Environmental Site Assessment – Stage 1 Investigation

7-9 Gibbons Street, Redfern NSW

24 August 2009 3001747

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Project Name:	Stage 1 ESA - Gibbons Street, Redfern NSW
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Report for:	Lawson Square Pty Ltd

PREPARATION, REVIEW AND AUTHORISATION

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Stage 1 ESA - Gibbons Street, Redfern NSW

For: Kimberley Securities Limited

AUGUST 24, 2009

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1 INTRODUCTION

1.1 Background

SMEC was engaged by Brett McKechnie, on behalf of Lawson Square Pty Ltd, to provide a Phase 1 Contamination Assessment for the site located at 9 Gibbons Street, Redfern NSW (the site).

SMEC understands that a Phase 1 Contamination Assessment is required to facilitate a Development Application (DA) related to a proposed site redevelopment.

The site is located within the City of Sydney Council (Council) local government area and is zoned *Business – Commercial Core* under State Environmental Planning Policy 2005. The site is currently occupied by a four storey car park with a commercial office located on the ground floor. SMEC understands that the existing development was constructed in the early 1970s and the site layout has remained substantially unchanged.

1.2 Proposed Redevelopment

The proposed redevelopment consists in an 18 storey building with underground car park comprising:

- Four (4) levels underground car park;
- One (1) ground level car park;
- Three (3) levels occupied by retail premises; and
- Fourteen (14) occupied by residential premises.

1.3 Project Objectives

The objectives of the Phase 1 Contamination Assessment are to:

- determine the potential for contamination to be present at the subject site;
- determine if contamination potentially poses any risk to human health or the environment and/or has the potential to preclude development of the site for commercial / residential purposes; and
- prepare a Preliminary Contamination Assessment in accordance with the requirements of relevant NSW EPA Guidelines and Council's DCP No.42 – Contaminated Land Management.

1.4 Scope of works

The scope of works for this Stage 1 ESA includes:

- review of information relating to the current site condition, including:
  - Site Planning (s149) Certificate;
  - Geological and lithological maps of the area;
  - Groundwater data; and
  - Acid Sulphate Soil Risk Map.
- site history review comprising:
  - Historical aerial photography over the past 40-50 years;
  - Historical Land Title Search;
  - Historical Council Records;
  - Current and past NSW WorkCover Licenses to Keep Dangerous Goods at the site;
  - NSW Environmental Protection Authority (EPA) Contaminated Land Searches; and
  - Existing literature regarding contamination assessments.
- site walkover by SMEC Environmental Engineer to assess present and past potentially contaminating activities, current landforms and site condition;
- preparation of a Draft Stage 1 ESA report presenting information gained during the above tasks and providing preliminary recommendations; and
- Preparation of Final Stage 1 ESA report including consideration of comments from relevant stakeholders.

1.5 Published Guidelines And Framework

The assessment has been undertaken in accordance with applicable legislation and guidelines including:

- National Environment Protection Council, *National Environmental Protection Measures* 1998;
- NSW EPA, *Contaminated Sites – Guidelines for Consultants Reporting on Contaminated Sites*, 1997; and
- *State Environmental Planning Policy No.55 - Contaminated Land*, 1998.

2 SITE LAND USE AND DESCRIPTION

2.1 Site Location and Land Zoning

The site is situated in Redfern, a suburb located south of Sydney CBD, New South Wales. The investigated site consists of a parcel of land located on the eastern side of Gibbons Street between Redfern Street and Marian Street, as indicated in **Figure 1, Appendix A**. The site area is estimated to be approximately 1,618m^2.

The site is indicated as "Business Zone – Commercial Core" by the Planning Certificate under Section 149 of the Environmental Planning and Assessment Act. 1979 and comprises three lots, identified as follows:

- Lot B DP 354297; and
- Lot 6 and 8 DP4209.

Gibbons Street runs along the western boundary of the site. Redfern Street is located along the northern boundary and Marian Street borders the southern boundary of the site. The eastern boundary of the site is located adjacent to William lane.

Redfern train station is situated approximately 50m west of the site. The railway line runs in a north west-south east direction.

2.2 Site Ownership and Land Use

The site is currently owned by Brett McKechnie of Lawson Square Pty Ltd. The ground floor is leased by "Travelex", a foreign currency exchange company. Levels 1 to 4 of the site are used as a car park.

2.3 Site Planning Certificates

Planning Certificates detailing information provided pursuant to Section 149(2) of the EP&A Act for the site were obtained from City of Sydney Council and revealed the following, with regard to contamination,:

- The land is zoned for Business - Commercial Core land use and development other than bulky good premises, depots, dual occupancies, dwelling house, hazardous industries, storage and establishments, heavy duties, light industries, offensive industries, restricted premises, transport depots, vehicle body repair workshops, warehouses and distribution centres, is allowed;
- The property is not affected by a draft zone;
- the car park;
- The land is not affected by:
    - The operation of section 38 and 39 of the coastal protection act, 1979;
    - Mine subsidence;
    - Road widening and/or realignment; and
    - Other hazard risk restrictions.
- The land is not within land declared to be an investigation area of remediation site under Part 3 of the *Contaminated Land Management Act 1997*;
- The land is not subject to an investigation or a remediation order within the meaning of the *Contaminated Land Management Act 1997*; and

- No risk of tidal inundation, landslip, bushfire, subsidence has been identified for the site. Council may restrict the development of land if the potential for the risk of land contamination or acid sulphate soils exists.

Planning Certificates from Section 149(2) of the EP&A Act for the site are presented in **Appendix B**.

2.4 Adjacent Land Uses

The site is located in an area generally occupied by residential and commercial premises, with some light industrial land use. The adjacent land use is as follows:

- North: Redfern RSL is located adjacent to the northern boundary of the site and includes a concrete building and a sealed car park area. A multi storey building, comprising a police station and an educational facility, is situated on the opposite side of Redfern Street;
- East: Residential and commercial premises are located beyond William Lane.
- South: A Council depot, used for the storage of garbage is located south of the site, beyond Marian Street; and
- West: Redfern train station is situated approximately 50m west of the site, beyond Gibbons Street.

2.5 Topography and Landforms

Gibbons Street slopes to the south, in accordance with the natural grade of the surrounding area. The bottom level of the site is a basement with a flat surface. The southern boundary of the site is at ground level and northern part approximately 2m below ground level.

2.6 Vegetation

No prominent vegetation was observed within the site perimeter during the site visit conducted on 10 August 2009.

2.7 Regional Geology

The published geological maps (NSW Geological Survey 1;250,000 Sydney geological Series Sheet S1 56-5, 1966, 3rd Edition) indicate the geology at the site to be underlain by Triassic aged Hawkesbury Sandstone, characterised by the presence of sandstone, quartz and some shale.

2.8 Regional Lithology

The site is situated in an area of highly disturbed soils and it is considered that little natural soil is still in place within the site area. In general, the Redfern area includes both the Blacktown and Tuggerah soil landscapes.

The Blacktown Landscape is characterised by gently undulating rises on shales of the Wianamatta Group and Hawkesbury shales.

Soils are shallow to moderately deep red and brown podzolic soils on crests, upper slopes and well drained areas; deeper Yellow Podzolic Soils and soliths are found on lower slopes and in areas of poor drainage.

Limitations for these soil types include the presence of highly plastic subsoil, generally characterised by low soil fertility and poor soil drainage.

The Tuggerah landscape comprises gently undulating to rolling coastal dunefields. Slope gradients are generally low. Dunes are north-south oriented with convex narrow crests. The vegetation consists of extensively cleared open forest and woodland.

Deep soils include podzols on dunes and Podzol/Humus Podzol intergrades on swales.

Limitations for these soil types include extreme wind erosion hazard, and the presence of non cohesive, highly permeable soil, very low soil fertility, localized flooding and permanently high water tables.

2.9 Hydrology and Hydrogeology

The site is entirely occupied by a concrete building and is therefore sealed and under cover. No standing surface water was noticed within the premises. Surface water in the surrounding area is likely to flow to the south, in accordance with the general topography. The water flowing overland is likely to discharge into Alexandria canal, located approximately 2km directly south of the site.

SMEC completed a preliminary search of the Department of Water and Energy Online Database to identify groundwater bores within the vicinity of the site. The search indicates that there are five (6) boreholes registered under the Database within a 1 km radius from the site. **Figure 2** in **Appendix A** shows the locations of the identified groundwater boreholes in relation to the site.

Table 1 describes the characteristics and locations of the registered groundwater boreholes.

Table 1- Summary of borehole information

Borehole ID	Standing Water Level (mbgl)	Yield (L/min)	Electrical Conductivity (EC, uS/cm)	Comments
071907	2.00	1.90	--	Borehole located ~350m south east of the site. According to the drilling log, fill material is followed by sand at 3.00m bgl and shale bedrock at 6.50m bgl. The bore is 6.50m deep and used for privately owned.
109500	2.30	--	--	Borehole located ~450m north east of the site. The bore is 4.80m deep and used for monitoring purposes.
109503	2.24	--	--	Borehole located ~450m north west of the site. The bore is 5.20m deep and is used for monitoring purposes.
106192	--	--	--	Borehole located ~500m south of the site. The bore is used for domestic purposes.

Borehole ID	Standing Water Level (mbgl)	Yield (L/min)	Electrical Conductivity (EC, uS/cm)	Comments
105938	--	--	--	Borehole located ~600m south west of the site. The bore is 4.00m deep and used for monitoring purposes.
109744	1.50	--	--	Borehole located ~750m south east of the site. The bore is 4.00m deep and used for monitoring purposes.

According to the information provided by the Database, groundwater was encountered in sandy soils above shale bedrock.

The groundwater standing water level (SWL) in the area is generally located between 2.00m and 2.30m below the ground level. According to information provided by the Department of Water and Energy for borehole 071907, the groundwater yield was approximately 1.90 L/min.

2.10 Acid Sulphate Soil Risk

The digital 1:25,000 DIPNR Acid Sulphate Soil Risk Map (1997) indicated that the site is not located in an acid sulphate soil prone area. However the Sydney Harbour sediments located at approximately 2000m north of the site are identified as subject to high risk of occurrence of acid sulphate soil.

3 SITE HISTORY AND OBSERVATIONS

3.1 Review of Historical Aerial Photographs

Table 2 lists the historical aerial photographs that were obtained and the review observations. Aerial photographs dated between 1930 and 2005 were reviewed.

The photos revealed that the study area was developed prior to 1930, when it was occupied by a building of industrial/commercial appearance. Between 1930 and 1951, the existing building was replaced by a number of smaller rectangular structures, accordingly to the lot division at that time.

Between 1970 and 1986 the site was redeveloped into its current layout and has remained substantially unchanged since.

The TNT towers, on the northern side of Redfern Street were developed approximately at the same time. The building immediately north of the site, currently Redfern RSL, experienced several redevelopments before acquiring its current appearance, between 1986 and 2005.

Redfern train station and the railway line were in place in 1930 and appear to have remained unchanged. The area surrounding the site was already extensively developed in 1930.The general land use in has remained substantially unchanged, showing mixed residential, commercial and industrial features.

Table 2- Summary of historical aerial photograph information

Year	Site Description and Surrounding Area
20 February 1930 Sydney, Run 16 B/W Scale Unknown	The site appears occupied by a building and a small paved area on the northern part. The structure is rectangular with a sloping roof and appears to be of commercial/industrial nature. This may suggest that the site was used for commercial or industrial purposes. The surrounding area is densely developed and generally shows residential, commercial and light industrial features. The lots surrounding the study area appear to be mostly occupied by commercial and industrial premises. Redfern Station and the railway line are visible west of the site.
May 1951 Sydney, Run 14 B/W Scale unknown	The open area in the northern part of the site appears unchanged. The rest of the site appears to be occupied by a number of narrow, tall, rectangular buildings adjacent to each other, in accordance with the lot division at the time of the photograph. The general land use in the surrounding area has remained substantially unchanged in comparison to the 1930 photograph. The area between the train station and Gibbons Street, directly west of the site, appears occupied by small buildings, sheds and cargo containers.
7 July 1970 Cumberland Run 18 B/W Scale unknown	The site appears substantially unchanged in comparison to the 1951 photograph. Some parked vehicles are visible in the open area in the north of the site. The surrounding area has remained substantially unchanged in comparison to the 1951 photograph.

Year	Site Description and Surrounding Area
2 August 1986 Run 23E Colour Scale 1:16,000	The site has been redeveloped into a multi-level car park. Several vehicles are parked on the top level. The new building occupies the entire site area. The building immediately north of the site has experienced some degree of redevelopment and a parking area is now visible along Gibbons Street. The TNT towers have been erected on the northern side of Redfern Street, replacing two smaller buildings. The area between the train station and Gibbons Street, directly west of the site, has been cleared and is now occupied by a sealed car park and some trees. The general land use in the surrounding area has remained substantially unchanged in comparison to the 1970 photograph.
10 December 2005 Run 11 Colour Scale 1:25,000	The layout of the site appears substantially unchanged in comparison with the 1986 photograph. The building immediately north of the site has experienced some further redevelopment and part of the former parking area is now occupied by a building resembling the current structure (Redfern RSL). The general land use in the surrounding area has remained substantially unchanged in comparison to the 1986 photograph.

Refer to **Appendix C** for aerial photos summarised within Table 2.

3.2 Historical Land Title Search

SMEC contacted *Espreon* to request a search of current and past Land Titles for the three lots comprised within the study area. *Espreon* disclosed the records summarised in Table 3.

Table 3- Summary of historical land title information

Lot and Plan	Land Title Certificate Date	Purchaser/Leasers	Activity/Profession
	27/9/1946	Owner: Arthur Alexander Murrel	Fish and poultry merchant
Lot B DP 354297	1956	Owner: Green's Product s Limited	--
	1959	Owner: Andrew Hamilton	Manufacturer
	1971	Owner: TNT Redfern Pty Ltd	--
	1998	Lessee: Data Security Services	--
	1993	Owner: TNT Australia Pty Ltd	--
	1999	Lessee: Kunama Security Pty Ltd	--
	1999	Lessee: Wyne Nickless Limited	--
	2003	Owner: Kimberley Securities Limited	--
	2003, 2005, 2008	Lessee: Travelex Limited	Currency Exchange

Lot and Plan	Land Title Certificate Date	Purchaser/Leasers	Activity/Profession
Lots 6 and 8 DP 4209	1945	Owner: Andrew Hamilton	Business manager
	1961	Owner: Diva Holdings Pty Ltd	--
	1971	Owner: TNT Redfern Pty Ltd	--
	1993	Lessee: Data Security Services Pty Ltd	--
	1993	Owner: TNT Australia	--
	1993	Lessee: Group 4 TNT Security Pty Ltd	--
	1999	Lessee: Kunama Security Pty Ltd	--
	1999	Lessee: Wyne Nickless Limited	--
	2003	Owner: Kimberley Securities Limited	--
	2003, 2005, 2008	Lessee: Travelex Limited	Currency Exchange

The Title Certificates revealed that the lots comprised by the site have been held by private owners and by a number of private companies.

Copies of the historical land title certificates obtained are included in **Appendix D**.

3.3 Licenses To Keep Dangerous Goods

NSW WorkCover was contacted by SMEC to conduct a search of records pertaining to Licences to Keep Dangerous Goods at the site.

A search of the Stored Chemical information database (SCID) and the microfiche records held by WorkCover NSW disclosed the following information, related to Dangerous Goods Licence 35/007522:

- An application for renewal of licences to keep dangerous goods at the site was submitted by TNT Management in April 1991. The application was related to a 30,000L underground tank containing flammable liquids; and
- A declaration of abandonment of tank was presented in March 1994 by TNT Fleet management. The content was removed and the tank was filled with water and rust inhibitor and sealed.

No site plans showing the location of the tank were provided by WorkCover.

WorkCover documentation is included in **Appendix E**.

3.4 NSW DECC Contaminated Land Search

NSW DECC Contaminated Land records were searched and no Notices for the site were identified. No records were held in relation to the land within 1km radius from the site. However some records were identified in the surrounding area within 2km radius from the site. The outcomes of the search are summarised below.

Table 4- Summary of EPA register information

Business name	Distance and direction from site	EPA Contaminated Land Notice	Comments
Lawrence Dry Cleaners	1.1km SE	Declaration of investigation area (Ref. 15026), one current declaration of remediation site (Ref 21084)	Elevated levels of chlorinated hydrocarbons, and vinyl chloride have been detected in the groundwater at the site.
Alexandria Canal	1.5km, SW	1 current remediation order (Ref. 23004), 1 current declaration of remediation site (Ref. 21008)	The bed sediments at the site have been found to be contaminated with chlorinated hydrocarbons including organochlorine pesticides, polychlorinated biphenyls (PCBs) and metals.
Cadbury Schwepps Site, Alexandria	1.5km, S	One current notice of existence of voluntary remediation proposal (Ref.26094)	Fill material at the site caused zinc contamination in the groundwater.

3.5 Review of Existing Literature

No environmental studies or investigations appear to have been undertaken at the site in the past, with the exception of a Hazardous Material Survey for the TNT Plaza in 2002. The TNT site surveyed includes the two TNT towers, the car park and the secured facility at 7-9 Gibbons Street. In addition, an environmental investigation was undertaken in 2008 for the site adjacent to the northern boundary of the study area. A summary of the findings of both studies is presented below.

Noel Arnold & Associates – *Hazardous Materials Survey, TNT Australia Pty Limited TNT Plaza, Redfern NSW*, 2002

The report documents the findings of a hazardous material survey conducted at the TNT Plaza located at Lawson Square, Redfern. The audit includes two buildings, the car park and the Armaguard depot (the secured facility currently occupied by Travelex, defined as the TNT site (the study area).The main focus of the survey was to report upon the location and extent of hazardous materials at the site as part of pre-divestment works. Hazardous materials assessed were asbestos, synthetic mineral fibres (SMF), polychlorinated biphenyls (PBCs) and lead paint.

Hazardous material of various nature were identified within the TNT car park premises (the site). In particular:

- Asbestos containing mustard-coloured brittle vinyl floor tiles were identified throughout the Armaguard depot (currently occupied by Travelex);
- Compressed SMF ceiling tiles were found at the Travelex area;
- PBC-containing capacitors were present in the single-tube fluorescent lights located throughout the Armaguard depot. Old style PBC-era, single tube fluorescent light fittings were identified in the TNT car park. These lights are likely to contain PBC but were not examined due to live power supply.

JBS Environmental – *Environmental Site Assessment, 157 Redfern Street, Redfern NSW,* 2008

An environmental investigation was conducted at the Redfern RSL site by JBS Environmental in 2008. The investigation revealed the existence of a grease trap and a disused UST in the cellar area, in the vicinity of the southern boundary of the site.

Ten soil boreholes were drilled across the site to a depth between 0.35m and 1.0m and 22 soil samples were collected at various depths. One shallow soil sample was collected up gradient from the disused UST.

Building rubble containing brick, cement, glass, plastic and tile fragments, was encountered in the fill material at all sampling locations. Natural soils comprising residual clay were found at approximately 0.8m. PAH odour was noticed in one borehole in the vicinity of the former UST at a depth of 0.15m.

Selected samples were submitted for laboratory analysis including heavy metals, TPH, PAH, OPC, PBC, VHC, sulphate, cyanide, total actual acidity and asbestos.

The analytical results showed several exceedances of the adopted standard residential criteria (NEHF-A) for lead, chromium, Benzo(a)pyrene and total PAH in various samples

across the site. The level of Benzo(a)pyrene in one location was above the commercial/industrial adopted criteria (NEHF-F).

A water sample was collected form the content of the disused UST within the cellar, comprising oily water mixed with a petroleum product. Laboratory analysis revealed the presence of elevated concentrations of semi-volatile TPH constituents.

The fill material encountered at the site was considered generally suitable for future site use as commercial/industrial or high density residential with minimal access to soils. In case a proposed redevelopment include accessible soil, then remediation involving the removal of contaminated soil will be required. It was recommended that the UST and its contents be removed by a licensed contractor. The removal of contaminated backfilling soil was also contemplated.

An extract from the report, including figures and a laboratory result summary table, is presented in **Appendix F.**

3.6 Site Interviews

During the site visit conducted by SMEC on 10 August 2009 an interview was conducted with Mr Brett McKechnie, the site owner. According to Mr McKechnie, the existing building was erected in 1972 and the site use, including foreign currency exchange and car park, hasn't changed since.

Mr. McKechnie stated that no fuel or other flammable liquids are currently stored on site, and he was not aware of the presence of UST, AST or other flammable liquid storage being held at the site in the past.

3.7 Site Inspection

Overview

A site inspection was undertaken by a SMEC Environmental Scientist on 10 August 2009. The purpose of the site inspection was to ensure all areas of potential environmental concern are identified and to field-check the desktop information.

Purpose

The purpose of the detailed site reconnaissance was to gather non-invasive data to increase the confidence in the conceptual understanding of the spatial extent of historic activities and disturbed areas across the site. In order to achieve this, general site observations were made and the location of areas of environmental concern and potential environmental receptors were noted.

The detailed site inspection was undertaken to identify, locate and map the following surface features:

- Disturbed ground possibly in the form of trenches or mounds;
- Waste disposal, including domestic rubbish and building rubble, including asbestos (fragments and sheets);
- Stained or odorous soils;

- Eroded soils;
- Unnatural changes in vegetation (including evidence of cleared ground or vegetation potentially impacted by contamination);
- The location of site structures, including evidence of potential underground structures; and
- Potential environmental receptors.

Site Observations

The site is entirely occupied by a four storey concrete building. The building appears to be approximately 30 years old. A secured foreign currency exchange terminal occupies the majority of the basement level, with the exception of the north western corner, which due to the site topography sloping south, is at ground level and is occupied by the entrance to a car park. The upper levels of the building are entirely used as a car park.

The basement is occupied by “Travelex”, a money exchange company. It comprises a secured access walkway, several rooms for office use, various storage areas for paper and cardboard material, a kitchen and toilet facilities. The facility is entirely with concrete floors in good condition. The office rooms are paved with carpet and brittle vinyl floor tiles of mustard colour were noticed in several areas. The ceilings in the basement level are lined with sprayed fibro material showing signs of moisture staining and damaging in some corners. The lighting at the site is provided by single tube fluorescent lights, with non screwed ends and plastic cover casing.

At the time of the site some cardboard and paper material was piled in a concrete sealed corner of the basement to be disposed as waste. Two old air-con units were noticed in the same area awaiting disposal.

The car park surfaces, entirely concrete sealed, were observed in good conditions.

3.8 Site History Summary

The historical aerial photograph review revealed that the site was developed before 1930, when it was occupied by a building of industrial/commercial appearance. Between 1930 and 1951, the existing building was replaced by a number of smaller rectangular structures, accordingly to the lot division at that time.

According to the historical Land Title documentation, the site has belonged to various private owners since the 1940s and has primarily been used for commercial purposes. In 1971 TNT Redfern Pty Ltd acquired all lots; the aerial photograph documentation show that the site was redeveloped between 1970 and 1986 and the site owner, Mr. Brett McKechnie, stated that the current building was erected in 1972, presumably by TNT.

The site was then leased to various companies and finally purchased by Kimberley Securities Limited (the current owner) in 2003. Since then it has been leased to Travelex Limited, a money exchange company, which is the current occupier of the basement level of the building.

A Hazardous Material Survey conducted at the TNT Plaza and including the study area revealed the presence of hazardous materials within the site structures, including asbestos containing brittle vinyl floor tiles, compressed SMF ceiling tiles in the secured facility and PBC-containing capacitors in the single-tube fluorescent lights at the Travelex area. Potentially PBC-containing lights were found in the car-park.

An environmental investigation conducted at the site adjacent to the north boundary of the site revealed the presence of contaminated soil potentially associated with the presence of a grease trap and a former UST located up-gradient of the site boundary.

A search for records of licenses to keep dangerous goods at the site issued by WorkCover revealed the existence of an application for renewal of a license submitted in 1991 for a 30,000L tank containing flammable liquids. According to the records the tank was decommissioned in 1994 by removing all content and filling with waster and anti-rust agent. The UST was not identified during the site inspection and Mr McKechnie was not aware of its existence.

4 POTENTIAL AREAS AND CONTAMINANTS OF ENVIRONMENTAL CONCERN

4.1 Potential Sources of Contamination

On site

Potential on-site sourced for site contamination are:

- The site topography was noticed to be flat, while the surrounding land slopes naturally towards south: imported fill material of unknown origin may have been used to level the site;
- Leaks and spills of oil and fuels from vehicles may have occurred in the car park area;
- The aerial photographs show that the site experienced several redevelopments before 1970: hazardous material were potentially contained in former buildings;
- Unknow previous site activities may have included commercial/small industrial, activities which may have affected soils locally;
- Hazardous materials (including asbestos containing brittle vinyl tiles, compressed SMF ceiling tiles and PBC-containing capacitors in the fluorescent lights) were identified within the premises (Noel Arnold & Associates, 2002); and
- WorkCover revealed the existence of a 30,000L decommissioned UST within the premises, formerly containing flammable liquids. This tank may have adversely impacted on subsoils.

Surrounding Land

Potential off-site sources for site contamination are:

- TPH, BTEX and PAH contamination associated with an UST identified in previous studies on the adjacent, up-gradient site, could have affected subsoils under this site; and
- The regional groundwater is known to be affected by anthropogenic activities.

4.2 Potential Areas of Environmental Concern (AECs) and Contaminants of Concern (CoCs)

Based on the site history review and the observations made during the site visit, a number of potential areas of environmental concern (AECs) and associated contaminants of concern (CoCs) were identified. These are summarised in Table 5.

