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Historical Search

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LAND AND PROPERTY INFORMATION NEW SOUTH WALES - HISTORICAL SEARCH

SEARCH DATE

23/5/2006 7:12PM

FOLIO: 21/602327

First Title(s): SEE PRIOR TITLE(S)
Prior Title(s): VOL 13892 FOL 112

Recorded	Number	Type of Instrument	C.T. Issue
28/3/1988		TITLE AUTOMATION PROJECT	LOT RECORDED FOLIO NOT CREATED
1/9/1988		CONVERTED TO COMPUTER FOLIO	FOLIO CREATED CT NOT ISSUED
7/11/1988	X912271	TRANSFER OF LEASE	
7/11/1988	X912272	SUB-LEASE	
26/4/1991	Z610229	LEASE	EDITION 1
1/4/1997	2940201	LEASE	EDITION 2
5/7/2002	8745999	LEASE	EDITION 3

*** END OF SEARCH ***

HLA - Macquarie Park ALSP PRINTED ON 23/5/2006

NEW SOUTH WALES

Appln. No.641?

Prior Title Vol.13448 Fol.199

13892 Fol. 112

EDITION ISSUED

CANCELLED 27 6 1979

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

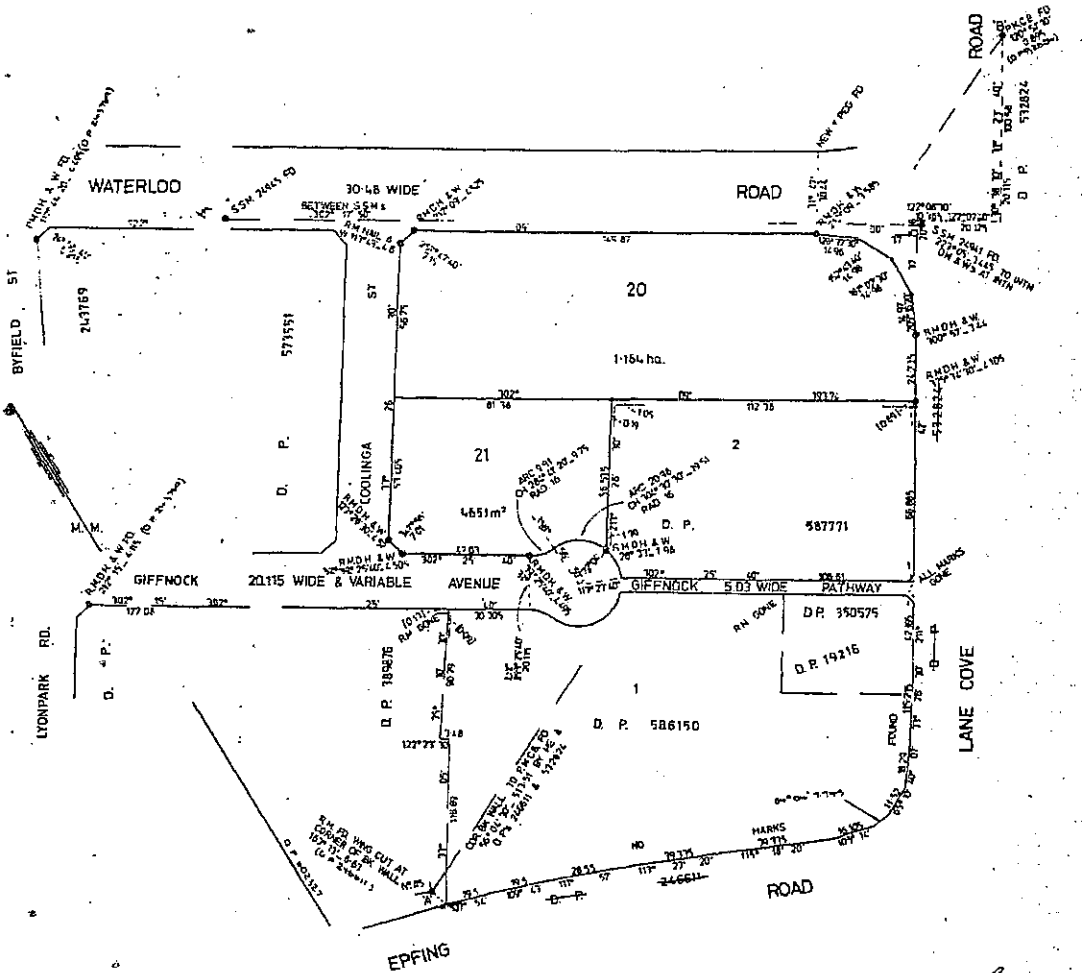
SEE AUTO FOLIO

Registrar General.

(Page 1) Vol. 13892 Fol. 112

PLAN SHOWING LOCATION OF LAND

LENGTHS ARE IN METRES



ESTATE AND LAND REFERRED TO

Estate in Fee Simple in Lot 21 in Deposited Plan 602327 at North Ryde in the Municipality of Ryde Parish of Hunters Hill and County of Cumberland being part of Portion 139 granted to William Kent Junior on 17-4-1803.

FIRST SCHEDULE

~~LOCAL GOVERNMENT [illegible] BOARD~~.

SECOND SCHEDULE

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

Vol. 13892 Fol. 112

FIRST SCHEDULE (continued)

REGISTERED PROPRIETOR	INSTRUMENT NATURE	INSTRUMENT NUMBER	REGISTERED	Signature of Registrar General
Miff Pty. Limited by Transfer V222363. Registered 11-7-1984.				[signature]

T563516 L
7R
8L R.
9cc
V222363 Tel
4M
W238627 Sel
W974923 GMR

SECOND SCHEDULE (continued)

INSTRUMENT NATURE	INSTRUMENT NUMBER	PARTICULARS	REGISTERED	Signature of Registrar General	CANCELLATION	
~~Lease~~	~~[illegible]~~	~~to [illegible] Australia Pty. Limited without option of renewal. Expires [illegible]~~				
~~T563518~~		~~Lease to Samuelson Film Service (Australia) Pty. Limited, together with an option of renewal. Expires 31-7-1985. Registered 6-6-1983~~	~~[illegible]~~	[signature]	Surrendered	T563517
~~V222364~~		~~Mortgage to Public Authorities Superannuation Board. Registered 11-7-1984.~~		[signature]	Expired	W238627
W238627		Lease to Samuelson Film Service (Australia) Pty. Limited together with and reserving rights. Expires 31-7-1990. with option of renewal for 5 years. Registered 17-3-1986.		[signature]	Discharged	W974923

CANCELLED

SEE AUTO FOLIO

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

NEW SOUTH WALES

[redacted]ICATE OF TITLE

[redacted] PROPERTY ACT, 1900

CT12639-110

Vol. 12639 Fol. 110

(Page 1) Vol. 12639 Fol. 110

Appln.Nos.195 and 641

Prior Title Vol.2522 Fol.148

CANCELLED R

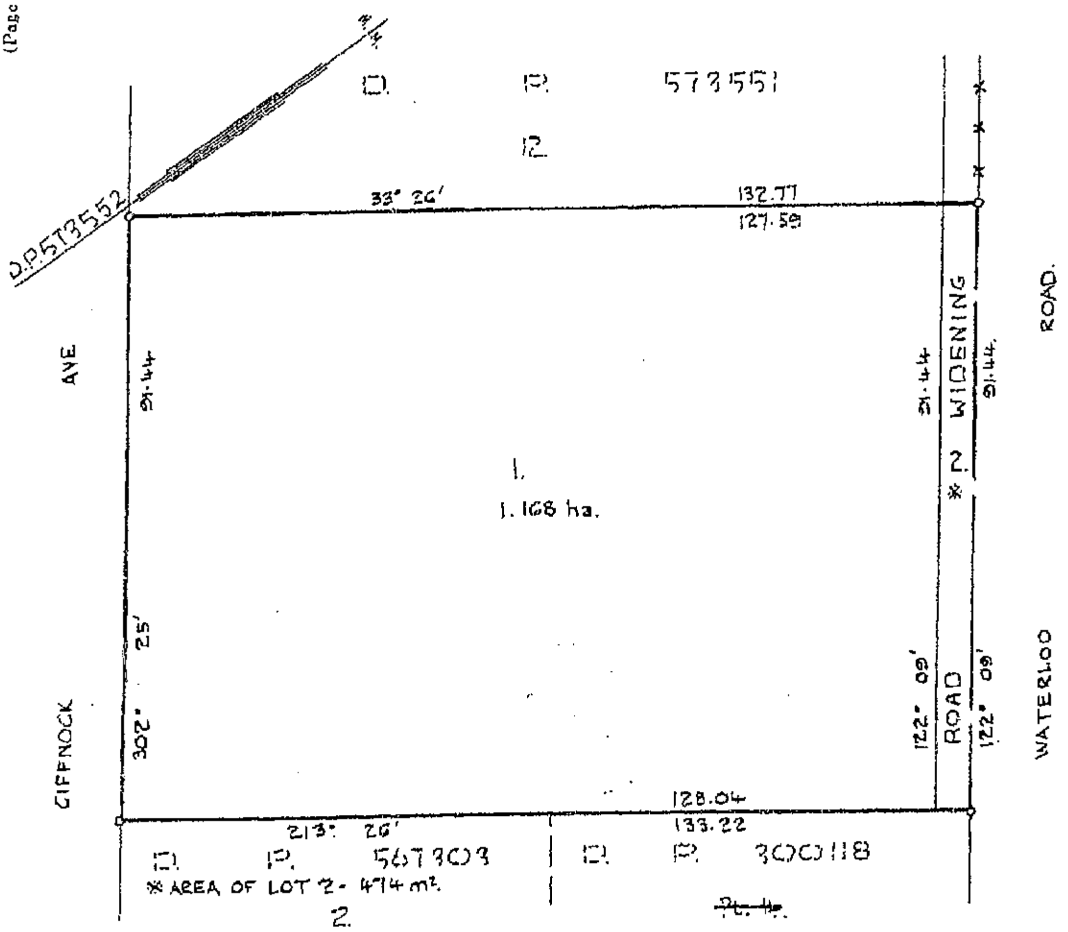
Edition issued 25-11-1974

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

Registrar General.

PLAN SHOWING LOCATION OF LAND

LENGTHS ARE IN METRES



ESTATE AND LAND REFERRED TO

Estate in Fee Simple in Lot 1 in Deposited Plan 573552 at North Ryde in the Municipality of Ryde Parish of Hunters Hill and County of Cumberland, being part of Portion 139 granted to William Kent Junior on 17-4-1803.

FIRST SCHEDULE

~~GANALETH PTY. LIMITED.~~

SECOND SCHEDULE

1. Reservations and conditions, if any, contained in the Crown Grant above referred to.
2. ~~Mortgage No.N905147 to Permanent Nominees Limited. Entered 8-7-1974.~~

20923-627

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

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

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

FIRST SCHEDULE (continued)

REGISTERED PROPRIETOR	INSTRUMENT NATURE	INSTRUMENT NUMBER	INSTRUMENT DATE	ENTERED	Signature of Registrar General
[illegible] (Australia) Pty Limited	Transfer	P373587	——	15.3.1975	[illegible]

This deed is cancelled as to the whole
New Certificates of Title have issued on 29-9-1977
for lots in Deposited Plan No. 591400 as follows:-
Lots [illegible] Vol. [illegible] Fol. 199 respectively.

REGISTRAR GENERAL

NEW CERTIFICATE OF TITLE ISSUED FOR LOT 1 IN DP1043041. RESIDUE COMPRISES ROAD BEING LOT 50 & 52 IN DP1043041. SEE REQUEST 8984763

P373587 [illegible]
[illegible] 12.7.77
DP591400

SECOND SCHEDULE (continued)

INSTRUMENT NATURE	INSTRUMENT NUMBER	INSTRUMENT DATE	PARTICULARS	ENTERED	Signature of Registrar General	CANCELLATION
			The interest of the Council of the Municipality of Ryde in the new road shown in DP591400	5.9.1977	[signature]	

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

NEW SOUTH WALES

3448 Fol. 199

Appln. Nos.195 & 641

Prior Title Vol.12639 Fol.110

EDITION ISSUED

28 9 1977

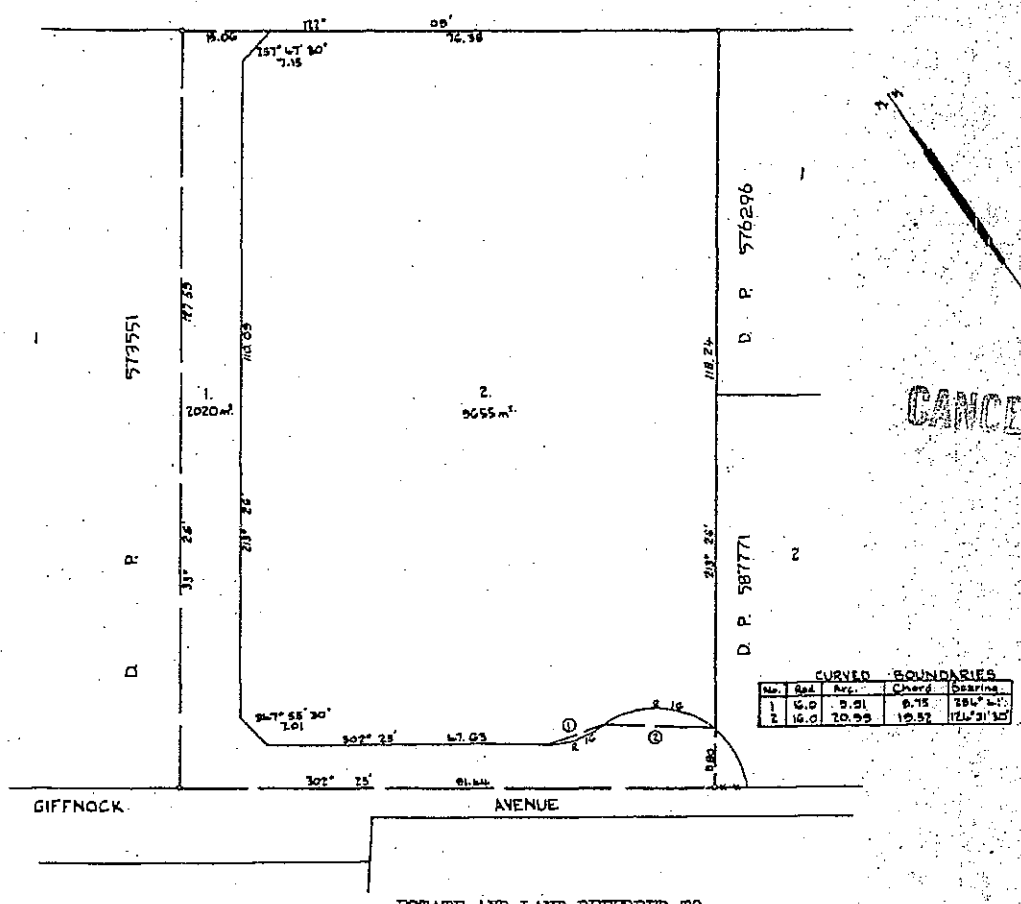
I certify that the person described in the First Schedule is the registered proprietor of the undermentioned estate in the land within described subject nevertheless to such exceptions encumbrances and interests as are shown in the Second Schedule.

Registrar General.

(Page 1) Vol. 13448 Fol. 199

PLAN SHOWING LOCATION OF LAND

LENGTHS ARE IN METRES



CANCELLED

ESTATE AND LAND REFERRED TO

Estate in Fee Simple in Lot 2 in Deposited Plan 591400 at North Ryde in the Municipality of Ryde Parish of Hunters Hill and County of Cumberland being part of Portion 139 granted to William Kent, Junior on 17-4-1803.

FIRST SCHEDULE

~~EUTECTIC (AUSTRALIA) PTY. LIMITED.~~

SECOND SCHEDULE

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

Vol. 13448 Fol. 199

FIRST SCHEDULE (continued)

REGISTERED PROPRIETOR		INSTRUMENT			ENTERED	Signature of Registrar General
		NATURE	NUMBER	DATE		
Local Government Superannuation Board	This deed is cancelled as to The whole New Certificates of Title have issued on 26-6-1979 for lots in ~~Deposited~~ Plan No. 602327 as follows:- Lots 20 & 21 Vol. 13892 Fol. 111 & 112 respectively.	Transfer	R135485	-----	23-3-1979	

REGISTRAR GENERAL

NEW CERTIFICATE(S) OF TITLE ISSUING ON DP 602327
NO DEALING TO BE REGISTERED WITHOUT REFERENCE TO SURVEY DRAFTING BRANCH

R135
C12-4
DP 60232
11/6/79

SECOND SCHEDULE (continued)

NATURE	INSTRUMENT NUMBER	DATE	PARTICULARS	ENTERED	Signature of Registrar General	CANCELLATION		
CAVEAT	Q997149		by Easpeland Developments Limited	8-1-1979		Withdrawn	R135484	

(Page 2 of 2 pages)

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

[redacted]

ICATE OF TITLE

CT12726-163

NEW SOUTH WALES

L PROPERTY ACT, 1900

Vol. 12726 Fol. 163

Appln. No. 195

Prior Title Vol. 2868 Fol. 151

Edition issued 6-3-1975

CANCELLED R

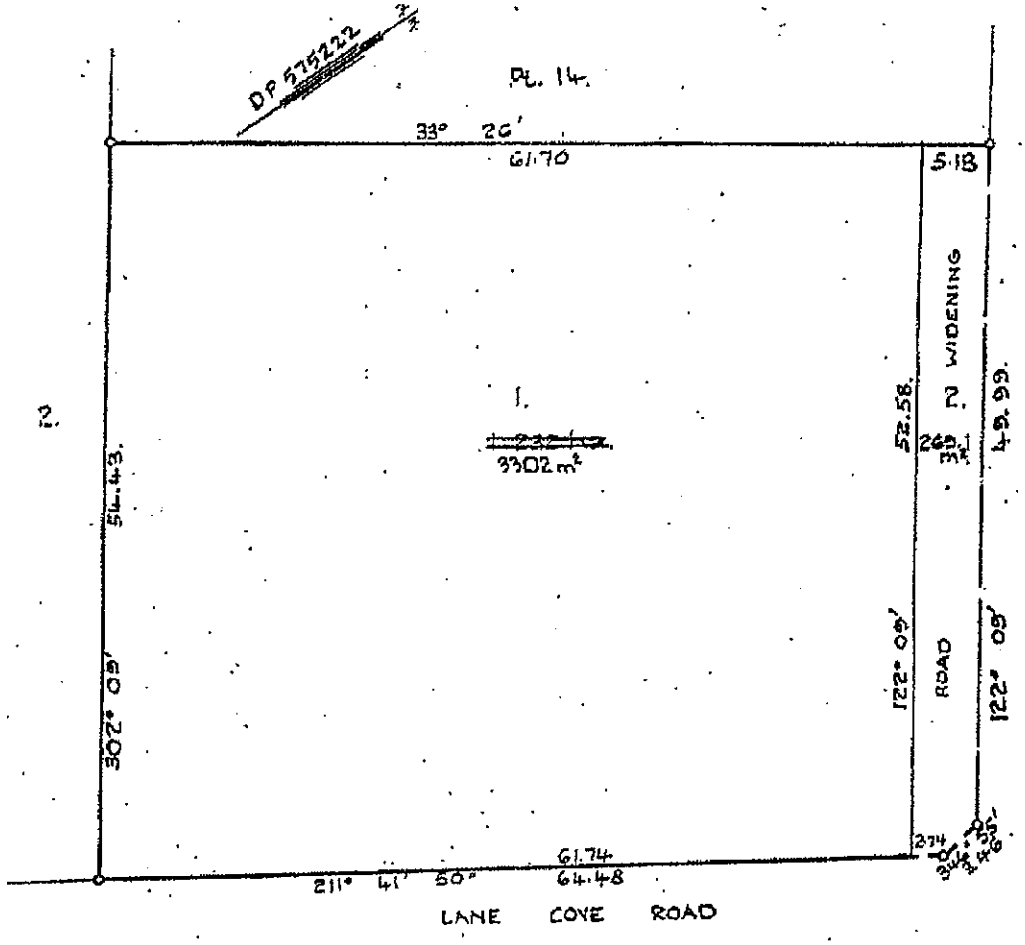
(Page 1 Vol. 12726 Fol. 163)

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

Registrar General.

PLAN SHOWING LOCATION OF LAND

LENGTHS ARE IN METRES



ESTATE AND LAND REFERRED TO

Estate in Fee Simple in Lot 1 in Deposited Plan.575222 at North Ryde in the Municipality of Ryde, Parish of Hunters Hill and County of Cumberland being part of Portion 139 granted to William Kent Junior on 17-4-1803.

