ✓          | ✓  | ✓  | ✓  | ✓  | ✓    | ✓  | ✓    | ✓                          | ✓            | ✓                    | ✓    | ✓     |       |
| 19/05                | 22                                 |        | ✓          | ✓  | ✓  | ✓  | ✓  | ✓    | ✓  | ✓    | ✓                          | ✓            | ✓                    | ✓    | ✓     |       |
| PQL (S)              | mg/kg                              |        | 0.05       | 1  | 5  | 3  | 5  | 0.01 | 5  | 0.5* | *                          | *            | *                    | *    | *     |       |

PQL = practical quantitation limit, \*As per Laboratory Method  
Detection Limit

**SAMPLES RECEIVED**  
Please sign and date to acknowledge  
receipt of samples and return by fax

Send results to:  
Douglas Partners Pty Ltd  
Address: 96 Hermitage Road  
West Ryde NSW 2114

Date relinquished: .....  
Total number of samples in container: .....  
Results required by: .....  
Relinquished by: .....  
Signature: .....

Signature: .....  
Date: .....  
Lab Ref: .....

Fax: 9809 4095

Project Name: .....  
 Project No: .....  
 DP Contact Person: .....  
 Prior Storage: esky / fridge / shelved (circle) .....

To: Envirolab Services Pty Ltd  
 54 Frenchs Road  
 WILLOUGHBY NSW 2068  
 Ph: 9958 5801 Fax: 9958 5803  
 Attn: Tania Notaras

3/3

| Sample ID | Sample Type<br>S-soil<br>W-water | Lab ID | Inorganics |    |    |    |    |    |    |    |                            |              | Organics             |      |       |   |   | TCLP | Notes |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------|----------------------------------|--------|------------|----|----|----|----|----|----|----|----------------------------|--------------|----------------------|------|-------|---|---|------|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|           |                                  |        | As         | Cd | Cr | Cu | Pb | Hg | Zn | Ni | Total /<br>GS/MS<br>Phenol | BTEX/<br>TPH | OCs/<br>OPs/<br>PCBs | PAHs | Other |   |   |      |       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
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PQL = practical quantitation limit, \*As per Laboratory Method  
 Date relinquished: .....  
 Total number of samples in container: .....  
 Results required by: .....  
 Relinquished by: .....  
 Signature: .....

SAMPLES RECEIVED  
 Please sign and date to acknowledge receipt of samples and return by fax  
 Signature: .....  
 Date: ..... Lab Ref: .....

Send results to:  
 Douglas Partners Pty Ltd  
 Address: 96 Hermitage Road  
 West Ryde NSW 2114  
 Fax: 9809 4095

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***APPENDIX E***  
***Quality Assurance / Quality Control Results***

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## QA/QC PROCEDURES AND RESULTS

### FIELD QUALITY ASSURANCE AND QUALITY CONTROL

The field QC procedures for sampling as prescribed in Douglas Partners *Field Procedures Manual* were followed at all times during the validation assessment. Field sampling comprised replicate sampling, at a rate of approximately one replicate sample for every ten original samples.

#### ***Rinsate Sample***

Equipment rinsate sample was not necessary due to the use of disposable sampling equipment.

#### ***Replicate Samples***

The field QC comprised the collection of replicate samples during the course of sampling. Replicate sample BD1/201205 and its original sample was submitted for analysis along with other selected soil samples. The soil replicate was analysed for heavy metals (As, Cd, Cr, Cu, Pb, Hg, Ni and Zn). Comparative results of analysis are included in Table 1. Relative Percentage Differences (RPD) was calculated as an assessment of the result consistency.

### RELATIVE PERCENTAGE DIFFERENCE

A measure of the consistency of results for field samples is derived by the calculation of relative percentage differences (RPDs) for replicate samples. A RPD of  $\pm 30\%$  is generally considered acceptable for inorganic analytes by EPA, although in general a wider RPD range may be acceptable for organic and inorganic analytes.

The comparative results of analysis between original and replicates are summarised in the table below.

**Table 1 - RPD Results for Heavy Metals, TRH, BTEX and PAH**

| Sample ID  | As | Cd | Cr III | Cu  | Pb | Hg   | Ni | Zn |
|------------|----|----|--------|-----|----|------|----|----|
| 1/0.5      | <4 | <1 | 13     | 8.6 | 14 | <0.1 | 4  | 11 |
| BD1/201205 | <4 | <1 | 8.4    | 3.5 | 10 | <0.1 | 3  | 7  |
| %RPD       | 0  | 0  | 43     | 84  | 33 | 0    | 29 | 44 |

The calculated RPD values for the samples and their replicates were generally within the acceptable range of  $\pm 30\%$  with the exception of Chromium (III), Copper, Lead and Zinc. The calculated RPDs exceeding the acceptability range are not, however, considered to be of significant concern due to the generally low levels of metals detected (relative to the adopted guideline levels), the low actual differences in concentration and the overall good quality of the QA/WC data. Therefore, the findings are unlikely to affect the assessment results.

It is therefore considered that the results indicate an acceptable consistency between the samples and their replicates and indicate that suitable field sampling methodology was adopted and laboratory precision was achieved.

## LABORATORY QA/QC PROCEDURES

### *Intra-laboratory Procedures*

The following QA/QC procedures were conducted by the laboratory.

#### *Reagent Blank*

This sample is prepared and analysed at the beginning of every analytical run, following calibration of the analytical apparatus. The laboratory results for reagent blanks for soil analyses indicated concentrations of all analytes to be below laboratory detection limits. These results are included in the laboratory report in Appendix C.

#### *Spike Recovery*

This is a sample replicate prepared by adding a known amount of analyte prior to analysis, and then treated exactly the same as all other samples. The recovery result

indicates the proportion of the known concentration of the analyte that is detected during analysis. These results are included in the laboratory report in Appendix C. The spike recovery rates are compared with limits as specified in Envirolab Services Quality Control System, and any exceedances are highlighted in the report.

The spike recovery all fell within the acceptable range with the exception of chromium for Sample 20/0.5 where high spike results were reported. *'However, an acceptable recovery has been obtained for the Reference Material (AGAL-10)'*. On this basis, it is considered that the spike recovery results are acceptable and does not materially affect the assessment results.

### ***Surrogate Recovery***

This sample is prepared by adding a known amount of surrogate, which behaves similarly to the analyte, prior to analysis to each sample. The recovery result indicates the proportion of the known concentration of the surrogate that is detected during analysis.

The surrogate recovery rates are compared with limits as specified in Envirolab Services and any exceedances are highlighted in the report.

As no exceedances and no comments were noted on the report, it is considered that the results indicate that the analytical results are not significantly affected by matrix interference.

### ***Duplicates***

These are additional portions of a sample which are analysed in exactly the same manner as all other samples. The duplicate sample results are included in the laboratory results in Appendix C.

In overall terms, therefore, the data quality objectives have been attained and the quality of the investigation data is considered acceptable.