Table 5- Summary of potential AECs and CoCs

Potential AECs	Potentially contaminating activity	CoC	Observations
Entire Site	Shallow importation of contaminated fill	Metals, PAHs, TPH, BTEX, PCB, OCP, OPP, asbestos	The site surface is flat, while the surrounding area slopes towards south. Fill material of unknown origin may have been imported and used to level the site surface. Although the site is lower than the street level, suggesting that cutting works may have been undertaken to level the site, fill material was encountered at an adjacent site (JBS, 2008) with a similar layout.
Car park area	Oil leaks from vehicles used and parked on site	Metals, PAHs, TPH, BTEX, VOCs, SVOCs	Fuel or oil may have leaked from the vehicles and penetrated into the soil in localised parts of the site. However the penetration may have been limited by the concrete pavement which is in good condition. Moreover, the car park, with the exception of the entrance, is situated on the upper levels of the buildings.
Entire site	Demolition, renovation, weathering of former buildings which potentially contained hazardous materials	Asbestos, lead, PCBs	The aerial photograph documentation revealed that the site has experienced several redevelopments involving the demolition of former structures prior 1970. Hazardous materials potentially contained in the former buildings may have leached into the ground or remained in site soils following demolition, renovation or weathering activities.
Entire site	Weathering of current structures potentially containing hazardous materials	Asbestos, lead, PCBs	Hazardous materials (including asbestos containing brittle vinyl tiles, compressed SMF ceiling tiles and PBC-containing capacitors in the fluorescent lights) were identified within the premises. Although the site in entirely sealed with concrete surfaces, which may have limited the penetration of hazardous material in the soil, the presence of such materials should be taken into

Potential AECs	Potentially contaminating activity	CoC	Observations
			consideration during demolition works.
Entire site	Leaks and spills from the decommissioned UST located within the premises, formerly containing flammable liquids	Metals, PAHs, TPH, BTEX	WorkCover revealed the presence of a 30,000L UST at the site, used to store flammable liquids since at least 1991 and decommissioned in 1994 by the removal of the contents and the filling with water and anti-rust agent. Tank contents may have leaked and affected soil and groundwater at the site.
Entire site (Up-gradient Section)	Contaminant migration from RSL UST	Metals, PAHs, TPH, BTEX	Contamination associated with the presence of a disused UST was found in the soil of the dwelling adjacent to the north boundary of the site. The site appears to be up-gradient from the study area and contaminants may have migrated on site and affected soil and groundwater.
Entire Site	Regional groundwater	Organics, metals	Regional groundwater contamination may affect the groundwater under the site. Contact with groundwater is not expected, but ac at this stage not be excluded.

5 CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

Based on the work carried out by SMEC for this Phase 1 Contamination Assessment, SMEC concludes that:

1. Development consent is required to facilitate the redevelopment of the premises into an 18 storey building including 4 levels underground car park;
2. The site is entirely sealed with concrete pavement in good condition;
3. Potential contamination issues include:
    a. The potential presence of imported fill of unknown origin that might underlay some sections of the current building slab;
    b. Minor oil leaks and spills from the vehicle in the car park area, and hazardous building materials in former or current structures;
    c. A decommissioned 30,000L petrol UST in the down gradient corner of the site; and
    d. Potential migration of hydrocarbon contamination from an UST on the adjacent and up-gradient RSL property.
4. The proposed redevelopment includes the demolition of all current structures, the removal of the concrete capping, the excavation of the site surface for the creation of a four level underground car park and the erection of an 18 storey building;
5. Ground conditions are unlikely to currently pose unacceptable risks to human health;
6. Site development may expose limited contamination associated with fill, and USTs;
7. Site investigations would be required to chemically characterise site conditions, and if required, determine suitable management procedures. Such investigations could be conducted during the subsequent development approval stages;
8. If contamination is encountered, and following appropriate remediation, the site will be suitable for the proposed development; and
9. Hazardous material (hazmat) contained within the current structures would have to be managed adequately not to pose unacceptable risks to workers and the public during demolition.

5.2 Recommendations

On the basis of the Phase 1 Investigation results and considering site contamination aspects only, SMEC recommends that:

1. Site investigations be conducted during the following stages of the development process to chemically characterise site conditions, and if required, determine suitable management procedures. The investigations should initially focus on potential contamination associated with the off-site UST, on-site UST, and potential fill. Following demolition, further testing may be required to characterise any shallow sub-slab fill and for waste classification purposes to determine off-site disposal options;
2. The site be considered suitable for the proposed development, under the assumption that some contamination management will be required, and subject to findings from future soil sampling and testing; and
3. The conclusions and recommendations are not considered without considering the remainder of the report.

6 REFERENCES

Australian Standard AS4482, 2005

Geological Survey of New South Wales, *Sydney Geology Map, 1:250,000 Geological Series Sheet S1 56-5*, 3rd Edition, 1966

JSB Environmental, *Environmental Site Assessment, 157 Redfern Street, Redfern NSW,* 2008

National Environmental Protection Council, *National Environmental Protection Measures*, 1998

NSW DPNR, *1:25,000 Acid Sulphate Soils Risk Map*, 1997

NSW EPA, *Contaminated Sites – Guidelines for Consultants Reporting on Contaminated Sites*, 1997.

State Environmental Planning Policy No 55 – Contaminated Land, 1998

APPENDIX A – SITE FIGURES

DATE 11/08/2009	**SCALE** 1:1,000 (0 5 10 20 Meters)	**COORDINATE SYSTEM** MGA 94 Zone 56	**FIG NO.** 1
FIGURE TITLE Site Location Plan			
PROJECT NO. 3001747	**PROJECT TITLE** Phase 1 Contamination Assessment, 7-9 Gibbons Street, Redfern NSW	**CREATED BY** B. Stewart	**LOCATION** R:\group information\Environment and Planning\ EandP\Cassie\Projects\7-9 Gibbons Street, Redfern

SMEC

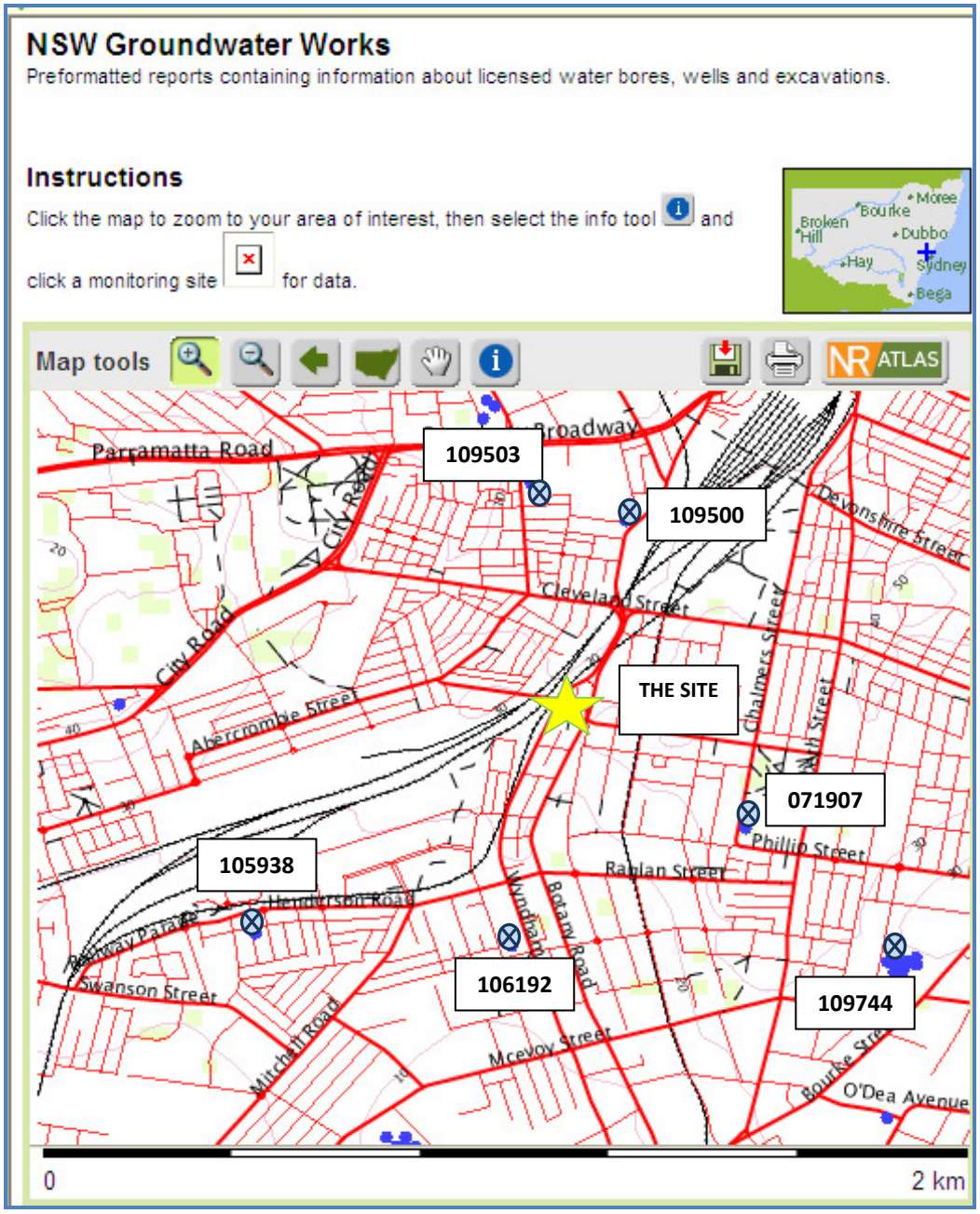


Fig 2 – Location of registered groundwater bores within 1km radius from the site.

APPENDIX B – SECTION 149 PLANNING CERTIFICATES

City of Sydney
ABN 22 636 550 790
GPO Box 1591 Sydney NSW 2001 Australia
Town Hall House 456 Kent Street Sydney NSW 2000 Australia
Phone +61 2 9265 9333 Fax +61 2 9265 9222 TTY +61 2 9265 9276
council@cityofsydney.nsw.gov.au www.cityofsydney.nsw.gov.au

CITY OF SYDNEY

KIMBERLEY SECURITIES LTD
LEVEL 2 90 NEW SOUTH HEAD ROAD
EDGECLIFF NSW 2027

PLANNING CERTIFICATE

Under Section 149 of the Environmental Planning and Assessment Act, 1979

Applicant:	KIMBERLEY SECURITIES LTD
Applicant's reference:	
Address of property:	7-9 Gibbons Street , REDFERN NSW 2016
Owner (as per last valuation):	KIMBERLEY SECURITIES LTD
Description of land:	Lot B DP 354297, Lot 1 Sec 9 DP 4209, Lot 2 Sec 9 DP 4209, Lot 3 Sec 9 DP 4209, Lot 4 Sec 9 DP 4209, Lot 5 Sec 9 DP 4209, Lot 6 Sec 9 DP 4209, Lot 7 Sec 9 DP 4209, Lot 8 Sec 9 DP 4209, Lot 9 Sec 9 DP 4209
Area:	
Certificate No.:	2007303725
Certificate Date:	25/05/07
Receipt No:	2516355
Fee:	$40.00
Paid:	24/05/07

Title information, description, dimensions and area of land are provided from data supplied by the valuer general and shown where available.

Issuing Officer
per **Monica Barone**
Chief Executive Officer

CERTIFICATE ENQUIRIES:
Ph: 9265 9333
Fax: 9265 9415

Certificate No:2007303725

PLANNING CERTIFICATE UNDER SECTION 149 (2) OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

MATTERS AFFECTING THE LAND AS PRESCRIBED BY SCHEDULE 4 - ENVIRONMENTAL PLANNING & ASSESSMENT REGULATION, 2000, CLAUSES (1) - (2).

DEVELOPMENT CONTROLS

The following information must be read in conjunction with and subject to all other provisions of the environmental planning instruments specified in this certificate. In addition to the controls listed below clause 29 of the Environmental Planning And Assessment (Savings And Transitional) Regulation 1998 sets out further circumstances where development consent will be required for particular development. These circumstances may include development that does not require development consent under the controls listed below. A copy of clause 29 is attached.

ZONING

Zoned Business Zone – Commercial Core - State Environmental Planning Policy (Major Projects) 2005 (Amendment 7)

Clause 9

(2) Development for ay of the following purposes is prohibited on land within the Business Zone- Commercial Core

Bulky goods premises; depots; dual occupancies; dwelling house; hazardous industries; hazardous storage establishments; heavy industries; home occupations (sex services), industries, light industries; offensive industries; offensive storage establishments; restricted premises; sex services premises; transport depots; truck depots; vehicle body repair workshops; warehouses or distribution centres

(3) Except as otherwise provided by this Policy, development is permitted with consent on land within the Business Zone – commercial Core unless it is prohibited by Subclause (2).

Clause 17 Exempt development

The following development is exempt development if it is carried out on land Within the Redfern – Waterloo Authority Sites, is of minimal environmental impact and complies with the criteria set out in the guidelines prepared by the Redfern – Waterloo Authority (and Approved by the Minister and made publicly available) for the purposes of this clause:

(a) The temporary use of the land for community events that are open to the general public, including public gatherings, ceremonies, sporting events or outdoor exhibitions,
(b) The erection and use of temporary structures, having minimal visual impact, for the purposes of, or in connection with, any such community event,
(c) The erection and use of outdoor seating, tables and similar furniture located in the public domain and associated with cafes, restaurants, bars and other similar development,
(d) The erection and use of public furniture, planter boxes, lighting, bus shelters, public telephone boots or post boxes, or the carrying out of street planing, footpath widening and related road works, undertaken by a public authority,
(e) The erection and use of public furniture and the carrying out of landscaping associated with existing public recreation areas, such as the erection of shade structures, tables seats, children's play equipment, barbeques and toilets,
(f) Development for the purposes of real estate signs,

(g) The erection of a flagpole, if the maximum height of the flagpole is not more than 6 metres above existing ground level,
(h) Erection of a side or rear boundary fence located behind the front wall of a building, if the fence does not exceed 1.8 metres in height and is not of masonry construction,
(i) The use of premises for home business.

PROPOSED ZONING

This property is not affected by a draft zone.

LOCAL PLANNING CONTROLS

City of Sydney Signage and Advertising Structures Development Control Plan 2005 (commenced 28.03.2005) – This DCP applies to all land within the City of Sydney Local Government Area, the boundaries of which may change from time to time. An indicative map of the City of Sydney is shown in Figure 1 within the DCP.

City of Sydney Visitor and Tourist Accommodation Development Control Plan 2006 (commenced 24.03.2006) – This DCP applies to all land within the City of Sydney Local Government Area, the boundaries of which may change from time to time. An indicative map of the City of Sydney is shown in Figure 1 within the DCP.

City of Sydney Telecommunications and Radiocommunications Development Control Plan 2006 (commenced 14.08.2006) – This DCP applies to all land within the City of Sydney Local Government Area, the boundaries of which may change from time to time. An indicative map of the City of Sydney is shown below in Figure 1 with in the DCP.

HERITAGE

State Heritage Register **(Amendment To Heritage Act, 1977 Gazetted 2/4/99)**
This property may be identified as being of state heritage significance, and entered on the State Heritage Register.

To confirm whether the site is listed under the Heritage Act 1977 a Section 167 Certificate should be obtained from the NSW Heritage Office by contacting the NSW Heritage office on (02) 9873 8500 for an application from or by downloading the application form from www.heritage.nsw.gov.au

STATE PLANNING CONTROLS

Clause 29 of the Environmental Planning and Assessment (Savings And Transitional) Regulation 1998 affects the provisions of certain state environmental planning policies and how they apply to the land. A copy of clause 29 is attached and should be read in conjunction with the State Environmental Planning Policies listed. Full copies of State Environmental Planning Policies are available online at www.planning.nsw.gov.au.

State Environmental Planning Policy No. 1 – Development Standards
This policy makes development standards more flexible. It allows Council to approve a development proposal that does not comply with a set standard where this can be shown to be unreasonable or unnecessary.

State Environmental Planning Policy No. 4 – Development without Consent and Miscellaneous Complying Development
This policy allows relatively simple or minor changes of land or building use and certain types of development by public authorities without the need for formal development applications. The types of development covered are outlined in the policy.

State Environmental Planning Policy No. 6 – Number of Storeys In a Building
This policy sets out a method for determining the number of storeys in a building, to prevent possible confusion arising from the interpretation of various environmental planning instruments.

State Environmental Planning Policy No. 8 – Surplus Public Lands
This policy only applies to surplus public land, so as to allow for its effective development in an appropriate manner.

State Environmental Planning Policy No. 9 – Group Homes
The policy controls the development of group homes on all land where dwellings are allowed.

State Environmental Planning Policy No. 10 – Retention of Low-Cost Accommodation
This policy aims to provide a mechanism for the retention of low-cost rental accommodation. The policy establishes criteria for determining a low-cost rental residential building (including boarding houses, hostels and low rental residential flat buildings), matters for Council consideration and requirements for development proposed under the policy.

State Environmental Planning Policy No. 11 – Traffic Generating Developments
This is a policy that requires applications for development listed in schedules 1 and 2 of the policy to be referred to the Roads and Traffic Authority for its comments prior to determination.

State Environmental Planning Policy No. 16 – Tertiary Institutions
This policy permits any kind of tertiary institution on land zoned for a specific kind of tertiary institution.

State Environmental Planning Policy No. 19 – Bushland in Urban Areas
This is a policy to protect and preserve bushland within certain urban areas, as part of the natural heritage or for recreational, educational and scientific purposes. This policy is designed to protect bushland in public open space zones and reservations, and to ensure that bush preservation is given a high priority when local environmental plans for urban development are prepared.

State Environmental Planning Policy No. 22 – Shops and Commercial Premises
This policy allows, with the consent of Council, a change of use from a shop to another kind of shop or commercial premises, where the new use is prohibited under an environmental planning instrument.

State Environmental Planning Policy No. 32 – Urban Consolidation
This policy implements the principles of urban consolidation, including the orderly, economic use and development of land. The policy enables urban land which is no longer required for the purpose for which it is currently zoned or used to be redeveloped for multi-unit housing and related development.

State Environmental Planning Policy No. 33 – Hazardous and Offensive Development
This policy aims to amend the definitions of hazardous and offensive industries; to render ineffective any environmental planning instruments not defining hazardous or offensive as per this policy; to control development of hazardous and offensive industries.

State Environmental Planning Policy No. 34 – **Major Employment Generating Industrial Development**
This policy aims to promote and coordinate orderly and economic use of development land and facilitate certain types of major employment generating industrial development of state significance.

State Environmental Planning Policy No. 37 – Continued Mines and Extractive Industries
This policy aims to provide for certain existing mines and extractive industries to continue to operate subject to conditions during the three month registration period and the two year moratorium period.

State Environmental Planning Policy No. 43 –New Southern Railway
This Policy aims to promote the social and economic welfare of the State through the provision of a public transport facility linking Sydney's central business district and Sydney (Kingsford Smith) Airport, and to promote the development of Sydney in particular as a world class tourist destination through the provision of such a public transport facility for the use of tourists to and travellers within Australia as well as commuters within the Sydney metropolitan area, by enabling the construction and operation of the New Southern Railway.
This Policy provides that development for the purpose of the New Southern Railway may be carried out without development consent. Consequently, that development will be environmentally assessed under Part 5 of the Environmental Planning and assessment Act 1979.

State Environmental Planning Policy No. 51 – Eastern Distributor
This Policy aims to co-ordinate the orderly and economic development of land comprising the site of the Eastern Distributor by enabling all parts of the Eastern Distributor to be subject to a consistent process of assessment under Part 5 of the Environmental Planning and assessment Act 1979.

This Policy provides that development for the purpose of the Eastern Distributor may be carried out without development consent. Consequently, that development will be assessed under Part 5 of the Environmental Planning and assessment Act 1979.

State Environmental Planning Policy No. 55 – Managing Land Contamination
This policy provides planning controls for the remediation of contaminated land. The policy states that land must not be developed if it is unsuitable for a proposed use because it is contaminated. If the land is unsuitable, remediation must take place before the land is developed. The policy makes remediation permissible across the State, defines when consent is required, requires all remediation to comply with standards, ensures land is investigated if contamination is suspected, and requires councils to be notified of all remediation proposals.
To assist councils and developers, the Department, in conjunction with the Environment Protection Authority, has prepared Managing Land Contamination: Planning Guidelines.

State Environmental Planning Policy No. 63 – Major Transport Projects
This policy aims to facilitate the Parramatta Rail Line, Liverpool-Parramatta Transitway, Cross City Tunnel and the Bondi Beach Rail Link by:

- Co-ordinating the orderly and economic development of land by providing for the assessment of those projects under Part 5 of the Environmental Planning and Assessment Act, 1979 (as amended), and
- Requiring development applications involving excavation, or other penetration of the ground that may affect any of those projects to be referred for comment to the proponent of the relevant project.

Development applications that are to be referred to the proponent include applications that involve excavation or other penetration of the ground to the relevant depth on land in the transport corridor of a major transport project, or land that is the site of a project facility outside any such transport corridor. In the City of Sydney the relevant depth is 3 metres or more measured vertically from the best assessment of natural ground level.

State Environmental Planning Policy No. 63 – Major Transport Projects (Amendment No 4)

The aim of this Policy is to amend State Environmental Planning Policy No. 63 – Major Transport Projects to, among other things

(a) Require the concurrence of RialCorp to development applications that may affect land within rail corridors for the real expansion project and

(b) Require a public authority that proposes to carry out development of a kind for which concurrence is not required but may affect land within rail corridors for the rail expansion project to notify RailCorp in writing of particulars of the proposed development.

State Environmental Planning Policy No. 64 – Advertising and Signage

This policy aims to ensure that signage (including advertising):
Is compatible with the desired amenity and visual character of an area, and
Provides effective communications in suitable locations, and
Is of a high quality design and finish.

To this end the policy regulates signage (but not content) under Part 4 of the Act and provides limited time consents for the display of certain advertisements. The policy does not apply to signage that is exempt development under an environmental planning instrument. It does apply to all signage that can be displayed with or without consent and is visible from any public place or reserve, except as provided by the policy.

This policy should be read in conjunction with the Central Sydney Local Environmental Plan 1996, the City of Sydney Signage and Advertising Structures Development Control Plan 2003 and State Environmental Planning Policy No. 60 where these apply.

State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Buildings

This policy aims to improve the design quality of flats of three or more storeys with four or more self contained dwellings. The policy sets out a series of design principles for local councils to consider when assessing development proposals for residential flat development. The policy also creates a role for an independent design review panel and requires the involvement of a qualified designed in the design and approval process.

State Environmental Planning Policy No. 69 – Major Electricity Supply Projects

This policy aims to clarify the planning, decision-making and assessment process of the TransGrid Picnic Point to Haymarket 330kV electricity supply proposal and Energy Australia's Haymarket to Surry Hills 132kV electricity supply proposal. This policy requires development applications that involve excavation, or other penetration of the ground and that may affect the project to be referred for comment to the proponent of that project.

State Environmental Planning Policy (Seniors Living) 2004

This Policy does not apply to land described in Schedule 1 (Environmentally sensitive land), or land that is zoned for industrial purposes, or land to which an interim heritage order made under the *Heritage Act 1997* by the Minister administering that Act applies, or land to which a listing on the State Heritage Register kept under the *Heritage Act 1997* applies.

The Policy aims to encourage the provision of housing (including residential care facilities) that will increase the supply and diversity of residences that meet the needs of seniors or people with a disability, and make efficient use of existing infrastructure and services, and be of good design.

State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004

Aims to ensure consistency in the implementation of the BASIX scheme throughout the State. This Policy achieves its aim by overriding provisions of other environmental planning instruments and development control plans that would otherwise add to, subtract from or modify any obligations arising under the BASIX scheme.

State Environmental Planning Policy (ARTC Rail Infraestructure) 2004
The aim of this Policy is to facilitate development for the purposes of rail infrastructure facilities that are subject to arrangements between the Australian Rail Track Corporation Ltd and State rail authorities.
This Policy provides that development for the purposes of certain rail infrastructure facilities may be carried out without development consent. Consequently, that development will be assessed under Part 5 of the Act.

State Environmental Planning Policy (Major Projects) 2005
This Policy aims to identify development of economic, social or environmental significance to the State or regions of the State so as to provide a consistent and comprehensive assessment and decision making process for that development.

State Environmental Planning Policy (Sydney Metropolitan Water Supply) 2004
The aim of the policy is to facilitate development for water supply infrastructure to enable deep water extraction from dams supplying water to the Sydney metropolitan area, to facilitate investigation into the availability of groundwater to augment water supply to the Sydney metropolitan area (including the carrying out of exploratory drilling), to facilitate development for the purposes of desalination plants (including pilot plants) to augment water supply to the Sydney metropolitan area

DRAFT State Environmental Planning Policy No. 66 – Integrating Land Use and Transport
Aims to ensure that urban structure, building forms, land use locations, development designs, subdivision and street layouts help achieve planning objectives such as improved accessibility to housing, employment and services by walking, cycling and public transport.

DRAFT State Environmental Planning Policy (Application of Development Standards) 2004 (proposed to replace SEPP No.1)
Aims to provide an appropriate degree of flexibility in the application to particular development of a development standard specified in or under an environmental planning instrument, and to achieve better outcomes for and from development in the circumstances addressed in this Policy, and to promote good strategic planning practice by incorporating provisions allowing flexibility in local environmental plans.

REGIONAL PLANNING CONTROLS

Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005
This plan applies to land within the Sydney Harbour Catchment, as shown edged heavy black on the Sydney Harbour Catchment Map, being part of the Sydney Region declared by order published in Gazette No 38 of 7 April 1989 at page 1841.

This plan has the following aims with respect to the Sydney Harbour Catchment:
to ensure that the catchment, foreshores, waterways and islands of Sydney Harbour are recognised, protected and maintained: as outstanding natural asset, and as a public asset of national and heritage significance, for existing and future generations; to ensure a healthy, sustainable environment on land and water; to achieve a high quality urban environment; to ensure a prosperous working waterfront and an effective transport corridor, to encourage a culturally rich and vibrant place for people; to ensure accessibility to and along Sydney Harbour and its foreshores; to ensure the protection, maintenance and rehabilitation of watercourses, wetlands, riparian lands, remnant vegetation and ecological connectivity, to provide a consolidated, simplified and updated legislative framework for future planning.

Certificate No:2007303725

OTHER MATTERS AFFECTING THE LAND AS PRESCRIBED BY SCHEDULE 4 - E. P. & A. REGULATION, 2000. CLAUSES (3) - (10)

(3) Any development, or class of development, that is State Significant Development by virtue of a declaration that has been made by the Minister under section 76A(7)(b) of the Act and that applies to the land.