FIRST SCHEDULE

~~MARIA JOSEPHINE TERESA PAPALLO of North Ryde, Widow, BEN PAPALLO of North Ryde, Motor Mechanic JOHN PAPALLO of Eastwood, Manager, JACK PAPALLO of Leichhardt, Bootmaker and JOSEPH PAPALLO of Bondi Junction, Storeman all as Tenants in Common in equal shares.~~

SECOND SCHEDULE

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

FIRST SCHEDULE (continued)

REGISTERED PROPRIETOR	INSTRUMENT NATURE	INSTRUMENT NUMBER	INSTRUMENT DATE	ENTERED	Signature of Registrar General
Eutectic (Australia) Pty. Limited	Transfer	P373306	——	3-9-1975	[signature]

This deed is cancelled as to WHOLE (EX ROAD)
New Certificates of Title have issued on 14-9-1977
for lots in DEPOSITED Plan No. 591284 as follows:-
Lots 1 Vol. 13133 Fol. 147 respectively.

REGISTRAR GENERAL

The residue of land in this folio comprises ROAD.

REGISTRAR-GENERAL

NEW CERTIFICATE OF TITLE ISSUED FOR LOT 1 IN DP1043041. RESIDUE COMPRISES ROAD BEING LOT 22 & 25 IN DP1043041. SEE REQUEST 8984763

NEW CERTIFICATE(S) OF TITLE ISSUING ON DP591284. NO DEALING TO BE REGISTERED WITHOUT REFERENCE TO SURVEY DRAFTING BRANCH.

P373306 Fol. 12.7.7-
DP591284 22/8/77
DP1044956 (PLAN OF ACQUISITION) ACQUISITION OF LEASE OF LOT 6 D.P. 1044956 ACQUIRED FOR THE PURPOSES OF THE STATE RAIL AUTHORITY VIDE GAZ. 11.4.2003 FOL. 4460
9306130 R. Regd
9775407 Request

SECOND SCHEDULE (continued)

INSTRUMENT NATURE	INSTRUMENT NUMBER	DATE	PARTICULARS	ENTERED	Signature of Registrar General	CANCELLATION
			The interest of the Council of the Municipality of Ryde in the addition to existing road shown in D.P. 591284	19.8.1977	[signature]	
REQUEST	9306130		PROPOSED ACQUISITION PURSUANT TO SECTION 11 LAND ACQUISITION (JUST TERMS COMPENSATION) ACT, 1991 AFFECTING THE PART BEING LOT 6 SHOWN IN DP1044956 ISSUE DATED 8-7-2003. Registered 30-10-2003			
Request	9775407		Lease to State Rail Authority of New South Wales as to part being Lot 6 DP1044956 Expires 10/4/2009	8.3.2004		

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

NEW SOUTH WALES

Appln. No.195

Prior Title Vol.12726 Fol.163

13433 Fol. 247

EDITION ISSUED

15 9 1977

13433 Fol. 247

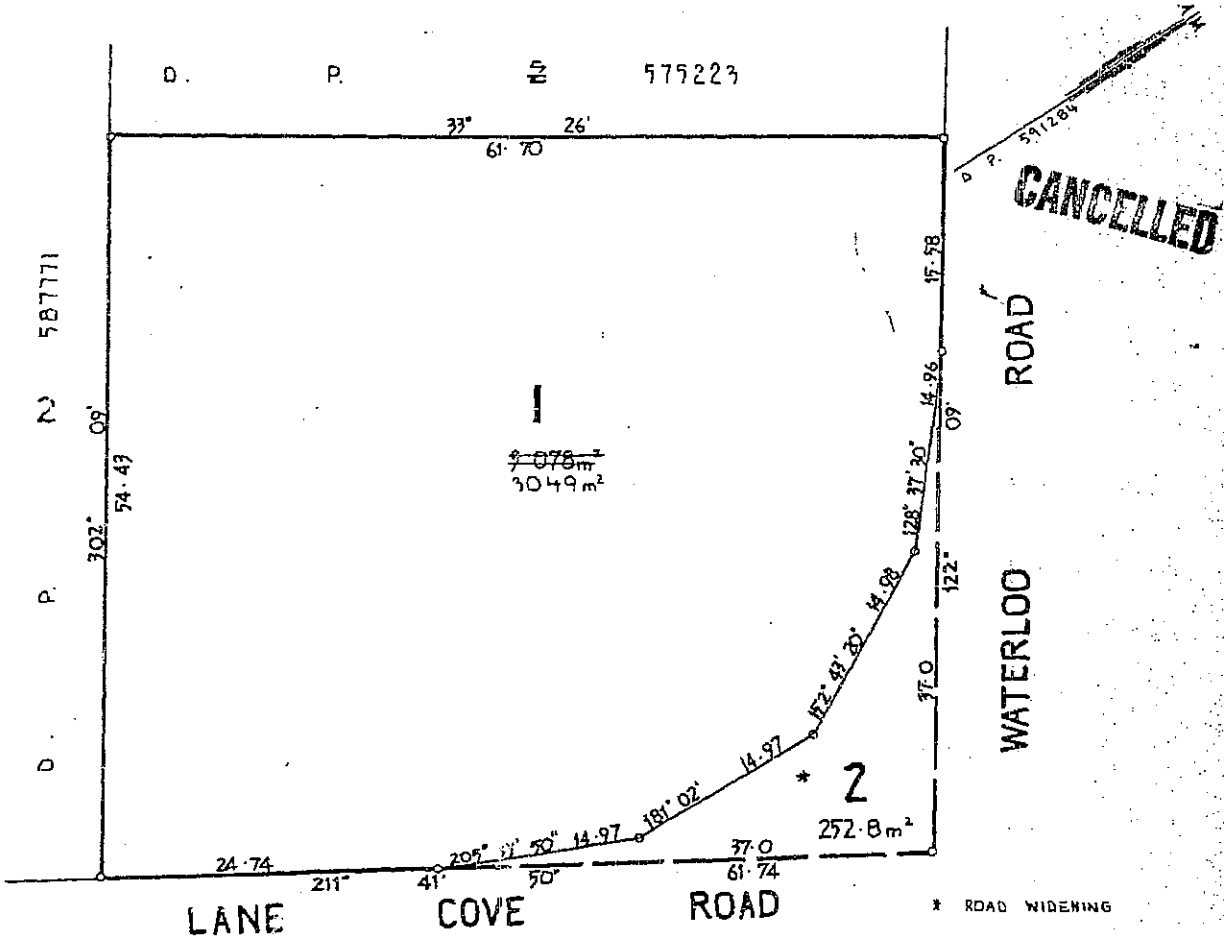
(Page 1) Vol.

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

Registrar General.

PLAN SHOWING LOCATION OF LAND

LENGTHS ARE IN METRES



ESTATE AND LAND REFERRED TO

Estate in Fee Simple in Lot 1 in Deposited Plan 591284 at North Ryde in the Municipality of Ryde Parish of Hunters Hill and County of Cumberland being part of Portion 139 granted to William Kent Junior on 17-4-1803.

FIRST SCHEDULE

~~EUTECTIC (AUSTRALIA) PTY. LIMITED.~~

SECOND SCHEDULE

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

Vol. 13433 Fol. 247

FIRST SCHEDULE (continued)

REGISTERED PROPRIETOR		INSTRUMENT NATURE	INSTRUMENT NUMBER	INSTRUMENT DATE	ENTERED	Signature of Registrar General
Local Government Superannuation Board	This deed is cancelled as to the whole New Certificates of Title have issued on 26-6-1979 for lots in Deposited Plan No. 60237 as follows: Lots 20 & 21 Vol. 13892 Fol. 111-112 respectively. REGISTRAR GENERAL NEW CERTIFICATE(S) OF TITLE ISSUING ON DP 60237 NO DEALING TO BE REGISTERED WITHOUT REFERENCE TO SURVEY DRAFTING BRANCH.	Transfer	R135485	———	23-3-1979	

R13

CT 2-

DP 60237 — 11/6/79

SECOND SCHEDULE (continued)

INSTRUMENT NATURE	INSTRUMENT NUMBER	INSTRUMENT DATE	PARTICULARS	ENTERED	Signature of Registrar General	CANCELLATION		
CAVEAT	Q997149	———	by Copeland Developments Limited	8-1-1979		Withdrawn	R135484	

(Page 2 of 2 pages)

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

NEW SOUTH WALES

Vol. 12711 Fol. 169

Appln. No. 195

Prior Title Vol. 3125 Fol. 165

Edition issued 24-2-1975

(Page 1) Vol. 12711 Fol. 169

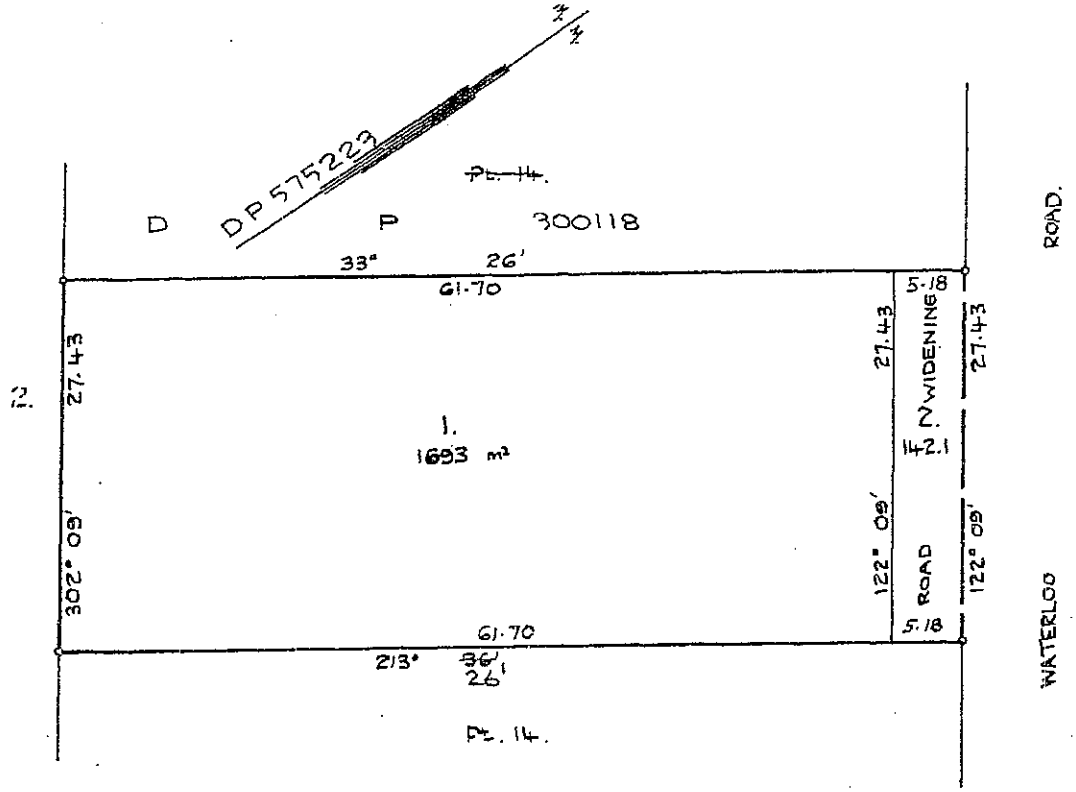
I certify that the person described in the First Schedule is the registered proprietor of the undermentioned estate in the land within described subject nevertheless to such exceptions encumbrances and interests as are shown in the Second Schedule.

Registrar General.

CANCELLED

PLAN SHOWING LOCATION OF LAND

LENGTHS ARE IN METRES



ESTATE AND LAND REFERRED TO

Estate in Fee Simple in Lot 1 in Deposited Plan 575223 at North Ryde, in the Municipality of Ryde, Parish of Hunters Hill and County of Cumberland being part of Portion 139 granted to William Kent Junior on 17-4-1803.

FIRST SCHEDULE

~~MARIA JOSEPHINE TERESA PAPALLO of North Ryde, Widow, BEN PAPALLO of North Ryde, Motor Mechanic, JOHN PAPALLO of Earlwood, Manager JACK PAPALLO of Leichhardt, Bootmaker and JOSEPH PAPALLO of Bondi Junction, Storeman all as Tenants in Common in equal shares.~~

SECOND SCHEDULE

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

Vol. 12711 Fol. 169

FIRST SCHEDULE (continued)

REGISTERED PROPRIETOR	INSTRUMENT NATURE	INSTRUMENT NUMBER	INSTRUMENT DATE	ENTERED	Signature of Registrar General
~~Eutectic (Australia) Pty. Limited~~	~~Transfer~~	~~P373306~~	~~—~~	~~3-9-1975~~	
Local Government Superannuation Board	Transfer	R135485	—	23-3-1979	

NEW CERTIFICATE(S) OF TITLE ISSUING ON AP602327
NO DEALING TO BE REGISTERED WITHOUT REFERENCE TO SURVEY-DRAFTING BRANCH

RS
CT 2-
DP 602327
— 1/6/79

SECOND SCHEDULE (continued)

INSTRUMENT NATURE	INSTRUMENT NUMBER	INSTRUMENT DATE	PARTICULARS	ENTERED	Signature of Registrar General	CANCELLATION		
~~CAVEAT~~	~~C997149~~	—	~~by Eyeland Development, Limited~~	8-1-1979		Withdrawn	R135484	
			This deed is cancelled as to the whole					
			New Certificates of Title have issued on 26-6-1979					
			for lots in Deposited Plan No. 602327 as follows:-					
			Lots 20 & 21 Vol 13867 Fol 111 & 112 respectively.					

REGISTRAR GENERAL

(Page 2 of 2 pages)

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

NEW SOUTH WALES

Appln. Nos.195 & 641

Prior Titles Vol.12711 Fol.169
Vol.12786 Fol. 17
Vol.13433 Fol.247
Vol.13448 Fol.199

Vol. 13892 Fol. 111

EDITION ISSUED

CANCELLED 1979

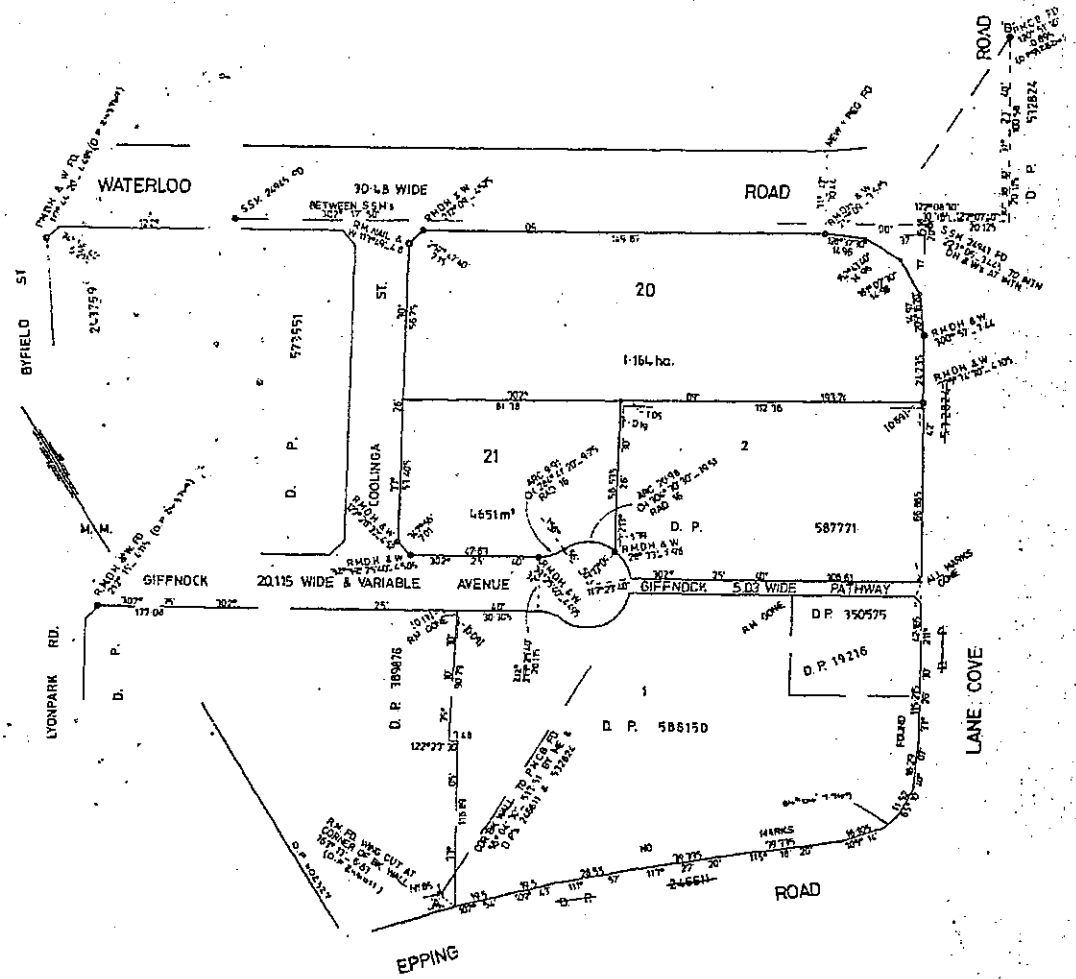
I certify that the person described in the First Schedule is the registered proprietor of the undermentioned estate in the land within described subject nevertheless to such exceptions encumbrances and interests as are shown in the Second Schedule.

SEE AUTO FOLIO

Registrar General.

PLAN SHOWING LOCATION OF LAND

LENGTHS ARE IN METRES



S

ESTATE AND LAND REFERRED TO

Estate in Fee Simple in Lot 20 in Deposited Plan 602327 at North Ryde in the Municipality of Ryde Parish of Hunters Hill and County of Cumberland being part of Portion 139 granted to William Kent Junior on 17-4-1803.

FIRST SCHEDULE

~~LOCAL GOVERNMENT SUPERANNUATION BOARD.~~

SECOND SCHEDULE

GRY

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

Vol. 13892 Fol. 111

FIRST SCHEDULE (continued)

REGISTERED PROPRIETOR	INSTRUMENT NATURE	INSTRUMENT NUMBER	REGISTERED	Signature of Registrar General
~~Dick Smith (Wholesale) Pty. Limited~~	~~Transfer~~	~~R781344~~	~~5-5-1980~~	
Miff Pty. Limited by Transfer S645802. Registered 15-9-1981				

CANCELLED

SEE AUTO FOLIO

SECOND SCHEDULE (continued)

INSTRUMENT NATURE	INSTRUMENT NUMBER	PARTICULARS	REGISTERED	Signature of Registrar General	CANCELLATION	
M Mortgage	R781345P	to The Local Government Superannuation Board	5-5-1980			
L S331800P Lease to the Sydney County Council of Substation premises No. 5395 together with right of way and easement for electricity purposes over other parts of the land within described. Expires 1-1-2030 Registered 1-5-1981						
~~S645803 Lease to Dick Smith (Wholesale) Pty. Limited, together with option of renewal. Expires 15-1-1991. Registered 15-9-1981~~					Surrendered	V425036
L V425037P Lease to Dick Smith (Wholesale) Pty. Limited. Expires 26-7-1993. Option of renewal 10 years. Registered 12-11-1984						
V R781345P Mortgage V711060. Variation. Registered 24.5.1985.						
V R781345P Mortgage. V803024 Variation. Registered 31-7-1985.						

(Page 2 of 2 pages)

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

R.
CT12
S331800 — 1L
C.T. 14-7-81
S645802 Le — 3L — 4C
V425036 — 7L
V711060 V/M
V803024 V/M R781345 R

NEW SOUTH WALES

E

Vol. 12786 Fol. 17

(Page 1) Vol. 12786 Fol. 17

Appln. Nos. 195 and 641

Prior Title Vol. 3106 Fol. 242

Edition issued 13-5-1975.

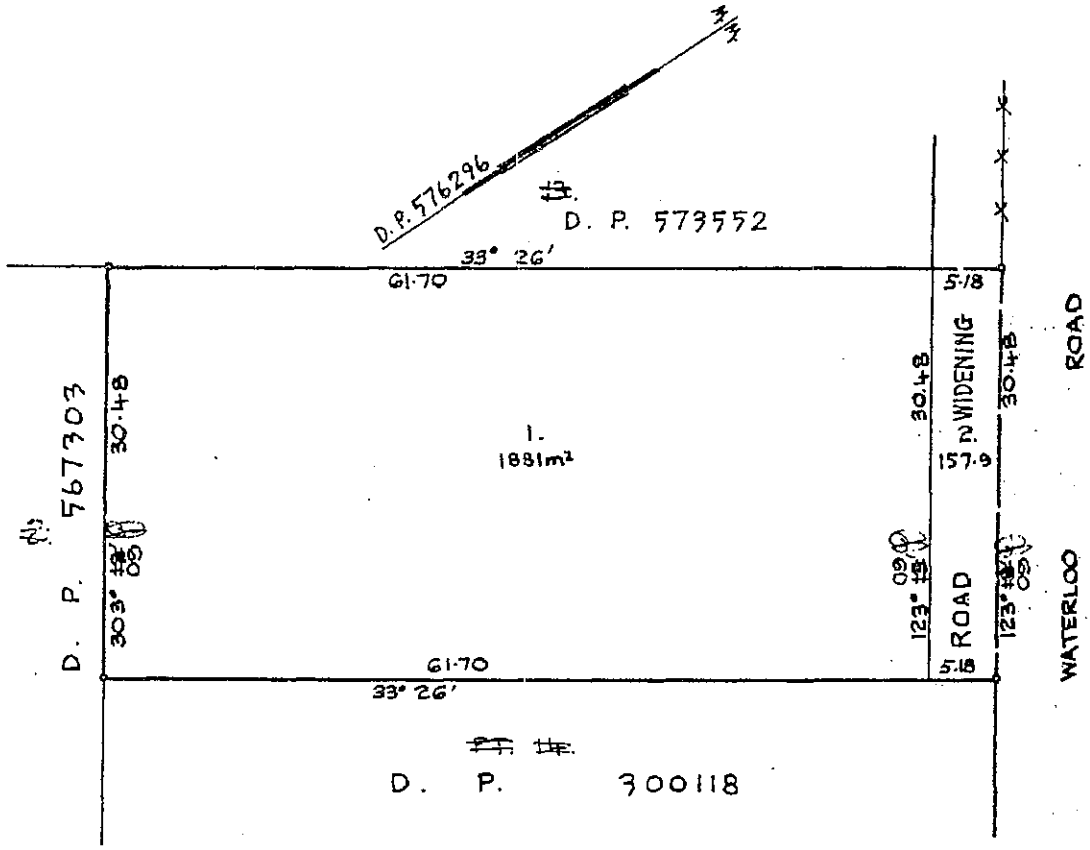
I certify that the person described in the First Schedule is the registered proprietor of the undermentioned estate in the land within described subject nevertheless to such exceptions encumbrances and interests as are shown in the Second Schedule.

Registrar General.

CANCELLED

PLAN SHOWING LOCATION OF LAND

LENGTHS ARE IN METRES



ESTATE AND LAND REFERRED TO

Estate in Fee Simple in Lot 1 in Deposited Plan 576296 at North Ryde in the Municipality of Ryde Parish of Hunters Hill and County of Cumberland being part of Portion 139 granted to William Kerr Junior on 17-4-1803.

FIRST SCHEDULE

~~WILLIAM GALL of Eastwood, JAMES GALL of North Ryde, Builders Foremen and GORDON GALL of North Ryde, Supervisor, as Joint Tenants~~.

SECOND SCHEDULE

1. Reservations and conditions, if any, contained in the Crown Grant above referred to.
2. ~~Caveat No.K244857 by the Registrar General entered 21-2-1966.~~ Withdrawn P236785

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

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

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

Vol. 12786 Fol. 17

FIRST SCHEDULE (continued)

REGISTERED PROPRIETOR	INSTRUMENT NATURE	INSTRUMENT NUMBER	INSTRUMENT DATE	ENTERED	Signature of Registrar General
James Gall, Painters Foreman and Gordon Gall, Supervisor, both of North Ryde as tenants in common in equal shares					
~~Eutectic (Australia) Pty. Limited~~	Transfer	F226165		24-6-1975	
Local Government Superannuation Board	Transfer	P356286		1-8-1975	
	Transfer	R135485		23-3-1979	

P35
Q997147
R135484
SK
DP602327
11/6/79

NEW CERTIFICATE(S) OF TITLE ISSUING ON DP602327
NO DEALING TO BE REGISTERED WITHOUT REFERENCE TO SURVEY DRAFTING BRANCH

SECOND SCHEDULE (continued)

INSTRUMENT NATURE	INSTRUMENT NUMBER	INSTRUMENT DATE	PARTICULARS	ENTERED	Signature of Registrar General	CANCELLATION		
CAVEAT	Q997147		by Copeland Development Limited	8-1-1979		Withdrawn	R135484	

This deed is cancelled as to the whole

New Certificates of Title have issued on 26-6-1979

for lots in Deposited Plan No. 602327 as follows:-

Lots 2021 Vol. 12892 Fol. 111 - 112 respectively.

REGISTRAR GENERAL

(Page 2 of 2 pages)

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

NSW EPA

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Search results

Your search for: **LGA -** RYDE
Notice type - S 91 Clean-Up Notice

matched

No records match your query.

22 June 2006

Appendix B

B1.0 INTRODUCTION

The following sections describe components of the Quality Assurance and Quality Control (QA/QC) Plan for the Stage II Environmental Site Assessment (ESA) of 396 Lane Cove Road and 1 Giffnock Avenue, Macquarie Park, NSW, which complement the measures described in the report. An evaluation of the conformance of the results of the investigation against predetermined data quality objectives (DQOs) is also included.

B2.0 QUALITY CONTROL PLAN

B2.1 Sampling Objectives

The objectives of the sampling program were to:

- Evaluate the concentrations of contaminants within soil and groundwater at the site;
- Establish acceptable reporting limits for all analytes so that an appropriate assessment of potential risk can be made related to continued commercial/industrial land use; and
- Confirm that laboratory analytical procedures were in accordance with relevant guidelines.

The data collected during the investigation were used to:

- Evaluate the existence of soil and/or groundwater impact;
- Evaluate the waste classification of soil material at the site; and
- Assess the Site's suitability for continued commercial/industrial land use.

B2.2 Field Data Quality Objectives

The following field methods and quality control measures were defined for the Stage II ESA to achieve results of sufficient quality to be used in an assessment of the environmental condition of soil and groundwater at the site:

Item	Comments
Field Staff	Appropriately qualified and experienced staff to undertake field investigation works
Soil Sample Locations	Completion of 20 exploratory soil boreholes to approximately 3.0 m depth or prior refusal on bedrock. Sample locations were based on a combination of site coverage and targeting identified potential contamination sources. Due to site observations indicating the presence of an underground storage tank (UST) of petroleum spirit, and presence of probable asbestos containing material, four additional sample locations were completed.
Soil Sampling Methodology	Soil boreholes to be completed by: • Stainless steel hand auger (where drill rig access is not possible) • Truck-mounted drill rig using continuous push-tube sampling capability • Truck mounted drill rig equipped with solid flight augers, using SPT equipment to collect samples, for boreholes to be converted to monitoring wells. Soil samples were generally collected from the boreholes via the methodologies specified above. Exceptions included collection of samples directly from the auger flights where the presence of ironstone gravels negated SPT and/or Push-tube sample collection. The recovery column on the borelogs (refer Appendix D) depict the sample collection methodology, with relatively undisturbed samples (ie: SPT and/or Push-tubes) denoted as an "X" and auger samples denoted as a schematic auger symbol and/or a "hand". Surface grab samples were collected by stainless steel hand trowel.
Soil Sampling Depths	Samples will be collected at the surface (0.0-0.2 m), from 0.5 m and 1 m and 1 m intervals thereafter and at changes in lithology to the full depth of borehole at each borehole location.
Sample Collection, Handling and Preservation	Soil and groundwater samples will be collected in the sample jars and bottles supplied by the selected analytical laboratory. The filled jars and bottles will be stored on ice in a chilled, insulated container until received by the analysing laboratory. Sample numbers, dates, preservation and analytical requirements will be recorded on Chain of Custody (COC) documentation, which will also be delivered to the analytical laboratories.
Field Duplicate Samples	Duplicate soil and groundwater samples will be collected in the field at a rate of one in every 10 primary samples and will be analysed at a minimum rate of 1 per 20 primary samples. Duplicated samples will be labelled so as to conceal their relationship from the laboratory.
Inter-laboratory Duplicate Soil Samples	Inter-laboratory duplicate soil sample to be submitted to the secondary laboratory for analysis will be collected at a rate of 1 per 20 primary samples.
Monitoring Well Installation	Four groundwater monitoring wells to be installed in the vicinity of identified potential contamination sources and to provide site coverage. The monitoring wells are to be constructed of 50mm internal diameter, Class 18 uPVC factory slotted (0.4mm) and blank casing (riser) with flush threaded joiners. Monitoring wells to be developed after installation to promote connectivity with the aquifer and to be purged prior to the collection of groundwater samples.
Decontamination	Cleaning of soil sampling (eg: lead auger and SPT equipment) and groundwater

	(eg: interface meter probe heads) equipment prior to the use of the equipment and between sampling. The equipment will be washed in a phosphate-free detergent solution and rinsed in clean water. The effectiveness of decontamination procedures will be evaluated by the collection and analysis of a rinsate blank sample from sampling equipment.
Rinsate Blanks	One rinsate blank sample (from the soil sampling equipment) was collected by running distilled and/or bottled mineral water over the relevant section of the equipment and decanting directly into the laboratory prepared and supplied sample bottles. The rinsate wias be taken from the final rinse of the equipment after decontamination.
Calibration	On-site screening of samples for volatile organic compounds (VOCs) in the field will be undertaken using a portable photoionisation detector (PID) equipped with a 10.6 eV lamp. Groundwater physio-chemical parameters to be measured using a calibrated water quality meter (WQM). The PID will be calibrated at least once daily (at the start of each sampling day) with 100 ppm isobutylene. Calibration details are provided in this appendix.

B2.3 Adopted Field Procedures

B2.3.1 Field Staff

All fieldwork was undertaken by experienced HLA Environmental Scientists (Ben Pearce, approximately 3 years experience)

In addition, fieldworks were completed in accordance with Field Briefs prepared by Alex Latham, Senior Environmental Scientist (approximately 12 years experience).

B2.3.2 Soil Sample Locations, Sample Depths & Sampling Methodology

Soil boreholes were completed during the field program, as follows:

- **29 May 2006 and 30 May 2006**: BH01 to BH17 and HA01 to HA05. Surface samples MS01 and SS01 were also collected. HLA fieldwork completed by Ben Pearce. Soil boreholes completed by hand auger, push-tube sampling and solid flight auger drilling;

Samples obtained from the soil boreholes were collected from regular depth intervals to the full depth of the boreholes, and at stratigraphy changes. Soil samples were obtained by push tube equipment, which is indicated on the borehole logs as an “X” in the ‘Recovery’ column (refer Appendix D).

A sub-sample was obtained from each sampling interval and placed into a snap-lock plastic bag for field screening for the presence of volatile organic compounds (VOCs) using a calibrated photoionisation detector (PID).

B2.3.3 Groundwater Monitoring Well Installation

The groundwater monitoring wells (MW01 to MW04) were installed after reaming of the push-tube boreholes (BH01, BH11, BH14 and BH16 respectively) with solid flight augers to refusal. After reaming of

the borehole, 50mm internal diameter, Class 18 uPVC (factory slotted (0.4mm) and blank casing (riser) with flush threaded joiners) monitoring wells were installed (MW01 to MW04), which entailed:

- Measurement and cutting of screen and riser to accommodate the depth of the borehole. Note that saturated soil stratum, indicative of groundwater, were not encountered during completion of soil boreholes BH01, BH11, BH14 and BH16, however, monitor wells were installed to assess if low yielding, shallow groundwater subsequently accumulated;
- The base of each well was sealed by a PVC plug;
- Suspension of the monitoring well within the reamed auger holes, followed by pouring filter pack (2-3 mm graded sand) around the outside of the well to approximately 0.5m above the level of the screen. Bentonite pellets were then placed above the filter pack to form a sanitary seal, which extended for a minimum height of 0.5m. The top of the well was capped with an expandable locking cap; and
- Groundwater had not accumulated at the completion of drilling activities, and as such, the wells were not developed.

B2.3.4 Groundwater Sample Collection

Groundwater sampling was undertaken on 5 June 2006 (ie: approximately one week after installation). All monitoring wells were gauged using an electronic depth to water probe to assess for the presence of groundwater. Groundwater was not detected.

B2.3.5 Sample Handling and Preservation

Soil samples were collected using a new pair of disposable nitrile sampling gloves placed into laboratory supplied, acid washed and solvent rinsed glass jars with screw top Teflon-lined lids. The jars were filled so that no headspace remained (where practicable), labelled (on the lid and side of jar) with the sample identification (borehole number and depth), project number and date of collection. Groundwater sample collection is discussed above in Section B2.3.4.

The jars were stored on ice in a chilled, insulated container until received by the analysing laboratory. Sample numbers, depths, preservation and analytical requirements were recorded on Chain of Custody (COC) documentation, which was delivered to the analytical laboratory with the samples.

B2.3.6 Field Duplicate & Triplicate (Inter-laboratory duplicate) Samples

The purpose of duplicate samples was to estimate the variability of a given characteristic or contaminant associated with a population. Duplicate soil samples were collected in the field at a rate of at least one in ten primary samples. The duplicated soil samples were obtained from similar soils of an identical depth and close proximity to the primary sample.

Triplicate (or inter-laboratory duplicate) samples were obtained at a rate of at least 1 in 20 primary samples and are analysed by a secondary laboratory. The inter-laboratory duplicate samples are analysed to assess the accuracy and precision of the primary laboratory data.

Approximately equal portions of the primary sample were placed in the duplicate sample jars. All duplicated samples were labelled so as to conceal their relationship to the primary sample from the laboratory.

Duplicates are used to measure the precision of the sampling and analysis process (sampling, sample preparation, and analysis). Significant variation in duplicate results is often observed (particularly for solid matrix samples) due to sample heterogeneity or low reported concentrations near the practical quantitation limit (PQL).

The overall precision of field duplicates, laboratory split samples and laboratory duplicates is generally assessed by their Relative Percent Difference (RPD), given by:

$$RPD = \frac{|C1-C2|}{(C1+C2)/2} \times 100$$

where C1 is the primary sample concentration
C2 is the duplicate sample concentration

RPDs of field and laboratory duplicates have been compared to criteria detailed in the laboratory DQOs.

B2.3.7 Decontamination

The following decontamination procedures were utilised:

- SPT equipment and/or the push-tube sampling shoe was cleaned in phosphate free detergent solution ("Decon" 90) and rinsed in potable water prior to use and after collection of each soil sample;
- The stainless steel spatula was cleaned in phosphate free detergent solution ("Decon" 90) and rinsed in potable water prior to use and between each sample location;
- The lead-auger and cutting head (of the solid flight augers) was first brushed and then cleaned in phosphate free detergent solution ("Decon" 90) and rinsed in potable water prior to use and between each borehole location;
- Water Quality and Depth to water meter probe heads were cleaned in phosphate free detergent solution ("Decon" 90) and rinsed in potable water prior to use and between each monitor well location; and
- A new pair of disposable, nitrile sampling gloves were worn for the collection of each soil and groundwater sample.

The effectiveness of decontamination procedures was assessed by the analysis of a rinsate blank sample collected during field works. The rinsate sample (QW01) was collected from the flight of the hand auger after decontamination procedures were completed. Laboratory prepared deionised water was then poured over the flight and collected into the sample containers (metals, TPH, BTEX, PAH);

Metals, TPH, BTEX and PAH were not detected at concentrations above laboratory PQLs in the rinsate sample collected.

Based on the rinsate sample result, the adopted decontamination procedures are considered to be adequate.

B2.3.8 Calibration

Screening of soil samples for volatile organic compounds (VOCs) in the field was undertaken using a portable photoionisation detector (PID). The PID was calibrated by Enviroequip with isobutylene (97 ppm) prior to the start of field activities and by HLA during field activities.

Measurement of groundwater physio-chemical parameters, if present) would have been undertaken using a 90FLMV TPS Water Quality Meter (WQM). The WQM was calibrated by Enviroequip prior to use by HLA.

The PID and WQM calibration records are included within this Appendix.

B3.0 SAMPLE ANALYSIS RATIONALE

As stated in Section B2.2, 22 boreholes and two surface sample locations were completed at the site, on a combined site coverage (grid) and targeted basis (refer to Figure 2).

The site is approximately 1.6 hectares and the sampling density undertaken (24) generally meets the NSW EPA (1995) minimum requirements for site characterisation (25 locations). The sampling program completed to date is considered sufficient to evaluate site suitability for continued commercial/industrial land use.

Samples were classified as fill or natural soils. A total of 34 soil samples (excluding QA samples) were selected from the soil boreholes and surface samples for testing, based on field observations, the presence of fill, proximity to the identified potential contamination sources (eg: UST), field observations and PID screening results. Table 1, of the tables section of the main ESA report, presents a summary of the soil analyses undertaken.

For the purpose of this investigation, the analytical testing program was limited to potential contaminants of concern identified in Section 8, including:

- pH;
- Metals;
- PAH;
- TPH and BTEX;
- VHC;
- OCP, OPP and PCB; and
- Asbestos.

Samples not analysed were submitted to the laboratory for storage. Logs of the soil borings are provided in Appendix D.

B4.0 LABORATORY QUALITY OBJECTIVES

Listed below are the predetermined quality objectives defined for the assessment of the laboratory analytical data:

- All sample analyses to be conducted using National Association of Testing Authorities (NATA) registered methods in accordance with ANZECC (1996) and NEPM (1999) guidelines;
- Maximum acceptable sample holding time is 14 days for organic analyses and 6 months for metal analyses (except Mercury (Hg), which should be analysed within 28 days of sample collection);
- Samples to be appropriately preserved and handled;
- Laboratory method blank analyses required to be below the laboratories practical quantitation limits (PQL);
- Surrogate compound concentrations required to be spiked at similar concentration to sample results, at a rate of 1 in 20;
- All PQLs to be less than the assessment criteria;
- The relative percent difference (RPD) of duplicates will be determined and compared to the following criteria for acceptability. The acceptance criteria are based on both HLA's experience and the criteria listed in AS 4482.1 of 1997:
  - Field Duplicate Samples: < 50%;
  - Inter-laboratory duplicates (triplicates): < 50%;
  - Laboratory duplicates where the detection is less than 10 x the PQL: < 30%; and
  - Laboratory duplicates where the detection is greater than 10 x the PQL: < 20%.
- RPDs for Control Spike Duplicates were compared to an acceptable limit of 20% and undertaken at a minimum of 1 per batch.
- Percent recoveries of control spikes and matrix spikes were compared to an acceptable range of 70–130 %. Should this range be exceeded, reference to the laboratories internal DQO limits will be undertaken. Matrix pikes should be undertaken at a minimum of 1 per 20 samples, when the batch size exceeds 5 samples.

In HLA's experience, since samples to be analysed for volatiles cannot be homogenised, the RPD results obtained for duplicate and triplicate samples and repeat analyses will typically not provide an assessment of laboratory precision, but rather an indication of homogeneity of the distribution of the analyte within the sample. Any exceedences of the above acceptable limits were professionally assessed to determine the affect, if any on the overall usability or validity of the field sample data.

B4.1 Chemical Analysis

The primary laboratory used for sample analysis was LabMark Pty Ltd (LabMark) and the secondary laboratory was Australian Laboratory Services (ALS). Asbestos samples were analysed by ASET. All laboratories are NATA accredited for all analyses undertaken. The following table presents a summary of the analytical methods used by LabMark, ASET, and ALS and endorsed by NATA:

Analyte	Matrix	Reference Method*	Detection Limit (PQL)	Assessment Criteria
Metals (8)	Soil	USEPA SW846, 6010	0.05-5	>100
TPH C_6-C_9	Soil	USEPA 5030A, 8260B	10	65
TPH C_{10}-C_{36}	Soil	USEPA 8015A	50-100	1000
BTEX	Soil	USEPA 5030A, 8260B	0.2-1	1-14
PAH	Soil	USEPA 8270C	0.5	5-100
OCP, OPP	Soil	USEPA 8270B	0.05 – 0.2	>50
PCB	Soil	USEPA 8270B	0.5	50
VHC	Soil	USEPA 5030A	0.5-5	N/A
Asbestos	Soil	Polarised light microscopy with dispersion staining	Detect / not detect	N/A
TCLP Preparation	Soil		N/A	N/A
Metals (8)	Water	USEPA SW846, 6010	0.1-5	0.1-70
TPH C_6-C_9	Water	USEPA 5030A, 8260B	20	7**
TPH C_{10}-C_{36}	Water	USEPA 3510B, 8015A	250-200	7**
BTEX	Water	USEPA 5030A, 8260B	1-2	>5

Notes:

* denotes Laboratory methodology based on Reference Method

** denotes Assessment Criteria are low reliability, interim working levels only

(8) = As, Cd, Cr, Cu, Hg, Ni, Pb and Zn

Detection Limits & Assessment Criteria are mg/kg (soil) and ug/L (water)

N/A = not applicable

B4.2 Laboratory Blanks

Laboratory or control blanks consist of reagents specific to each individual analytical method and are prepared and analysed by laboratories in the same manner as regular samples. The preparation and analysis of laboratory blanks enables the measurement of contamination within the laboratory.

Laboratory blanks are typically analysed at a frequency of 1 in 20, with a minimum of one analysed per batch. Review of the Labmark and ALS reports indicated that this laboratory blank sample frequency was performed and that all results were below the PQL.

B4.3 Laboratory Duplicates

Laboratory duplicate samples are prepared in the laboratory by splitting a field sample and analysing it as two independent samples. The analysis of laboratory duplicate samples provides an indication of analytical precision and may be influenced by sample heterogeneity. The laboratory duplicate RPDs are used to assess laboratory precision. Laboratory duplicates are typically analysed at a frequency of 1 in 20, with a minimum of one analysed per batch (when the batch size exceeds 5 samples).