This item has been omitted from planning certificates vide Government Gazette No. 96 of 29/7/05

(4) Coastal Protection Act, 1979

The council has not been notified by the department of public works that the land is affected by the operation of section 38 or 39 of the coastal protection act, 1979.

(5) Mine Subsidence District

This land has not been proclaimed to be a mine subsidence district within the meaning of section 15 of the mine subsidence compensation act, 1961

(6) Road Widening and/or Road Realignment affected by (a) Division 2 of Part 3 of the Roads act 1993 or (c) any resolution of council or other authority

This land **is not** affected by road widening and/or road realignment under section 25 of the Roads Act, 1993 and/or resolution of Council or any other authority.

(6) Road Widening and/or Road Realignment Affected by (b) any environmental planning instrument.

This land **is not** affected by any road widening or road realignment under any planning instrument

(7) Council and other public authorities policies on hazard risk restrictions.

(a) The land **is not** affected by a policy adopted by the Council that that restricts the development of the land because of the likelihood of land slip, bushfire, flooding, tidal inundation, subsidence, acid sulphate soils or any other risk; and

(b) The land **is not** affected by a policy adopted by any other public authority and notified to the council for the express purpose of its adoption by that authority being referred to on planning certificate issued by Council, that restricts the development of the land because of the likelihood of land slip, bushfire, flooding, tidal inundation, subsidence, acid sulphate soils or any other risk.

(8) Land reserved for acquisition

No environmental planning instrument, deemed environmental planning instrument or draft environmental planning instrument applying to the land provides for the acquisition of the land by a public authority, as referred to in section 27 of the Act.

Certificate No:2007303725

(9) Contribution plans

The following Contributions Plans apply to properties within the City of Sydney local government area. Contributions plans marked **YES** may apply to this property.

• Central Sydney Contributions (Amendment) Plan 2002 – in operation 16th June 2003	**NO**
• Ultimo Pyrmont Section 94 Contributions Plan (approved C.S.P.C 15th December 1994 and Council 19th December 1994)	**NO**
• City of Sydney Development Contributions Plan 2006 – in operation 7th April 2007	**NO**
• Redfern Waterloo Authority Contributions Plan 2006 – in operation 16th May 2007 • Redfern Waterloo Authority Affordable Housing Contributions Plan – in operation 16th May 2007	**YES**

(10) Matters arising under the Contaminated Land Management Act 1997

(a) The land to which the certificate relates **is not** within land declared to be an **investigation area** or **remediation site** under Part 3 of the Contaminated Land Management Act 1997.

(b) The land to which the certificate relates **is not** subject to an **investigation order** or a **remediation order** within the meaning of the Contamination Land Management Act 1997.

(c) The land to which the certificate relates **is not** the subject of a voluntary investigation proposal (or voluntary remediation proposal) the subject of the Environmental Protection Authority's agreement under section 19 or 26 of the Contaminated Land Management Act 1997.

(d) At the date of issue of this section 149 certificate, Council **has not** identified that a site audit statement has been received in respect of the land the subject of the certificate. Council is in the process of reviewing systems for the purpose of identifying whether a site audit statement has been received in respect of this land. Parties should make specific requisitions in relation to contamination to the owner of the land.

(11) Bush fire prone land

The land has not been identified as Bush fire prone land.

(12) Property vegetation plans

Not Applicable

(13) Orders under Trees (Disputes Between Neighbours) Act 2006

Council has not been notified of an order which as been made under the *Trees (Disputes Between Neighbours) Act 2006* to carry out work in relation to a tree on the land.

Certificate No:2007303725

PLANNING CERTIFICATE SECTION 149(2) INFORMATION:
Information provided in accordance with planning certificate section 149 (2) has been taken from council's records and advice from other authorities but council disclaims all liability for any omission or inaccuracy in the information. Specific inquiry should be made where doubt exists.

For information regarding outstanding notices and orders a CERTIFICATE FOR OUTSTANDING NOTICES OF INTENTION AND/OR AN ORDER UNDER SECTION 735A OF THE LOCAL GOVERNMENT ACT, 1993 AND SECTION 121ZP OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979 may be applied for at Sydney City Council.

Planning certificate section 149 (2), local planning controls are available for inspection at the following Council locations:

General Enquiries:
Telephone: 02 9265 9333
Facsimile: 02 9265 9415

Town Hall House
Level 2,
Town Hall House,
456 Kent Street,
Sydney
8am – 6pm, Monday - Friday

Neighbourhood Service Centre Redfern
TNT Tower 2,
1 Lawson Square
Redfern
9am – 5pm, Monday – Friday
9am – 12pm, Saturday

Neighbourhood Service Centre Glebe Town Hall
Glebe Town Hall,
160 St. Johns Road,
Glebe
8.30am – 5.30pm, Monday - Friday

Neighbourhood Service Centre Kings Cross
50 Darlinghurst Road,
Potts Point
9am – 5pm, Monday – Friday
9am – 12pm, Saturday

Neighbourhood Service Centre Erskineville
104 Erskineville Road
Erskineville
9am – 5pm, Monday – Friday

State planning controls are available for inspection at the following locations:

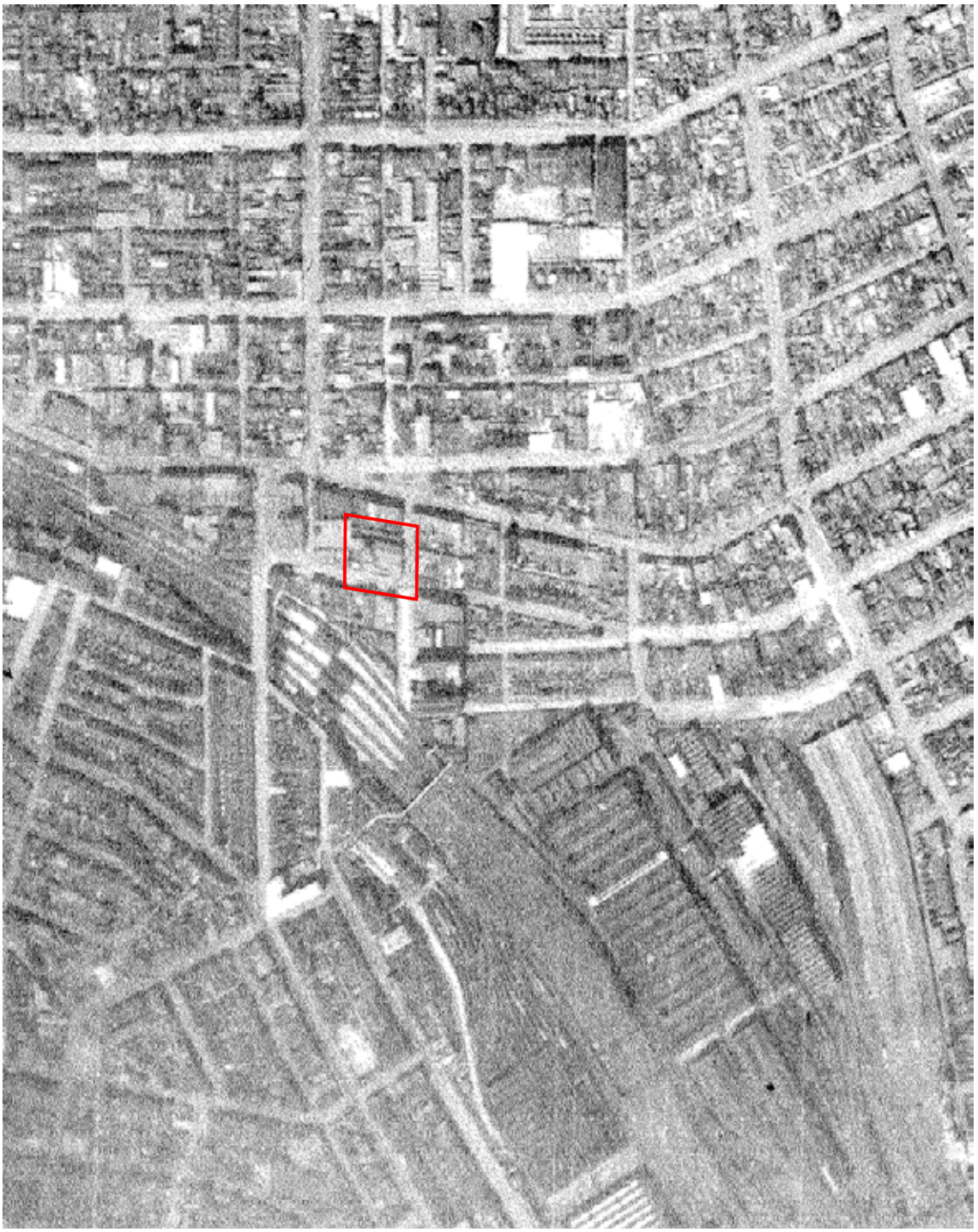
Sydney Harbour Foreshore Authority (former Sydney Cove Authority and Darling Harbour Authority),
Level 6,
66 Harrington Street,
The Rocks.

Department of Planning Information Centre
20 Lee Street,
Henry Dean Plaza,
Sydney NSW 2000

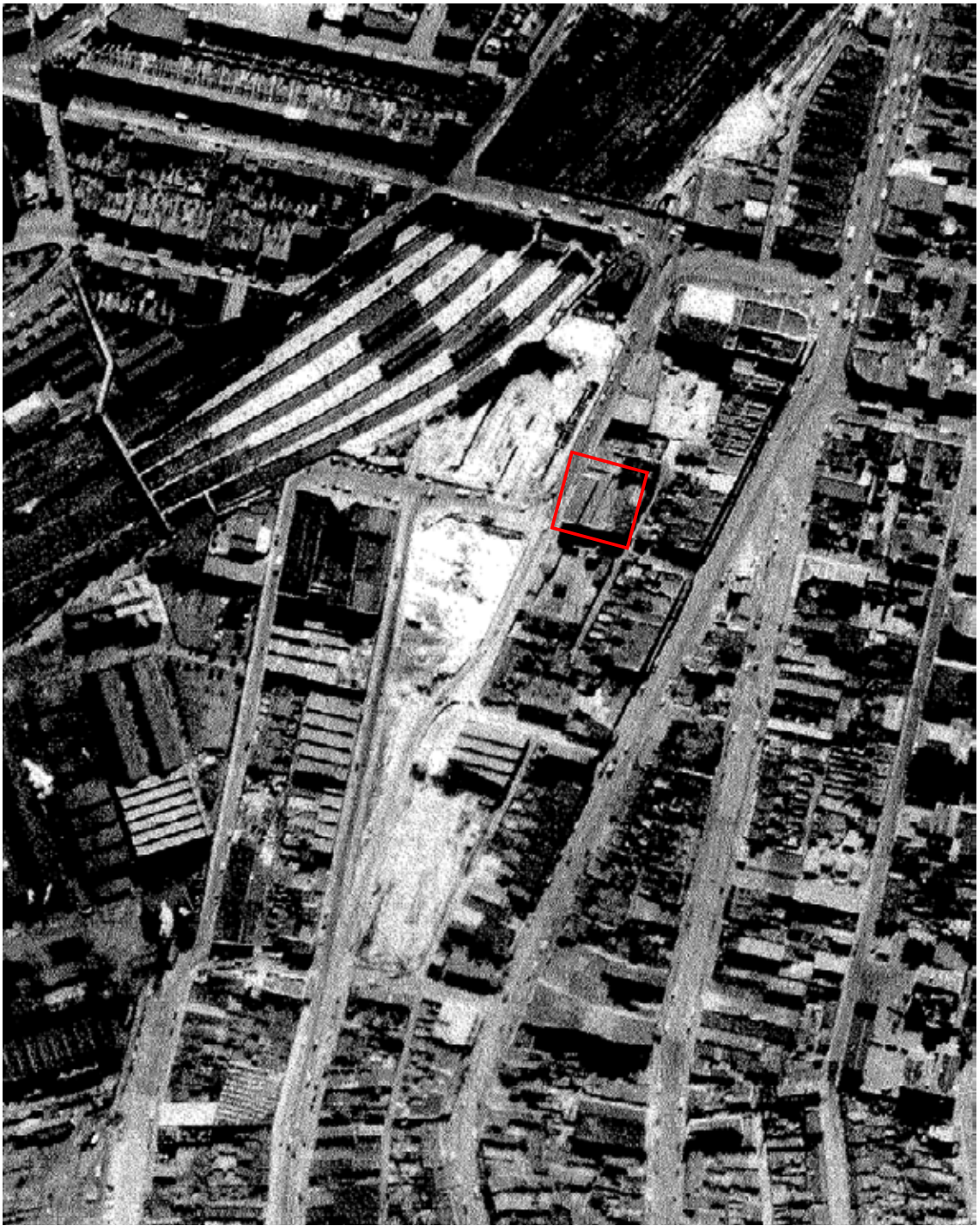
Where planning certificate section 149 (5) matters are supplied, complete details are available by writing to:
Chief Executive Officer,
City of Sydney,
G.P.O. Box 1591,
Sydney, NSW 2000

End of Document

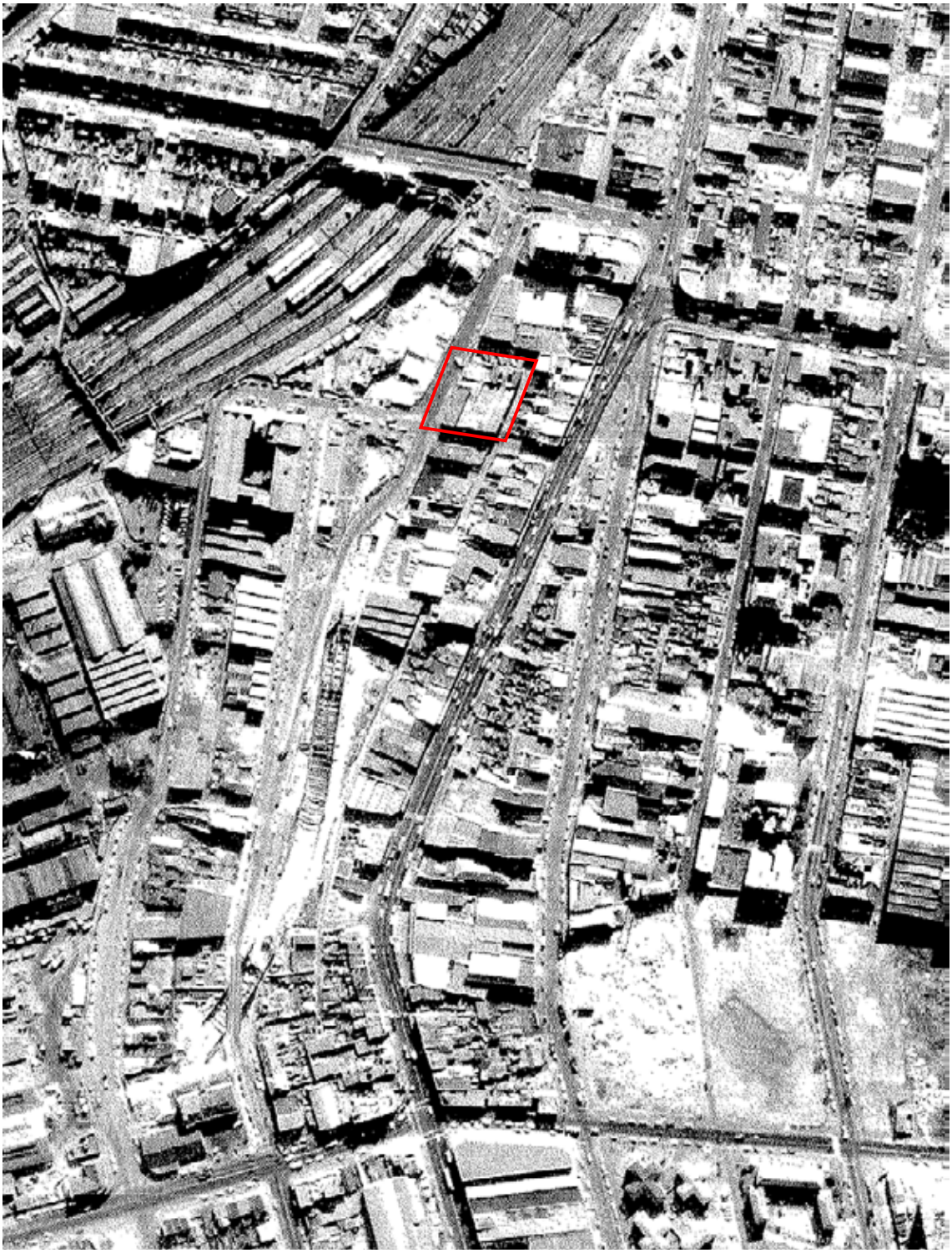
APPENDIX C – HISTORICAL AERIAL PHOTOGRAPHS



Aerial Photograph 1930 – Sydney, Run 16



Aerial Photograph 1951 – Sydney, Run 14



Aerial Photograph 1970 – Cumberland, Run 18

Aerial Photograph 1986 – Run 23E

Aerial Photograph 2005 – Run 11

APPENDIX D – HISTORICAL LAND TITLE CERTIFICATES

— Search —

Historical to 1959

Re: 7 to 9 Gibbons Street, Redfern
Lots 1 to 9 Section 9 in DP 4209 and
Lot B in DP 354297

1. B/354297 Title + Historical

Lessee: Travelex Limited 2008, 2005, 2003
Owner: Kimberley Securities Limited 2003
Lessee: Wayne Nickless Limited 1999
(Transfer of Lease)
Lessee: Kumama Securities Pty Limited 1999
(Transfer of Lease)
Lessee: Group 4 T.N.T Security Pty. Limited 1993
Owner: T.N.T. Australia Pty. Limited 1993
Lessee: Data Security Services Pty. Limited 1993

Prior Title:

Vol. 5608 Fol. 155
Owner: T.N.T. Redfern Pty Limited 1971
Owner: Andrew Hamilton 1959
Owner: Green Products Limited 1956

2. AC 11923-174 Title + Historical

Lessee: Travelex Limited 2008, 2005, 2003
Owner: Kimberley Securities Limited 2003
Lessee: Wayne Nickless Limited 1999
Lessee: Kumama Securities Pty Limited 1999
Lessee: Group 4 TNT Security Pty Limited 1993
Owner: T.N.T. Australia Pty Limited 1993
Lessee: Data Security Services Pty Limited 1993

Prior Titles:

Vol. 11923 Fol. 74 ; Vol. 5454 Fol. 124
Owner: TNT Redfern Pty Limited 1971
Owner: Dina Holdings Pty Limited 1961
Owner: Andrew Hamilton 1945

(Hard Copy to follow)

10.8.2009

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - TITLE SEARCH

FOLIO: B/354297

SEARCH DATE	TIME	EDITION NO	DATE
7/8/2009	11:03 AM	9	20/10/2008

LAND

LOT B IN DEPOSITED PLAN 354297
LOCAL GOVERNMENT AREA SYDNEY
PARISH OF ALEXANDRIA COUNTY OF CUMBERLAND
TITLE DIAGRAM DP354297

FIRST SCHEDULE

KIMBERLEY SECURITIES LIMITED (T 9450615)

SECOND SCHEDULE (5 NOTIFICATIONS)

1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
2 D488561 COVENANT
3 9450616 MORTGAGE TO PERMANENT TRUSTEE AUSTRALIA LIMITED
AA742079 VARIATION OF MORTGAGE 9450616
4 AB655573 MORTGAGE TO BABCOCK & BROWN FINANCIAL SERVICES PTY LIMITED
5 AE248317 LEASE TO TRAVELEX LIMITED OF THE PART OF THE GROUND FLOOR SHOWN HATCHED & CROSS-HATCHED IN PLAN WITH 9545056. EXPIRES: 30/6/2012.

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

J/APEX13943837 PRINTED ON 7/8/2009

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - HISTORICAL SEARCH

SEARCH DATE
7/8/2009 11:03AM

FOLIO: B/354297

First Title(s): SEE PRIOR TITLE(S)
Prior Title(s): VOL 5608 FOL 55

Recorded	Number	Type of Instrument	C.T. Issue
2/9/1989		TITLE AUTOMATION PROJECT	LOT RECORDED FOLIO NOT CREATED
26/10/1989		CONVERTED TO COMPUTER FOLIO	FOLIO CREATED CT NOT ISSUED
19/11/1993	I781785	LEASE	
19/11/1993	I781786	TRANSFER	
19/11/1993	I781787	LEASE	EDITION 1
20/6/1995	O318627	DETERMINATION OF LEASE	
20/6/1995	O318628	TRANSFER OF LEASE	
20/6/1995	O318629	VARIATION OF LEASE	EDITION 2
6/2/1997	2816647	DISCHARGE OF MORTGAGE	EDITION 3
4/9/1997		AMENDMENT: LOCAL GOVT AREA	
15/11/1999	6345018	TRANSFER OF LEASE	
15/11/1999	6345019	VARIATION OF LEASE	EDITION 4
14/3/2003	9450615	TRANSFER	
14/3/2003	9450616	MORTGAGE	EDITION 5
6/5/2003	9545056	LEASE	EDITION 6
14/3/2004	AA472866	DEPARTMENTAL DEALING	
16/6/2004	AA719903	CAVEAT	
23/6/2004	AA742079	VARIATION OF MORTGAGE	EDITION 7
31/8/2005	AB655572	WITHDRAWAL OF CAVEAT	
31/8/2005	AB555693	LEASE	
31/8/2005	AB655573	MORTGAGE	EDITION 8
20/10/2008	AE248316	DETERMINATION OF LEASE	
20/10/2008	AE248317	LEASE	EDITION 9

*** END OF SEARCH ***

J/APEX13943837 PRINTED ON 7/8/2009

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - TITLE SEARCH

FOLIO: AUTO CONSOL 11923-174

SEARCH DATE	TIME	EDITION NO	DATE
7/8/2009	11:03 AM	9	20/10/2008

LAND

LAND DESCRIBED IN SCHEDULE OF PARCELS
LOCAL GOVERNMENT AREA SYDNEY
PARISH OF ALEXANDRIA COUNTY OF CUMBERLAND
TITLE DIAGRAM DP4209

FIRST SCHEDULE

KIMBERLEY SECURITIES LIMITED (T 9450615)

SECOND SCHEDULE (5 NOTIFICATIONS)

1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
2 LAND EXCLUDES THE ROAD(S) WITHIN LOTS 1 & 6 SHOWN IN PLAN WITH M974245
3 9450616 MORTGAGE TO PERMANENT TRUSTEE AUSTRALIA LIMITED
AA742079 VARIATION OF MORTGAGE 9450616
4 AB655573 MORTGAGE TO BABCOCK & BROWN FINANCIAL SERVICES PTY LIMITED
5 AE248317 LEASE TO TRAVELEX LIMITED OF THE PART OF THE GROUND FLOOR SHOWN HATCHED & CROSS-HATCHED IN PLAN WITH 9545056. EXPIRES: 30/6/2012.

NOTATIONS

UNREGISTERED DEALINGS: NIL

SCHEDULE OF PARCELS

LOTS 1-9 SEC. 9 IN DP4209.

*** END OF SEARCH ***

J/APEX13943837 PRINTED ON 7/8/2009

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - HISTORICAL SEARCH

SEARCH DATE
7/8/2009 11:04AM

FOLIO: AUTO CONSOL 11923-174

Recorded	Number	Type of Instrument	C.T. Issue
16/10/1991		CONSOL HISTORY RECORD CREATED FOR AUTO CONSOL 11923-174	
		PARCELS IN CONSOL ARE: 1-9/9/4209.	
19/11/1993	I781785	LEASE	
19/11/1993	I781786	TRANSFER	
19/11/1993	I781787	LEASE	EDITION 1
20/6/1995	O318627	DETERMINATION OF LEASE	
20/6/1995	O318628	TRANSFER OF LEASE	
20/6/1995	O318629	VARIATION OF LEASE	EDITION 2
6/2/1997	2816647	DISCHARGE OF MORTGAGE	EDITION 3
15/11/1999	6345018	TRANSFER OF LEASE	
15/11/1999	6345019	VARIATION OF LEASE	EDITION 4
14/3/2003	9450615	TRANSFER	
14/3/2003	9450616	MORTGAGE	EDITION 5
6/5/2003	9545056	LEASE	EDITION 6
23/6/2004	AA742079	VARIATION OF MORTGAGE	EDITION 7
10/6/2005	AB545581	CAVEAT	
31/8/2005	AB655571	WITHDRAWAL OF CAVEAT	
31/8/2005	AB555693	LEASE	
31/8/2005	AB655573	MORTGAGE	EDITION 8
20/10/2008	AE248316	DETERMINATION OF LEASE	
20/10/2008	AE248317	LEASE	EDITION 9

*** END OF SEARCH ***

J/APEX13943837 PRINTED ON 7/8/2009

Form: 07L
Release: 1.1
www.lpi.nsw.gov.au

LEASE

New South Wale
Real Property Act

AB555693P

PRIVACY NOTE: this information is legally required and will become part of the public record

STAMP DUTY

Office of State Revenue use only

NEW SOUTH WALES DUTY
20-04-2005 0002607700-001
LEASE - GENERAL
DUTIABLE AMOUNT $ ********515,100.00
DUTY $ ****1,802.85

(A) **TORRENS TITLE**

Property leased: if appropriate, specify the part or premises

PART FOLIO IDENTIFIERS 18/C/7328, B/354297 & AUTO CONSOL 11923-174 BEING THAT PART OF THE BULDING KNOWN AS 7-9 GIBBONS STREET, REDFERN AND MORE PARTICULARLY DESCRIBED IN THE DEFINITION OF PREMISES IN CLAUSE 1.1 OF ANNEXURE B TO THIS LEASE

(B) **LODGED BY**

Delivery Box	Name, Address or DX and Telephone	CODE
987T	LANDERER & COMPANY DX 1247 SYDNEY Reference: MA:11100667:KB	L

(C) **LESSOR**

KIMBERLEY SECURITIES LIMITED ABN 14 000 815 476

The lessor leases to the lessee the property referred to above.