Review of this data indicates that 31 field samples were duplicated within the laboratories, representing 239 separate results. The RPD was calculated for each result and compared to the specified DQO. The RPD calculations indicated that two results exceeded the DQO, representing a non-conformance rate of 0.83 %. The non-conformance results were obtained from duplication of heteregeneous soil fill materials in which variation in contaminant distribution could be expected. HLA notes that the laboratory duplicate results that exceeded the DQO were at very low concentrations marginally above the laboratory PQLs, and were well below the assessment criteria and are considered acceptable for the purpose of this investigation.

B4.4 Laboratory Control Samples

Laboratory control samples (LCS) or Quality Control check samples are prepared within the laboratory by spiking an aliquot of an appropriate clean matrix reagent with known concentrations of specific analytes. The check sample is then analysed and the results are used to assess the laboratory performance on sample preparation and analysis procedure. Certified reference material may also be used to assess analytical accuracy independent of the investigations.

Accuracy is assessed by calculation of percent recovery (PR):

$$PR = X / T \times 100$$

Where: X is the measured analyte concentration
T is the "true" value

To evaluate percent recovery, the quality control limits that the laboratories have calculated are assessed following the procedures required by the USEPA. Ideally, all calculated recovery values should be within acceptance limits, which for the case of metals and phenoxy acetic acid herbicides consists of historical analyte recoveries as experienced by the laboratory. However, in the event that control limit outliers are reported, professional judgement is used to assess the extent to which such results may affect the overall useability of the data. LCSs are typically analysed at a frequency of 1 in 20, with a minimum of one analysed per analytical batch.

Review of the laboratory reports indicates that LCSs were analysed at the rate of 1 in 20, with a minimum of one per batch, and that the recovery rates were within the quality objectives.

The data is considered acceptable for the purpose of this investigation.

B4.5 Matrix Spikes

Matrix spikes are samples prepared within the laboratory by dividing a field sample into two aliquots, then spiking each with identical concentrations of the analytes. The matrix spike, and matrix spike duplicate, are then analysed separately and the results compared to determine the effects of the sample matrix on the accuracy and precision of the analytes. Accuracy is assessed by the calculation of the percent recovery (PR) for matrix spikes:

$$PR = \frac{(SSR - SR)}{SA} \times 100$$

Where: SSR is the spiked sample result
SR is the sample result
SA is the spike added

Note that when the sample concentration is less than the instrument detection level, then a value of SR = 0 is recommended.

Review of the laboratory reports indicates that matrix spike were analysed at the rate of 1 in 20, when the batch size exceeded 5 samples, and that the recovery rates were within the quality objectives.

The matrix spike results for are considered acceptable for the purpose of this investigation.

B4.6 Surrogates

Surrogates are compounds which are similar to the organic analytes of interest in chemical composition, extraction, and chromatography, but which are not normally found in field samples. Surrogates are generally spiked into all sample aliquots prior to preparation and analysis. Percent recoveries are calculated for each surrogate, providing an indication of analytical accuracy. US EPA methodology (SW – 846) requires that surrogate testing be performed whenever analysing by Gas Chromatography or HPLC.

In order to compare analytical accuracy, it is usually necessary to spike a range of surrogate compounds of different chemical properties into each sample aliquot.

USEPA Method 8000 (7) provides that the laboratory may calculate its own surrogate recovery limit should the EPA not specify a limit. In the absence of specified PR criteria for individual surrogates or laboratory calculated control limit, the general acceptance criteria for quality control measurements employed were taken from USEPA guidelines (5) which are summarised below:

< 10%	Unacceptable low recovery which may result in negative detections.
10% to 70%	Recoveries are sufficiently low that results provide only an estimate of analyte concentration.
70% to 130%	Acceptable recovery.
> 130%	Unacceptable high recovery which may result in false high detections.

Ideally, all calculated surrogate recovery values should be within acceptable limits. In the event that some recoveries lie outside the control limits, the USEPA guidance documents provide criteria for surrogate recovery results to assign a level of confidence in the results of actual sample analyses. USEPA protocols identify the need to test a minimum of three surrogates for each analytical group.

Review of the analytical laboratory reports indicates that all surrogate recovery rates were within the specified DQOs.

B5.0 DATA VALIDATION

The overall assessment of the quality of the data obtained during the investigation is discussed below in terms of the following data quality indicators.

B5.1 Chain of Custody Documentation

All samples collected in the field were forwarded to Labmark and ALS under chain of custody documentation. A copy of the chain of custody (received by the laboratory) is included with the laboratory reports.

B5.2 Sample Preservation

All samples collected in the field and requested for analysis were received by the laboratories in appropriate condition. This is noted by the laboratory on the Sample Receipt Notification (SRN) form. A copy of the SRN is included with each laboratory report.

B5.3 Sample Holding Times

A total of 41 samples (including: soil, material, field duplicates, interlaboratory duplicates and equipment rinsates) were analysed. All samples were analysed within the specified technical holding times (THT), with the following exceptions:

- All soil samples for pH, for which the THT is 6 hours. Samples were extracted between one and two days after the THT. The results are not considered to compromise data integrity.

B5.4 PQLs / Assessment Criteria

All laboratory PQLs were below DEC endorsed assessment criteria.

B5.5 Precision

Precision or variability of the data was assessed by determining RPDs between the original and duplicated field samples analysed. The RPD results are presented on the tables of results and summarised on the following table:

Primary Sample	Duplicate Sample	Compounds Analysed	RPD DQO	RPD	Sample Type
BH12_0.0-0.30	DUP02	Metals	50 %	< 50%. Ni = 67%	Fill
BH13_0.0-0.1	DUP03	Metals	50 %	< 50 %	Fill
		TPH	50 %	< 50 %	
		BTEX	50 %	< 50 %	
		PAH	50 %	< 50 %	
BH13_0.0-0.1	TRIP03*	Metals	50 %	< 50 %	Fill
		TPH	50 %	< 50 %	
		BTEX	50 %	< 50 %	
		PAH	50 %	< 50 %	
BH16_1.9-2.0	DUP04	Metals	50 %	< 50 %	Weathered Shale
		TPH	50 %	< 50 %. C6-C9 = 120%	
		BTEX	50 %	< 50 %. Toluene = 100% Ethylbenzene = 86%, Xylenes = 79%	
		PAH	50 %	< 50 %. Naphthalene (53%)	
BH16_2.9-3.0	TRIP02*	Metals	50 %	< 50 %	Weathered Shale
		TPH	50 %	< 50 %. C6-C9 – 140%	
		BTEX	50 %	< 50 %. Toluene = 52%, Ethylbenzene = 67 %, Xylenes = 71 %	
		PAH	50 %	< 50	

Notes: calculated RPDs are presented on the summary result tables
* denotes inter-laboratory duplicate (triplicate)

Results exceeding the RPD DQO are discussed below:

DUP02 & BH12_0.0-0.3: The elevated RPD for nickel is attributed to contaminant concentrations at or near the PQL (1 & 2 mg/kg), and therefore considered acceptable.

DUP04& BH16_1.9-2.0: The elevated RPDs for TPH (C_6-C_9), toluene, ethylbenzene, xylenes and naphthalene is attributed to the volatile nature of the organic analytes and are considered acceptable.

TRIP02 & BH16_1.9-2.0: The elevated RPDs for TPH (C_6-C_9), toluene, ethylbenzene and xylenes is attributed to the volatile nature of the organic analytes and are considered acceptable.

HLA conclude that the precision of the data is sufficient for the purposes of the investigation.

B5.6 Accuracy

The laboratory QA/QC results indicated:

- All method blank samples were reported at less than laboratory PQLs;
- Laboratory PQLs were less than the assessment criteria, with the exceptions as previously discussed;
- Samples were extracted and analysed within acceptable holding times, with the exceptions as previously discussed; and
- Surrogate compound concentrations were similar to sample result concentrations.

The accuracy of the data obtained from the laboratory is considered to be sufficient for the purposes of the investigation.

B5.7 Representativeness

Representativeness expresses the degree to which sample data accurately and precisely represent a characteristic of parameter variations at sampling points or environmental conditions. Sample representativeness is controlled through selecting sampling locations that exemplify site conditions and obtaining suitable samples from these sites. Sampling rationale is discussed in the body of the report.

Analysis for the contaminants of concern was conducted on soil as indicated in analytical summary tables. Based on the sampling and analytical regime undertaken, the results obtained are considered to be sufficiently representative of the subsurface conditions at the site.

B5.8 Comparability

Comparability expresses the confidence with which one data set can be compared with another. In order to assess comparability, field sampling procedures, laboratory sample preparation procedures, analytical procedures, and reporting units must be known and similar to established protocols, as was the case during this investigation. Qualitatively, data subjected to strict QA/QC procedures will be deemed more reliable, and therefore more comparable, than other data.

This investigation was performed by appropriately trained environmental scientists, with adopted procedures in accordance with HLA's Protocols and as such the data collected is comparable. Furthermore, analyses conducted by the secondary laboratory provided similar results to the primary laboratory.

B5.9 Completeness

The completeness of data is defined as the percentage of analytical results that are considered valid. Valid chemical data are values that have been identified as acceptable or acceptable as qualified during the data validation process. The completeness is a comparison of the total number of samples accepted against the total number of samples, calculated as a percentage. The project goal for completeness is 90%. Completeness also includes checking that all entries in the database are correct, properly entered, and that any typographical errors in the database are corrected and the data are re-entered properly. Completeness is defined as:

$$\text{Completeness} = \frac{\textit{number of acceptable items}}{\textit{total number of items}} \times 100$$

All samples collected and analysed complied with the predetermined DQOs as such the data obtained is considered to be 95 % quantitative and complete.

B5.10 Overall Assessment

Based on an assessment of field and laboratory QA/QC data, the reported analytical results are considered to be valid and representative of concentrations of the analysed compounds at the sample locations tested.

Appendix C

AUSTRALIAN SAFER ENVIRONMENT & TECHNOLOGY PTY LTD

ABN 36 088 095 112

Our ref : ASET 8783/ 11917 / 1 - 3
Your ref: E026815
NATA Accreditation No: 14484

7 June 2006

LABMARK
P O Box 641,
Hornsby NSW 1630

Attn:Mr David Burns

Dear David,

Asbestos Identification
This report presents the results of three samples, forwarded by LABMARK on 5 June 2006, for analysis for asbestos.

1.Introduction: Three samples forwarded were examined and analysed for the presence of asbestos.

2. Methods : The samples were examined under a Stereo Microscope and selected fibres were analysed by Polarized Light Microscopy in conjunction with Dispersion Staining method **(Safer Environment Method 1.)**

3. Results : **Sample No. 1. ASET 8783 / 11917 / 1. E026815 - 26104 - HA02 - 0.5 - 0.6.**
Approx dimensions 5.0 cm x 4.0 cm x 2.0 cm
The sample consisted of a mixture of sandy soil, stones, plant matter and fragments of bitumen.
No asbestos detected.

Sample No. 2. ASET 8783 / 11917 / 2. E026815 - 26149 - SS01.
Approx dimensions 14.0 cm x 5.0 cm x 3.5 cm
The sample consisted of a mixture of clayish sandy soil, stones, plant matter, fragments of plaster and brick.
Chrysotile asbestos and Amosite asbestos detected.

Sample No. 3. ASET 8783 / 11917 / 3. E026815 - 26150 - MS01.
Approx dimensions 8.0 cm x 6.0 cm x 0.5 cm
The sample consisted of a fragment of a fibro plaster cement material.
Chrysotile asbestos detected.

Analysed and reported by,

Mahen De Silva . BSc. MSc. Grad Dip (Occ Hyg)
Occupational Hygienist / Approved Signatory.

NATA
WORLD RECOGNISED ACCREDITATION

CUSTOMER CENTRIC - ANALYTICAL CHEMISTS

No. 13542.

Accredited for compliance with ISO/IEC 17025. The results of tests, calibrations and/or measurements included in this document are traceable to Australian/national standards. NATA is a signatory to the APLAC mutual recognition arrangement for the mutual recognition of the equivalence of testing, calibration and inspection reports.

AQIS
AUSTRALIAN QUARANTINE AND INSPECTION SERVICE

SYDNEY License No. N0356.

Quarantine Approved premises criteria 5.1 for quarantine containment level 1 (QCI) facilities. Class five criteria cover premises utilised for research, analysis,and/or testing of biological material, soil, animal, plant and human products.

FINAL CERTIFICATE OF ANALYSIS - ENVIRONMENTAL DIVISION

Laboratory Report No:	E026815	Cover Page 1 of 4
Client Name:	HLA - Envirosciences Pty Limited	plus Sample Results
Client Reference:	MM Group North Ryde	
Contact Name:	Ben Pearce	
Chain of Custody No:	na	Date Received: 31/05/2006
Sample Matrix:	OTHER & SOIL & WATER	Date Reported: 09/06/2006

This Final Certificate of Analysis consists of sample results, DQI's, method descriptions, laboratory definitions, and internationally recognised NATA accreditation and endorsement. The DQO compliance relates specifically to QA/QC results as performed as part of the sample analysis, and may provide an indication of sample result quality. Transfer of report ownership from Labmark to the client shall only occur once full & final payment has been settled and verified. All report copies may be retracted where full payment has not occured within the agreed settlement period.

QUALITY ASSURANCE CRITERIA

Accuracy:	matrix spike:	1 in first 5-20, then 1 every 20 samples
	lcs, crm, method:	1 per analytical batch
	surrogate spike:	addition per target organic method
Precision:	laboratory duplicate:	1 in first 5-10, then 1 every 10 samples
	laboratory triplicate:	re-extracted & reported when duplicate RPD values exceed acceptance criteria
Holding Times:	soils, waters:	Refer to LabMark Preservation & THT table VOC's 14 days water / soil VAC's 7 days water or 14 days acidified VAC's 14 days soil SVOC's 7 days water, 14 days soil Pesticides 7 days water, 14 days soil Metals 6 months general elements Mercury 28 days
Confirmation:	target organic analysis:	GC/MS, or confirmatory column
Sensitivity:	EQL:	Typically 2-5 x Method Detection Limit (MDL)

QUALITY CONTROL GLOBAL ACCEPTANCE CRITERIA (GAC)

Accuracy:	spike, lcs, crm surrogate:	general analytes 70% - 130% recovery phenol analytes 50% - 130% recovery organophosphorous pesticide analytes 60% - 130% recovery phenoxy acid herbicides 50% - 130% recovery
	anion/cation bal:	+/- 10% (0-3 meq/l), +/- 5% (>3 meq/l)
Precision:	method blank:	not detected >95% of the reported EQL
	duplicate lab RPD (metals):	0-30% (>10xEQL), 0-75% (5-10xEQL) 0-100% (<5xEQL)
	duplicate lab RPD:	0-50% (>10xEQL), 0-75% (5-10xEQL) 0-100% (<5xEQL)

QUALITY CONTROL ANALYTE SPECIFIC ACCEPTANCE CRITERIA (ASAC)

Accuracy:	spike, lcs, crm surrogate:	analyte specific recovery data <3xsd of historical mean
Uncertainty:	spike, lcs:	measurement calculated from historical analyte specific control charts

RESULT ANNOTATION

DQO:	Data Quality Objective	s:	matrix spike recovery	p:	pending
DQI:	Data Quality Indicator	d:	laboratory duplicate	lcs:	laboratory control sample
EQL:	Estimated Quantitation Limit	t:	laboratory triplicate	crm:	certified reference material
- - :	not applicable	r:	RPD relative % difference	mb:	method blank

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NEPC GUIDELINE COMPLIANCE - DQO

1. GENERAL

A. Results relate specifically to samples as received. Sample results are not corrected for matrix spike, lcs, or surrogate recovery data.

B. EQL's are matrix dependant and may be increased due to sample dilution or matrix interference.

C. Laboratory QA/QC samples are specific to this project.

D. Inter-laboratory proficiency results are available upon request. NATA accreditation details available at www.nata.asn.au.

E. VOC spikes & surrogates added to samples during extraction, SVOC spikes & surrogates added prior to extraction.

F. Recovery data outside GAC limits shall be investigated and compared to ASAC (historical mean +/- 3sd). If recovery data <20%, then the relevant results for that compound are considered not reliable.

G. Recovery data (ms, surrogate, crm, lcs) outside ASAC limits shall initiate an investigative action. Anomolous QC data is examined in conjunction with other QC samples and a final decision whether to accept or reject results is provided by the professional judgement of the senior analyst. The USEPA-CLP National Functional Guidelines are referred to for specific recommendations.

H. Extraction (preparation) date refers to the date that sample preparation was initiated. Note that certain methods not requiring sample preparation (eg. VOCs in water, etc) may report a common extraction and analysis date.

I. LabMark shall maintain an official copy of this Certificate of Analysis for all tracable reference purposes.

2. CHAIN OF CUSTODY (COC) & SAMPLE RECEIPT NOTICE (SRN) REQUIREMENTS

A. SRN issued to client upon sample receipt & login verification.

B. Preservation & sampling date details specified on COC and SRN, unless noted.

C. Sample Integrity & Validated Time of Sample Receipt (VTSR) Holding Times verified (preservation may extend holding time, refer to preservation chart).

3. NATA ACCREDITED METHODS

A. NATA accreditation held for each in-house method and sample matrix type reported, unless noted below (Refer to subcontracted test reports for NATA accreditation status).

B. NATA accredited in-house laboratory methods are referenced from NEPC, ASTM, modified USEPA / APHA documents. Corporate Accreditation No. 13542.

C. Subcontracted analyses: Refer to Sample Receipt Notice and additional DQO comments.

Reported by Aust. Safer Env & Tech., NATA accreditation No. 14484

4. QA/QC FREQUENCY COMPLIANCE TABLE SPECIFIC TO THIS REPORT

Matrix: **SOIL**

Page:	Method:	Totals:	#d	%d-ratio	#t	#s	%s-ratio
1	BTEX by P&T	17	2	12%	0	1	6%
1	Volatile TPH by P&T (vTPH)	17	2	12%	0	1	6%
4	Petroleum Hydrocarbons (TPH)	17	2	12%	0	1	6%
9	Polyaromatic Hydrocarbons (PAH)	15	2	13%	0	1	7%
13	Volatile Halogenated Compounds (VHC)	2	0	0%	0	0	0%
15	Organochlorine Pesticides (OC)	9	1	11%	0	1	11%
17	Organophosphorus Pesticides	8	1	13%	0	1	13%
19	Polychlorinated Biphenyls (PCB)	10	1	10%	0	1	10%
22	Acid extractable metals (M7)	36	4	11%	0	2	6%
27	Acid extractable mercury	36	4	11%	0	2	6%
33	pH in soil	7	1	14%	0	0	0%
34	Moisture	39	--	--	--	--	--

Matrix: **SOIL-LEACHATE**

Page:	Method:	Totals:	#d	%d-ratio	#t	#s	%s-ratio
21	TCLP Preparation	4	0	0%	0	0	0%
32	TCLP metals	4	0	0%	0	0	0%

Matrix: **WATER**

Page:	Method:	Totals:	#d	%d-ratio	#t	#s	%s-ratio
7	BTEX by P&T	1	0	0%	0	0	0%
7	Volatile TPH by P&T (vTPH)	1	0	0%	0	0	0%
8	Petroleum Hydrocarbons (TPH)	1	0	0%	0	0	0%
12	Polyaromatic Hydrocarbons (PAH)	1	0	0%	0	0	0%
30	Filtered metals (M7)	1	0	0%	0	0	0%
31	Filtered mercury	1	0	0%	0	0	0%

GLOSSARY:

#d	number of discrete duplicate extractions/analyses performed.
%d-ratio	NEPC guideline for laboratory duplicates is 1 in 10 samples (min 10%).
#t	number of triplicate extractions/analyses performed.
#s	number of spiked samples analysed.
%s-ratio	USEPA guideline for laboratory matrix spikes is 1 in 20 samples (min 5%).

5. ADDITIONAL COMMENTS SPECIFIC TO THIS REPORT

A. All tests were conducted by LabMark Environmental Sydney, NATA accreditation No. 13542, Corporate Site No. 13535.
B. Asbestos analysis performed by ASET, refer to report attached.

Laboratory QA/QC data shall relate specifically to this report, and may provide an indication of site specific sample result quality. LabMark DOES NOT report NON-RELEVANT BATCH QA/QC data. Acceptance of this self assessment certificate does not preclude any requirement for a QA/QC review by a accredited contaminated site EPA auditor, when and wherever necessary. Laboratory QA/QC self assessment references available upon request.