(D) Encumbrances (if applicable): _____

(E) **LESSEE**

TRAVELEX LIMITED ACN 004 179 953

(F) **TENANCY:** OFF L 9545056

(G)
1. **TERM:** THREE (3) YEARS
2. **COMMENCING DATE:** 3 MARCH 2005
3. **TERMINATING DATE:** 2 MARCH 2008
4. With an **OPTION TO RENEW** for a period of N.A.
   set out in clause N.A. of N.A.
5. With an **OPTION TO PURCHASE** set out in clause N.A. of N.A.
6. Together with and reserving the **RIGHTS** set out in clause N.A. of N.A.
7. Incorporates the provisions set out in **ANNEXURE** A & B hereto.
8. Incorporates the provisions set out in **MEMORANDUM** filed at Land and Property Information New South Wales as No. lease9545056
9. The **RENT** is set out in item No. 7 of ANNEXURE "B"

All handwriting must be in block capitals.

Total Pages (office use only) 8

LAND AND PROPERTY INFORMATION NSW

3 cat-prod 795D 15/4/05 & 17/6/05 for this dlg.

Form: 07L
Licence: 01-05-028
Licensee: MACQUARIE LEGAL PRACTICE

LEASE

New South Wales
Real Property Act 1900

9545056D

PRIVACY NOTE: this information is legally required and will become part of the public record

STAMP DUTY

Office of State Revenue use only

OFFICE OF STATE REVENUE (N.S.W. TREASURY)

CLIENT No. 3323749
STAMP DUTY $770-
TRANSACTION No. 1327745
STAMP No. 1368
SIGNATURE
DATE 20-3-03
ASSESSMENT DETAILS:

Extra $62 plan fee paid

(A) TORRENS TITLE

Property leased: if appropriate, specify the part or premises

Part Folio Identifiers 18/C/7328 and B/354297 and Auto Consol 11923-174 being that part of the building known as 7-9 Gibbons Street, Redfern and more particularly described in the definition of Premises in Clause 1.1 of Annexure A to this Lease.

(B) LODGED BY

Delivery Box	Name, Address or DX and Telephone	CODE
124E	The LegalinK Reference (optional): J-MACQL-926165	L

(C) LESSOR

KIMBERLEY SECURITIES LIMITED (ACN 000 815 476)

The lessor leases to the lessee the property referred to above.

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

(E) LESSEE

TRAVELEX LIMITED (ACN 004 179 953)

(F) TENANCY:

(G)
1. TERM: Two (2) years.
2. COMMENCING DATE: 3rd March 2003
3. TERMINATING DATE: 2nd March 2005
4. With an OPTION TO RENEW for a period of Not applicable set out in Not applicable
5. With an OPTION TO PURCHASE set out in Not applicable
6. Together with and reserving the RIGHTS set out in Annexure A
7. Incorporates the provisions set out in ANNEXURE(S) A hereto.
8. Incorporates the provisions set out in MEMORANDUM filed at Land and Property Information New South Wales as No. Not applicable
9. The RENT is set out in item/clause 7 of the Reference Schedule

All handwriting must be in block capitals.

Total Pages (office use only)_____

CT prod by 795D 14/4/03 for L

6345018C

Form: 97-01TL
Licence: 27C/0038/95

TRANSFER OF LEASE MORTGAGE OR CHARGE

New South Wales
Real Property Act 1900

Office of State Revenue use only	NEW SOUTH WALES DUTY 27-10-1999 0000136143-002 SECTION 18(2) DUTY $ ********2.00

(A) **LEASE/MORTGAGE/CHARGE** I 781785

(B) **TITLE**

If appropriate, specify the share or part transferred.

B/354297
AUTO CONSOL 11923-174

(C) **LODGED BY**

LTO Box	Name, Address or DX and Telephone
27C	FREEHILL HOLLINGDALE & PAGE DX 361 SYDNEY TELEPHONE: 02 9225 5000 REFERENCE (15 character maximum): BTR:FEE:30A

(D) **TRANSFEROR** KUNAMA SECURITIES PTY LIMITED (ACN 008 799 362)

(E) acknowledges receipt of the consideration in accordance with the deed of consent and assignment of lease between the transferor and transferee dated

(F) Encumbrances (if applicable) 1. ..... 2. ..... 3. ..... 4. .....

(G) **TRANSFEREE**

TL
TM
TC

MAYNE NICKLESS LIMITED (ACN 004 073 410)

(H) **TENANCY:**

FREEHILL HOLLINGDALE & PAGE

CHECKED BY (LTO use) DD Reg 43

CT PROD BY 118Y

(I) We certify this dealing correct for the purposes of the Real Property Act 1900 DATE 26 October 1999

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

Signature of Witness

Name of Witness (BLOCK LETTERS)

Address of Witness

Signature of Transferor

The common seal of
KUNAMA SECURITIES PTY LIMITED
is fixed to this document
in the presence of:

KUNAMA SECURITIES PTY. LTD. A.C.N. 008 799 362 common SEAL

Secretary/Director

Director

MILTON LYLE FREDERICK HUNT

Name (please print)

Name (please print)

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

Signed sealed and delivered for and on behalf of **Mayne Nickless Limited** ACN 004 073 410 by its Attorneys under Power of Attorney dated 18 April 1996, each of whom declares that he/she holds the office in Mayne Nickless Limited indicated under his/her signature and that he/she has no notice of revocation of the Power of Attorney Registered Book 4132 No.237 in the presence of:

Signature

KENNETH MALCOLM SLEEP

Name (please print)

SECRETARY

Office

Witness

Signature

JOHN WILLIAM PRIESTLEY

ROBERT L. LEASK

Name (please print)

DIRECTOR, COMMERCIAL

Name (please print)

Office

APPENDIX E – WORKCOVER RECORDS

Our Ref: D09/098131
Your Ref: Martina Carosi

11 August 2009

Attention: Martina Carosi
SMEC Australia
6/76 Berry Street
North Sydney NSW 2059

Re Site: 7-9 Gibbons St, Redfern NSW 2016

Dear Martina

I refer to your site search request received on 6th August 2009 requesting information on a Licence to Keep Dangerous Goods on the above site.

Enclosed are copies of the documents that WorkCover NSW holds on Dangerous Goods Licence **35/007522** relating to the storage of dangerous goods at the above-mentioned premises, as listed on the Stored Chemical Information Database (SCID).

If you have any further queries, please contact WorkCover's Dangerous Goods Licensing staff on (02) 4321 5500.

Yours sincerely

Leisa Robson
A/Senior Licensing Officer
Dangerous Goods Team

TNT Fuel

TNT Fuel
A Division of
TNT Australia Pty. Limited
ACN 000 495 269

March 17, 1994

Chief Inspector of Dangerous Goods,
Work Cover Authority,
Locked Bag 10,
Clarence Street,
SYDNEY NSW 2000

Dear Sir/Madam,

RE: ABANDONMENT OF TANK

This is to inform you that TNT have abandoned their tank previously covered under Licence for keeping of dangerous goods number 35/007522, cnr Gibbons Street and Marion Street, Redfern 2016.

Attached is the contractors certificate relating to the work carried out.

Yours faithfully,
TNT FLEET MANAGEMENT

L.A. O'Connell
FUEL CONTROLLER

SYDNEY
10 Burrows Road
St Peters 2044
P.O. Box 131, St Peters
Telephone: (02) 517 7300
Fax: (02) 517 7333

VICTORIA
21 Coode Road
West Melbourne 3003
P.O. Box 302, Footscray 3011
Telephone: (03) 688 8444
Fax: (03) 688 8430

QUEENSLAND
127 Riawena Road
Salisbury 4107
P.O. Box 71, Salisbury North
Telephone: (07) 275 0733
Fax: (07) 275 0579

SOUTH AUSTRALIA
376 Burbridge Road
Brooklyn Park 5032
Telephone: (08) 238 9396
Fax: (08) 234 4337

WESTERN AUSTRALIA
138 Kurnall Road
Welshpool 6106
Telephone: (09) 451 9266
Fax: (09) 350 6021

Licence # 35/007522

TO: Chief Inspector of Dangerous Goods
Work Cover Authority
Locked Bag 10
Clarence Street
Sydney. NSW 2000

DANGEROUS GOODS ACT, 1975

CONTRACTOR'S CERTIFICATE

ABANDONMENT OF UNDERGROUND TANKS

I hereby certify that the tank (s) indicated below have been abandoned by the removal of all inflammable liquid, filling and sealing to the requirements of the Dangerous Goods Branch.

PETROLEUM COMPANY ..... Nil.

CUSTOMER ..... T.N.T.

ADDRESS OF CUSTOMER'S PREMISES ..... cnr Gibbons & Marion Sts
..... Riverstone. NSW.

EQUIPMENT ..... one Type of Underground Tank.
.....

METHOD ABANDONED BY (1) WATER & RUST INHIBITOR
~~(2) CONCRETE SLURRY~~
~~(3) TANKS REMOVED~~

CONTRACTOR ..... CLARRENDY PTY. LTD.
RIVERSTONE 2765
67 WELLINGTON ST.
PH. (02) 627 4352
FAX (02) 627 4353

SIGNED .....

DATE 23.2.94

Reference

WORKCOVER AUTHORITY

Dangerous Goods Section
Locked Mail Bag 2 P O, ROSEBERY NSW 2018
Ph. (02) 287 6239 OR (02) 287 6237

Licensee

T N T MANAGEMENT P/L
T N T EQUIPMENT
BOX 131 P O
ST PETERS 2044

DANGEROUS GOODS BRANCH
11 APR 1991

19 MAR 1991

Dear Sir/Madam,

RE **APPLICATION FOR RENEWAL OF LICENCE FOR THE KEEPING OF DANGEROUS GOODS**

Our records indicate you hold licence number 35/007522 for keeping dangerous goods at GIBBONS ST & MARIAN ST REDFERN 2016.

Details of depots at site.

Depot No.	Depot type	Goods stored in depot	Quantity kg/litres/no.
1	UNDERGROUND TANK	FLAMMABLE LIQUIDS	30 000

This licence is now due for renewal. **TO RENEW YOUR LICENCE.** Please carefully check the details shown in this letter and make any required corrections. Then, **SIGN** and **DATE** the declaration below and return this letter to the WorkCover Authority, Dangerous Goods Section. **Fees for these licences have been abolished. DO NOT SEND ANY MONIES.**

Declaration: I wish to renew this licence to 15/04/92. I certify that the licence details shown in this letter are correct.

TNT FUEL
A DIVISION OF TNT AUSTRALIA PTY. LTD.

....10th April 1991..
(Signature) *(Date)*

If you do not wish to renew the licence. Please provide the Dangerous Goods Section with a signed statement giving the reason why it is not to be renewed. If you have sold/vacated the site please provide the name and address of the new owner/occupier so we may contact them.

Yours faithfully

Chief Inspector of Dangerous Goods.

APPENDIX F – EXISTING LITERATURE

8 Discussion of Soil Results

8.1 Field Observations

Geology encountered at the site during the field works is summarised below. Test pit logs are included in **Appendix G**.

Building rubble was identified within fill material across the site to an approximate depth of 0.8m bgs. The silty sand was noted to contain brick, cement, glass, plastic and tile fragments. No asbestos was noted in any subsurface soils encountered.

Other fill material at the site appeared to be reworked natural material, comprising silty clay material with gravel inclusions.

Fill material was observed to be underlain by natural silty clay soil at approximately 0.8m bgs.

8.2 Soil Analytical Results

The soil sampling locations are shown on **Figure 5** and summarised laboratory results are presented in **Table B**. Detailed laboratory reports and chain of custody documentation is provided in **Appendix F**.

The laboratory results are discussed in the following sections.

8.2.1 Metals

No levels of heavy metals have exceeded the high density residential (NEHF-D) or commercial / industrial (NEHF-F) assessment criteria. The following exceedances of the standard residential (NEHF-A) criteria have been recorded:

- The level of total chromium at sample location 5 at a depth of 0.1m has exceeded the published criteria for chromium (VI); and
- The level of lead at sample locations 3 at a depth of 0.3m, 8 at a depth of 0.2m, 9 at a depth of 0.3m and 10 at a depth of 0.15m has exceeded the published criteria for lead.

Numerous exceedances of the phytotoxicity based criteria have been recorded across the soils, with level of total chromium exceeding the published assessment criteria for chromium (VI) and other localised exceedances of copper, nickel and zinc criteria.

The location of heavy metals exceedances above health based criteria are summarised in **Figure 5**.

8.2.2 TPH/MAH

There were no reported concentrations of TPH/MAH compounds above the NSW EPA (1994) threshold concentrations detected at the site.

8.2.3 PAHs

No levels of total PAHs have exceeded the adopted commercial / industrial or high density residential criteria. However the level of benzo(a)pyrene at sample location 3 has exceeded the adopted commercial / industrial criteria and high density residential criteria.

The following exceedances have been recorded for the standard residential criteria:

- The level of total PAHs and benzo(a)pyrene at sample location 3 has substantially exceeded the adopted assessment criteria; and

- The level of total PAHs and benzo(a)pyrene at sample locations 9 and 10 have exceeded the adopted assessment criteria.

The location of PAH (including benzo(a)pyrene) exceedances above health based criteria are summarised in **Figure 5**.

8.2.4 OCP/PCBs

There were no reported concentrations of OCP or PCBs above the laboratory detection limit in any sample. On this basis, OCP and PCB compounds are not considered to pose a contamination issue in soil at the site.

8.2.5 Volatile Halogenated Compounds

There were no reported concentrations of VHCs above the adopted criteria in any sample.

8.2.6 Asbestos

Asbestos fibres were not reported in any soil sample selected for analysis and no potential asbestos containing materials were identified within the soils sampled during the assessment.

8.2.7 Other Constituents

Levels of sulphate were recorded below laboratory detection limits. Levels of cyanide were recorded slightly above the laboratory detection limit in one sample only, but were well below the adopted assessment criteria.

8.2.8 Leachable metals and PAHs

TCLP analysis was undertaken for selected heavy metals and benzo(a)pyrene for the most impacted soil samples. Results were compared to waste classification criteria provided to DECC (2008) 'Waste Classification Guidelines'. No levels of potentially leachable constituents were found to exceed TCLP limits for 'general solid waste'.

8.2.9 Acid Sulphate Soils

One sample was analysed for Acid Sulphate Soils, with no concentrations of Total Actual Acidity being detected, and Total Potential Acidity having a concentration slightly over the guidelines (18moles H+/tonne) with a concentration of 20 moles H+/tonne.

8.3 Water Analytical Results

One water sample was taken from the contents of the disused UST within the cellar, shown on **Figure 4** and summarised laboratory results are presented in **Table B**. Detailed laboratory reports and chain of custody documentation is provided in **Appendix F**.

Concentrations of all VOCs were below laboratory detection limits apart from 1,3,5-trimethylbenzene and 1,2,4-trimethylbenzene. Elevated levels of semi-volatile TPH constituents were also recorded in this sample. The sample is considered to be representative of oily water, was most likely mixed with a former petroleum product that may have been held in the UST.

8.4 Statistical Analysis

Statistical analysis was undertaken of benzo(a)pyrene concentrations recorded in the fill material across the site. Statistical analysis was undertaken using the US EPA 'ProcUCL'

package. As per the requirements of NSW EPA (1995) statistical results are summarised following:

- 95% UCL_{avg} – 3.1 mg/kg;
- Maximum – 6.5 mg/kg;
- Standard Deviation – 1.9 mg/kg; and
- Recommended distribution – gamma.

The statistically derived level is found to be less than the adopted commercial / industrial (NEHF – F) and high density residential (NEHF – D) assessment criteria. The maximum concentration is less than 2.5 times the respective assessment criteria and the standard deviation is less than 0.5 times the assessment criteria. By reference to NEPC (1999) the level of benzo(a)pyrene is found to be below the assessment criteria for the site.

8.5 Discussion and Likely Costs Associated with Future Remediation Works

The fill material underlying the site is found to be generally suitable, from a chemical contamination perspective, for future use on a commercial / industrial or high density residential site where minimal access to soils occurs. Where soils are proposed to be accessible for a site redevelopment (i.e. low density residential, or high density residential with site soils used in gardens) then soil remediation works would be required. In the scenario where gardens are proposed with a site redevelopment, it is likely that imported top soils would require to be used. Fill based soils with the highest levels of impact, particularly lead and benzo(a)pyrene, would be required to be either removed from the site, or managed by placement under structures.

Where soils were required to be removed from the site, the fill materials would be classified as 'general solid waste' under the recent DECC (2008) waste guidelines. Fees in the order of $120/tonne (ex GST) would be required to transport and dispose of this material at a landfill legally licensed to accept the material.

A single sample has been analysed for the presence of potential acid sulphate soils, and found to have a level of potential acidity marginally exceeding the published assessment criteria. Noting the slight exceedance of the criteria, and the nature of the soils, it is considered unlikely that substantial actual of potential acid sulphate soils are present across the site. However where site redevelopment (including disturbance of soils and/or removal of site pavement) was proposed this would need to be assessed and confirmed by a more detailed acid sulphate soil assessment. An allowance of $20,000 (ex GST) should be provided to complete this assessment. It is considered that where soils and site pavement is left in place, the risk of acid sulphate soils is negligible and no further works require to be undertaken.

The UST requires to have the contents removed by a licensed liquid waste tanker and removed from site for destruction at a licensed tank destruction facility. There is a potential that backfill soils in proximity of the UST may also be contaminated and require remediation. An allowance of $30,000 (ex GST) should be provided to complete these works. Where the current structure is require to be retained, the UST will require to be decommissioned in-situ. An allowance of $10,000 should be made to complete these works.

Appendix G

Borehole Logs

Borehole No.: RRSL-1 **Location:** 157 Redfern Street, Redfern

Project: Redfern RSL ESA	***Total Hole Depth:*** 0.5m	***Driller and Co.:*** DO and TD
Project No.: 40565	***Longitude:***	***Drill Method:*** Hand Auger
Client: Fusion Property Partners	***Latitude:***	***Log By:*** Danielle Ord
Project Manager: Matt Parkinson	***Date:*** 26/05/2008	***Bore Diameter:*** 100mm

SUBSURFACE PROFILE			SAMPLE				
Depth	Visual	Description	Number	Condition	PID (ppm)	Observations	Well Completion Details
0.0		Ground Surface					
		Asphalt					
		Fill Sandy road base, dark grey and dark brown, dry, gritty sand, concrete and gravel angular inclusions <60mm	RRSL1-0.1		7.3	No odour, no staining, no fibrous cement sheeting observed	
		Fill Dark brown silty soil, fine, heterogeneous particles, slightly damp, brick fragments throughout profile	RRSL1-0.3		8.7		
			RRSL1-0.4		1.4		
		Fill Dark brown gravelly silty soil, fine particles, slightly damp, predominantly black and grey angular gravel 10-40mm					
1.0		**EOH @ 0.5m** Refusal					
2.0							

Sample Method	*Sample Condition*		
HA - Hand Auger ***SFA - Solid Flight Auger*** ***HFA - Hollow Flight Auger*** ***PT - Push Tubing***	***U - undisturbed tube sample*** ***D - disturbed sample*** ***CS - core sample***		

Borehole No.: RRSL-2 **Location:** 157 Redfern Street, Redfern

Project: Redfern RSL ESA
Project No.: 40565
Client: Fusion Property Partners
Project Manager: Matt Parkinson

Total Hole Depth: 0.4m
Longitude:
Latitude:
Date: 26/05/2008

Driller and Co.: DO and TD
Drill Method: Hand Auger
Log By: Danielle Ord
Bore Diameter: 100mm

SUBSURFACE PROFILE			SAMPLE				
Depth	Visual	Description	Number	Condition	PID (ppm)	Observations	Well Completion Details
0.0		Ground Surface					
		Concrete					
		Fill Sandy road base, dark grey and dark brown, dry, gritty sand, concrete and gravel angular inclusions <20mm	RRSL2-0.1		4.6	No odour, no staining, no fibrous cement sheeting observed	
		Fill Bricks, red with yellow flecks, dry, compacted	RRSL2-0.3		6.9		
		Fill Dark brown/black gravelly silty soil, fine to medium particles, slightly damp, black and grey angular gravel inclusions (10-40mm)					
1.0		**EOH @ 0.4m** Refusal					
2.0							

Sample Method	*Sample Condition*		
HA - Hand Auger ***SFA - Solid Flight Auger*** ***HFA - Hollow Flight Auger*** ***PT - Push Tubing***	***U - undisturbed tube sample*** ***D - disturbed sample*** ***CS - core sample***		

Borehole No.: RRSL-3 **Location:** 157 Redfern Street, Redfern

Project: Redfern RSL ESA	***Total Hole Depth:*** 0.5m	***Driller and Co.:*** DO and TD
Project No.: 40565	***Longitude:***	***Drill Method:*** Hand Auger
Client: Fusion Property Partners	***Latitude:***	***Log By:*** Danielle Ord
Project Manager: Matt Parkinson	***Date:*** 26/05/2008	***Bore Diameter:*** 100mm

SUBSURFACE PROFILE			SAMPLE				
Depth	Visual	Description	Number	Condition	PID (ppm)	Observations	Well Completion Details
0.0		Ground Surface					
		Asphalt				No odour, no staining, no fibrous cement sheeting observed	
		Fill Sandy road base, dark grey and dark brown, damp, gritty sand, concrete and gravel angular inclusions <30mm	RRSL3-0.2		6.1		
			RRSL3-0.3		13.2		
		Fill Red and black gravelly silt, angular, <10mm particles, damp, brick and cement fragment inclusions <20mm					
1.0		**EOH @ 0.5m** Refusal on brick					
2.0							

Sample Method	*Sample Condition*		
HA - Hand Auger ***SFA - Solid Flight Auger*** ***HFA - Hollow Flight Auger*** ***PT - Push Tubing***	***U - undisturbed tube sample*** ***D - disturbed sample*** ***CS - core sample***		

Borehole No.: RRSL-4 **Location:** 157 Redfern Street, Redfern

Project: Redfern RSL ESA
Project No.: 40565
Client: Fusion Property Partners
Project Manager: Matt Parkinson

Total Hole Depth: 0.35m
Longitude:
Latitude:
Date: 26/05/2008

Driller and Co.: DO and TD
Drill Method: Hand Auger
Log By: Danielle Ord
Bore Diameter: 100mm

SUBSURFACE PROFILE			SAMPLE				
Depth	Visual	Description	Number	Condition	PID (ppm)	Observations	Well Completion Details
		Ground Surface					
0.0		**Concrete**					
		Fill Sandy road base, dark grey and dark brown, dry, gritty sand, concrete and gravel angular inclusions <20mm	RRSL4-0.1		8.6	No odour, no staining, no fibrous cement sheeting observed	
		Fill Sand, light brown, fine, heterogeneous particles, dry, ashy inclusions	RRSL4-0.3		1.4		
		EOH @ 0.35m Refusal on wood/metal plate (sounds hollow when tapped with crow bar)					
1.0							
2.0							

Sample Method	*Sample Condition*		
HA - Hand Auger ***SFA - Solid Flight Auger*** ***HFA - Hollow Flight Auger*** ***PT - Push Tubing***	***U - undisturbed tube sample*** ***D - disturbed sample*** ***CS - core sample***		

Borehole No.: RRSL-5 **Location:** 157 Redfern Street, Redfern

Project: Redfern RSL ESA
Project No.: 40565
Client: Fusion Property Partners
Project Manager: Matt Parkinson

Total Hole Depth: 0.35m
Longitude:
Latitude:
Date: 26/05/2008

Driller and Co.: DO and TD
Drill Method: Hand Auger
Log By: Danielle Ord
Bore Diameter: 100mm

SUBSURFACE PROFILE			SAMPLE				
Depth	Visual	Description	Number	Condition	PID (ppm)	Observations	Well Completion Details
		Ground Surface					
0.0		**Concrete**					
		Fill Sandy road base, dark grey and dark brown, dry, gritty sand, concrete and gravel angular inclusions <20mm	RRSL5-0.1		3.7	No odour, no staining, no fibrous cement sheeting observed	
		Fill Sand, light brown, fine, heterogenous particles, dry, ashy inclusions	RRSL5-0.3		12.1		
		EOH @ 0.35m Refusal on brick					
1.0							
2.0							

Sample Method	*Sample Condition*		
HA - Hand Auger ***SFA - Solid Flight Auger*** ***HFA - Hollow Flight Auger*** ***PT - Push Tubing***	***U - undisturbed tube sample*** ***D - disturbed sample*** ***CS - core sample***		

Borehole No.: RRSL-6 **Location:** 157 Redfern Street, Redfern

Project: Redfern RSL ESA
Project No.: 40565
Client: Fusion Property Partners
Project Manager: Matt Parkinson

Total Hole Depth: 0.5m
Longitude:
Latitude:
Date: 26/05/2008

Driller and Co.: DO and TD
Drill Method: Hand Auger
Log By: Danielle Ord
Bore Diameter: 100mm

SUBSURFACE PROFILE			SAMPLE				
Depth	Visual	Description	Number	Condition	PID (ppm)	Observations	Well Completion Details
		Ground Surface					
0.0		**Concrete**					
		Fill Sandy road base, dark grey and dark brown, dry, gritty sand, concrete and gravel angular inclusions <20mm	RRSL6-0.1		21.4	No odour, no staining, no fibrous cement sheeting observed	
		Fill Dark brown silty soil, fine, heterogeneous, slightly damp particles, angular gravel inclusions 10-30mm	RRSL6-0.4		3.7		
		Fill Dark brown silty soil, fine, heterogeneous, slightly damp particles, brick, cement, glass plastic and tile fragments identified					
		EOH @ 0.5m Refusal on brick					
1.0							
2.0							

Sample Method	*Sample Condition*		
HA - Hand Auger ***SFA - Solid Flight Auger*** ***HFA - Hollow Flight Auger*** ***PT - Push Tubing***	***U - undisturbed tube sample*** ***D - disturbed sample*** ***CS - core sample***		

Borehole No.: RRSL-7 **Location:** 157 Redfern Street, Redfern

Project: Redfern RSL ESA	***Total Hole Depth:*** 1.0m	***Driller and Co.:*** DO and TD
Project No.: 40565	***Longitude:***	***Drill Method:*** Hand Auger
Client: Fusion Property Partners	***Latitude:***	***Log By:*** Danielle Ord
Project Manager: Matt Parkinson	***Date:*** 26/05/2008	***Bore Diameter:*** 100mm

SUBSURFACE PROFILE			SAMPLE				Well Completion Details
Depth	Visual	Description	Number	Condition	PID (ppm)	Observations	
0.0		Ground Surface					
		Concrete					
		Fill Dark brown silty soil, medium, heterogeneous particles, slightly damp, no inclusions	RRSL7-0.3		4.1	No odour, no staining, no fibrous cement sheeting observed	
		Fill Light brown, orange and dark brown mottled clays, high plasticity, high density, slightly damp, no inclusions	RRSL7-0.4		6.9		
		Fill Dark brown clay, high plasticity, medium-high density, damp, no inclusions	RRSL7-0.6		1.4	Samples QA1 and QA1a collected	
		Fill Dark brown silt, fine, heterogeneous particles, slightly damp, no inclusions	RRSL7-0.8		0		
1.0		**Sand** Light brown/yellow consolidated sands, fine, homogeneous particles, dry, no inclusions					
		Sandy Clay Light brown/yellow consolidated sand/clay, fine, homogeneous particles, dry, low palsticity, medium density, no inclusions					
		EOH @ 1.0m Refusal on brick					
2.0							

Sample Method	*Sample Condition*		
HA - Hand Auger ***SFA - Solid Flight Auger*** ***HFA - Hollow Flight Auger*** ***PT - Push Tubing***	***U - undisturbed tube sample*** ***D - disturbed sample*** ***CS - core sample***		

Borehole No.: RRSL-8 ***Location:*** 157 Redfern Street, Redfern

Project: Redfern RSL ESA
Project No.: 40565
Client: Fusion Property Partners
Project Manager: Matt Parkinson

Total Hole Depth: 0.3m
Longitude:
Latitude:
Date: 26/05/2008

Driller and Co.: DO and TD
Drill Method: Hand Auger
Log By: Danielle Ord
Bore Diameter: 100mm

SUBSURFACE PROFILE			SAMPLE				Well Completion Details
Depth	Visual	Description	Number	Condition	PID (ppm)	Observations	
0.0		Ground Surface					
		Concrete					
		Sandy Clay Light brown, light pink and light grey sandy clay, fine, heterogeneous particles, dry, no inclusions	RRSL8-0.2		12.7	No odour, no staining, no fibrous cement sheeting observed	
		EOH @ 0.3m Refusal on brick					
1.0							
2.0							

Sample Method	*Sample Condition*		
HA - Hand Auger ***SFA - Solid Flight Auger*** ***HFA - Hollow Flight Auger*** ***PT - Push Tubing***	***U - undisturbed tube sample*** ***D - disturbed sample*** ***CS - core sample***		

Borehole No.: RRSL-9 ***Location:*** 157 Redfern Street, Redfern

Project: Redfern RSL ESA
Project No.: 40565
Client: Fusion Property Partners
Project Manager: Matt Parkinson

Total Hole Depth: 0.45m
Longitude:
Latitude:
Date: 26/05/2008

Driller and Co.: DO and TD
Drill Method: Hand Auger
Log By: Danielle Ord
Bore Diameter: 100mm

SUBSURFACE PROFILE			SAMPLE				Well Completion Details
Depth	Visual	Description	Number	Condition	PID (ppm)	Observations	
0.0		Ground Surface					
		Concrete				No odour, no staining, no fibrous cement sheeting observed	
		Sandy Clay Light brown, light pink and light grey sandy clay, fine, heterogeneous particles, dry, no inclusions	RRSL9-0.3		13.4		
		EOH @ 0.45m Refusal on brick					
1.0							
2.0							

Sample Method	*Sample Condition*		
HA - Hand Auger ***SFA - Solid Flight Auger*** ***HFA - Hollow Flight Auger*** ***PT - Push Tubing***	***U - undisturbed tube sample*** ***D - disturbed sample*** ***CS - core sample***		

Borehole No.: RRSL-10 **Location:** 157 Redfern Street, Redfern

Project: Redfern RSL ESA
Project No.: 40565
Client: Fusion Property Partners
Project Manager: Matt Parkinson

Total Hole Depth: 0.85m
Longitude:
Latitude:
Date: 26/05/2008

Driller and Co.: DO and TD
Drill Method: Hand Auger
Log By: Danielle Ord
Bore Diameter: 100mm

SUBSURFACE PROFILE			SAMPLE				
Depth	Visual	Description	Number	Condition	PID (ppm)	Observations	Well Completion Details
0.0		Ground Surface					
		Concrete					
		Fill Light brown sand, fine, heterogeneous particles, wet, densely compacted, no inclusions	RRSL10-0.15		53.1	Slight PAH odour observed No odour, no staining, no fibrous cement sheeting observed	
		Fill Dark brown clay, high plasticity, medium density, soft and pliable, damp, some anglar gravel inclusions <15mm	RRSL10-0.5		17.1		
		Fill Medium brown and red mottled clay, low plasticity, low density, damp, no inclusions	RRSL10-0.7		5.2		
1.0		**EOH @ 0.85m** Refusal					
2.0							

Sample Method	*Sample Condition*		
HA - Hand Auger ***SFA - Solid Flight Auger*** ***HFA - Hollow Flight Auger*** ***PT - Push Tubing***	***U - undisturbed tube sample*** ***D - disturbed sample*** ***CS - core sample***		

Appendix F

Workcover Search Report

NORKCOVER
EW SOUTH WALES

Our Ref: D08/051270
Your Ref: Danielle Ord

30 May 2008

Attention: Danielle Ord
JBS Environmental
128 O'Riordan Rd
MASCOT NSW 2020

Dear Danielle,

RE SITE: 157 Redfern St, Redfern

I refer to your search request of 20th May 2008 requesting information on licences to Keep Dangerous Goods for the above site.

A search of the Stored Chemical Information Database (SCID) and the microfiche records held by WorkCover has not located any records pertaining to the above-mentioned premises.

If you have any further queries, please contact Dangerous Goods Licensing staff on (02) 4321 5500.

Naomi James
A/Senior Licensing Officer
Dangerous Goods

Appendix F

Laboratory Reports and Chain of Custody Documentation

3 June 2008 **TEST REPORT**

JBS Environmental Pty Ltd
PO Box 940
MASCOT
NSW 1460

Your Reference: 40565 - Redfern RSL
Report Number: 61262

Attention: Danielle Ord

Dear Danielle
The following samples were received from you on the date indicated.

Samples:	Qty.	1 Soil
Date of Receipt of Samples:		27/5/08
Date of Receipt of Instructions:		27/5/08
Date Preliminary Report Emailed:		Not Issued

These samples were analysed in accordance with your written instructions.
A copy of the instructions is attached with the analytical report.

The results and associated quality control are contained in the following pages of this report. Unless otherwise stated, solid samples are expressed on a dry weight basis (moisture has been supplied for your information only), air and liquid samples as received.

Should you have any queries regarding this report please contact the undersigned.

Yours faithfully
SGS ENVIRONMENTAL SERVICES

Ly Kim Ha
Senior Organic Chemist

Edward Ibrahim
Laboratory Services Manager

SGS Australia Pty Ltd
ABN 44 000 964 278
Environmental Services Unit 16, 33 Maddox Street, Alexandria Australia
t (02) 8594 0400 f (02) 8594 0499
www.au.sgs.com
Member of the SGS Group

MAH in Soil Our Reference: Your Reference Sample Type Depth	UNITS ---------- ----------	61262-1 QA1A Soil
Date extracted		27/05/2008
Date analysed		28/05/2008
Benzene	mg/kg	<0.50
Toluene	mg/kg	<0.50
Ethyl benzene	mg/kg	<0.50
m/p-Xylenes	mg/kg	<1.0
Styrene	mg/kg	<0.50
o-Xylene	mg/kg	<0.50
Isopropylbenzene	mg/kg	<0.50
n-Propylbenzene	mg/kg	<0.50
1,3,5-Trimethylbenzene	mg/kg	<0.50
tert-Butylbenzene	mg/kg	<0.50
1,2,4-Trimethylbenzene	mg/kg	<0.50
sec-Butylbenzene	mg/kg	<0.50
p-Isopropyltoluene	mg/kg	<0.50
n-Butylbenzene	mg/kg	<0.50
Dibromofluoromethane	% Recovery	93
1,2-Dichloroethane-d4	% recovery	101
Toluene-*d8 Surrogate 2*	% recovery	100
4-Bromofluorobenzene *Surrogate 3*	% recovery	98

TRH in soil with C6-C9 by P/T Our Reference: Your Reference Sample Type Depth	UNITS ---------- ----------	61262-1 QA1A Soil
Date Extracted (TRH C6-C9 PT)		27/05/2008
Date Analysed (TRH C6-C9 PT)		29/05/2008
TRH C_6 - C_9 P&T	mg/kg	<20
Date Extracted (TRH C10-C36)		30/05/2008
Date Analysed (TRH C10-C36)		30/05/2008
TRH C_{10} - C_{14}	mg/kg	<20
TRH C_{15} - C_{28}	mg/kg	<50
TRH C_{29} - C_{36}	mg/kg	<50

PAHs in Soil Our Reference: Your Reference Sample Type Depth	UNITS ---------- ----------	61262-1 QA1A Soil
Date Extracted		30/05/2008
Date Analysed		30/05/2008
Naphthalene	mg/kg	<0.1
Acenaphthylene	mg/kg	<0.1
Acenaphthene	mg/kg	<0.1
Fluorene	mg/kg	<0.1
Phenanthrene	mg/kg	0.2
Anthracene	mg/kg	<0.1
Fluoranthene	mg/kg	0.3
Pyrene	mg/kg	0.2
Benzo[*a*]anthracene	mg/kg	0.1
Chrysene	mg/kg	0.1
Benzo[*b,k*]fluoranthene	mg/kg	0.2
Benzo[*a*]pyrene	mg/kg	0.12
Indeno[*123-cd*]pyrene	mg/kg	<0.1
Dibenzo[*ah*]anthracene	mg/kg	<0.1
Benzo[*ghi*]perylene	mg/kg	<0.1
Total PAHs	mg/kg	<2.02
Nitrobenzene-d5	%	92
2-Fluorobiphenyl	%	92
p -Terphenyl-*d14*	%	91

Metals in Soil by ICP-OES Our Reference: Your Reference Sample Type Depth	UNITS ---------- ----------	61262-1 QA1A Soil
Date Extracted (Metals)		30/05/2008
Date Analysed (Metals)		30/05/2008
Arsenic	mg/kg	<3
Cadmium	mg/kg	<0.3
Chromium	mg/kg	6.7
Copper	mg/kg	38
Lead	mg/kg	87
Nickel	mg/kg	2.3
Zinc	mg/kg	41

Mercury Cold Vapor/Hg Analyser Our Reference: Your Reference Sample Type Depth	UNITS ---------- ----------	 61262-1 QA1A Soil
Date Extracted (Mercury)		30/05/2008
Date Analysed (Mercury)		30/05/2008
Mercury	mg/kg	0.42

Moisture Our Reference: Your Reference Sample Type Depth	UNITS ---------- ----------	61262-1 QA1A Soil
Date Analysed (moisture)		28/05/2008
Moisture	%	16

Method ID	Methodology Summary
SEO-019	VOCs by P&T GC/MS- Determination of Volatile Organic Compounds by Purge and Trap then Gas Chromatography / Mass spectrometry following extraction with methanol for soils. Waters are introduced directly on the purge and trap.
SEO-017	BTEX/TRH C6-C9 - Determination by Purge and Trap Gas Chromatography with Flame Ionisation Detection (FID) and Photo Ionisation Detection (PID). The surrogate spike used is aaa-trifluorotoluene.
SEO-020	TRH - Determination of Total Recoverable Hydrocarbons by gas chromatography following extraction with DCM/Acetone for solids and DCM for liquids.
SEO-030	PAHs by GC/MS - Determination of Polynuclear Aromatic Hydrocarbons (PAH's) by Gas Chromatography / Mass Spectrometry following extraction with dichloromethane or dichloromethane/acetone. The surrogate spike used is p-Terphenyl-d14.
SEM-010	Metals - Determination of various metals by ICP-OES following appropriate sample preparation or digestion process.
SEM-005	Mercury - Determination of Mercury by Cold Vapour Generation Atomic Absorption Spectroscopy.
AN002	Preparation of soils, sediments and sludges undergo analysis by either air drying, compositing, subsampling and 1:5 soil water extraction where required. Moisture content is determined by drying the sample at 105 $\pm$ 5°C.

QUALITY CONTROL MAH in Soil	UNITS	LOR	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery Duplicate + %RPD
Date extracted				27/05/08	[NT]	[NT]	LCS	27/05/08%
Date analysed				28/05/08	[NT]	[NT]	LCS	28/05/08%
Benzene	mg/kg	0.5	SEO-019	<0.50	[NT]	[NT]	LCS	88%
Toluene	mg/kg	0.5	SEO-019	<0.50	[NT]	[NT]	LCS	88%
Ethyl benzene	mg/kg	0.5	SEO-019	<0.50	[NT]	[NT]	LCS	90%
m/p-Xylenes	mg/kg	1.0	SEO-019	<1.0	[NT]	[NT]	LCS	90%
Styrene	mg/kg	0.5	SEO-019	<0.50	[NT]	[NT]	[NR]	[NR]
o-Xylene	mg/kg	0.5	SEO-019	<0.50	[NT]	[NT]	LCS	86%
Isopropylbenzene	mg/kg	0.5	SEO-019	<0.50	[NT]	[NT]	[NR]	[NR]
n-Propylbenzene	mg/kg	0.5	SEO-019	<0.50	[NT]	[NT]	[NR]	[NR]
1,3,5-Trimethylbenzene	mg/kg	0.5	SEO-019	<0.50	[NT]	[NT]	[NR]	[NR]
tert-Butylbenzene	mg/kg	0.5	SEO-019	<0.50	[NT]	[NT]	[NR]	[NR]
1,2,4-Trimethylbenzene	mg/kg	0.5	SEO-019	<0.50	[NT]	[NT]	[NR]	[NR]
sec-Butylbenzene	mg/kg	0.5	SEO-019	<0.50	[NT]	[NT]	[NR]	[NR]
p-Isopropyltoluene	mg/kg	0.5	SEO-019	<0.50	[NT]	[NT]	[NR]	[NR]
n-Butylbenzene	mg/kg	0.5	SEO-019	<0.50	[NT]	[NT]	[NR]	[NR]
Dibromofluoromethane	% Recovery	0	SEO-019	99	[NT]	[NT]	LCS	99%
1,2-Dichloroethane-d4	% recovery	0	SEO-019	103	[NT]	[NT]	LCS	99%
Toluene-*d8 Surrogate* 2	% recovery	0	SEO-019	100	[NT]	[NT]	LCS	100%
4-Bromofluorobenzene *Surrogate 3*	% recovery	0	SEO-019	97	[NT]	[NT]	LCS	98%

QUALITY CONTROL TRH in soil with C6-C9 by P/T	UNITS	LOR	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery Duplicate + %RPD
Date Extracted (TRH C6-C9 PT)				27/05/08	[NT]	[NT]	LCS	27/05/08%
Date Analysed (TRH C6-C9 PT)				29/05/08	[NT]	[NT]	LCS	29/05/08%
TRH C_6 - C_9 P&T	mg/kg	20	SEO-017	<20	[NT]	[NT]	LCS	99%
Date Extracted (TRH C10-C36)				30/05/08	[NT]	[NT]	LCS	30/05/08%
Date Analysed (TRH C10-C36)				30/05/08	[NT]	[NT]	LCS	30/05/08%
TRH C_{10} - C_{14}	mg/kg	20	SEO-020	<20	[NT]	[NT]	LCS	115%
TRH C_{15} - C_{28}	mg/kg	50	SEO-020	<50	[NT]	[NT]	LCS	118%
TRH C_{29} - C_{36}	mg/kg	50	SEO-020	<50	[NT]	[NT]	LCS	125%
QUALITY CONTROL PAHs in Soil	UNITS	LOR	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery Duplicate + %RPD
Date Extracted				30/05/08	[NT]	[NT]	LCS	30/05/08%
Date Analysed				30/05/08	[NT]	[NT]	LCS	30/05/08%
Naphthalene	mg/kg	0.1	SEO-030	<0.1	[NT]	[NT]	LCS	81%
Acenaphthylene	mg/kg	0.1	SEO-030	<0.1	[NT]	[NT]	LCS	83%
Acenaphthene	mg/kg	0.1	SEO-030	<0.1	[NT]	[NT]	LCS	103%
Fluorene	mg/kg	0.1	SEO-030	<0.1	[NT]	[NT]	[NR]	[NR]
Phenanthrene	mg/kg	0.1	SEO-030	<0.1	[NT]	[NT]	LCS	94%
Anthracene	mg/kg	0.1	SEO-030	<0.1	[NT]	[NT]	LCS	99%
Fluoranthene	mg/kg	0.1	SEO-030	<0.1	[NT]	[NT]	LCS	96%
Pyrene	mg/kg	0.1	SEO-030	<0.1	[NT]	[NT]	LCS	99%
Benzo[*a*]anthracene	mg/kg	0.1	SEO-030	<0.1	[NT]	[NT]	[NR]	[NR]
Chrysene	mg/kg	0.1	SEO-030	<0.1	[NT]	[NT]	[NR]	[NR]
Benzo[*b,k*]fluoranthene	mg/kg	0.2	SEO-030	<0.2	[NT]	[NT]	[NR]	[NR]
Benzo[*a*]pyrene	mg/kg	0.05	SEO-030	<0.05	[NT]	[NT]	LCS	100%
Indeno[*123-cd*]pyrene	mg/kg	0.1	SEO-030	<0.1	[NT]	[NT]	[NR]	[NR]
Dibenzo[*ah*]anthracene	mg/kg	0.1	SEO-030	<0.1	[NT]	[NT]	[NR]	[NR]
Benzo[*ghi*]perylene	mg/kg	0.1	SEO-030	<0.1	[NT]	[NT]	[NR]	[NR]
Total PAHs	mg/kg	1.55	SEO-030	<1.55	[NT]	[NT]	[NR]	[NR]
Nitrobenzene-d5	%	0	SEO-030	105	[NT]	[NT]	LCS	105%
2-Fluorobiphenyl	%	0	SEO-030	103	[NT]	[NT]	LCS	103%
p -Terphenyl-*d*14	%	0	SEO-030	105	[NT]	[NT]	LCS	105%

QUALITY CONTROL **Metals in Soil by ICP-OES**	**UNITS**	**LOR**	**METHOD**	**Blank**	**Duplicate Sm#**	**Duplicate** **Base + Duplicate + %RPD**	**Spike Sm#**	**Matrix Spike % Recovery** **Duplicate + %RPD**
Date Extracted (Metals)				30/05/08	[NT]	[NT]	LCS	30/05/08%
Date Analysed (Metals)				30/05/08	[NT]	[NT]	LCS	30/05/08%
Arsenic	mg/kg	3	SEM-010	<3	[NT]	[NT]	LCS	97%
Cadmium	mg/kg	0.3	SEM-010	<0.3	[NT]	[NT]	LCS	103%
Chromium	mg/kg	0.3	SEM-010	<0.3	[NT]	[NT]	LCS	96%
Copper	mg/kg	0.5	SEM-010	<0.5	[NT]	[NT]	LCS	100%
Lead	mg/kg	1	SEM-010	<1	[NT]	[NT]	LCS	101%
Nickel	mg/kg	0.5	SEM-010	<0.5	[NT]	[NT]	LCS	100%
Zinc	mg/kg	0.5	SEM-010	<0.5	[NT]	[NT]	LCS	99%
QUALITY CONTROL Mercury Cold Vapor/Hg Analyser	UNITS	LOR	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery Duplicate + %RPD
Date Extracted (Mercury)				30/05/08	[NT]	[NT]	LCS	30/05/08%
Date Analysed (Mercury)				30/05/08	[NT]	[NT]	LCS	30/05/08%
Mercury	mg/kg	0.05	SEM-005	<0.05	[NT]	[NT]	LCS	107%
QUALITY CONTROL Moisture	UNITS	LOR	METHOD	Blank				
Date Analysed (moisture)				28/05/08				
Moisture	%	1	AN002	<1				

Result Codes

[INS]	:	Insufficient Sample for this test	[RPD]	:	Relative Percentage Difference
[NR]	:	Not Requested	*	:	Not part of NATA Accreditation
[NT]	:	Not tested	[N/A]	:	Not Applicable

Report Comments

Date Organics extraction commenced: 27/05/08
NATA Corporate Accreditation No. 2562, Site No 4354
Note: Test results are not corrected for recovery (excluding Dioxins/Furans* and PAH in XAD and PUF).
This document is issued, on the Client's behalf, by the Company under its General Conditions of Service available on request and accessible at http://www.sgs.com/terms_and_conditions.htm. The Client's attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any other holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.

Quality Control Protocol

Method Blank: An analyte free matrix to which all reagents are added in the same volume or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. A method blank is prepared every 20 samples.
Duplicate: A separate portion of a sample being analysed that is treated the same as the other samples in the batch. One duplicate is processed at least every 10 samples.
Surrogate Spike: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. Surrogates are added to samples before extraction to monitor extraction efficiency and percent recovery in each sample.
Internal Standard: Added to all samples requiring analysis for organics (where relevant) or metals by ICP after the extraction/digestion process; the compounds/elements serve to give a standard of retention time and/or response, which is invariant from run-to-run with the instruments.
Laboratory Control Sample: A known matrix spiked with compound(s) representative of the target analytes. It is used to document laboratory performance. When the results of the matrix spike analysis indicates a potential problem due to the sample matrix itself, the LCS results are used to verify that the laboratory can perform the analysis in a clean matrix.
Matrix Spike: An aliquot of sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Quality Acceptance Criteria

Unless otherwise specified in the test method, the following general acceptance criteria apply:

Method Blanks:	<LOR
Duplicates:	<5 x LOR: No RPD criteria applied.
	>5 x LOR: 0-30% RPD is accepted.
LCS's:	Determined by Control Charts.
	Where control charts have not been developed, the Matrix Spikes criteria apply.
Matrix Spikes:	70-130% recovery is accepted for metals / inorganics.
	60-140% is accepted for organics.
Surrogates:	60-130% recovery is accepted for BTEX.
	70-130% recovery is accepted for other organics.

Envirolab Services Pty Ltd
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ph 02 9910 6200 fax 02 9910 6201
enquiries@envirolabservices.com.au
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CERTIFICATE OF ANALYSIS 19679

Client:
JBS Environmental
P.O. Box 940
MASCOT
NSW 1460

Attention: Danielle Ord

Sample log in details:

Your Reference:	**40565, Redfern RSL**
No. of samples:	1 Water
Date samples received:	26/05/08
Date completed instructions received:	26/05/08

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:	2/06/08
Date of Preliminary Report:	Not Issued
Issue Date:	3/06/08

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Tests not covered by NATA are denoted with *.

Results Approved By:

Jacinta Hurst
Operations Manager

VOCs in water		
Our Reference:	UNITS	19679-1
Your Reference	----------	RRSL-UST
Date Sampled	----------	26/05/2008
Type of sample		Water
Date extracted	-	2/06/2008
Date analysed	-	2/06/2008
Dichlorodifluoromethane	µg/L	<100
Chloromethane	µg/L	<100
Vinyl Chloride	µg/L	<100
Bromomethane	µg/L	<100
Chloroethane	µg/L	<100
Trichlorofluoromethane	µg/L	<100
1,1-Dichloroethene	µg/L	<10
Trans-1,2-dichloroethene	µg/L	<10
1,1-dichloroethane	µg/L	<10
Cis-1,2-dichloroethene	µg/L	<10
Bromochloromethane	µg/L	<10
Chloroform	µg/L	<10
2,2-dichloropropane	µg/L	<10
1,2-dichloroethane	µg/L	<10
1,1,1-trichloroethane	µg/L	<10
1,1-dichloropropene	µg/L	<10
Carbon tetrachloride	µg/L	<10
Benzene	µg/L	<10
Dibromomethane	µg/L	<10
1,2-dichloropropane	µg/L	<10
Trichloroethene	µg/L	<10
Bromodichloromethane	µg/L	<10
trans-1,3-dichloropropene	µg/L	<10
cis-1,3-dichloropropene	µg/L	<10
1,1,2-trichloroethane	µg/L	<10
Toluene	µg/L	<10
1,3-dichloropropane	µg/L	<10
Dibromochloromethane	µg/L	<10
1,2-dibromoethane	µg/L	<10
Tetrachloroethene	µg/L	<10
1,1,1,2-tetrachloroethane	µg/L	<10
Chlorobenzene	µg/L	<10
Ethylbenzene	µg/L	<10
Bromoform	µg/L	<10
m+p-xylene	µg/L	<20
Styrene	µg/L	<10
1,1,2,2-tetrachloroethane	µg/L	<10

VOCs in water Our Reference: Your Reference Date Sampled Type of sample	UNITS ---------- ----------	19679-1 RRSL-UST 26/05/2008 Water
o-xylene	µg/L	<10
1,2,3-trichloropropane*	µg/L	<10
Isopropylbenzene	µg/L	<10
Bromobenzene	µg/L	<10
n-propyl benzene	µg/L	<10
2-chlorotoluene	µg/L	<10
4-chlorotoluene	µg/L	<10
1,3,5-trimethyl benzene	µg/L	15
Tert-butyl benzene	µg/L	<10
1,2,4-trimethyl benzene	µg/L	50
1,3-dichlorobenzene	µg/L	<10
Sec-butyl benzene	µg/L	<10
1,4-dichlorobenzene	µg/L	<10
4-isopropyl toluene	µg/L	<10
1,2-dichlorobenzene	µg/L	<10
n-butyl benzene	µg/L	<10
1,2-dibromo-3-chloropropane	µg/L	<10
1,2,4-trichlorobenzene	µg/L	<10
Hexachlorobutadiene	µg/L	<10
1,2,3-trichlorobenzene	µg/L	<10
Surrogate Dibromofluoromethane	%	76
Surrogate toluene-d8	%	83
Surrogate 4-BFB	%	92

vTPH in Water (C6-C9)		
Our Reference:	UNITS	19679-1
Your Reference	----------	RRSL-UST
Date Sampled	----------	26/05/2008
Type of sample		Water
Date extracted	-	2/06/2008
Date analysed	-	2/06/2008
TPH C_6 - C_9	µg/L	<100
Surrogate Dibromofluoromethane	%	76
Surrogate toluene-d8	%	83
Surrogate 4-BFB	%	92

sTPH in Water (C10-C36)		
Our Reference:	UNITS	19679-1
Your Reference	----------	RRSL-UST
Date Sampled	----------	26/05/2008
Type of sample		Water
Date extracted	-	27/05/2008
Date analysed	-	28/05/2008
TPH C_{10} - C_{14}	µg/L	2,000
TPH C_{15} - C_{28}	µg/L	7,500
TPH C_{29} - C_{36}	µg/L	<100
Surrogate o-Terphenyl	%	#

Method ID	Methodology Summary
GC.13	Water samples are analysed directly 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.