Laboratory Report No: E026815
Client Name: HLA - Enviroscienses Pty Limited
Contact Name: Ben Pearce
Client Reference MM Group North Ryde S4062801

Date: 09/06/06
This report supercedes reports issued on: 07/06/06

Final
Certificate
of Analysis

Laboratory Identification			**26075**	**26085**	**26088**	**26089**	**26091**	**26092**	**26096**	**26101**	**26104**	**26124**
Sample Identification			BH04	BH06	BH06	BH07	BH08	BH08	BH09	HA01	HA02	BH13
Depth (m)			0.05-0.15	0.05-0.15	1.0-1.1	0.15-0.3	0.16-0.25	0.6-0.8	0.17-0.3	0.5-0.6	0.5-0.6	0.0-0.1
Sampling Date recorded on COC			29/5/06	29/5/06	29/5/06	29/5/06	29/5/06	29/5/06	29/5/06	29/5/06	29/5/06	30/5/06
Laboratory Extraction (Preparation) Date			1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06
Laboratory Analysis Date			2/6/06	2/6/06	2/6/06	2/6/06	5/6/06	2/6/06	5/6/06	2/6/06	2/6/06	2/6/06
Method	**BTEX by P&T**	**EQL**										
E002.2	Benzene	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Toluene	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Ethylbenzene	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	meta- and para-Xylene	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	ortho-Xylene	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Total Xylene	--	--	--	--	--	--	--	--	--	--	--
	CDFB (Surr @ 10mg/kg)	--	*96%*	*96%*	*100%*	*93%*	*72%*	*93%*	*82%*	*98%*	*102%*	*97%*
Method	**Volatile TPH by P&T (vTPH)**	**EQL**										
E003.2	C6 - C9 Fraction	10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10

Results expressed in mg/kg dry weight unless otherwise specified

Comments:

E002.2: 8-10g soil extracted with 20ml methanol. Analysis by P&T/GC/PID/MSD.
E003.2: 8-10g soil extracted with 20ml methanol. Analysis by P&T/GC/FID.

Laboratory Identification			**26126**	**26132**	**26136**	**26137**	**26138**	**26139**	**26145**	**26101d**	**26101r**	**26124d**
Sample Identification			BH14	BH15	BH16	BH16	BH16	BH17	DUP04	QC	QC	QC
Depth (m)			0.05-0.25	0.15-0.35	0.6-0.8	1.9-2.0	2.9-3.0	0.17-0.3	--	--	--	--
Sampling Date recorded on COC			30/5/06	30/5/06	30/5/06	30/5/06	30/5/06	30/5/06	30/5/06	--	--	--
Laboratory Extraction (Preparation) Date			1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	--	1/6/06
Laboratory Analysis Date			2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	--	2/6/06
Method	**BTEX by P&T**	**EQL**										
E002.2	Benzene	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.3	<0.2	--	<0.2
	Toluene	0.5	<0.5	<0.5	<0.5	1	<0.5	<0.5	3.0	<0.5	--	<0.5
	Ethylbenzene	0.5	<0.5	<0.5	<0.5	1.4	<0.5	<0.5	3.5	<0.5	--	<0.5
	meta- and para-Xylene	1	<1	<1	<1	7	<1	<1	16	<1	--	<1
	ortho-Xylene	0.5	<0.5	<0.5	<0.5	2.8	<0.5	<0.5	6.6	<0.5	--	<0.5
	Total Xylene	--	--	--	--	9.8	--	--	22.6	--	--	--
	CDFB (Surr @ 10mg/kg)	--	*97%*	*98%*	*91%*	*94%*	*105%*	*98%*	*96%*	*95%*	*3%*	*96%*
Method	**Volatile TPH by P&T (vTPH)**	**EQL**										
E003.2	C6 - C9 Fraction	10	<10	<10	<10	10	<10	<10	40	<10	--	<10

Results expressed in mg/kg dry weight unless otherwise specified

Comments:

E002.2: 8-10g soil extracted with 20ml methanol. Analysis by P&T/GC/PID/MSD.
E003.2: 8-10g soil extracted with 20ml methanol. Analysis by P&T/GC/FID.

Laboratory Identification			**26124r**	**26104s**	**lcs**	**mb**						
Sample Identification			QC	QC	QC	QC						
Depth (m)			--	--	--	--						
Sampling Date recorded on COC			--	--	--	--						
Laboratory Extraction (Preparation) Date			--	1/6/06	1/6/06	1/6/06						
Laboratory Analysis Date			--	2/6/06	1/6/06	1/6/06						
Method	**BTEX by P&T**	**EQL**										
E002.2	Benzene	0.2	--	96%	107%	<0.2						
	Toluene	0.5	--	97%	113%	<0.5						
	Ethylbenzene	0.5	--	91%	111%	<0.5						
	meta- and para-Xylene	1	--	102%	123%	<1						
	ortho-Xylene	0.5	--	95%	116%	<0.5						
	Total Xylene	--	--	--	--	--						
	CDFB (Surr @ 10mg/kg)	--	*1%*	*94%*	*100%*	*102%*						
Method	**Volatile TPH by P&T (vTPH)**	**EQL**										
E003.2	C6 - C9 Fraction	10	--	86%	111%	<10						

Results expressed in mg/kg dry weight unless otherwise specified

Comments:

E002.2: 8-10g soil extracted with 20ml methanol. Analysis by P&T/GC/PID/MSD.
E003.2: 8-10g soil extracted with 20ml methanol. Analysis by P&T/GC/FID.

Final
Certificate of Analysis

Laboratory Identification			**26075**	**26085**	**26088**	**26089**	**26091**	**26092**	**26096**	**26101**	**26104**	**26124**
Sample Identification			BH04	BH06	BH06	BH07	BH08	BH08	BH09	HA01	HA02	BH13
Depth (m)			0.05-0.15	0.05-0.15	1.0-1.1	0.15-0.3	0.16-0.25	0.6-0.8	0.17-0.3	0.5-0.6	0.5-0.6	0.0-0.1
Sampling Date recorded on COC			29/5/06	29/5/06	29/5/06	29/5/06	29/5/06	29/5/06	29/5/06	29/5/06	29/5/06	30/5/06
Laboratory Extraction (Preparation) Date			1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06
Laboratory Analysis Date			3/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06
Method	**Petroleum Hydrocarbons (TPH)**	**EQL**										
E006.2	C10 - C14 Fraction	50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
	C15 - C28 Fraction	100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
	C29 - C36 Fraction	100	<100	160	<100	<100	<100	<100	<100	<100	<100	<100
	Sum of TPH C10 - C36	--	--	160	--	--	--	--	--	--	--	--

Results expressed in mg/kg dry weight unless otherwise specified

Comments:

E006.2: 8-10g soil extracted with 20ml DCM/Acetone (8:2). Analysis by GC/FID.

Final
Certificate of Analysis

Laboratory Identification			**26126**	**26132**	**26136**	**26137**	**26138**	**26139**	**26145**	**26101d**	**26101r**	**26124d**
Sample Identification			BH14	BH15	BH16	BH16	BH16	BH17	DUP04	QC	QC	QC
Depth (m)			0.05-0.25	0.15-0.35	0.6-0.8	1.9-2.0	2.9-3.0	0.17-0.3	--	--	--	--
Sampling Date recorded on COC			30/5/06	30/5/06	30/5/06	30/5/06	30/5/06	30/5/06	30/5/06	--	--	--
Laboratory Extraction (Preparation) Date			1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	--	1/6/06
Laboratory Analysis Date			2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	--	2/6/06
Method	**Petroleum Hydrocarbons (TPH)**	**EQL**										
E006.2	C10 - C14 Fraction	50	<50	<50	<50	50	<50	<50	90	<50	--	<50
	C15 - C28 Fraction	100	<100	<100	<100	<100	<100	<100	<100	<100	--	<100
	C29 - C36 Fraction	100	<100	<100	<100	<100	<100	<100	<100	<100	--	<100
	Sum of TPH C10 - C36	--	--	--	--	50	--	--	90	--	--	--

Results expressed in mg/kg dry weight unless otherwise specified

Comments:

E006.2: 8-10g soil extracted with 20ml DCM/Acetone (8:2). Analysis by GC/FID.

Laboratory Identification			26124r	26104s	lcs	mb						
Sample Identification			QC	QC	QC	QC						
Depth (m)			--	--	--	--						
Sampling Date recorded on COC			--	--	--	--						
Laboratory Extraction (Preparation) Date			--	1/6/06	1/6/06	1/6/06						
Laboratory Analysis Date			--	2/6/06	1/6/06	1/6/06						
Method	**Petroleum Hydrocarbons (TPH)**	**EQL**										
E006.2	C10 - C14 Fraction	50	--	84%	90%	<50						
	C15 - C28 Fraction	100	--	--	--	<100						
	C29 - C36 Fraction	100	--	--	--	<100						
	Sum of TPH C10 - C36	--	--	--	--	--						

Results expressed in mg/kg dry weight unless otherwise specified

Comments:

E006.2: 8-10g soil extracted with 20ml DCM/Acetone (8:2). Analysis by GC/FID.

Laboratory Identification			**26112**	**lcs**	**mb**							
Sample Identification			QW01	QC	QC							
Depth (m)			--	--	--							
Sampling Date recorded on COC			29/5/06	--	--							
Laboratory Extraction (Preparation) Date			2/6/06	2/6/06	2/6/06							
Laboratory Analysis Date			3/6/06	2/6/06	2/6/06							
Method	**BTEX by P&T**	**EQL**										
E002.1	Benzene	1	<1	104%	<1							
	Toluene	1	<1	106%	<1							
	Ethylbenzene	1	<1	105%	<1							
	meta- & para-Xylene	2	<2	111%	<2							
	ortho-Xylene	1	<1	104%	<1							
	Total Xylene	--	--	--	--							
	4-BFB (Surr @ 100ug/l)	--	*98%*	*100%*	*99%*							
Method	**Volatile TPH by P&T (vTPH)**	**EQL**										
E003.1	C6-C9	50	<50	100%	<50							

Results expressed in ug/l unless otherwise specified

Comments:

E002.1: Direct injection into P&T/GC/PID/MSD.
E003.1: Direct injection into P&T/GC/FID.

Laboratory Identification			**26112**	**lcs**	**mb**							
Sample Identification			QW01	QC	QC							
Depth (m)			--	--	--							
Sampling Date recorded on COC			29/5/06	--	--							
Laboratory Extraction (Preparation) Date			2/6/06	2/6/06	2/6/06							
Laboratory Analysis Date			5/6/06	3/6/06	3/6/06							
Method	**Petroleum Hydrocarbons (TPH)**	**EQL**										
E004.1	C10-C14 Fraction	50	<50	--	<50							
	C15-C28 Fraction	200	<200	93%	<200							
	C29-C36 Fraction	50	<50	--	<50							
	Sum of TPH C10 - C36	--	--	--	--							

Results expressed in ug/l unless otherwise specified

Comments:

E004.1: Triple extraction with DCM. Analysis by GC/FID.

Laboratory Identification			**26075**	**26085**	**26088**	**26101**	**26104**	**26113**	**26124**	**26126**	**26137**	**26138**
Sample Identification			BH04	BH06	BH06	HA01	HA02	BH11	BH13	BH14	BH16	BH16
Depth (m)			0.05-0.15	0.05-0.15	1.0-1.1	0.5-0.6	0.5-0.6	0.05-0.15	0.0-0.1	0.05-0.25	1.9-2.0	2.9-3.0
Sampling Date recorded on COC			29/5/06	29/5/06	29/5/06	29/5/06	29/5/06	30/5/06	30/5/06	30/5/06	30/5/06	30/5/06
Laboratory Extraction (Preparation) Date			1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06
Laboratory Analysis Date			2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	6/6/06	2/6/06	2/6/06
Method	**Polyaromatic Hydrocarbons (PAH)**	**EQL**										
E007.2	Naphthalene	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.1	<0.5
	Acenaphthylene	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Acenaphthene	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Fluorene	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Phenanthrene	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Anthracene	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Fluoranthene	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Pyrene	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Benz(a)anthracene	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Chrysene	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Benzo(b)&(k)fluoranthene	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Benzo(a) pyrene	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Indeno(1,2,3-c,d)pyrene	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Dibenz(a,h)anthracene	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Benzo(g,h,i)perylene	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Sum of reported PAHs	--	--	--	--	--	--	--	--	--	1.1	--
	2-FBP (Surr @ 5mg/kg)	--	*108%*	*109%*	*117%*	*120%*	*109%*	*110%*	*104%*	*105%*	*95%*	*98%*
	TP-d14 (Surr @ 5mg/kg)	--	*101%*	*102%*	*115%*	*119%*	*111%*	*109%*	*101%*	*94%*	*93%*	*99%*

Results expressed in mg/kg dry weight unless otherwise specified

Comments:

E007.2: 8-10g soil extracted with 20ml DCM/acetone (8:2). Analysis by GC/MS.

Laboratory Identification			26139	26144	26145	26147	26148	26101d	26101r	26124d	26124r	26104s
Sample Identification			BH17	DUP03	DUP04	BIT01	BIT02	QC	QC	QC	QC	QC
Depth (m)			0.17-0.3	--	--	--	--	--	--	--	--	--
Sampling Date recorded on COC			30/5/06	30/5/06	30/5/06	30/5/06	30/5/06	--	--	--	--	--
Laboratory Extraction (Preparation) Date			1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	--	1/6/06	--	1/6/06
Laboratory Analysis Date			2/6/06	3/6/06	3/6/06	3/6/06	3/6/06	2/6/06	--	2/6/06	--	2/6/06
Method	**Polyaromatic Hydrocarbons (PAH)**	**EQL**										
E007.2	Naphthalene	0.5	<0.5	<0.5	1.9	<0.5	<0.5	<0.5	--	<0.5	--	101%
	Acenaphthylene	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	<0.5	--	102%
	Acenaphthene	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	<0.5	--	102%
	Fluorene	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	<0.5	--	101%
	Phenanthrene	0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	--	<0.5	--	92%
	Anthracene	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	<0.5	--	93%
	Fluoranthene	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	<0.5	--	101%
	Pyrene	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	<0.5	--	99%
	Benz(a)anthracene	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	<0.5	--	99%
	Chrysene	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	<0.5	--	93%
	Benzo(b)&(k)fluoranthene	1	<1	<1	<1	<1	<1	<1	--	<1	--	95%
	Benzo(a) pyrene	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	<0.5	--	93%
	Indeno(1,2,3-c,d)pyrene	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	<0.5	--	89%
	Dibenz(a,h)anthracene	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	<0.5	--	95%
	Benzo(g,h,i)perylene	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	<0.5	--	96%
	Sum of reported PAHs	--	--	--	--	1.9	--	0.5	--	--	--	--
	2-FBP (Surr @ 5mg/kg)	--	*116%*	*105%*	*101%*	*110%*	*91%*	*106%*	*12%*	*109%*	*5%*	*107%*
	TP-d14 (Surr @ 5mg/kg)	--	*113%*	*102%*	*97%*	*104%*	*88%*	*111%*	*7%*	*104%*	*3%*	*105%*

Results expressed in mg/kg dry weight unless otherwise specified

Comments:

E007.2: 8-10g soil extracted with 20ml DCM/acetone (8:2). Analysis by GC/MS.

Laboratory Identification			**lcs**	**mb**								
Sample Identification			QC	QC								
Depth (m)			--	--								
Sampling Date recorded on COC			--	--								
Laboratory Extraction (Preparation) Date			1/6/06	1/6/06								
Laboratory Analysis Date			1/6/06	1/6/06								
Method	**Polyaromatic Hydrocarbons (PAH)**	**EQL**										
E007.2	Naphthalene	0.5	98%	<0.5								
	Acenaphthylene	0.5	120%	<0.5								
	Acenaphthene	0.5	99%	<0.5								
	Fluorene	0.5	88%	<0.5								
	Phenanthrene	0.5	98%	<0.5								
	Anthracene	0.5	105%	<0.5								
	Fluoranthene	0.5	98%	<0.5								
	Pyrene	0.5	99%	<0.5								
	Benz(a)anthracene	0.5	96%	<0.5								
	Chrysene	0.5	97%	<0.5								
	Benzo(b)&(k)fluoranthene	1	88%	<1								
	Benzo(a) pyrene	0.5	86%	<0.5								
	Indeno(1,2,3-c,d)pyrene	0.5	96%	<0.5								
	Dibenz(a,h)anthracene	0.5	88%	<0.5								
	Benzo(g,h,i)perylene	0.5	93%	<0.5								
	Sum of reported PAHs	--	--	--								
	2-FBP (Surr @ 5mg/kg)	--	*96%*	*99%*								
	TP-d14 (Surr @ 5mg/kg)	--	*103%*	*110%*								

Results expressed in mg/kg dry weight unless otherwise specified

Comments:

E007.2: 8-10g soil extracted with 20ml DCM/acetone (8:2). Analysis by GC/MS.

Laboratory Identification			**26112**	**lcs**	**mb**							
Sample Identification			QW01	QC	QC							
Depth (m)			--	--	--							
Sampling Date recorded on COC			29/5/06	--	--							
Laboratory Extraction (Preparation) Date			2/6/06	2/6/06	2/6/06							
Laboratory Analysis Date			3/6/06	3/6/06	3/6/06							
Method	**Polyaromatic Hydrocarbons (PAH)**	**EQL**										
E007.1	Naphthalene	1	<1	97%	<1							
	Acenaphthylene	1	<1	94%	<1							
	Acenaphthene	1	<1	92%	<1							
	Fluorene	1	<1	96%	<1							
	Phenanthrene	1	<1	99%	<1							
	Anthracene	1	<1	90%	<1							
	Fluoranthene	1	<1	100%	<1							
	Pyrene	1	<1	98%	<1							
	Benz(a)anthracene	1	<1	99%	<1							
	Chrysene	1	<1	83%	<1							
	Benzo(b)&(k)fluoranthene	2	<2	95%	<2							
	Benzo(a) pyrene	1	<1	97%	<1							
	Indeno(1,2,3-c,d)pyrene	1	<1	99%	<1							
	Dibenz(a,h)anthracene	1	<1	100%	<1							
	Benzo(g,h,i)perylene	1	<1	102%	<1							
	Sum of reported PAHs	--	--	--	--							
	2-FBP (Surr @ 250ug/l)	--	*94%*	*99%*	*96%*							
	TP-d14 (Surr @ 250ug/l)	--	*112%*	*100%*	*108%*							

Results expressed in ug/l unless otherwise specified

Comments:

E007.1: Triple extraction with DCM. Analysis by GC/MS.

Laboratory Identification			26091	26096	lcs	mb						
Sample Identification			BH08	BH09	QC	QC						
Depth (m)			0.16-0.25	0.17-0.3	--	--						
Sampling Date recorded on COC			29/5/06	29/5/06	--	--						
Laboratory Extraction (Preparation) Date			1/6/06	1/6/06	1/6/06	1/6/06						
Laboratory Analysis Date			5/6/06	5/6/06	3/6/06	3/6/06						
Method	**Volatile Halogenated Compounds (VHC)**	**EQL**										
E010.2	Dichlorodifluoromethane	5	<5	<5	84%	<5						
	Chloromethane	5	<5	<5	95%	<5						
	Vinyl chloride	5	<5	<5	106%	<5						
	Bromomethane	5	<5	<5	99%	<5						
	Chloroethane	5	<5	<5	99%	<5						
	Trichlorofluoromethane	5	<5	<5	95%	<5						
	1,1-dichloroethene	0.5	<0.5	<0.5	124%	<0.5						
	trans-1,2-dichloroethene	0.5	<0.5	<0.5	126%	<0.5						
	1,1-dichloroethane	0.5	<0.5	<0.5	129%	<0.5						
	cis-1,2-dichloroethene	0.5	<0.5	<0.5	109%	<0.5						
	2,2-dichloropropane	0.5	<0.5	<0.5	105%	<0.5						
	Chloroform	0.5	<0.5	<0.5	116%	<0.5						
	1,1,1-trichloroethane	0.5	<0.5	<0.5	117%	<0.5						
	1,2-dichloroethane	0.5	<0.5	<0.5	121%	<0.5						
	1,1-dichloropropene	0.5	<0.5	<0.5	109%	<0.5						
	Carbon tetrachloride	0.5	<0.5	<0.5	118%	<0.5						
	Trichloroethene	0.5	<0.5	<0.5	110%	<0.5						
	1,2-dichloropropane	0.5	<0.5	<0.5	113%	<0.5						
	Dibromomethane	0.5	<0.5	<0.5	123%	<0.5						
	Bromodichloromethane	0.5	<0.5	<0.5	116%	<0.5						
	cis-1,3-dichloropropene	0.5	<0.5	<0.5	107%	<0.5						
	trans-1,3-dichloropropene	0.5	<0.5	<0.5	115%	<0.5						
	1,1,2-trichloroethane	0.5	<0.5	<0.5	113%	<0.5						
	1,3-dichloropropane	0.5	<0.5	<0.5	115%	<0.5						
	Chlorodibromomethane	0.5	<0.5	<0.5	123%	<0.5						
	Tetrachloroethene	0.5	<0.5	<0.5	121%	<0.5						
	1,2-dibromoethane	0.5	<0.5	<0.5	112%	<0.5						

Laboratory Identification			26091	26096	lcs	mb						
Sample Identification			BH08	BH09	QC	QC						
Depth (m)			0.16-0.25	0.17-0.3	--	--						
Sampling Date recorded on COC			29/5/06	29/5/06	--	--						
Laboratory Extraction (Preparation) Date			1/6/06	1/6/06	1/6/06	1/6/06						
Laboratory Analysis Date			5/6/06	5/6/06	3/6/06	3/6/06						
Method	**Volatile Halogenated Compounds (VHC)**	**EQL**										
E010.2	Chlorobenzene	0.5	<0.5	<0.5	120%	<0.5						
	1,1,1,2-tetrachloroethane	0.5	<0.5	<0.5	123%	<0.5						
	Bromoform	0.5	<0.5	<0.5	127%	<0.5						
	1,1,2,2-tetrachloroethane	0.5	<0.5	<0.5	117%	<0.5						
	1,2,3-trichloropropane	0.5	<0.5	<0.5	112%	<0.5						
	1,3-dichlorobenzene	0.5	<0.5	<0.5	126%	<0.5						
	1,4-dichlorobenzene	0.5	<0.5	<0.5	119%	<0.5						
	1,2-dichlorobenzene	0.5	<0.5	<0.5	124%	<0.5						
	1,2-dibromo-3-chloropropane	0.5	<0.5	<0.5	112%	<0.5						
	Hexachlorobutadiene	0.5	<0.5	<0.5	109%	<0.5						
	CTFCB (Surr @ 20mg/kg)	--	*71%*	*70%*	*127%*	*123%*						
	BCP (Surr @ 20mg/kg)	--	*112%*	*113%*	*119%*	*112%*						
	DCFB (Surr @ 20mg/kg)	--	*84%*	*85%*	*129%*	*116%*						

Results expressed in mg/kg dry weight unless otherwise specified

Comments:

E010.2: 8-10g soil extracted with 20ml methanol. Analysis by P&T/GC/MS. (NB) Dichloromethane not reported unless requested.