QUALITY CONTROL VOCs in water	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			2/6/08	[NT]	[NT]	LCS-W1	2/6/08%
Date analysed	-			2/6/08	[NT]	[NT]	LCS-W1	2/6/08%
Dichlorodifluoromethane	µg/L	10	GC.13	<10	[NT]	[NT]	[NR]	[NR]
Chloromethane	µg/L	10	GC.13	<10	[NT]	[NT]	[NR]	[NR]
Vinyl Chloride	µg/L	10	GC.13	<10	[NT]	[NT]	[NR]	[NR]
Bromomethane	µg/L	10	GC.13	<10	[NT]	[NT]	[NR]	[NR]
Chloroethane	µg/L	10	GC.13	<10	[NT]	[NT]	[NR]	[NR]
Trichlorofluoromethane	µg/L	10	GC.13	<10	[NT]	[NT]	[NR]	[NR]
1,1-Dichloroethene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
Trans-1,2-dichloroethene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
1,1-dichloroethane	µg/L	1	GC.13	<1.0	[NT]	[NT]	LCS-W1	67%
Cis-1,2-dichloroethene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
Bromochloromethane	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
Chloroform	µg/L	1	GC.13	<1.0	[NT]	[NT]	LCS-W1	67%
2,2-dichloropropane	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
1,2-dichloroethane	µg/L	1	GC.13	<1.0	[NT]	[NT]	LCS-W1	73%
1,1,1-trichloroethane	µg/L	1	GC.13	<1.0	[NT]	[NT]	LCS-W1	74%
1,1-dichloropropene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
Carbon tetrachloride	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
Benzene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
Dibromomethane	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
1,2-dichloropropane	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
Trichloroethene	µg/L	1	GC.13	<1.0	[NT]	[NT]	LCS-W1	91%
Bromodichloromethane	µg/L	1	GC.13	<1.0	[NT]	[NT]	LCS-W1	92%
trans-1,3-dichloropropene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
cis-1,3-dichloropropene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
1,1,2-trichloroethane	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
Toluene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
1,3-dichloropropane	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
Dibromochloromethane	µg/L	1	GC.13	<1.0	[NT]	[NT]	LCS-W1	95%
1,2-dibromoethane	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
Tetrachloroethene	µg/L	1	GC.13	<1.0	[NT]	[NT]	LCS-W1	98%
1,1,1,2-tetrachloroethane	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
Chlorobenzene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
Ethylbenzene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
Bromoform	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
m+p-xylene	µg/L	2	GC.13	<2.0	[NT]	[NT]	[NR]	[NR]
Styrene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
1,1,2,2-tetrachloroethane	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]

QUALITY CONTROL VOCs in water	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
o-xylene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
1,2,3-trichloropropane*	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
Isopropylbenzene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
Bromobenzene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
n-propyl benzene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
2-chlorotoluene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
4-chlorotoluene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
1,3,5-trimethyl benzene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
Tert-butyl benzene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
1,2,4-trimethyl benzene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
1,3-dichlorobenzene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
Sec-butyl benzene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
1,4-dichlorobenzene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
4-isopropyl toluene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
1,2-dichlorobenzene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
n-butyl benzene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
1,2-dibromo-3-chloropropane	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
1,2,4-trichlorobenzene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
Hexachlorobutadiene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
1,2,3-trichlorobenzene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
Surrogate Dibromofluoromethane	%		GC.13	111	[NT]	[NT]	LCS-W1	81%
Surrogate toluene-d8	%		GC.13	98	[NT]	[NT]	LCS-W1	102%
Surrogate 4-BFB	%		GC.13	90	[NT]	[NT]	LCS-W1	104%

QUALITY CONTROL vTPH in Water (C6-C9)	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			2/6/08	[NT]	[NT]	LCS-W1	2/6/08%
Date analysed	-			2/6/08	[NT]	[NT]	LCS-W1	2/6/08%
TPH C_6 - C_9	µg/L	10	GC.16	<10	[NT]	[NT]	LCS-W1	94%
Surrogate Dibromofluoromethane	%		GC.13	111	[NT]	[NT]	LCS-W1	78%
Surrogate toluene-d8	%		GC.13	98	[NT]	[NT]	LCS-W1	107%
Surrogate 4-BFB	%		GC.13	90	[NT]	[NT]	LCS-W1	99%
QUALITY CONTROL sTPH in Water (C10-C36)	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			27/5/08	[NT]	[NT]	LCS-W2	27/5/08%
Date analysed	-			28/5/08	[NT]	[NT]	LCS-W2	28/5/08%
TPH C_{10} - C_{14}	µg/L	50	GC.3	<50	[NT]	[NT]	LCS-W2	78%
TPH C_{15} - C_{28}	µg/L	100	GC.3	<100	[NT]	[NT]	LCS-W2	100%
TPH C_{29} - C_{36}	µg/L	100	GC.3	<100	[NT]	[NT]	LCS-W2	103%
Surrogate o-Terphenyl	%		GC.3	107	[NT]	[NT]	LCS-W2	112%

Report Comments:

Total Petroleum Hydrocarbons in water:# Percent recovery not available due to sample matrix.

VOC's in Water: PQL raised due to sample matrix.

Total Petroleum Hydrocarbons in water (volatile) :PQL raised due to sample matrix.
Asbestos was analysed by Approved Identifier: Not applicable for this job

INS: Insufficient sample for this test	NT: Not tested	PQL: Practical Quantitation Limit
RPD: Relative Percent Difference	NA: Test not required	LCS: Laboratory Control Sample
NR: Not requested	<: Less than	>: Greater than

Quality Control Definitions

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 and 10-140% for SVOC and speciated phenols is acceptable. Surrogates: 60-140% is acceptable for general organics and 10-140% for SVOC and speciated phenols.

CHAIN OF CUSTODY

JBS ENVIRONMENTAL

PROJECT NO.: 40565
PROJECT NAME: Redfern RSL
SEND REPORT TO: D.Ord SEND INVOICE TO: A.Worth
DATE NEEDED BY: STD

LABORATORY BATCH NO:
SAMPLERS: D.Ord
PHONE: 8338 1011 / 0418611322 EMAIL:
QC LEVEL: NEPM 1999 ( )

COMMENTS / SPECIAL HANDLING / STORAGE OR DISPOSAL:

SAMPLE ID	MATRIX	D A T E	TIME	TYPE & PRESERVATIVE	pH	TPH trace	VOCs	NOTES
RRSL-UST	Water	26/5/08		Ice + various		X	X	

Envirolab Services
12 Ashley St
Chatswood NSW 2067
Ph: 9910 6200

Job No: 19674
Date received: 26/5/08
Time received: 17:5
Received by:
Temp: Cool/Ambient
Cooling: Icepack
Security: Intact/Broken/None

RELINQUISHED BY:	METHOD OF SHIPMENT:	RECEIVED BY:	FOR RECEIVING LAB USE ONLY:
NAME: D.Ord DATE: 26/5/08	CONSIGNMENT NOTE NO.	NAME: Rebecca DATE: 26/5/08	COOLER SEAL – Yes No Intact Broken
OF: JBS ENV	TRANSPORT CO.	OF: Envirolab	COOLER TEMP deg C
NAME: DATE:	CONSIGNMENT NOTE NO.	NAME: DATE:	COOLER SEAL Yes No Intact Broken
OF:	TRANSPORT CO	OF:	COOLER TEMP deg C

Container & Preservative Codes: P = Plastic; J = Soil Jar; B = Glass Bottle; N = Nitric Acid Prsvd.; C = Sodium Hydroxide Prsvd; VC = Hydrochloric Acid Prsvd Vial; VS = Sulfuric Acid Prsvd Vial; S = Sulfuric Acid Prsvd; Z = Zinc Prsvd; E = EDTA Prsvd; ST = Sterile Bottle; O = Other

JBS Environmental Pty Ltd ABN 67 071 842 638
Phone: (02) 8338-1011
Fax: (02) 8338-1700

Suite 2, 595 Gardeners Road MASCOT NSW 2020
PO Box 940 MASCOT NSW 1460
www.jbsgroup.com.au

Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
enquiries@envirolabservices.com.au
www.envirolabservices.com.au

CERTIFICATE OF ANALYSIS 19678

Client:
JBS Environmental
P.O. Box 940
MASCOT
NSW 1460

Attention: Danielle Ord

Sample log in details:

Your Reference:	**40565, Redfern RSL**
No. of samples:	23 Soils, 3 Waters
Date samples received:	26/05/08
Date completed instructions received:	26/05/08

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:	2/06/08
Date of Preliminary Report:	Not issued
Issue Date:	2/06/08

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Results Approved By:

Jacinta Hurst
Operations Manager

David Springer
Business Development & Quality Manager

Joshua Lim
Chemist

VOCs in soil				
Our Reference:	UNITS	19678-7	19678-13	19678-20
Your Reference	----------	RRSL3	RRSL6	RRSL10
Depth	----------	0.3	0.4	0.15
Date Sampled		26/05/2008	26/05/2008	26/05/2008
Type of sample		Soil	Soil	Soil
Date extracted	-	28/05/2008	28/05/2008	28/05/2008
Date analysed	-	30/05/2008	30/05/2008	30/05/2008
Dichlorodifluoromethane	mg/kg	<10	<10	<10
Chloromethane	mg/kg	<10	<10	<10
Vinyl Chloride	mg/kg	<10	<10	<10
Bromomethane	mg/kg	<10	<10	<10
Chloroethane	mg/kg	<10	<10	<10
Trichlorofluoromethane	mg/kg	<10	<10	<10
1,1-Dichloroethene	mg/kg	<1.0	<1.0	<1.0
trans-1,2-dichloroethene	mg/kg	<1.0	<1.0	<1.0
1,1-dichloroethane	mg/kg	<1.0	<1.0	<1.0
cis-1,2-dichloroethene	mg/kg	<1.0	<1.0	<1.0
bromochloromethane	mg/kg	<1.0	<1.0	<1.0
chloroform	mg/kg	<1.0	<1.0	<1.0
2,2-dichloropropane	mg/kg	<1.0	<1.0	<1.0
1,2-dichloroethane	mg/kg	<1.0	<1.0	<1.0
1,1,1-trichloroethane	mg/kg	<1.0	<1.0	<1.0
1,1-dichloropropene	mg/kg	<1.0	<1.0	<1.0
carbon tetrachloride	mg/kg	<1.0	<1.0	<1.0
Benzene	mg/kg	<0.5	<0.5	<0.5
dibromomethane	mg/kg	<1.0	<1.0	<1.0
1,2-dichloropropane	mg/kg	<1.0	<1.0	<1.0
trichloroethene	mg/kg	<1.0	<1.0	<1.0
bromodichloromethane	mg/kg	<1.0	<1.0	<1.0
trans-1,3-dichloropropene	mg/kg	<1.0	<1.0	<1.0
cis-1,3-dichloropropene	mg/kg	<1.0	<1.0	<1.0
1,1,2-trichloroethane	mg/kg	<1.0	<1.0	<1.0
Toluene	mg/kg	<0.5	<0.5	<0.5
1,3-dichloropropane	mg/kg	<1.0	<1.0	<1.0
dibromochloromethane	mg/kg	<1.0	<1.0	<1.0
1,2-dibromoethane	mg/kg	<1.0	<1.0	<1.0
tetrachloroethene	mg/kg	<1.0	<1.0	<1.0
1,1,1,2-tetrachloroethane	mg/kg	<1.0	<1.0	<1.0
chlorobenzene	mg/kg	<1.0	<1.0	<1.0
Ethylbenzene	mg/kg	<1.0	<1.0	<1.0
bromoform	mg/kg	<1.0	<1.0	<1.0
m+p-xylene	mg/kg	<2.0	<2.0	<2.0
styrene	mg/kg	<1.0	<1.0	<1.0

VOCs in soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ---------- ----------	19678-7 RRSL3 0.3 26/05/2008 Soil	19678-13 RRSL6 0.4 26/05/2008 Soil	19678-20 RRSL10 0.15 26/05/2008 Soil
1,1,2,2-tetrachloroethane	mg/kg	<1.0	<1.0	<1.0
o-Xylene	mg/kg	<1.0	<1.0	<1.0
1,2,3-trichloropropane*	mg/kg	<1.0	<1.0	<1.0
isopropylbenzene	mg/kg	<1.0	<1.0	<1.0
bromobenzene	mg/kg	<1.0	<1.0	<1.0
n-propyl benzene	mg/kg	<1.0	<1.0	<1.0
2-chlorotoluene	mg/kg	<1.0	<1.0	<1.0
4-chlorotoluene	mg/kg	<1.0	<1.0	<1.0
1,3,5-trimethyl benzene	mg/kg	<1.0	<1.0	<1.0
tert-butyl benzene	mg/kg	<1.0	<1.0	<1.0
1,2,4-trimethyl benzene	mg/kg	<1.0	<1.0	<1.0
1,3-dichlorobenzene	mg/kg	<1.0	<1.0	<1.0
sec-butyl benzene	mg/kg	<1.0	<1.0	<1.0
1,4-dichlorobenzene	mg/kg	<1.0	<1.0	<1.0
4-isopropyl toluene	mg/kg	<1.0	<1.0	<1.0
1,2-dichlorobenzene	mg/kg	<1.0	<1.0	<1.0
n-butyl benzene	mg/kg	<1.0	<1.0	<1.0
1,2-dibromo-3-chloropropane	mg/kg	<1.0	<1.0	<1.0
1,2,4-trichlorobenzene	mg/kg	<1.0	<1.0	<1.0
hexachlorobutadiene	mg/kg	<1.0	<1.0	<1.0
1,2,3-trichlorobenzene	mg/kg	<1.0	<1.0	<1.0
Surrogate Dibromofluorometha	%	81	84	82
Surrogate aaa-Trifluorotoluene	%	123	118	119
Surrogate Toluene-d_8	%	91	89	91
Surrogate 4-Bromofluorobenzene	%	78	79	78

MAH's in soil						
Our Reference:	UNITS	19678-1	19678-5	19678-9	19678-10	19678-16
Your Reference	----------	RRSL1	RRSL2	RRSL4	RRSL5	RRSL7
Depth	----------	0.1	0.3	0.3	0.1	0.6
Date Sampled		26/05/2008	26/05/2008	26/05/2008	26/05/2008	26/05/2008
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/05/2008	28/05/2008	28/05/2008	28/05/2008	28/05/2008
Date analysed	-	30/05/2008	30/05/2008	30/05/2008	30/05/2008	30/05/2008
Benzene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
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
styrene	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
isopropylbenzene	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
n-propyl benzene	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
1,3,5-trimethyl benzene	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
tert-butyl benzene	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-trimethyl benzene	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
sec-butyl benzene	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
4-isopropyl toluene	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
n-butyl benzene	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
Surrogate Dibromofluorometha	%	91	81	82	82	76
Surrogate aaa-Trifluorotoluene	%	114	124	125	124	129
Surrogate Toluene-d_8	%	90	92	94	92	92
Surrogate 4-Bromofluorobenzene	%	84	82	74	81	83

MAH's in soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ---------- ----------	19678-17 RRSL7 0.8 26/05/2008 Soil	19678-18 RRSL8 0.2 26/05/2008 Soil	19678-19 RRSL9 0.3 26/05/2008 Soil	19678-22 RRSL10 0.7 26/05/2008 Soil	19678-23 QA1 - 26/05/2008 Soil
Date extracted	-	28/05/2008	28/05/2008	28/05/2008	28/05/2008	28/05/2008
Date analysed	-	30/05/2008	30/05/2008	30/05/2008	30/05/2008	30/05/2008
Benzene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
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
styrene	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
isopropylbenzene	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
n-propyl benzene	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
1,3,5-trimethyl benzene	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
tert-butyl benzene	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-trimethyl benzene	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
sec-butyl benzene	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
4-isopropyl toluene	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
n-butyl benzene	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
Surrogate Dibromofluorometha	%	81	82	70	79	79
Surrogate aaa-Trifluorotoluene	%	122	122	131	114	125
Surrogate Toluene-d_8	%	90	93	90	92	91
Surrogate 4-Bromofluorobenzene	%	81	80	74	78	78

TPH in Soil (C6-C9)						
Our Reference:	UNITS	19678-1	19678-5	19678-7	19678-9	19678-10
Your Reference	----------	RRSL1	RRSL2	RRSL3	RRSL4	RRSL5
Depth	----------	0.1	0.3	0.3	0.3	0.1
Date Sampled		26/05/2008	26/05/2008	26/05/2008	26/05/2008	26/05/2008
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/05/2008	28/05/2008	28/05/2008	28/05/2008	28/05/2008
Date analysed	-	30/05/2008	30/05/2008	30/05/2008	30/05/2008	30/05/2008
vTPH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
Surrogate aaa-Trifluorotoluene	%	114	124	123	125	124

TPH in Soil (C6-C9)						
Our Reference:	UNITS	19678-13	19678-16	19678-17	19678-18	19678-19
Your Reference	----------	RRSL6	RRSL7	RRSL7	RRSL8	RRSL9
Depth	----------	0.4	0.6	0.8	0.2	0.3
Date Sampled		26/05/2008	26/05/2008	26/05/2008	26/05/2008	26/05/2008
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/05/2008	28/05/2008	28/05/2008	28/05/2008	28/05/2008
Date analysed	-	30/05/2008	30/05/2008	30/05/2008	30/05/2008	30/05/2008
vTPH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
Surrogate aaa-Trifluorotoluene	%	118	129	122	122	131

TPH in Soil (C6-C9)				
Our Reference:	UNITS	19678-20	19678-22	19678-23
Your Reference	----------	RRSL10	RRSL10	QA1
Depth	----------	0.15	0.7	-
Date Sampled		26/05/2008	26/05/2008	26/05/2008
Type of sample		Soil	Soil	Soil
Date extracted	-	28/05/2008	28/05/2008	28/05/2008
Date analysed	-	30/05/2008	30/05/2008	30/05/2008
vTPH C_6 - C_9	mg/kg	<25	<25	<25
Surrogate aaa-Trifluorotoluene	%	119	114	125

sTPH in Soil (C10-C36)						
Our Reference:	UNITS	19678-1	19678-5	19678-7	19678-9	19678-10
Your Reference	----------	RRSL1	RRSL2	RRSL3	RRSL4	RRSL5
Depth	----------	0.1	0.3	0.3	0.3	0.1
Date Sampled		26/05/2008	26/05/2008	26/05/2008	26/05/2008	26/05/2008
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/05/2008	28/05/2008	28/05/2008	28/05/2008	28/05/2008
Date analysed	-	29/05/2008	29/05/2008	29/05/2008	29/05/2008	29/05/2008
TPH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TPH C_{15} - C_{28}	mg/kg	<100	130	220	<100	<100
TPH C_{29} - C_{36}	mg/kg	<100	110	<100	<100	<100
Surrogate o-Terphenyl	%	88	99	95	90	91

sTPH in Soil (C10-C36)						
Our Reference:	UNITS	19678-13	19678-16	19678-17	19678-18	19678-19
Your Reference	----------	RRSL6	RRSL7	RRSL7	RRSL8	RRSL9
Depth	----------	0.4	0.6	0.8	0.2	0.3
Date Sampled		26/05/2008	26/05/2008	26/05/2008	26/05/2008	26/05/2008
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/05/2008	28/05/2008	28/05/2008	28/05/2008	28/05/2008
Date analysed	-	29/05/2008	29/05/2008	29/05/2008	29/05/2008	29/05/2008
TPH C_{10} - C_{14}	mg/kg	<50	<50	<50	<50	<50
TPH C_{15} - C_{28}	mg/kg	<100	<100	<100	540	570
TPH C_{29} - C_{36}	mg/kg	<100	<100	<100	200	270
Surrogate o-Terphenyl	%	95	90	87	120	121

sTPH in Soil (C10-C36)				
Our Reference:	UNITS	19678-20	19678-22	19678-23
Your Reference	----------	RRSL10	RRSL10	QA1
Depth	----------	0.15	0.7	-
Date Sampled		26/05/2008	26/05/2008	26/05/2008
Type of sample		Soil	Soil	Soil
Date extracted	-	28/05/2008	28/05/2008	28/05/2008
Date analysed	-	29/05/2008	29/05/2008	29/05/2008
TPH C_{10} - C_{14}	mg/kg	<50	<50	<50
TPH C_{15} - C_{28}	mg/kg	<100	<100	<100
TPH C_{29} - C_{36}	mg/kg	<100	<100	<100
Surrogate o-Terphenyl	%	93	90	86

PAHs in Soil						
Our Reference:	UNITS	19678-1	19678-5	19678-7	19678-9	19678-10
Your Reference	----------	RRSL1	RRSL2	RRSL3	RRSL4	RRSL5
Depth	----------	0.1	0.3	0.3	0.3	0.1
Date Sampled		26/05/2008	26/05/2008	26/05/2008	26/05/2008	26/05/2008
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	28/05/2008	28/05/2008	28/05/2008	28/05/2008	28/05/2008
Date analysed	-	29/05/2008	29/05/2008	29/05/2008	29/05/2008	29/05/2008
Naphthalene	mg/kg	<0.1	<0.1	0.3	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	0.9	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	1.0	<0.1	<0.1
Phenanthrene	mg/kg	0.2	0.4	12	0.2	0.1
Anthracene	mg/kg	<0.1	<0.1	2.8	<0.1	<0.1
Fluoranthene	mg/kg	0.2	0.8	13	0.3	<0.1
Pyrene	mg/kg	0.2	0.9	13	0.3	<0.1
Benzo(a)anthracene	mg/kg	<0.1	0.5	6.2	0.2	<0.1
Chrysene	mg/kg	0.1	0.5	6.3	0.2	<0.1
Benzo(b+k)fluoranthene	mg/kg	<0.2	0.8	8.6	0.4	<0.2
Benzo(a)pyrene	mg/kg	0.09	0.5	6.5	0.3	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	0.3	4.0	0.2	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	0.7	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	0.3	3.3	0.2	<0.1
Surrogate p-Terphenyl-d_{14}	%	104	104	101	108	106

PAHs in Soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ---------- ----------	19678-13 RRSL6 0.4 26/05/2008 Soil	19678-16 RRSL7 0.6 26/05/2008 Soil	19678-17 RRSL7 0.8 26/05/2008 Soil	19678-18 RRSL8 0.2 26/05/2008 Soil	19678-19 RRSL9 0.3 26/05/2008 Soil
Date extracted	-	28/05/2008	28/05/2008	28/05/2008	28/05/2008	28/05/2008
Date analysed	-	29/05/2008	29/05/2008	29/05/2008	29/05/2008	29/05/2008
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	0.3	2.4
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	0.5
Fluoranthene	mg/kg	0.3	0.1	<0.1	0.5	4.7
Pyrene	mg/kg	0.3	0.1	<0.1	0.6	4.0
Benzo(a)anthracene	mg/kg	0.2	<0.1	<0.1	0.3	1.5
Chrysene	mg/kg	0.2	0.1	<0.1	0.3	1.6
Benzo(b+k)fluoranthene	mg/kg	0.4	<0.2	<0.2	0.5	2.4
Benzo(a)pyrene	mg/kg	0.2	0.08	<0.05	0.2	1.4
Indeno(1,2,3-c,d)pyrene	mg/kg	0.2	<0.1	<0.1	0.2	1.0
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	0.1
Benzo(g,h,i)perylene	mg/kg	0.1	<0.1	<0.1	0.2	0.8
Surrogate p-Terphenyl-d_{14}	%	108	104	107	105	106

PAHs in Soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ---------- ----------	19678-20 RRSL10 0.15 26/05/2008 Soil	19678-22 RRSL10 0.7 26/05/2008 Soil	19678-23 QA1 - 26/05/2008 Soil
Date extracted	-	28/05/2008	28/05/2008	28/05/2008
Date analysed	-	29/05/2008	29/05/2008	29/05/2008
Naphthalene	mg/kg	0.2	<0.1	<0.1
Acenaphthylene	mg/kg	0.6	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.5	<0.1	<0.1
Phenanthrene	mg/kg	3.9	<0.1	<0.1
Anthracene	mg/kg	1.0	<0.1	<0.1
Fluoranthene	mg/kg	5.5	<0.1	<0.1
Pyrene	mg/kg	4.9	<0.1	<0.1
Benzo(a)anthracene	mg/kg	2.6	<0.1	<0.1
Chrysene	mg/kg	2.4	<0.1	<0.1
Benzo(b+k)fluoranthene	mg/kg	3.9	<0.2	<0.2
Benzo(a)pyrene	mg/kg	2.6	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	1.5	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	0.3	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	1.1	<0.1	<0.1
Surrogate p-Terphenyl-d_{14}	%	104	105	102

Organochlorine Pesticides in soil				
Our Reference:	UNITS	19678-7	19678-13	19678-20
Your Reference	----------	RRSL3	RRSL6	RRSL10
Depth	----------	0.3	0.4	0.15
Date Sampled		26/05/2008	26/05/2008	26/05/2008
Type of sample		Soil	Soil	Soil
Date extracted	-	28/05/2008	28/05/2008	28/05/2008
Date analysed	-	29/05/2008	29/05/2008	29/05/2008
HCB	mg/kg	<0.1	<0.1	<0.1
alpha-BHC	mg/kg	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1
Surrogate TCLMX	%	75	77	76