Final
Certificate of Analysis

Laboratory Identification			**26075**	**26096**	**26101**	**26104**	**26108**	**26110**	**26120**	**26124**	**26144**	**26101d**
Sample Identification			BH04	BH09	HA01	HA02	HA04	HA05	BH12	BH13	DUP03	QC
Depth (m)			0.05-0.15	0.17-0.3	0.5-0.6	0.5-0.6	0.0-0.1	0.0-0.1	0.0-0.3	0.0-0.1	--	--
Sampling Date recorded on COC			29/5/06	29/5/06	29/5/06	29/5/06	29/5/06	29/5/06	30/5/06	30/5/06	30/5/06	--
Laboratory Extraction (Preparation) Date			1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06
Laboratory Analysis Date			4/6/06	3/6/06	3/6/06	3/6/06	3/6/06	3/6/06	3/6/06	6/6/06	6/6/06	3/6/06
Method	**Organochlorine Pesticides (OC)**	**EQL**										
E013.2	a-BHC	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	~<0.5	~<0.5	<0.05
	HCB	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	~<0.5	~<0.5	<0.05
	b-BHC	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	~<0.5	~<0.5	<0.05
	g-BHC (Lindane)	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	~<0.5	~<0.5	<0.05
	d-BHC	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	~<0.5	~<0.5	<0.05
	Heptachlor	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	~<0.5	~<0.5	<0.05
	Aldrin	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	~<0.5	~<0.5	<0.05
	Heptachlor epoxide	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	~<0.5	~<0.5	<0.05
	trans-chlordane	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	~<0.5	~<0.5	<0.05
	Endosulfan I	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	~<0.5	~<0.5	<0.05
	cis-chlordane	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	~<0.5	~<0.5	<0.05
	Dieldrin	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	~<0.5	~<0.5	<0.05
	4,4-DDE	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	~<0.5	~<0.5	<0.05
	Endrin	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	~<0.5	~<0.5	<0.05
	Endosulfan II	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	~<0.5	~<0.5	<0.05
	4,4-DDD	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	~<0.5	~<0.5	<0.05
	Endosulfan sulphate	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	~<0.5	~<0.5	<0.05
	4,4-DDT	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	~<2	~<2	<0.2
	Methoxychlor	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	~<2	~<2	<0.2
	DBC (Surr @ 0.2mg/kg)	--	*86%*	*90%*	*97%*	*75%*	*96%*	*80%*	*71%*	*89%*	*70%*	*79%*

Results expressed in mg/kg dry weight unless otherwise specified

Comments: ~Sample dilution required, EQLs adjusted accordingly.

E013.2: 8-10g soil extracted with 20ml hexane/acetone (1:1). Analysis by GC/dual ECD.

Laboratory Identification			**26101r**	**26104s**	**lcs**	**mb**						
Sample Identification			QC	QC	QC	QC						
Depth (m)			--	--	--	--						
Sampling Date recorded on COC			--	--	--	--						
Laboratory Extraction (Preparation) Date			--	1/6/06	1/6/06	1/6/06						
Laboratory Analysis Date			--	3/6/06	2/6/06	2/6/06						
Method	**Organochlorine Pesticides (OC)**	**EQL**										
E013.2	a-BHC	0.05	--	105%	98%	<0.05						
	HCB	0.05	--	116%	117%	<0.05						
	b-BHC	0.05	--	114%	114%	<0.05						
	g-BHC (Lindane)	0.05	--	104%	102%	<0.05						
	d-BHC	0.05	--	106%	106%	<0.05						
	Heptachlor	0.05	--	101%	101%	<0.05						
	Aldrin	0.05	--	98%	101%	<0.05						
	Heptachlor epoxide	0.05	--	124%	108%	<0.05						
	trans-chlordane	0.05	--	100%	108%	<0.05						
	Endosulfan I	0.05	--	103%	109%	<0.05						
	cis-chlordane	0.05	--	103%	110%	<0.05						
	Dieldrin	0.05	--	103%	110%	<0.05						
	4,4-DDE	0.05	--	107%	110%	<0.05						
	Endrin	0.05	--	104%	108%	<0.05						
	Endosulfan II	0.05	--	127%	111%	<0.05						
	4,4-DDD	0.05	--	105%	111%	<0.05						
	Endosulfan sulphate	0.05	--	97%	99%	<0.05						
	4,4-DDT	0.2	--	99%	92%	<0.2						
	Methoxychlor	0.2	--	105%	98%	<0.2						
	DBC (Surr @ 0.2mg/kg)	--	*20%*	*74%*	*107%*	*125%*						

Results expressed in mg/kg dry weight unless otherwise specified

Comments: ~Sample dilution required, EQLs adjusted accordingly.

E013.2: 8-10g soil extracted with 20ml hexane/acetone (1:1). Analysis by GC/dual ECD.

Final
Certificate of Analysis

Laboratory Identification			**26075**	**26101**	**26104**	**26108**	**26110**	**26120**	**26124**	**26144**	**26101d**	**26101r**
Sample Identification			BH04	HA01	HA02	HA04	HA05	BH12	BH13	DUP03	QC	QC
Depth (m)			0.05-0.15	0.5-0.6	0.5-0.6	0.0-0.1	0.0-0.1	0.0-0.3	0.0-0.1	--	--	--
Sampling Date recorded on COC			29/5/06	29/5/06	29/5/06	29/5/06	29/5/06	30/5/06	30/5/06	30/5/06	--	--
Laboratory Extraction (Preparation) Date			1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	--
Laboratory Analysis Date			2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	--
Method	**Organophosphorus Pesticides**	**EQL**										
E014.2	Dichlorvos	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--
	Mevinphos (Phosdrin)	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--
	Demeton (total)	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	--
	Ethoprop	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--
	Monocrotophos	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--
	Phorate	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--
	Dimethoate	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--
	Diazinon	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--
	Disulfoton	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--
	Methyl parathion	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--
	Ronnel	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--
	Fenitrothion	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--
	Malathion	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--
	Chlorpyrifos	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--
	Fenthion	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--
	Parathion	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--
	Stirofos	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--
	Prothiofos	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--
	Azinophos methyl	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--
	Coumaphos	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--
	TPP (Surr @ 2mg/kg)	--	*111%*	*74%*	*89%*	*93%*	*98%*	*88%*	*98%*	*70%*	*90%*	*20%*

Results expressed in mg/kg dry weight unless otherwise specified

Comments:

E014.2: 8-10g soil extracted with 20ml hexane/acetone (1:1). Analysis by GC/FPD/MS.

Laboratory Identification			26104s	lcs	mb							
Sample Identification			QC	QC	QC							
Depth (m)			--	--	--							
Sampling Date recorded on COC			--	--	--							
Laboratory Extraction (Preparation) Date			1/6/06	1/6/06	1/6/06							
Laboratory Analysis Date			2/6/06	7/6/06	1/6/06							
Method	**Organophosphorus Pesticides**	**EQL**										
E014.2	Dichlorvos	0.5	122%	107%	<0.5							
	Mevinphos (Phosdrin)	0.5	99%	103%	<0.5							
	Demeton (total)	1	110%	104%	<1							
	Ethoprop	0.5	103%	105%	<0.5							
	Monocrotophos	0.5	94%	70%	<0.5							
	Phorate	0.5	101%	106%	<0.5							
	Dimethoate	0.5	99%	100%	<0.5							
	Diazinon	0.5	96%	67%	<0.5							
	Disulfoton	0.5	99%	105%	<0.5							
	Methyl parathion	0.5	111%	105%	<0.5							
	Ronnel	0.5	97%	110%	<0.5							
	Fenitrothion	0.5	104%	112%	<0.5							
	Malathion	0.5	102%	102%	<0.5							
	Chlorpyrifos	0.5	98%	112%	<0.5							
	Fenthion	0.5	99%	112%	<0.5							
	Parathion	0.5	106%	107%	<0.5							
	Stirofos	0.5	93%	100%	<0.5							
	Prothiofos	0.5	103%	113%	<0.5							
	Azinophos methyl	0.5	102%	109%	<0.5							
	Coumaphos	0.5	113%	106%	<0.5							
	TPP (Surr @ 2mg/kg)	--	*96%*	*103%*	*117%*							

Results expressed in mg/kg dry weight unless otherwise specified

Comments:

E014.2: 8-10g soil extracted with 20ml hexane/acetone (1:1). Analysis by GC/FPD/MS.

Laboratory Identification			**26075**	**26088**	**26096**	**26101**	**26104**	**26108**	**26110**	**26120**	**26124**	**26144**
Sample Identification			BH04	BH06	BH09	HA01	HA02	HA04	HA05	BH12	BH13	DUP03
Depth (m)			0.05-0.15	1.0-1.1	0.17-0.3	0.5-0.6	0.5-0.6	0.0-0.1	0.0-0.1	0.0-0.3	0.0-0.1	--
Sampling Date recorded on COC			29/5/06	29/5/06	29/5/06	29/5/06	29/5/06	29/5/06	29/5/06	30/5/06	30/5/06	30/5/06
Laboratory Extraction (Preparation) Date			1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06
Laboratory Analysis Date			3/6/06	3/6/06	3/6/06	3/6/06	3/6/06	3/6/06	3/6/06	3/6/06	6/6/06	6/6/06
Method	**Polychlorinated Biphenyls (PCB)**	**EQL**										
E013.2	Arochlor 1016	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	~<5	~<5
	Arochlor 1232	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	~<5	~<5
	Arochlor 1242	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	~<5	~<5
	Arochlor 1248	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	~<5	~<5
	Arochlor 1254	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	~<5	~<5
	Arochlor 1260	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	~<5	~<5
	Sum of reported PCBs	--	--	--	--	--	--	--	--	--	--	--
	DBC (Surr @ 0.2mg/kg)	--	*86%*	*84%*	*90%*	*97%*	*75%*	*96%*	*80%*	*71%*	*89%*	*70%*

Results expressed in mg/kg dry weight unless otherwise specified

Comments: ~Sample dilution required, EQLs adjusted accordingly.

E013.2: 8-10g soil extracted with 20ml hexane/acetone (1:1). Analysis by GC/dual ECD.

Laboratory Identification			26101d	26101r	26104s	lcs	mb					
Sample Identification			QC	QC	QC	QC	QC					
Depth (m)			--	--	--	--	--					
Sampling Date recorded on COC			--	--	--	--	--					
Laboratory Extraction (Preparation) Date			1/6/06	--	1/6/06	1/6/06	1/6/06					
Laboratory Analysis Date			3/6/06	--	6/6/06	2/6/06	2/6/06					
Method	**Polychlorinated Biphenyls (PCB)**	**EQL**										
E013.2	Arochlor 1016	0.5	<0.5	--	--	--	<0.5					
	Arochlor 1232	0.5	<0.5	--	--	--	<0.5					
	Arochlor 1242	0.5	<0.5	--	--	--	<0.5					
	Arochlor 1248	0.5	<0.5	--	86%	115%	<0.5					
	Arochlor 1254	0.5	<0.5	--	--	--	<0.5					
	Arochlor 1260	0.5	<0.5	--	--	--	<0.5					
	Sum of reported PCBs	--	--	--	--	--	--					
	DBC (Surr @ 0.2mg/kg)	--	*79%*	*20%*	*121%*	*115%*	*125%*					

Results expressed in mg/kg dry weight unless otherwise specified

Comments: ~Sample dilution required, EQLs adjusted accordingly.

E013.2: 8-10g soil extracted with 20ml hexane/acetone (1:1). Analysis by GC/dual ECD.

Laboratory Identification			**26108**	**26110**	**26113**	**26135**						
Sample Identification			HA04	HA05	BH11	BH16						
Depth (m)			0.0-0.1	0.0-0.1	0.05-0.15	0.1-0.3						
Sampling Date recorded on COC			29/5/06	29/5/06	30/5/06	30/5/06						
Laboratory Extraction (Preparation) Date			6/6/06	6/6/06	6/6/06	6/6/06						
Laboratory Analysis Date			--	--	--	--						
Method	**TCLP Preparation**	**EQL**										
E019.2	TCLP Fluid No.	--	1	1	1	1						
	Initial pH (pH units)	--	8.0	7.6	9.0	6.7						
	pH after HCl (pH units)	--	1.9	1.9	1.9	1.9						
	Final pH (pH units)	--	5.0	4.9	4.9	4.8						

Results expressed in pH units unless otherwise specified

Comments:

E019.2: Soil leached for 18 hours with fluid as specified above . Refer to relevant water method for results.

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Certificate of Analysis

Laboratory Identification			**26065**	**26070**	**26071**	**26073**	**26075**	**26078**	**26081**	**26085**	**26088**	**26089**
Sample Identification			BH01	BH02	BH02	BH03	BH04	BH04	BH05	BH06	BH06	BH07
Depth (m)			0.05-0.2	0.05-0.15	0.4-0.5	0.15-0.25	0.05-0.15	0.8-1.0	0.05-0.15	0.05-0.15	1.0-1.1	0.15-0.3
Sampling Date recorded on COC			29/5/06	29/5/06	29/5/06	29/5/06	29/5/06	29/5/06	29/5/06	29/5/06	29/5/06	29/5/06
Laboratory Extraction (Preparation) Date			2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06
Laboratory Analysis Date			2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06
Method	**Acid extractable metals (M7)**	**EQL**										
E022.2	Arsenic	1	1	<1	8	1	4	11	3	<1	5	3
	Cadmium	0.1	<0.1	0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Chromium	1	17	15	15	5	11	16	11	12	5	7
	Copper	2	68	85	4	2	30	12	43	85	8	2
	Nickel	1	100	120	<1	<1	25	4	37	100	2	<1
	Lead	2	4	4	14	<2	24	17	18	3	7	13
	Zinc	5	58	61	<5	<5	43	11	55	54	<5	<5

Results expressed in mg/kg dry weight unless otherwise specified

Comments: # Percent recovery not available due to significant background levels of analyte in sample.

E022.2: 0.5g digested in nitric/hydrochloric acid. Analysis by ICP-MS.

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Laboratory Identification			26091	26092	26096	26099	26100	26101	26102	26104	26108	26110
Sample Identification			BH08	BH08	BH09	BH10	HA01	HA01	HA02	HA02	HA04	HA05
Depth (m)			0.16-0.25	0.6-0.8	0.17-0.3	0.16-0.3	0.0-0.1	0.5-0.6	0.0-0.1	0.5-0.6	0.0-0.1	0.0-0.1
Sampling Date recorded on COC			29/5/06	29/5/06	29/5/06	29/5/06	29/5/06	29/5/06	29/5/06	29/5/06	29/5/06	29/5/06
Laboratory Extraction (Preparation) Date			2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06
Laboratory Analysis Date			2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	3/6/06	3/6/06	3/6/06
Method	**Acid extractable metals (M7)**	**EQL**										
E022.2	Arsenic	1	7	13	12	1	4	2	2	3	3	6
	Cadmium	0.1	<0.1	<0.1	<0.1	<0.1	0.2	<0.1	0.2	0.1	16	0.4
	Chromium	1	15	17	22	5	15	8	9	9	24	23
	Copper	2	2	3	11	3	13	5	11	9	76	30
	Nickel	1	<1	<1	2	3	2	1	5	2	46	10
	Lead	2	13	11	25	9	36	17	27	14	97	150
	Zinc	5	5	<5	38	12	40	26	40	57	850	120

Results expressed in mg/kg dry weight unless otherwise specified

Comments: # Percent recovery not available due to significant background levels of analyte in sample.

E022.2: 0.5g digested in nitric/hydrochloric acid. Analysis by ICP-MS.

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Certificate of Analysis

Laboratory Identification			**26113**	**26115**	**26120**	**26124**	**26125**	**26126**	**26132**	**26133**	**26135**	**26137**
Sample Identification			BH11	BH11	BH12	BH13	BH13	BH14	BH15	BH15	BH16	BH16
Depth (m)			0.05-0.15	0.6-0.8	0.0-0.3	0.0-0.1	0.5-0.6	0.05-0.25	0.15-0.35	0.6-0.8	0.1-0.3	1.9-2.0
Sampling Date recorded on COC			30/5/06	30/5/06	30/5/06	30/5/06	30/5/06	30/5/06	30/5/06	30/5/06	30/5/06	30/5/06
Laboratory Extraction (Preparation) Date			2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06
Laboratory Analysis Date			3/6/06	3/6/06	3/6/06	3/6/06	3/6/06	3/6/06	3/6/06	3/6/06	3/6/06	3/6/06
Method	**Acid extractable metals (M7)**	**EQL**										
E022.2	Arsenic	1	<1	8	4	3	6	5	2	2	15	7
	Cadmium	0.1	<0.1	<0.1	0.1	0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1
	Chromium	1	14	22	17	11	23	22	9	8	10	8
	Copper	2	94	4	6	9	19	18	2	<2	20	23
	Nickel	1	130	1	1	4	3	16	2	<1	19	<1
	Lead	2	3	19	24	37	45	16	8	14	63	12
	Zinc	5	61	<5	27	33	23	14	15	<5	13	6

Results expressed in mg/kg dry weight unless otherwise specified

Comments: # Percent recovery not available due to significant background levels of analyte in sample.

E022.2: 0.5g digested in nitric/hydrochloric acid. Analysis by ICP-MS.

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Laboratory Identification			26138	26139	26140	26143	26144	26145	26065d	26065r	26085d	26085r
Sample Identification			BH16	BH17	BH17	DUP02	DUP03	DUP04	QC	QC	QC	QC
Depth (m)			2.9-3.0	0.17-0.3	0.4-0.6	--	--	--	--	--	--	--
Sampling Date recorded on COC			30/5/06	30/5/06	30/5/06	30/5/06	30/5/06	30/5/06	--	--	--	--
Laboratory Extraction (Preparation) Date			2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	--	2/6/06	--
Laboratory Analysis Date			3/6/06	3/6/06	3/6/06	3/6/06	3/6/06	3/6/06	2/6/06	--	2/6/06	--
Method	**Acid extractable metals (M7)**	**EQL**										
E022.2	Arsenic	1	9	1	4	4	3	6	1	0%	<1	--
	Cadmium	0.1	<0.1	<0.1	<0.1	0.1	0.1	<0.1	<0.1	--	0.2	>67%
	Chromium	1	12	6	10	16	10	8	15	13%	10	18%
	Copper	2	46	<2	5	6	8	23	72	6%	82	4%
	Nickel	1	17	2	2	2	3	<1	100	0%	93	7%
	Lead	2	14	9	17	25	35	15	4	0%	2	40%
	Zinc	5	83	17	16	32	29	6	56	4%	49	10%

Results expressed in mg/kg dry weight unless otherwise specified

Comments: # Percent recovery not available due to significant background levels of analyte in sample.

E022.2: 0.5g digested in nitric/hydrochloric acid. Analysis by ICP-MS.