PCBs in Soil				
Our Reference:	UNITS	19678-7	19678-13	19678-20
Your Reference	----------	RRSL3	RRSL6	RRSL10
Depth	----------	0.3	0.4	0.15
Date Sampled		26/05/2008	26/05/2008	26/05/2008
Type of sample		Soil	Soil	Soil
Date extracted	-	28/05/2008	28/05/2008	28/05/2008
Date analysed	-	29/05/2008	29/05/2008	29/05/2008
Arochlor 1016	mg/kg	<0.1	<0.1	<0.1
Arochlor 1232	mg/kg	<0.1	<0.1	<0.1
Arochlor 1242	mg/kg	<0.1	<0.1	<0.1
Arochlor 1248	mg/kg	<0.1	<0.1	<0.1
Arochlor 1254	mg/kg	<0.1	<0.1	<0.1
Arochlor 1260	mg/kg	<0.1	<0.1	<0.1
Surrogate TCLMX	%	75	77	76

Acid Extractable metals in soil						
Our Reference:	UNITS	19678-1	19678-5	19678-7	19678-9	19678-10
Your Reference	----------	RRSL1	RRSL2	RRSL3	RRSL4	RRSL5
Depth	----------	0.1	0.3	0.3	0.3	0.1
Date Sampled		26/05/2008	26/05/2008	26/05/2008	26/05/2008	26/05/2008
Type of sample		Soil	Soil	Soil	Soil	Soil
Date digested	-	29/05/2008	29/05/2008	29/05/2008	29/05/2008	29/05/2008
Date analysed	-	29/05/2008	29/05/2008	29/05/2008	29/05/2008	29/05/2008
Arsenic	mg/kg	<4.0	17	6.0	17	<4.0
Cadmium	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	mg/kg	100	18	55	28	130
Copper	mg/kg	36	30	54	74	36
Lead	mg/kg	17	260	360	250	7.5
Mercury	mg/kg	<0.10	0.30	0.33	0.28	<0.10
Nickel	mg/kg	120	13	49	30	120
Zinc	mg/kg	82	370	680	72	53

Acid Extractable metals in soil						
Our Reference:	UNITS	19678-13	19678-16	19678-17	19678-18	19678-19
Your Reference	----------	RRSL6	RRSL7	RRSL7	RRSL8	RRSL9
Depth	----------	0.4	0.6	0.8	0.2	0.3
Date Sampled		26/05/2008	26/05/2008	26/05/2008	26/05/2008	26/05/2008
Type of sample		Soil	Soil	Soil	Soil	Soil
Date digested	-	29/05/2008	29/05/2008	29/05/2008	29/05/2008	29/05/2008
Date analysed	-	29/05/2008	29/05/2008	29/05/2008	29/05/2008	29/05/2008
Arsenic	mg/kg	6.8	<4.0	<4.0	8.5	12
Cadmium	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	mg/kg	20	7.2	12	14	12
Copper	mg/kg	37	46	2.1	38	39
Lead	mg/kg	160	130	16	840	570
Mercury	mg/kg	0.17	0.64	<0.10	0.55	0.56
Nickel	mg/kg	31	2.4	1.4	14	12
Zinc	mg/kg	230	60	3.7	130	290

Acid Extractable metals in soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ---------- ----------	19678-20 RRSL10 0.15 26/05/2008 Soil	19678-22 RRSL10 0.7 26/05/2008 Soil	19678-23 QA1 - 26/05/2008 Soil
Date digested	-	29/05/2008	29/05/2008	29/05/2008
Date analysed	-	29/05/2008	29/05/2008	29/05/2008
Arsenic	mg/kg	5.0	4.7	<4.0
Cadmium	mg/kg	<1.0	<1.0	<1.0
Chromium	mg/kg	7.4	16	8.6
Copper	mg/kg	130	3.4	62
Lead	mg/kg	440	20	150
Mercury	mg/kg	0.47	<0.10	1.2
Nickel	mg/kg	6.4	3.3	3.4
Zinc	mg/kg	420	33	58

Miscellaneous Inorg - soil				
Our Reference:	UNITS	19678-7	19678-13	19678-20
Your Reference	----------	RRSL3	RRSL6	RRSL10
Depth	----------	0.3	0.4	0.15
Date Sampled		26/05/2008	26/05/2008	26/05/2008
Type of sample		Soil	Soil	Soil
Date prepared	-	29/05/2008	29/05/2008	29/05/2008
Date analysed	-	29/05/2008	29/05/2008	29/05/2008
Sulphate, SO4 1:5 soil:water	mg/kg	<25	<25	<25
Total Cyanide	mg/kg	0.7	<0.5	<0.5

Moisture						
Our Reference:	UNITS	19678-1	19678-5	19678-7	19678-9	19678-10
Your Reference	----------	RRSL1	RRSL2	RRSL3	RRSL4	RRSL5
Depth	----------	0.1	0.3	0.3	0.3	0.1
Date Sampled		26/05/2008	26/05/2008	26/05/2008	26/05/2008	26/05/2008
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	28/05/2008	28/05/2008	28/05/2008	28/05/2008	28/05/2008
Date analysed	-	28/05/2008	28/05/2008	28/05/2008	28/05/2008	28/05/2008
Moisture	%	7.0	18	12	11	7.5

Moisture						
Our Reference:	UNITS	19678-13	19678-16	19678-17	19678-18	19678-19
Your Reference	----------	RRSL6	RRSL7	RRSL7	RRSL8	RRSL9
Depth	----------	0.4	0.6	0.8	0.2	0.3
Date Sampled		26/05/2008	26/05/2008	26/05/2008	26/05/2008	26/05/2008
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	28/05/2008	28/05/2008	28/05/2008	28/05/2008	28/05/2008
Date analysed	-	28/05/2008	28/05/2008	28/05/2008	28/05/2008	28/05/2008
Moisture	%	13	18	20	11	12

Moisture				
Our Reference:	UNITS	19678-20	19678-22	19678-23
Your Reference	----------	RRSL10	RRSL10	QA1
Depth	----------	0.15	0.7	-
Date Sampled		26/05/2008	26/05/2008	26/05/2008
Type of sample		Soil	Soil	Soil
Date prepared	-	28/05/2008	28/05/2008	28/05/2008
Date analysed	-	28/05/2008	28/05/2008	28/05/2008
Moisture	%	18	24	18

Asbestos ID - soils				
Our Reference:	UNITS	19678-7	19678-13	19678-20
Your Reference	----------	RRSL3	RRSL6	RRSL10
Depth	----------	0.3	0.4	0.15
Date Sampled		26/05/2008	26/05/2008	26/05/2008
Type of sample		Soil	Soil	Soil
Date analysed	-	30/05/2008	30/05/2008	30/05/2008
Sample Description	-	30g soil	30g soil	30g soil
Asbestos ID in soil	-	No asbestos detected	No asbestos detected	No asbestos detected
Trace Analysis	-	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected

sPOCAS		
Our Reference:	UNITS	19678-14
Your Reference	----------	RRSL7
Depth	----------	0.1
Date Sampled		26/05/2008
Type of sample		Soil
Date prepared	-	28/05/2008
Date analysed	-	28/05/2008
pH kcl	pH units	7.3
TAA pH 6.5	moles H^+/ tonne	<5
s-TAA pH 6.5	%w/w S	<0.01
pH Ox	pH units	6.7
TPA pH 6.5	moles H^+/ tonne	20
s-TPA pH 6.5	%w/w S	0.030
TSA pH 6.5	moles H^+/ tonne	20
s-TSA pH 6.5	%w/w S	0.030
ANCE	% $CaCO_3$	0.3
a-ANCE	moles H^+/ tonne	50
s-ANCE	%w/w S	0.08
SKCl	%w/w	0.005
SP	%w/w	0.016
SPOS	%w/w	0.011
a-SPOS	moles H^+/ tonne	6.8
CaKCl	%w/w	0.14
CaP	%w/w	0.18
CaA	%w/w	0.044
MgKCl	%w/w	<0.005
MgP	%w/w	0.006
MgA	%w/w	<0.005
SRAS	%w/w	<0.005
SHCl	%w/w	<0.005
SNAS	%w/w	<0.005
a-SNAS	moles H^+/ tonne	<5
s-SNAS	%w/w S	<0.01
a-Net Acidity	moles H^+/ tonne	#
Liming rate	kg $CaCO_3$/tonne	#

BTEX in Water			
Our Reference:	UNITS	19678-24	19678-25
Your Reference	----------	Trip Blank	Trip Spike
Depth	----------	-	-
Date Sampled		26/05/2008	26/05/2008
Type of sample		Water	Water
Date extracted	-	27/05/2008	27/05/2008
Date analysed	-	27/05/2008	27/05/2008
Benzene	µg/L	<1.0	87%
Toluene	µg/L	<1.0	91%
Ethylbenzene	µg/L	<1.0	92%
m+p-xylene	µg/L	<2.0	88%
o-xylene	µg/L	<1.0	90%
Surrogate Dibromofluoromethane	%	92	108
Surrogate toluene-d8	%	98	99
Surrogate 4-BFB	%	78	103

Metals in Water - Dissolved		
Our Reference:	UNITS	19678-26
Your Reference	----------	Rinsate
Depth	----------	-
Date Sampled		26/05/2008
Type of sample		Water
Arsenic - Dissolved	mg/L	<0.05
Cadmium - Dissolved	mg/L	<0.01
Chromium - Dissolved	mg/L	<0.01
Copper - Dissolved	mg/L	<0.01
Lead - Dissolved	mg/L	<0.03
Mercury - Dissolved	mg/L	<0.0005
Nickel - Dissolved	mg/L	<0.02
Zinc - Dissolved	mg/L	<0.02

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 subset	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.
Metals.20 ICP-AES	Determination of various metals by ICP-AES.
Metals.21 CV-AAS	Determination of Mercury by Cold Vapour AAS.
LAB.9	Sulphate determined turbidimetrically.
LAB.13	Cyanide - determined colourimetrically, following distillation. Based on APHA 20th ED, 4500-CN_C,E.
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.
LAB.64	sPOCAS determined using titrimetric and ICP-AES techniques. Based on Acid Sulfate Soils Laboratory Methods Guidelines, Version 2.1 - June 2004.
GC.13	Water samples are analysed directly by purge and trap GC-MS.

QUALITY CONTROL VOCs in soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			28/5/08	[NT]	[NT]	LCS-1	28/5/08%
Date analysed	-			30/5/08	[NT]	[NT]	LCS-1	30/5/08%
Dichlorodifluoromethane	mg/kg	10	GC.14	<10	[NT]	[NT]	[NR]	[NR]
Chloromethane	mg/kg	10	GC.14	<10	[NT]	[NT]	[NR]	[NR]
Vinyl Chloride	mg/kg	10	GC.14	<10	[NT]	[NT]	[NR]	[NR]
Bromomethane	mg/kg	10	GC.14	<10	[NT]	[NT]	[NR]	[NR]
Chloroethane	mg/kg	10	GC.14	<10	[NT]	[NT]	[NR]	[NR]
Trichlorofluoromethane	mg/kg	10	GC.14	<10	[NT]	[NT]	[NR]	[NR]
1,1-Dichloroethene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	[NR]	[NR]
trans-1,2-dichloroethene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	[NR]	[NR]
1,1-dichloroethane	mg/kg	1	GC.14	<1.0	[NT]	[NT]	LCS-1	125%
cis-1,2-dichloroethene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	[NR]	[NR]
bromochloromethane	mg/kg	1	GC.14	<1.0	[NT]	[NT]	[NR]	[NR]
chloroform	mg/kg	1	GC.14	<1.0	[NT]	[NT]	LCS-1	106%
2,2-dichloropropane	mg/kg	1	GC.14	<1.0	[NT]	[NT]	[NR]	[NR]
1,2-dichloroethane	mg/kg	1	GC.14	<1.0	[NT]	[NT]	LCS-1	117%
1,1,1-trichloroethane	mg/kg	1	GC.14	<1.0	[NT]	[NT]	LCS-1	104%
1,1-dichloropropene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	[NR]	[NR]
carbon tetrachloride	mg/kg	1	GC.14	<1.0	[NT]	[NT]	[NR]	[NR]
Benzene	mg/kg	0.5	GC.14	<0.5	[NT]	[NT]	[NR]	[NR]
dibromomethane	mg/kg	1	GC.14	<1.0	[NT]	[NT]	[NR]	[NR]
1,2-dichloropropane	mg/kg	1	GC.14	<1.0	[NT]	[NT]	[NR]	[NR]
trichloroethene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	LCS-1	99%
bromodichloromethane	mg/kg	1	GC.14	<1.0	[NT]	[NT]	LCS-1	97%
trans-1,3-dichloropropene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	[NR]	[NR]
cis-1,3-dichloropropene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	[NR]	[NR]
1,1,2-trichloroethane	mg/kg	1	GC.14	<1.0	[NT]	[NT]	[NR]	[NR]
Toluene	mg/kg	0.5	GC.14	<0.5	[NT]	[NT]	[NR]	[NR]
1,3-dichloropropane	mg/kg	1	GC.14	<1.0	[NT]	[NT]	[NR]	[NR]
dibromochloromethane	mg/kg	1	GC.14	<1.0	[NT]	[NT]	LCS-1	85%
1,2-dibromoethane	mg/kg	1	GC.14	<1.0	[NT]	[NT]	[NR]	[NR]
tetrachloroethene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	LCS-1	94%
1,1,1,2-tetrachloroethane	mg/kg	1	GC.14	<1.0	[NT]	[NT]	[NR]	[NR]
chlorobenzene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	[NR]	[NR]
Ethylbenzene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	[NR]	[NR]
bromoform	mg/kg	1	GC.14	<1.0	[NT]	[NT]	[NR]	[NR]
m+p-xylene	mg/kg	2	GC.14	<2.0	[NT]	[NT]	[NR]	[NR]
styrene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	[NR]	[NR]
1,1,2,2-tetrachloroethane	mg/kg	1	GC.14	<1.0	[NT]	[NT]	[NR]	[NR]
o-Xylene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	[NR]	[NR]

QUALITY CONTROL VOCs in soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
1,2,3-trichloropropane*	mg/kg	1	GC.14	<1.0	[NT]	[NT]	[NR]	[NR]
isopropylbenzene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	[NR]	[NR]
bromobenzene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	[NR]	[NR]
n-propyl benzene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	[NR]	[NR]
2-chlorotoluene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	[NR]	[NR]
4-chlorotoluene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	[NR]	[NR]
1,3,5-trimethyl benzene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	[NR]	[NR]
tert-butyl benzene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	[NR]	[NR]
1,2,4-trimethyl benzene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	[NR]	[NR]
1,3-dichlorobenzene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	[NR]	[NR]
sec-butyl benzene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	[NR]	[NR]
1,4-dichlorobenzene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	[NR]	[NR]
4-isopropyl toluene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	[NR]	[NR]
1,2-dichlorobenzene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	[NR]	[NR]
n-butyl benzene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	[NR]	[NR]
1,2-dibromo-3-chloropropane	mg/kg	1	GC.14	<1.0	[NT]	[NT]	[NR]	[NR]
1,2,4-trichlorobenzene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	[NR]	[NR]
hexachlorobutadiene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	[NR]	[NR]
1,2,3-trichlorobenzene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	[NR]	[NR]
Surrogate Dibromofluorometha	%		GC.14	64	[NT]	[NT]	LCS-1	84%
Surrogate aaa-Trifluorotoluene	%		GC.14	96	[NT]	[NT]	LCS-1	91%
Surrogate Toluene-d_8	%		GC.14	116	[NT]	[NT]	LCS-1	89%
Surrogate 4-Bromofluorobenzene	%		GC.14	95	[NT]	[NT]	LCS-1	82%

QUALITY CONTROL MAH's in soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			28/5/08	19678-1	28/05/2008 || 28/05/2008	LCS-7	28/5/08%
Date analysed	-			30/5/08	19678-1	30/05/2008 || 30/05/2008	LCS-7	30/5/08%
Benzene	mg/kg	0.5	GC.14	<0.5	19678-1	<0.5 || <0.5	LCS-7	71%
Toluene	mg/kg	0.5	GC.14	<0.5	19678-1	<0.5 || <0.5	LCS-7	128%
Ethylbenzene	mg/kg	1	GC.14	<1.0	19678-1	<1.0 || <1.0	LCS-7	126%
m+p-xylene	mg/kg	2	GC.14	<2.0	19678-1	<2.0 || <2.0	LCS-7	132%
o-Xylene	mg/kg	1	GC.14	<1.0	19678-1	<1.0 || <1.0	LCS-7	136%
styrene	mg/kg	1	GC.14	<1.0	19678-1	<1.0 || <1.0	[NR]	[NR]
isopropylbenzene	mg/kg	1	GC.14	<1.0	19678-1	<1.0 || <1.0	[NR]	[NR]
n-propyl benzene	mg/kg	1	GC.14	<1.0	19678-1	<1.0 || <1.0	[NR]	[NR]
1,3,5-trimethyl benzene	mg/kg	1	GC.14	<1.0	19678-1	<1.0 || <1.0	[NR]	[NR]
tert-butyl benzene	mg/kg	1	GC.14	<1.0	19678-1	<1.0 || <1.0	[NR]	[NR]
1,2,4-trimethyl benzene	mg/kg	1	GC.14	<1.0	19678-1	<1.0 || <1.0	[NR]	[NR]
sec-butyl benzene	mg/kg	1	GC.14	<1.0	19678-1	<1.0 || <1.0	[NR]	[NR]
4-isopropyl toluene	mg/kg	1	GC.14	<1.0	19678-1	<1.0 || <1.0	[NR]	[NR]
n-butyl benzene	mg/kg	1	GC.14	<1.0	19678-1	<1.0 || <1.0	[NR]	[NR]
Surrogate Dibromofluorometha	%		GC.14	64	19678-1	91 || 90 || RPD: 1	LCS-7	60%
Surrogate aaa-Trifluorotoluene	%		GC.14	96	19678-1	114 || 111 || RPD: 3	LCS-7	105%
Surrogate Toluene-d_8	%		GC.14	116	19678-1	90 || 90 || RPD: 0	LCS-7	109%
Surrogate 4-Bromofluorobenzene	%		GC.14	95	19678-1	84 || 83 || RPD: 1	LCS-7	98%

QUALITY CONTROL TPH in Soil (C6-C9)	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			28/5/08	19678-1	28/05/2008 || 28/05/2008	LCS-7	28/5/08%
Date analysed	-			30/5/08	19678-1	30/05/2008 || 30/05/2008	LCS-7	30/5/08%
vTPH C_6 - C_9	mg/kg	25	GC.16	<25	19678-1	<25 || <25	LCS-7	118%
Surrogate aaa-Trifluorotoluene	%		GC.14	96	19678-1	114 || 111 || RPD: 3	LCS-7	105%
QUALITY CONTROL sTPH in Soil (C10-C36)	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			28/5/08	19678-1	28/05/2008 || 28/05/2008	LCS-7	28/5/08%
Date analysed	-			29/5/08	19678-1	29/05/2008 || 29/05/2008	LCS-7	29/5/08%
TPH C_{10} - C_{14}	mg/kg	50	GC.3	<50	19678-1	<50 || <50	LCS-7	84%
TPH C_{15} - C_{28}	mg/kg	100	GC.3	<100	19678-1	<100 || <100	LCS-7	91%
TPH C_{29} - C_{36}	mg/kg	100	GC.3	<100	19678-1	<100 || <100	LCS-7	97%
Surrogate o-Terphenyl	%		GC.3	93	19678-1	88 || 86 || RPD: 2	LCS-7	91%
QUALITY CONTROL PAHs in Soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			28/5/08	19678-1	28/05/2008 || 28/05/2008	LCS-7	28/5/08%
Date analysed	-			29/5/08	19678-1	29/05/2008 || 29/05/2008	LCS-7	29/5/08%
Naphthalene	mg/kg	0.1	GC.12 subset	<0.1	19678-1	<0.1 || <0.1	LCS-7	101%
Acenaphthylene	mg/kg	0.1	GC.12 subset	<0.1	19678-1	<0.1 || <0.1	[NR]	[NR]
Acenaphthene	mg/kg	0.1	GC.12 subset	<0.1	19678-1	<0.1 || <0.1	[NR]	[NR]
Fluorene	mg/kg	0.1	GC.12 subset	<0.1	19678-1	<0.1 || <0.1	LCS-7	96%
Phenanthrene	mg/kg	0.1	GC.12 subset	<0.1	19678-1	0.2 || 0.1 || RPD: 67	LCS-7	98%
Anthracene	mg/kg	0.1	GC.12 subset	<0.1	19678-1	<0.1 || <0.1	[NR]	[NR]
Fluoranthene	mg/kg	0.1	GC.12 subset	<0.1	19678-1	0.2 || <0.1	LCS-7	99%
Pyrene	mg/kg	0.1	GC.12 subset	<0.1	19678-1	0.2 || <0.1	LCS-7	102%
Benzo(a)anthracene	mg/kg	0.1	GC.12 subset	<0.1	19678-1	<0.1 || <0.1	[NR]	[NR]
Chrysene	mg/kg	0.1	GC.12 subset	<0.1	19678-1	0.1 || <0.1	LCS-7	122%
Benzo(b+k)fluoranthene	mg/kg	0.2	GC.12 subset	<0.2	19678-1	<0.2 || <0.2	[NR]	[NR]
Benzo(a)pyrene	mg/kg	0.05	GC.12 subset	<0.05	19678-1	0.09 || <0.05	LCS-7	115%
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	GC.12 subset	<0.1	19678-1	<0.1 || <0.1	[NR]	[NR]

QUALITY CONTROL PAHs in Soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Dibenzo(a,h)anthracene	mg/kg	0.1	GC.12 subset	<0.1	19678-1	<0.1 || <0.1	[NR]	[NR]
Benzo(g,h,i)perylene	mg/kg	0.1	GC.12 subset	<0.1	19678-1	<0.1 || <0.1	[NR]	[NR]
Surrogate p-Terphenyl-d14	%		GC.12 subset	107	19678-1	104 || 109 || RPD: 5	LCS-7	104%
QUALITY CONTROL Organochlorine Pesticides in soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			28/5/08	[NT]	[NT]	LCS-7	28/5/08%
Date analysed	-			29/5/08	[NT]	[NT]	LCS-7	29/5/08%
HCB	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	[NR]	[NR]
alpha-BHC	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-7	95%
gamma-BHC	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	[NR]	[NR]
beta-BHC	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-7	113%
Heptachlor	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-7	101%
delta-BHC	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	[NR]	[NR]
Aldrin	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-7	102%
Heptachlor Epoxide	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-7	105%
gamma-Chlordane	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	[NR]	[NR]
alpha-chlordane	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	[NR]	[NR]
Endosulfan I	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	[NR]	[NR]
pp-DDE	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-7	111%
Dieldrin	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-7	109%
Endrin	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-7	123%
pp-DDD	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-7	116%
Endosulfan II	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	[NR]	[NR]
pp-DDT	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	[NR]	[NR]
Endrin Aldehyde	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	[NR]	[NR]
Endosulfan Sulphate	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-7	110%
Methoxychlor	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	[NR]	[NR]
Surrogate TCLMX	%		GC-5	80	[NT]	[NT]	LCS-7	77%

QUALITY CONTROL PCBs in Soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			28/5/08	[NT]	[NT]	LCS-7	28/5/08%
Date analysed	-			29/5/08	[NT]	[NT]	LCS-7	29/5/08%
Arochlor 1016	mg/kg	0.1	GC-6	<0.1	[NT]	[NT]	[NR]	[NR]
Arochlor 1232	mg/kg	0.1	GC-6	<0.1	[NT]	[NT]	[NR]	[NR]
Arochlor 1242	mg/kg	0.1	GC-6	<0.1	[NT]	[NT]	[NR]	[NR]
Arochlor 1248	mg/kg	0.1	GC-6	<0.1	[NT]	[NT]	[NR]	[NR]
Arochlor 1254	mg/kg	0.1	GC-6	<0.1	[NT]	[NT]	LCS-7	87%
Arochlor 1260	mg/kg	0.1	GC-6	<0.1	[NT]	[NT]	[NR]	[NR]
Surrogate TCLMX	%		GC-6	80	[NT]	[NT]	LCS-7	121%
QUALITY CONTROL Acid Extractable metals in soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Date digested	-			29/5/08	19678-1	29/05/2008 || 29/05/2008	LCS-5	29/5/08%
Date analysed	-			29/5/08	19678-1	29/05/2008 || 29/05/2008	LCS-5	29/5/08%
Arsenic	mg/kg	4	Metals.20 ICP-AES	<4.0	19678-1	<4.0 || <4.0	LCS-5	99%
Cadmium	mg/kg	1	Metals.20 ICP-AES	<1.0	19678-1	<1.0 || <1.0	LCS-5	103%
Chromium	mg/kg	1	Metals.20 ICP-AES	<1.0	19678-1	100 || 120 || RPD: 18	LCS-5	102%
Copper	mg/kg	1	Metals.20 ICP-AES	<1.0	19678-1	36 || 37 || RPD: 3	LCS-5	104%
Lead	mg/kg	1	Metals.20 ICP-AES	<1.0	19678-1	17 || 15 || RPD: 12	LCS-5	99%
Mercury	mg/kg	0.1	Metals.21 CV-AAS	<0.10	19678-1	<0.10 || <0.10	LCS-5	114%
Nickel	mg/kg	1	Metals.20 ICP-AES	<1.0	19678-1	120 || 120 || RPD: 0	LCS-5	101%
Zinc	mg/kg	1	Metals.20 ICP-AES	<1.0	19678-1	82 || 72 || RPD: 13	LCS-5	100%

QUALITY CONTROL Miscellaneous Inorg - soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Date prepared	-			29/5/08	[NT]	[NT]	LCS-1	29/5/08%
Date analysed	-			29/5/08	[NT]	[NT]	LCS-1	29/5/08%
Sulphate, SO4 1:5 soil:water	mg/kg	25	LAB.9	<25	[NT]	[NT]	LCS-1	89%
Total Cyanide	mg/kg	0.5	LAB.13	<0.5	[NT]	[NT]	LCS-1	93%

QUALITY CONTROL Moisture	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD
Date prepared	-			28/5/08	19678-1	28/05/2008 || 28/05/2008
Date analysed	-			28/5/08	19678-1	28/05/2008 || 28/05/2008
Moisture	%	0.1	LAB.8	<0.10	19678-1	7.0 || 7.0 || RPD: 0