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Laboratory Identification			26101d	26101r	26133d	26133r	26070s	26104s	crm	lcs	mb	
Sample Identification			QC	QC	QC	QC	QC	QC	QC	QC	QC	
Depth (m)			--	--	--	--	--	--	--	--	--	
Sampling Date recorded on COC			--	--	--	--	--	--	--	--	--	
Laboratory Extraction (Preparation) Date			2/6/06	--	2/6/06	--	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	
Laboratory Analysis Date			2/6/06	--	3/6/06	--	2/6/06	3/6/06	2/6/06	2/6/06	2/6/06	
Method	**Acid extractable metals (M7)**	**EQL**										
E022.2	Arsenic	1	2	0%	2	0%	102%	95%	120%	112%	<1	
	Cadmium	0.1	<0.1	--	<0.1	--	95%	101%	106%	94%	<0.1	
	Chromium	1	8	0%	8	0%	77%	103%	115%	95%	<1	
	Copper	2	4	22%	2	>0%	#	117%	112%	95%	<2	
	Nickel	1	1	0%	<1	--	#	99%	105%	92%	<1	
	Lead	2	14	19%	12	15%	99%	85%	110%	103%	<2	
	Zinc	5	28	7%	<5	--	#	119%	106%	95%	<5	

Results expressed in mg/kg dry weight unless otherwise specified

Comments: # Percent recovery not available due to significant background levels of analyte in sample.

E022.2: 0.5g digested in nitric/hydrochloric acid. Analysis by ICP-MS.

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Certificate of Analysis

Laboratory Identification			26065	26070	26071	26073	26075	26078	26081	26085	26088	26089
Sample Identification			BH01	BH02	BH02	BH03	BH04	BH04	BH05	BH06	BH06	BH07
Depth (m)			0.05-0.2	0.05-0.15	0.4-0.5	0.15-0.25	0.05-0.15	0.8-1.0	0.05-0.15	0.05-0.15	1.0-1.1	0.15-0.3
Sampling Date recorded on COC			29/5/06	29/5/06	29/5/06	29/5/06	29/5/06	29/5/06	29/5/06	29/5/06	29/5/06	29/5/06
Laboratory Extraction (Preparation) Date			2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06
Laboratory Analysis Date			2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06
Method	**Acid extractable mercury**	**EQL**										
E026.2	Mercury	0.05	<0.05	<0.05	0.06	<0.05	0.11	<0.05	0.07	<0.05	<0.05	<0.05

Results expressed in mg/kg dry weight unless otherwise specified

Comments:

E026.2: 0.5g digested with nitric/hydrochloric acid. Analysis by CV-ICP-MS or FIMS.

Laboratory Identification			26091	26092	26096	26099	26100	26101	26102	26104	26108	26110
Sample Identification			BH08	BH08	BH09	BH10	HA01	HA01	HA02	HA02	HA04	HA05
Depth (m)			0.16-0.25	0.6-0.8	0.17-0.3	0.16-0.3	0.0-0.1	0.5-0.6	0.0-0.1	0.5-0.6	0.0-0.1	0.0-0.1
Sampling Date recorded on COC			29/5/06	29/5/06	29/5/06	29/5/06	29/5/06	29/5/06	29/5/06	29/5/06	29/5/06	29/5/06
Laboratory Extraction (Preparation) Date			2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06
Laboratory Analysis Date			2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	5/6/06	5/6/06	5/6/06
Method	**Acid extractable mercury**	**EQL**										
E026.2	Mercury	0.05	0.06	<0.05	0.05	<0.05	0.11	0.05	0.09	0.05	0.19	0.25

Results expressed in mg/kg dry weight unless otherwise specified

Comments:

E026.2: 0.5g digested with nitric/hydrochloric acid. Analysis by CV-ICP-MS or FIMS.

Laboratory Identification			26113	26115	26120	26124	26125	26126	26132	26133	26135	26137
Sample Identification			BH11	BH11	BH12	BH13	BH13	BH14	BH15	BH15	BH16	BH16
Depth (m)			0.05-0.15	0.6-0.8	0.0-0.3	0.0-0.1	0.5-0.6	0.05-0.25	0.15-0.35	0.6-0.8	0.1-0.3	1.9-2.0
Sampling Date recorded on COC			30/5/06	30/5/06	30/5/06	30/5/06	30/5/06	30/5/06	30/5/06	30/5/06	30/5/06	30/5/06
Laboratory Extraction (Preparation) Date			2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06
Laboratory Analysis Date			5/6/06	5/6/06	5/6/06	5/6/06	5/6/06	5/6/06	5/6/06	5/6/06	5/6/06	5/6/06
Method	**Acid extractable mercury**	**EQL**										
E026.2	Mercury	0.05	0.05	0.05	0.11	0.10	0.13	0.09	<0.05	<0.05	<0.05	<0.05

Results expressed in mg/kg dry weight unless otherwise specified

Comments:

E026.2: 0.5g digested with nitric/hydrochloric acid. Analysis by CV-ICP-MS or FIMS.

Laboratory Identification			26138	26139	26140	26143	26144	26145	26065d	26065r	26085d	26085r
Sample Identification			BH16	BH17	BH17	DUP02	DUP03	DUP04	QC	QC	QC	QC
Depth (m)			2.9-3.0	0.17-0.3	0.4-0.6	--	--	--	--	--	--	--
Sampling Date recorded on COC			30/5/06	30/5/06	30/5/06	30/5/06	30/5/06	30/5/06	--	--	--	--
Laboratory Extraction (Preparation) Date			2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	--	2/6/06	--
Laboratory Analysis Date			5/6/06	5/6/06	5/6/06	5/6/06	5/6/06	5/6/06	2/6/06	--	2/6/06	--
Method	**Acid extractable mercury**	**EQL**										
E026.2	Mercury	0.05	0.11	<0.05	<0.05	0.10	0.1	<0.05	<0.05	--	<0.05	--

Results expressed in mg/kg dry weight unless otherwise specified

Comments:

E026.2: 0.5g digested with nitric/hydrochloric acid. Analysis by CV-ICP-MS or FIMS.

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Certificate of Analysis

Laboratory Identification			**26101d**	**26101r**	**26133d**	**26133r**	**26070s**	**26104s**	**crm**	**lcs**	**mb**	
Sample Identification			QC	QC	QC	QC	QC	QC	QC	QC	QC	
Depth (m)			--	--	--	--	--	--	--	--	--	
Sampling Date recorded on COC			--	--	--	--	--	--	--	--	--	
Laboratory Extraction (Preparation) Date			2/6/06	--	2/6/06	--	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	
Laboratory Analysis Date			2/6/06	--	5/6/06	--	2/6/06	5/6/06	2/6/06	2/6/06	2/6/06	
Method	**Acid extractable mercury**	**EQL**										
E026.2	Mercury	0.05	<0.05	>0.0%	<0.05	--	100%	104%	106%	95%	<0.05	

Results expressed in mg/kg dry weight unless otherwise specified

Comments:

E026.2: 0.5g digested with nitric/hydrochloric acid. Analysis by CV-ICP-MS or FIMS.

Laboratory Identification			**26112**	**lcs**	**mb**							
Sample Identification			QW01	QC	QC							
Depth (m)			--	--	--							
Sampling Date recorded on COC			29/5/06	--	--							
Laboratory Extraction (Preparation) Date			2/6/06	2/6/06	2/6/06							
Laboratory Analysis Date			3/6/06	2/6/06	2/6/06							
Method	**Filtered metals (M7)**	**EQL**										
E022.1	Arsenic	1	<1	98%	<1							
	Cadmium	0.1	<0.1	95%	<0.1							
	Chromium	1	<1	96%	<1							
	Copper	1	<1	97%	<1							
	Nickel	1	<1	94%	<1							
	Lead	1	<1	92%	<1							
	Zinc	5	<5	94%	<5							

Results expressed in ug/l unless otherwise specified

Comments:

E022.1: Filtered HNO3 preserved sample directly analysed by ICP-MS.

Laboratory Identification			**26112**	**lcs**	**mb**							
Sample Identification			QW01	QC	QC							
Depth (m)			--	--	--							
Sampling Date recorded on COC			29/5/06	--	--							
Laboratory Extraction (Preparation) Date			2/6/06	2/6/06	2/6/06							
Laboratory Analysis Date			5/6/06	2/6/06	2/6/06							
Method	**Filtered mercury**	**EQL**										
E026.1	Mercury	0.1	<0.1	94%	<0.1							

Results expressed in ug/l unless otherwise specified

Comments:

E026.1: Analysis by CV-ICP-MS or FIMS following BrCl pre-treatment.

Final
Certificate of Analysis

Laboratory Identification			**26108**	**26110**	**26113**	**26135**	**lcs**	**mb**				
Sample Identification			HA04	HA05	BH11	BH16	QC	QC				
Depth (m)			0.0-0.1	0.0-0.1	0.05-0.15	0.1-0.3	--	--				
Sampling Date recorded on COC			29/5/06	29/5/06	30/5/06	30/5/06	--	--				
Laboratory Extraction (Preparation) Date			7/6/06	7/6/06	7/6/06	7/6/06	7/6/06	7/6/06				
Laboratory Analysis Date			9/6/06	9/6/06	9/6/06	9/6/06	9/6/06	9/6/06				
Method	**TCLP metals**	**EQL**										
E022.1	Arsenic	10	--	--	--	<10	94%	<10				
	Cadmium	1	10	--	--	--	100%	<1				
	Chromium	50	<50	--	--	--	109%	<50				
	Lead	10	--	20	--	--	95%	<10				
	Nickel	50	--	--	150	--	102%	<50				

Results expressed in ug/l unless otherwise specified

Comments:

E022.1: Filtered TCLP leachate acidifed with nitric/hydrochloric acid. Analysis by ICP/MS. Results are expressed as in the leachate.

Laboratory Identification			**26075**	**26085**	**26088**	**26091**	**26096**	**26124**	**26139**	**26085d**	**26085r**	
Sample Identification			BH04	BH06	BH06	BH08	BH09	BH13	BH17	QC	QC	
Depth (m)			0.05-0.15	0.05-0.15	1.0-1.1	0.16-0.25	0.17-0.3	0.0-0.1	0.17-0.3	--	--	
Sampling Date recorded on COC			29/5/06	29/5/06	29/5/06	29/5/06	29/5/06	30/5/06	30/5/06	--	--	
Laboratory Extraction (Preparation) Date			1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	--	
Laboratory Analysis Date			1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	--	
Method	**pH in soil**	**EQL**										
E031.2	pH (pH units)	0.1	9.0	9.0	4.3	4.9	4.9	5.4	8.9	9.0	0.0%	

Results expressed in pH units unless otherwise specified

Comments:

E031.2: 1:5 soil leachate. Followed by measurement by pH ion selective electrode. Results expressed as per leachate.

Laboratory Identification			**26065**	**26070**	**26071**	**26073**	**26075**	**26078**	**26081**	**26085**	**26088**	**26089**
Sample Identification			BH01	BH02	BH02	BH03	BH04	BH04	BH05	BH06	BH06	BH07
Depth (m)			0.05-0.2	0.05-0.15	0.4-0.5	0.15-0.25	0.05-0.15	0.8-1.0	0.05-0.15	0.05-0.15	1.0-1.1	0.15-0.3
Sampling Date recorded on COC			29/5/06	29/5/06	29/5/06	29/5/06	29/5/06	29/5/06	29/5/06	29/5/06	29/5/06	29/5/06
Laboratory Extraction (Preparation) Date			1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06
Laboratory Analysis Date			2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06
Method	**Moisture**	**EQL**										
E005.2	Moisture	--	4	4	18	12	7	15	5	5	9	17

Results expressed in % w/w unless otherwise specified

Comments:

E005.2: Moisture by gravimetric analysis. Results are in % w/w.

Laboratory Identification			**26091**	**26092**	**26096**	**26099**	**26100**	**26101**	**26102**	**26104**	**26108**	**26110**
Sample Identification			BH08	BH08	BH09	BH10	HA01	HA01	HA02	HA02	HA04	HA05
Depth (m)			0.16-0.25	0.6-0.8	0.17-0.3	0.16-0.3	0.0-0.1	0.5-0.6	0.0-0.1	0.5-0.6	0.0-0.1	0.0-0.1
Sampling Date recorded on COC			29/5/06	29/5/06	29/5/06	29/5/06	29/5/06	29/5/06	29/5/06	29/5/06	29/5/06	29/5/06
Laboratory Extraction (Preparation) Date			1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06
Laboratory Analysis Date			2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06
Method	**Moisture**	**EQL**										
E005.2	Moisture	--	18	12	17	7	15	7	14	7	27	8

Results expressed in % w/w unless otherwise specified

Comments:

E005.2: Moisture by gravimetric analysis. Results are in % w/w.

Laboratory Identification			**26113**	**26115**	**26120**	**26124**	**26125**	**26126**	**26132**	**26133**	**26135**	**26136**
Sample Identification			BH11	BH11	BH12	BH13	BH13	BH14	BH15	BH15	BH16	BH16
Depth (m)			0.05-0.15	0.6-0.8	0.0-0.3	0.0-0.1	0.5-0.6	0.05-0.25	0.15-0.35	0.6-0.8	0.1-0.3	0.6-0.8
Sampling Date recorded on COC			30/5/06	30/5/06	30/5/06	30/5/06	30/5/06	30/5/06	30/5/06	30/5/06	30/5/06	30/5/06
Laboratory Extraction (Preparation) Date			1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06
Laboratory Analysis Date			2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06
Method	**Moisture**	**EQL**										
E005.2	Moisture	--	3	17	7	6	14	18	15	16	11	12

Results expressed in % w/w unless otherwise specified

Comments:

E005.2: Moisture by gravimetric analysis. Results are in % w/w.

Laboratory Identification			**26137**	**26138**	**26139**	**26140**	**26143**	**26144**	**26145**	**26147**	**26148**	**26065d**
Sample Identification			BH16	BH16	BH17	BH17	DUP02	DUP03	DUP04	BIT01	BIT02	QC
Depth (m)			1.9-2.0	2.9-3.0	0.17-0.3	0.4-0.6	--	--	--	--	--	--
Sampling Date recorded on COC			30/5/06	30/5/06	30/5/06	30/5/06	30/5/06	30/5/06	30/5/06	30/5/06	30/5/06	--
Laboratory Extraction (Preparation) Date			1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06	1/6/06
Laboratory Analysis Date			2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06	2/6/06
Method	**Moisture**	**EQL**										
E005.2	Moisture	--	10	9	6	16	10	7	11	1	1	5

Results expressed in % w/w unless otherwise specified

Comments:

E005.2: Moisture by gravimetric analysis. Results are in % w/w.

Laboratory Identification			26065r	26085d	26085r	26101d	26101r	26124d	26124r	26133d	26133r	
Sample Identification			QC	QC	QC	QC	QC	QC	QC	QC	QC	
Depth (m)			--	--	--	--	--	--	--	--	--	
Sampling Date recorded on COC			--	--	--	--	--	--	--	--	--	
Laboratory Extraction (Preparation) Date			--	1/6/06	--	1/6/06	--	1/6/06	--	1/6/06	--	
Laboratory Analysis Date			--	2/6/06	--	2/6/06	--	2/6/06	--	2/6/06	--	
Method	**Moisture**	**EQL**										
E005.2	Moisture	--	22%	5	0%	7	0%	6	0%	15	6%	

Results expressed in % w/w unless otherwise specified

Comments:

E005.2: Moisture by gravimetric analysis. Results are in % w/w.

AUSTRALIAN SAFER ENVIRONMENT & TECHNOLOGY PTY LTD

ABN 36 088 095 112

Our ref : ASET 8783/ 11917 / 1 - 3
Your ref: E026815
NATA Accreditation No: 14484

7 June 2006

LABMARK
P O Box 641,
Hornsby NSW 1630

Attn:Mr David Burns

Dear David,

Asbestos Identification
This report presents the results of three samples, forwarded by LABMARK on 5 June 2006, for analysis for asbestos.

1.Introduction: Three samples forwarded were examined and analysed for the presence of asbestos.

2. Methods : The samples were examined under a Stereo Microscope and selected fibres were analysed by Polarized Light Microscopy in conjunction with Dispersion Staining method **(Safer Environment Method 1.)**

3. Results : **Sample No. 1. ASET 8783 / 11917 / 1. E026815 - 26104 - HA02 - 0.5 - 0.6.**
Approx dimensions 5.0 cm x 4.0 cm x 2.0 cm
The sample consisted of a mixture of sandy soil, stones, plant matter and fragments of bitumen.
No asbestos detected.

Sample No. 2. ASET 8783 / 11917 / 2. E026815 - 26149 - SS01.
Approx dimensions 14.0 cm x 5.0 cm x 3.5 cm
The sample consisted of a mixture of clayish sandy soil, stones, plant matter, fragments of plaster and brick.
Chrysotile asbestos and Amosite asbestos detected.

Sample No. 3. ASET 8783 / 11917 / 3. E026815 - 26150 - MS01.
Approx dimensions 8.0 cm x 6.0 cm x 0.5 cm
The sample consisted of a fragment of a fibro plaster cement material.
Chrysotile asbestos detected.

Analysed and reported by,

Mahen De Silva . BSc. MSc. Grad Dip (Occ Hyg)
Occupational Hygienist / Approved Signatory.

NATA
WORLD RECOGNISED ACCREDITATION

Quality, Service, Support

Report Date : 7/06/2006
Report Time : 2:02:38PM

Sample **Receipt** Notice (SRN) for **E026815**

Client Details		Laboratory Reference Information	
Client Name:	HLA - Envirosciences Pty Limited	**Please have this information ready when contacting Labmark.**	
Client Phone:	02 8484 8999		
Client Fax:	02 8484 8989	**Laboratory Report:**	**E026815**
Contact Name:	Ben Pearce	**Quotation Number:**	- Not provided, standard prices apply
Contact Email:	bpearce@hla-enviro.com.au	**Laboratory Address:**	Unit 1, 8 Leighton Pl. Asquith NSW 2077
Client Address:	PO Box 726 Pymble NSW 2073	**Phone:**	61 2 9476 6533
		Fax:	61 2 9476 8219
Project Name:	MM Group North Ryde	**Sample Receipt Contact:**	Ros Schacht
Project Number:	S4062801	**Email:**	ros.schacht@labmark.com.au
CoC Number:	- Not provided -	**Reporting Contact:**	Jyothi Lal
Purchase Order:	143588	**Email:**	jyothi.lal@labmark.com.au
Surcharge:	No surcharge applied (results by 6:30pm on due date)		
Sample Matrix:	OTHER & SOIL & WATER		
Date Sampled (earliest date):	29/05/2006	**NATA Accreditation:**	13542
Date Samples Received:	31/05/2006	**TGA GMP License:**	185-336 (Sydney)
Date Sample Receipt Notice issued:	07/06/2006	**APVMA License:**	6105 (Sydney)
Date Preliminary Report Due:	05/06/2006	**AQIS Approval:**	NO356 (Sydney)
		AQIS Entry Permit:	200409998 (Sydney)

Sample Condition:
COC received with samples. Report number and lab ID's defined on COC.
Samples received in good order .
Samples received with cooling media: Crushed ice .
Samples received chilled.
Security seals not required. Direct Labmark's custody taken .
Sample container & sample integrity suitable .

Comments:
SRN reissued with additional TCLP analysis. COC ananlysis request arrived at 16:32 on 31 May 06. Asbestos subcontracted to ASET.

Holding Times:
Date received allows for sufficient time to meet Technical Holding Times.

Preservation:
Chemical preservation of samples satisfactory for requested analytes.

Important Notes:
Sample disposal of environmental samples shall be 31 days (water) and 3 months (soil, HN03 preserved samples) after laboratory receipt, unless otherwise requested in writing by the client. Samples requested to be held in non-refrigerated storage shall incur $5.00/ sample/ 3 months. Additional refrigerated storage shall incur $20/ sample/ 3 months. Combination prices apply only if requested. Transfer of report ownership from LabMark to the client shall occur once full and final payment has been settled and verified. All report copies may be retracted where full payment does not occur within the agreed settlement period.

Analysis comments:
VOC E010.2: Dichloromethane not reported unless requested.