QUALITY CONTROL Asbestos ID - soils	UNITS	PQL	METHOD	Blank
Date analysed	-			[NT]

QUALITY CONTROL sPOCAS	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Date prepared	-			[NT]	[NT]	[NT]	LCS	28/5/08%
Date analysed	-			[NT]	[NT]	[NT]	LCS	28/5/08%
pH $_{kcl}$	pH units		LAB.64	[NT]	[NT]	[NT]	LCS	98%
TAA pH 6.5	moles H^+/ tonne	5	LAB.64	<5	[NT]	[NT]	LCS	98%
s-TAA pH 6.5	%w/w S	0.01	LAB.64	<0.01	[NT]	[NT]	[NR]	[NR]
pH $_{Ox}$	pH units		LAB.64	[NT]	[NT]	[NT]	LCS	96%
TPA pH 6.5	moles H^+/ tonne	5	LAB.64	<5.0	[NT]	[NT]	LCS	96%
s-TPA pH 6.5	%w/w S	0.01	LAB.64	<0.01	[NT]	[NT]	[NR]	[NR]
TSA pH 6.5	moles H^+/ tonne	5	LAB.64	<5.0	[NT]	[NT]	LCS	96%
s-TSA pH 6.5	%w/w S	0.01	LAB.64	<0.01	[NT]	[NT]	[NR]	[NR]
ANC$_E$	% $CaCO_3$	0.05	LAB.64	<0.05	[NT]	[NT]	[NR]	[NR]
a-ANC$_E$	moles H^+/ tonne	5	LAB.64	<5	[NT]	[NT]	[NR]	[NR]
s-ANC$_E$	%w/w S	0.05	LAB.64	<0.05	[NT]	[NT]	[NR]	[NR]
S$_{KCl}$	%w/w	0.005	LAB.64	<0.005	[NT]	[NT]	LCS	118%
S$_P$	%w/w	0.005	LAB.64	<0.005	[NT]	[NT]	LCS	110%

QUALITY CONTROL sPOCAS	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
S_{POS}	%w/w	0.005	LAB.64	<0.005	[NT]	[NT]	[NR]	[NR]
a-S_{POS}	moles H^+/ tonne	5	LAB.64	<5.0	[NT]	[NT]	[NR]	[NR]
Ca_{KCl}	%w/w	0.005	LAB.64	<0.005	[NT]	[NT]	LCS	112%
Ca_P	%w/w	0.005	LAB.64	<0.005	[NT]	[NT]	LCS	114%
Ca_A	%w/w	0.005	LAB.64	<0.005	[NT]	[NT]	[NR]	[NR]
Mg_{KCl}	%w/w	0.005	LAB.64	<0.005	[NT]	[NT]	LCS	105%
Mg_P	%w/w	0.005	LAB.64	<0.005	[NT]	[NT]	LCS	110%
Mg_A	%w/w	0.005	LAB.64	<0.005	[NT]	[NT]	[NR]	[NR]
SRAS	%w/w	0.005	LAB.64	<0.005	[NT]	[NT]	[NR]	[NR]
S_{HCl}	%w/w	0.005	LAB.64	<0.005	[NT]	[NT]	LCS	107%
S_{NAS}	%w/w	0.005	LAB.64	<0.005	[NT]	[NT]	[NR]	[NR]
a-S_{NAS}	moles H^+/ tonne	5	LAB.64	<5	[NT]	[NT]	[NR]	[NR]
s-S_{NAS}	%w/w S	0.01	LAB.64	<0.01	[NT]	[NT]	[NR]	[NR]
a-Net Acidity	moles H^+/ tonne	10	LAB.64	<10	[NT]	[NT]	LCS	107%
Liming rate	kg $CaCO_3$ /tonne	0.75	LAB.64	<0.75	[NT]	[NT]	[NR]	[NR]

QUALITY CONTROL BTEX in Water	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			27/5/08	[NT]	[NT]	LCS-W1	27/5/08%
Date analysed	-			27/5/08	[NT]	[NT]	LCS-W1	27/5/08%
Benzene	µg/L	1	GC.13	<1.0	[NT]	[NT]	LCS-W1	82%
Toluene	µg/L	1	GC.13	<1.0	[NT]	[NT]	LCS-W1	118%
Ethylbenzene	µg/L	1	GC.13	<1.0	[NT]	[NT]	LCS-W1	117%
m+p-xylene	µg/L	2	GC.13	<2.0	[NT]	[NT]	LCS-W1	120%
o-xylene	µg/L	1	GC.13	<1.0	[NT]	[NT]	LCS-W1	119%
Surrogate Dibromofluoromethane	%		GC.13	102	[NT]	[NT]	LCS-W1	83%
Surrogate toluene-d8	%		GC.13	102	[NT]	[NT]	LCS-W1	96%
Surrogate 4-BFB	%		GC.13	89	[NT]	[NT]	LCS-W1	102%

QUALITY CONTROL Metals in Water - Dissolved	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Date digested	-			[NT]	[NT]	[NT]	[NR]	[NR]
Date analysed	-			[NT]	[NT]	[NT]	[NR]	[NR]
Arsenic - Dissolved	mg/L	0.05	Metals.20 ICP-AES	<0.05	[NT]	[NT]	LCS-W1	96%
Cadmium - Dissolved	mg/L	0.01	Metals.20 ICP-AES	<0.01	[NT]	[NT]	LCS-W1	100%
Chromium - Dissolved	mg/L	0.01	Metals.20 ICP-AES	<0.01	[NT]	[NT]	LCS-W1	102%
Copper - Dissolved	mg/L	0.01	Metals.20 ICP-AES	<0.01	[NT]	[NT]	LCS-W1	101%
Lead - Dissolved	mg/L	0.03	Metals.20 ICP-AES	<0.03	[NT]	[NT]	LCS-W1	97%
Mercury - Dissolved	mg/L	0.0005	Metals.21 CV-AAS	<0.0005	[NT]	[NT]	LCS-W1	98%
Nickel - Dissolved	mg/L	0.02	Metals.20 ICP-AES	<0.02	[NT]	[NT]	LCS-W1	102%
Zinc - Dissolved	mg/L	0.02	Metals.20 ICP-AES	<0.02	[NT]	[NT]	LCS-W1	102%

Report Comments:

Asbestos: A portion of the supplied sample was sub-sampled for asbestos according to Envirolab procedures. We cannot guarantee that this sub-sample is indicative of the entire sample.
Envirolab recommends supplying 30-40g of sample in it's own container.

Due to the positive acid neutralizing capacity, net acidity net calculated.
Asbestos was analysed by Approved Identifier: Joshua Lim

INS: Insufficient sample for this test	NT: Not tested	PQL: Practical Quantitation Limit
RPD: Relative Percent Difference	NA: Test not required	LCS: Laboratory Control Sample
NR: Not requested	<: Less than	>: Greater than

Quality Control Definitions

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 and 10-140% for SVOC and speciated phenols is acceptable. Surrogates: 60-140% is acceptable for general organics and 10-140% for SVOC and speciated phenols.

CHAIN OF CUSTODY

JBS ENVIRONMENTAL

PROJECT NO.: 40565
PROJECT NAME: Redfern RSL
SEND REPORT TO: Danielle Ord SEND INVOICE TO: Amy Worth
DATE NEEDED BY: STA
COMMENTS / SPECIAL HANDLING / STORAGE OR DISPOSAL:

LABORATORY BATCH NO:
SAMPLERS: DanO + TimP
PHONE: 83381011 OR 0418611322 EMAIL: jbsgroup.com.au
QC LEVEL: NEPM 1999 ( )

SAMPLE ID	MATRIX	DATE	TIME	TYPE & PRESERVATIVE	pH	Heavy Metals	TPH	MAH	PAH	VHC	Cyanide	OCP	PCB	Sulfate (Total)	Asbestos	8 POCAs	NOTES
RRSL1-0.1	Soil	26/5/08		Ice + J		X	X	X	X								
RRSL1-0.3																	
RRSL1-0.4																	
RRSL2-0.1						X	X	X	X								
RRSL2-0.3																	
RRSL3-0.2						X	X	X	X	X	X	X	X	X	X		
RRSL3-0.3																	
RRSL4-0.1						X	X	X	X								
RRSL4-0.3						X	X	X	X								
RRSL5-0.1						WAIT											
RRSL5-0.3																	
RRSL6-0.1						X	X	X	X	X	X	X	X	X	X		
RRSL6 0.4																X	
RRSL7-0.1																	
RRSL7-0.4						X	X	X	X								
RRSL7-0.6						X	X	X	X								
RRSL7-0.8						X	X	X	X								
RRSL8-0.2																	

Enviro Lab Services
12 Ashley St
Chatswood NSW 2067
Ph: 9910 6200

Job No: 196718
Date received: 26/5/08
Time received: 1715
Received by:
Temp: Cool/Ambient
Cooling: Icepack
Security: Intact/Broken/None

RELINQUISHED BY:
NAME: Danielle Ord DATE: 26/5/08
OF: JBS Env
NAME: DATE:
OF:

METHOD OF SHIPMENT:
CONSIGNMENT NOTE NO.
TRANSPORT CO.
CONSIGNMENT NOTE NO.
TRANSPORT CO

RECEIVED BY:
NAME: DATE: 26/5/08
OF: Enviro Lab
NAME: DATE:
OF:

FOR RECEIVING LAB USE ONLY:
COOLER SEAL - Yes No Intact Broken
COOLER TEMP deg C
COOLER SEAL Yes No Intact Broken
COOLER TEMP deg C

Container & Preservative Codes: P = Plastic; J = Soil Jar; B = Glass Bottle; N = Nitric Acid Prsvd.; C = Sodium Hydroxide Prsvd; VC = Hydrochloric Acid Prsvd Vial; VS = Sulfuric Acid Prsvd Vial; S = Sulfuric Acid Prsvd; Z = Zinc Prsvd; E = EDTA Prsvd; ST = Sterile Bottle; O = Other

JBS Environmental Pty Ltd ABN 67 071 842 638
Phone: (02) 8338-1011
Fax: (02) 8338-1700
Suite 2, 595 Gardeners Road MASCOT NSW 2020
PO Box 940 MASCOT NSW 1460
www.jbsgroup.com.au

CHAIN OF CUSTODY

JBS ENVIRONMENTAL

PROJECT NO.: 40565
PROJECT NAME: Redfern RSL
SEND REPORT TO: Danielle Ord — SEND INVOICE TO: Amy Worth
DATE NEEDED BY: STA
COMMENTS / SPECIAL HANDLING / STORAGE OR DISPOSAL:

LABORATORY BATCH NO.:
SAMPLERS: Dan O + Tim D
PHONE: 83381011 or 0418611322 — EMAIL: jbsgroup.com.au
QC LEVEL: NEPM 1999 ( )

SAMPLE ID	MATRIX	DATE	TIME	TYPE & PRESERVATIVE	pH	Heavy Metals	TPH	MAH	PAH	VHC	Cyanide	OCP	PCB	Total Sulfide	Asbestos	sPOCAs	C6-C9	NOTES
RRSL9-0.3	Soil	26/5/08		Ice + J		X	X	X	X									
RRSL10-0.15	↓	↓		↓		X	X	X	X	X	X	X	X	X	X			
RRSL10 0.5																		
RRSL10 0.7						X	X	X	X									
QA1	↓			↓		X	X	X	X									
Trip blank	Water			Ice + various													X	
Trip spike	↓			↓													X	
Rinsate	↓	↓		↓		X												

RELINQUISHED BY:	METHOD OF SHIPMENT:	RECEIVED BY:	FOR RECEIVING LAB USE ONLY:
NAME: Danielle Ord DATE: 26/5/08	CONSIGNMENT NOTE NO.	NAME: DATE:	COOLER SEAL Yes No Intact Broken
OF: JBS Env	TRANSPORT CO.	OF:	COOLER TEMP deg C
NAME: DATE:	CONSIGNMENT NOTE NO.	NAME: DATE:	COOLER SEAL Yes No Intact Broken
OF:	TRANSPORT CO	OF:	COOLER TEMP deg C

Container & Preservative Codes: P = Plastic; J = Soil Jar; B = Glass Bottle; N = Nitric Acid Prsvd.; C = Sodium Hydroxide Prsvd; VC = Hydrochloric Acid Prsvd Vial; VS = Sulfuric Acid Prsvd Vial; S = Sulfuric Acid Prsvd; Z = Zinc Prsvd; E = EDTA Prsvd; ST = Sterile Bottle; O = Other

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Suite 2, 595 Gardeners Road MASCOT NSW 2020
PO Box 940 MASCOT NSW 1460
www.jbsgroup.com.au

S468 T- 10°C

CHAIN OF CUSTODY

JBS ENVIRONMENTAL

PROJECT NO.: 40565
PROJECT NAME Redfern RSL
SEND REPORT TO: D.Ord SEND INVOICE TO: A. Worth
DATE NEEDED BY: STA

LABORATORY BATCH NO.
SAMPLERS TaO
PHONE: 8338 1011 / 0418 611322 EMAIL:
QC LEVEL: NEPM 1999 ( )

COMMENTS / SPECIAL HANDLING / STORAGE OR DISPOSAL:

plo fwd to SGS!

SAMPLE ID	MATRIX	D A T E	TIME	TYPE & PRESERVATIVE	pH	Heavy Metals	TPH	MAH	PAH	NOTES
QA1a 1	Soil	26/5/08		Ice + J		X	X	X	X	

Received 27/5
By D
Time 1:30 pm
Samples Intact yes/no
Ice/Cooler Pack yes/no
Comments: 61262

RELINQUISHED BY:	METHOD OF SHIPMENT:	RECEIVED BY:	FOR RECEIVING LAB USE ONLY:
NAME: DOrd DATE:	CONSIGNMENT NOTE NO.	NAME: David DATE:	COOLER SEAL – Yes..... No ..... Intact ..... Broken .....
OF: JBS Env 26/5/08	TRANSPORT CO.	OF: SGS 27/5	COOLER TEMP 10 deg C
NAME: DATE:	CONSIGNMENT NOTE NO.	NAME: DATE:	COOLER SEAL – Yes..... No ..... Intact ..... Broken .....
OF:	TRANSPORT CO	OF:	COOLER TEMP ..... deg C

Container & Preservative Codes: P = Plastic; J = Soil Jar; B = Glass Bottle; N = Nitric Acid Prsvd.; C = Sodium Hydroxide Prsvd; VC = Hydrochloric Acid Prsvd Vial; VS = Sulfuric Acid Prsvd Vial; S = Sulfuric Acid Prsvd; Z = Zinc Prsvd; E = EDTA Prsvd; ST = Sterile Bottle; O = Other

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PO Box 940 MASCOT NSW 1460
www.jbsgroup.com.au

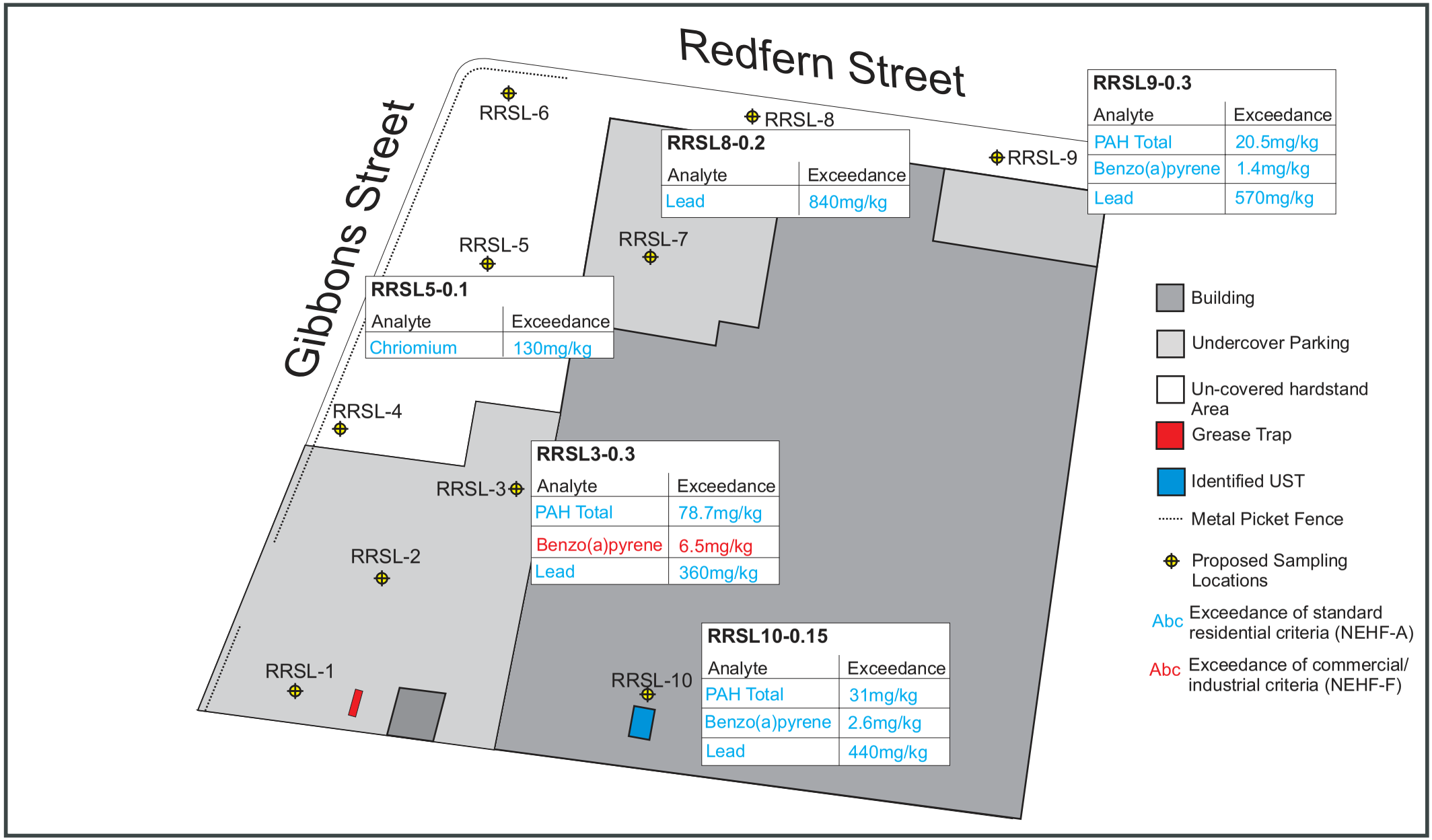

Figure 5 - Site criteria Exceedances
Redfern RSL - 157 Redfern St

Note- All locations shown are approximate only

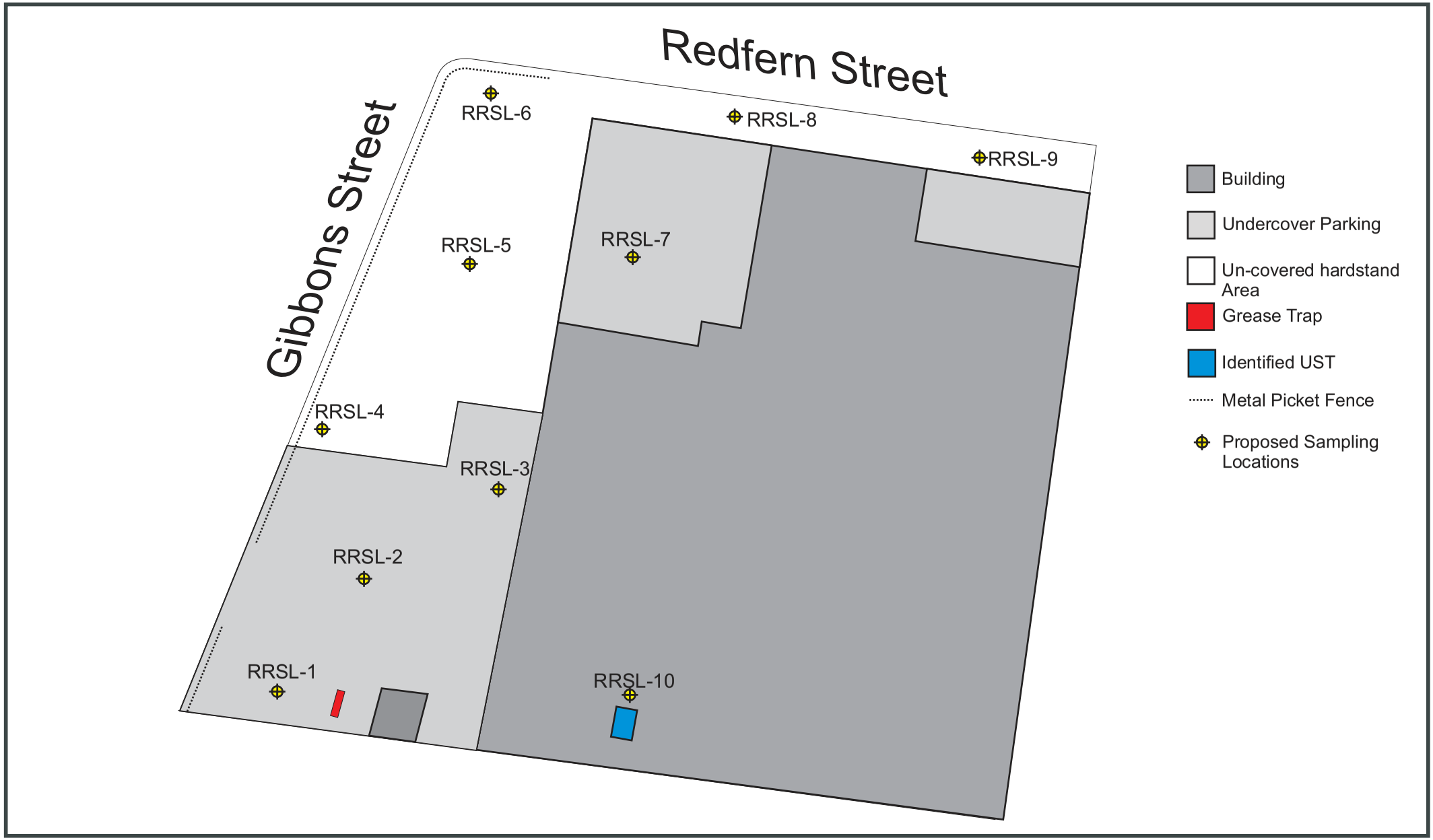

Figure 4 - Sample Locations
Redfern RSL - 157 Redfern St

Note- All locations shown are approximate only

Table B - TPH Results
Redfern RSL ESA
157 Redfern St, Redfern

				TPH				
				TPH C 6 - C 9 Fraction	TPH C10 - C14 Fraction	TPH C15 - C28 Fraction	TPH C29-C36 Fraction	TPH C10 - C36 (Sum of total)
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL				25	50	100	100	
Health-Based Investigation Level (Residential A) NEHF-A				65	-	-	-	1000
Health-Based Investigation Level (Residential D) NEHF-D				65	-	-	-	1000
Health-Based Investigation Level (Commercial/Industrial) NEHF-F				65	-	-	-	1000
Provisional phytotoxicity-based invesitgation levels				-	-	-	-	-
Field_ID	**LocCode**	**Sample Depth (m)**	**Sampled_Date**					
RRSL1-0.1	Soil	0.1	26/05/2008	<25	<50	<100	<100	0
RRSL2-0.3	Soil	0.3	26/05/2008	<25	<50	130	110	240
RRSL3-0.3	Soil	0.3	26/05/2008	<25	<50	220	<100	220
RRSL4-0.3	Soil	0.3	26/05/2008	<25	<50	<100	<100	0
RRSL5-0.1	Soil	0.1	26/05/2008	<25	<50	<100	<100	0
RRSL6-0.4	Soil	0.4	26/05/2008	<25	<50	<100	<100	0
RRSL7-0.6	Soil	0.6	26/05/2008	<25	<50	<100	<100	0
RRSL7-0.8	Soil	0.8	26/05/2008	<25	<50	<100	<100	0
RRSL8-0.2	Soil	0.2	26/05/2008	<25	<50	540	200	740
RRSL9-0.3	Soil	0.3	26/05/2008	<25	<50	570	270	840
RRSL10-0.15	Soil	0.15	26/05/2008	<25	<50	<100	<100	0
RRSL10-0.7	Soil	0.7	26/05/2008	<25	<50	<100	<100	0
QA/QC								
QA1	RRSL7-0.6	0.6	26/05/2008	<25	<50	<100	<100	0
QA1a	RRSL7-0.6	0.6	26/05/2008	<20	<20	<50	<50	0

APPENDIX G – SITE PHOTOGRAPH REGISTER

Plate 1: The car park area, above the secured premises.

Plate 2: Ceiling panels in the office area at the Travelex site (secured facility).

Plate 3: Sprayed fibro material in the toilet facility. The same material was noticed in several areas of the Travelex premises

Plate 4: The Travelex storage area. Fluorescent lights were used throughout the site.

Plate 5: One of Travelex's storage room, paved with brittle vinyl floor tiles.

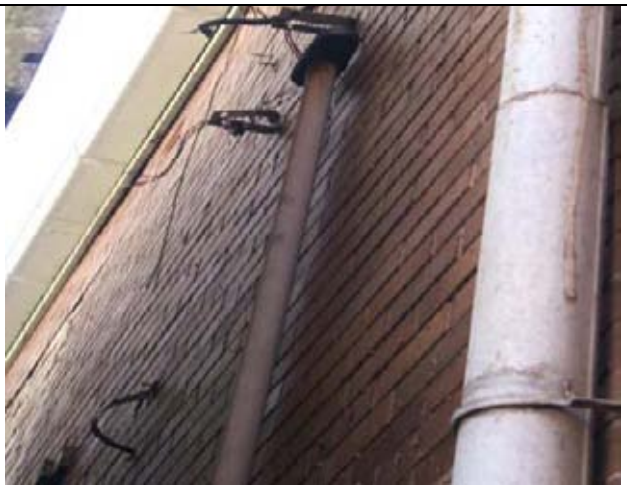

Plate 6: Vent pipe observed on the wall of the RSL site, adjacent to the north boundary of the study area. The pipe is presumably associated with the disused UST in the cellar of the RSL site.