Subcontracted Analyses:
Reported by Aust. Safer Env & Tech., NATA accreditation No. 14484

Thank you for choosing Labmark to analyse your project samples.
Additional information on www.labmark.com.au

Report Date : 7/06/2006
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Quality, Service, Support

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GRID REVIEW TABLE

No.	Date	Depth	Client Sample ID	Requested Analysis																				
				BTEX by P&T	BTEX by P&T	Filtered mercury	Acid extractable mercury	ON HOLD ON HOLD	Filtered metals (M7)	Acid extractable metals (M7)	TCLP metals	Moisture	Organochlorine Pesticides (OC)	Organophosphorus Pesticides	Polyaromatic Hydrocarbons (PAH)	Polyaromatic Hydrocarbons (PAH)	Polychlorinated Biphenyls (PCB)	pH in soil	PREP Not Reported	PREP Not Reported	PREP Not Reported	TCLP Preparation	Petroleum Hydrocarbons (TPH)
26065	29/05	0.05-0.2	BH01				●			●		●								●			
26066	29/05	0.4-0.6	BH01					●															
26067	29/05	1.0-1.2	BH01					●															
26068	29/05	2.0-2.2	BH01					●															
26069	29/05	2.7-2.8	BH01					●															
26070	29/05	0.05-0.15	BH02				●			●		●								●			
26071	29/05	0.4-0.5	BH02				●			●		●								●			
26072	29/05	1.0-1.1	BH02					●															
26073	29/05	0.15-0.25	BH03				●			●		●								●			
26074	29/05	0.3-0.5	BH03					●															
26075	29/05	0.05-0.15	BH04	●			●			●		●	●	●	●		●	●		●			●
26076	29/05	0.2-0.3	BH04					●															
26077	29/05	0.4-0.5	BH04					●															
26078	29/05	0.8-1.0	BH04				●			●		●								●			
26079	29/05	1.9-2.0	BH04					●															
26080	29/05	2.9-3.0	BH04					●															
26081	29/05	0.05-0.15	BH05				●			●		●								●			
26082	29/05	0.4-0.5	BH05					●															
26084	29/05	1.2-1.3	BH05					●															
26085	29/05	0.05-0.15	BH06	●			●			●		●			●			●		●			●
26086	29/05	0.4-0.5	BH06					●															
26087	29/05	0.6-0.7	BH06					●															
26088	29/05	1.0-1.1	BH06	●			●			●		●			●		●	●		●			●
26089	29/05	0.15-0.3	BH07	●			●			●		●								●			●
26090	29/05	0.6-0.75	BH07					●															
26091	29/05	0.16-0.25	BH08	●			●			●		●						●		●			●
26092	29/05	0.6-0.8	BH08	●			●			●		●								●			●
26093	29/05	1.3-1.4	BH08					●															
26094	29/05	1.9-2.0	BH08					●															
26095	29/05	2.9-3.0	BH08					●															
26096	29/05	0.17-0.3	BH09	●			●			●		●	●				●	●		●			●
26097	29/05	0.4-0.6	BH09					●															

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26098	29/05	1.2-1.3	BH09					●															
26099	29/05	0.16-0.3	BH10				●			●		●									●		
26100	29/05	0.0-0.1	HA01				●			●		●									●		
26101	29/05	0.5-0.6	HA01	●			●			●		●	●	●	●		●				●		●
26102	29/05	0.0-0.1	HA02				●			●		●									●		
26103	29/05	0.3-0.4	HA02					●															
26104	29/05	0.5-0.6	HA02	●			●			●		●	●	●	●		●				●		●
26105	29/05	0.1-0.2	HA03					●															
26106	29/05	0.2-0.3	HA03					●															
26107	29/05	0.4-0.5	HA03					●															
26108	29/05	0.0-0.1	HA04				●			●	●	●	●	●			●				●	●	
26109	29/05	0.45-0.5	HA04					●															
26110	29/05	0.0-0.1	HA05				●			●	●	●	●	●			●				●	●	
26111	29/05	0.4-0.5	HA05					●															
26112	29/05		QW01		●	●			●							●						●	
26113	30/05	0.05-0.15	BH11				●			●	●	●			●						●	●	
26114	30/05	0.4-0.5	BH11					●															
26115	30/05	0.6-0.8	BH11				●			●		●									●		
26116	30/05	1.9-2.0	BH11					●															
26117	30/05	2.9-3.0	BH11					●															
26118	30/05	3.9-4.0	BH11					●															
26119	30/05	4.9-5.0	BH11					●															
26120	30/05	0.0-0.3	BH12				●			●		●	●	●			●				●		
26121	30/05	0.6-0.8	BH12					●															
26123	30/05	1.6-1.7	BH12					●															
26124	30/05	0.0-0.1	BH13	●			●			●		●	●	●	●		●	●			●		●
26125	30/05	0.5-0.6	BH13				●			●		●									●		
26126	30/05	0.05-0.25	BH14	●			●			●		●			●						●		●
26127	30/05	0.6-0.8	BH14					●															
26128	30/05	1.3-1.5	BH14					●															
26129	30/05	1.9-2.0	BH14					●															
26130	30/05	2.9-3.0	BH14					●															

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Report Date : 7/06/2006
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Quality, Service, Support

Sample **Receipt** Notice (SRN) for **E026815**

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26131	30/05	3.9-4.0	BH14					●															
26132	30/05	0.15-0.35	BH15	●			●			●		●								●			●
26133	30/05	0.6-0.8	BH15				●			●		●								●			
26134	30/05	1.0-1.2	BH15					●															
26135	30/05	0.1-0.3	BH16				●			●	●	●								●	●	●	
26136	30/05	0.6-0.8	BH16	●								●								●			●
26137	30/05	1.9-2.0	BH16	●			●			●		●			●					●			●
26138	30/05	2.9-3.0	BH16	●			●			●		●			●					●			●
26139	30/05	0.17-0.3	BH17	●			●			●		●			●			●		●			●
26140	30/05	0.4-0.6	BH17				●			●		●								●			
26141	30/05	1.0-1.2	BH17					●															
26142	30/05		DUP01					●															
26143	30/05		DUP02				●			●		●								●			
26144	30/05		DUP03				●			●		●	●	●	●		●			●			
26145	30/05		DUP04	●			●			●		●			●					●			●
26146	30/05		DUP05					●															
26147	30/05		BIT01									●			●					●			
26148	30/05		BIT02									●			●					●			
26149	30/05		SS01																	●			
26150	30/05		MS01																●				
26186	29/05	0.6-0.8	BH06					●															
26187	29/05	0.4-0.5	HA01					●															
26188	29/05	0.5	HA04					●															
26189	30/05	1.4-1.5	BH12					●															
			Totals:	17	1	1	36	46	1	36	4	39	9	8	15	1	10	7	1	40	5	4	17

Thank you for choosing Labmark to analyse your project samples.
Additional information on www.labmark.com.au

Report Date : 7/06/2006
Report Time : 2:02:38PM

Quality, Service, Support

Sample **Receipt** Notice (SRN) for **E026815**

The table below represents LabMark's understanding and interpretation of the customer supplied sample COC request. Please confirm that your COC request has been entered correctly. Due to THT and TAT requirements, testing shall commence immediately as per this table, unless the customer intervenes with a correction prior to testing.

GRID REVIEW TABLE

No.	Date	Depth	Client Sample ID	Requested Analysis: Petroleum Hydrocarbons (TPH)	Volatile Halogenated Compounds (VHC)	Volatile TPH by P&T (vTPH)	Volatile TPH by P&T (vTPH)	External Not reported	External Not reported
26075	29/05	0.05-0.15	BH04			●			
26085	29/05	0.05-0.15	BH06			●			
26088	29/05	1.0-1.1	BH06			●			
26089	29/05	0.15-0.3	BH07			●			
26091	29/05	0.16-0.25	BH08		●	●			
26092	29/05	0.6-0.8	BH08			●			
26096	29/05	0.17-0.3	BH09		●	●			
26101	29/05	0.5-0.6	HA01			●			
26104	29/05	0.5-0.6	HA02			●			●
26112	29/05		QW01	●			●		
26124	30/05	0.0-0.1	BH13			●			
26126	30/05	0.05-0.25	BH14			●			
26132	30/05	0.15-0.35	BH15			●			
26136	30/05	0.6-0.8	BH16			●			
26137	30/05	1.9-2.0	BH16			●			
26138	30/05	2.9-3.0	BH16			●			
26139	30/05	0.17-0.3	BH17			●			
26145	30/05		DUP04			●			
26149	30/05		SS01						●
26150	30/05		MS01					●	
			Totals:	1	2	17	1	1	2

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Report Date : 7/06/2006
Report Time : 2:02:38PM

Quality, Service, Support

Sample **Receipt** Notice (SRN) for **E026815**

No.	Date	Depth	Client Sample ID	M8 - M7-F_W	M8 - M7-T_S	MET-TCLP_W Arsenic	MET-TCLP_W Cadmium	MET-TCLP_W Chromium	MET-TCLP_W Lead	MET-TCLP_W Nickel
				Requested Analysis						
26065	29/05	0.05-0.2	BH01		●					
26070	29/05	0.05-0.15	BH02		●					
26071	29/05	0.4-0.5	BH02		●					
26073	29/05	0.15-0.25	BH03		●					
26075	29/05	0.05-0.15	BH04		●					
26078	29/05	0.8-1.0	BH04		●					
26081	29/05	0.05-0.15	BH05		●					
26085	29/05	0.05-0.15	BH06		●					
26088	29/05	1.0-1.1	BH06		●					
26089	29/05	0.15-0.3	BH07		●					
26091	29/05	0.16-0.25	BH08		●					
26092	29/05	0.6-0.8	BH08		●					
26096	29/05	0.17-0.3	BH09		●					
26099	29/05	0.16-0.3	BH10		●					
26100	29/05	0.0-0.1	HA01		●					
26101	29/05	0.5-0.6	HA01		●					
26102	29/05	0.0-0.1	HA02		●					
26104	29/05	0.5-0.6	HA02		●					
26108	29/05	0.0-0.1	HA04		●		●	●		
26110	29/05	0.0-0.1	HA05		●				●	
26112	29/05		QW01	●						
26113	30/05	0.05-0.15	BH11		●					●
26115	30/05	0.6-0.8	BH11		●					
26120	30/05	0.0-0.3	BH12		●					
26124	30/05	0.0-0.1	BH13		●					
26125	30/05	0.5-0.6	BH13		●					
26126	30/05	0.05-0.25	BH14		●					
26132	30/05	0.15-0.35	BH15		●					
26133	30/05	0.6-0.8	BH15		●					
26135	30/05	0.1-0.3	BH16		●	●				
26137	30/05	1.9-2.0	BH16		●					
26138	30/05	2.9-3.0	BH16		●					
26139	30/05	0.17-0.3	BH17		●					

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Report Date : 7/06/2006
Report Time : 2:02:38PM

Quality, Service, Support

Sample **Receipt** Notice (SRN) for **E026815**

No.	Date	Depth	Client Sample ID	Requested Analysis																			
				M8 - M7-F_W	M8 - M7-T_S	MET-TCLP_W Arsenic	MET-TCLP_W Cadmium	MET-TCLP_W Chromium	MET-TCLP_W Lead	MET-TCLP_W Nickel													
26140	30/05	0.4-0.6	BH17		●																		
26143	30/05		DUP02		●																		
26144	30/05		DUP03		●																		
26145	30/05		DUP04		●																		
			Totals:	1	36	1	1	1	1	1													

Thank you for choosing Labmark to analyse your project samples.
Additional information on www.labmark.com.au

Ros Schacht

From: "Geoff Weir" <geoff.weir@labmark.com.au>
To: "Ros Schacht" <ros.schacht@labmark.com.au>
Sent: Tuesday, 6 June 2006 2:16 PM
Subject: Fw: Additional Analyses E026815

Jakleen ,

He wants these results by Friday. Can we do it?

gw
Labmark Pty Ltd

Phone : (02) 9476 6533
Fax : (02) 9476 8219
website: www.labmark.com.au

Tray 522-528.

----- Original Message -----
From: Ben Pearce
To: Geoff Weir
Sent: Tuesday, June 06, 2006 2:12 PM
Subject: Additional Analyses E026815

Hi Geoff,

Could you please conduct the following additional analyses from Labmark Job No. E026815.

	lab id
TCLP (Arsenic) – BH16_0.1-0.3	26135 (30/5)
TCLP (Nickel) – BH11_0.05-0.15	26113 (30/5)
TCLP (Cadmium) – HA04_0.0-0.1	26108 (29/5)
TCLP (Lead) – HA05_0.0-0.1	26116 (29/5)

The purchase order number for this is 143599.

I require the results by 3pm, Friday 9th June 2006.

Thanks for your help.

Kind Regards,

Ben Pearce
Environmental Scientist
HLA-Envirosciences Pty Limited
Level 5, 828 Pacific Hwy
Gordon NSW 2072
PO Box 726 Pymble NSW 2073 Australia
T +61 2 8484 8999
F +61 2 8484 8989
www.hla-enviro.com.au

Received by
6/6
2:20pm.

Ros Schacht

From: "Simon Mills" <simon.mills@labmark.com.au>
To: <ros.schacht@labmark.com.au>
Sent: Tuesday, 6 June 2006 4:04 PM
Subject: Fw: Additional analyses

Do you anything about this (Simon Matthews?)
----- Original Message -----
From: Ben Pearce
To: simon.mills@labmark.com.au
Sent: Tuesday, June 06, 2006 3:48 PM
Subject: Additional analyses

Hi Simon, Lab Id: 26108

As discussed, could you please analyse sample HA04_0.0-0.1 for Chromium (TCLP). Labmark job reference number – E026815.

Kind Regards

Ben Pearce
Environmental Scientist
HLA-Envirosciences Pty Limited
Level 5, 828 Pacific Hwy
Gordon NSW 2072
PO Box 726 Pymble NSW 2073 Australia
T +61 2 8484 8999
F +61 2 8484 8989
www.hla-enviro.com.au

Received by
7/6/06
7:30am

Quality, Service, Support

Report Date : 1/06/2006
Report Time : 3:49:50PM

Sample **Receipt** Notice (SRN) for **E026815**

Client Details		Laboratory Reference Information	
Client Name:	HLA - Envirosciences Pty Limited	**Please have this information ready when contacting Labmark.**	
Client Phone:	02 8484 8999		
Client Fax:	02 8484 8989	**Laboratory Report:**	**E026815**
Contact Name:	Ben Pearce	**Quotation Number:**	- Not provided, standard prices apply
Contact Email:	bpearce@hla-enviro.com.au	**Laboratory Address:**	Unit 1, 8 Leighton Pl. Asquith NSW 2077
Client Address:	PO Box 726 Pymble NSW 2073	**Phone:**	61 2 9476 6533
		Fax:	61 2 9476 8219
Project Name:	MM Group North Ryde	**Sample Receipt Contact:**	Ros Schacht
Project Number:	S4062801	**Email:**	ros.schacht@labmark.com.au
CoC Number:	- Not provided -	**Reporting Contact:**	Jyothi Lal
Purchase Order:	143588	**Email:**	jyothi.lal@labmark.com.au
Surcharge:	No surcharge applied (results by 6:30pm on due date)		
Sample Matrix:	OTHER & SOIL & WATER		
Date Sampled (earliest date):	29/05/2006	**NATA Accreditation:**	13542
Date Samples Received:	31/05/2006	**TGA GMP License:**	185-336 (Sydney)
Date Sample Receipt Notice issued:	01/06/2006	**APVMA License:**	6105 (Sydney)
Date Preliminary Report Due:	05/06/2006	**AQIS Approval:**	NO356 (Sydney)
		AQIS Entry Permit:	200409998 (Sydney)

Sample Condition:
COC received with samples. Report number and lab ID's defined on COC.
Samples received in good order .
Samples received with cooling media: Crushed ice .
Samples received chilled.
Security seals not required. Direct Labmark's custody taken .
Sample container & sample integrity suitable .

Comments:
COC ananlysis request arrived at 16:32 on 31 May 06. Asbestos subcontracted to ASET.

Holding Times:
Date received allows for sufficient time to meet Technical Holding Times.

Preservation:
Chemical preservation of samples satisfactory for requested analytes.

Important Notes:
Sample disposal of environmental samples shall be 31 days (water) and 3 months (soil, HN03 preserved samples) after laboratory receipt, unless otherwise requested in writing by the client. Samples requested to be held in non-refrigerated storage shall incur $5.00/ sample/ 3 months. Additional refrigerated storage shall incur $20/ sample/ 3 months. Combination prices apply only if requested. Transfer of report ownership from LabMark to the client shall occur once full and final payment has been settled and verified. All report copies may be retracted where full payment does not occur within the agreed settlement period.

Analysis comments:
VOC E010.2: Dichloromethane not reported unless requested.

Subcontracted Analyses:
Reported by Aust. Safer Env & Tech., NATA accreditation No. 14484

Thank you for choosing Labmark to analyse your project samples.
Additional information on www.labmark.com.au

Report Date : 1/06/2006
Report Time : 3:49:50PM

Quality, Service, Support

Sample **Receipt** Notice (SRN) for **E026815**

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GRID REVIEW TABLE

No.	Date	Depth	Client Sample ID	Requested Analysis																				
				BTEX by P&T	BTEX by P&T	Filtered mercury	Acid extractable mercury	ON HOLD ON HOLD	Filtered metals (M7)	Acid extractable metals (M7)	Moisture	Organochlorine Pesticides (OC)	Organophosphorus Pesticides	Polyaromatic Hydrocarbons (PAH)	Polyaromatic Hydrocarbons (PAH)	Polychlorinated Biphenyls (PCB)	pH in soil	PREP Not Reported	PREP Not Reported	PREP Not Reported	Petroleum Hydrocarbons (TPH)	Petroleum Hydrocarbons (TPH)	Volatile Halogenated Compounds (VHC)
26065	29/05	0.05-0.2	BH01				●			●	●								●					
26066	29/05	0.4-0.6	BH01					●																
26067	29/05	1.0-1.2	BH01					●																
26068	29/05	2.0-2.2	BH01					●																
26069	29/05	2.7-2.8	BH01					●																
26070	29/05	0.05-0.15	BH02				●			●	●								●					
26071	29/05	0.4-0.5	BH02				●			●	●								●					
26072	29/05	1.0-1.1	BH02					●																
26073	29/05	0.15-0.25	BH03				●			●	●								●					
26074	29/05	0.3-0.5	BH03					●																
26075	29/05	0.05-0.15	BH04	●			●			●	●	●	●	●		●	●		●		●			
26076	29/05	0.2-0.3	BH04					●																
26077	29/05	0.4-0.5	BH04					●																
26078	29/05	0.8-1.0	BH04				●			●	●								●					
26079	29/05	1.9-2.0	BH04					●																
26080	29/05	2.9-3.0	BH04					●																
26081	29/05	0.05-0.15	BH05				●			●	●								●					
26082	29/05	0.4-0.5	BH05					●																
26083	29/05	0.6-0.8	BH05					●																
26084	29/05	1.2-1.3	BH05					●																
26085	29/05	0.05-0.15	BH06	●			●			●	●			●			●		●		●			
26086	29/05	0.4-0.5	BH06					●																
26087	29/05	0.6-0.7	BH06					●																
26088	29/05	1.0-1.1	BH06	●			●			●	●			●		●	●		●		●			
26089	29/05	0.15-0.3	BH07	●			●			●	●								●		●			
26090	29/05	0.6-0.75	BH07					●																
26091	29/05	0.16-0.25	BH08	●			●			●	●						●		●		●			●
26092	29/05	0.6-0.8	BH08	●			●			●	●								●		●			
26093	29/05	1.3-1.4	BH08					●																
26094	29/05	1.9-2.0	BH08					●																
26095	29/05	2.9-3.0	BH08					●																
26096	29/05	0.17-0.3	BH09	●			●			●	●	●				●	●		●		●			●

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Report Date : 1/06/2006
Report Time : 3:49:50PM

Quality, Service, Support

Sample **Receipt** Notice (SRN) for **E026815**

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GRID REVIEW TABLE

No.	Date	Depth	Client Sample ID	Requested Analysis																				
				BTEX by P&T	BTEX by P&T	Filtered mercury	Acid extractable mercury	ON HOLD ON HOLD	Filtered metals (M7)	Acid extractable metals (M7)	Moisture	Organochlorine Pesticides (OC)	Organophosphorus Pesticides	Polyaromatic Hydrocarbons (PAH)	Polyaromatic Hydrocarbons (PAH)	Polychlorinated Biphenyls (PCB)	pH in soil	PREP Not Reported	PREP Not Reported	PREP Not Reported	Petroleum Hydrocarbons (TPH)	Petroleum Hydrocarbons (TPH)	Volatile Halogenated Compounds (VHC)
26097	29/05	0.4-0.6	BH09					●																
26098	29/05	1.2-1.3	BH09					●																
26099	29/05	0.16-0.3	BH10				●			●	●									●				
26100	29/05	0.0-0.1	HA01				●			●	●									●				
26101	29/05	0.5-0.6	HA01	●			●			●	●	●	●	●		●				●		●		
26102	29/05	0.0-0.1	HA02				●			●	●									●				
26103	29/05	0.3-0.4	HA02					●																
26104	29/05	0.5-0.6	HA02	●			●			●	●	●	●	●		●				●		●		
26105	29/05	0.1-0.2	HA03					●																
26106	29/05	0.2-0.3	HA03					●																
26107	29/05	0.4-0.5	HA03					●																
26108	29/05	0.0-0.1	HA04				●			●	●	●	●			●				●				
26109	29/05	0.45-0.5	HA04					●																
26110	29/05	0.0-0.1	HA05				●			●	●	●	●			●				●				
26111	29/05	0.4-0.5	HA05					●																
26112	29/05		QW01		●	●			●						●						●		●	
26113	30/05	0.05-0.15	BH11				●			●	●			●						●				
26114	30/05	0.4-0.5	BH11					●																
26115	30/05	0.6-0.8	BH11				●			●	●									●				
26116	30/05	1.9-2.0	BH11					●																
26117	30/05	2.9-3.0	BH11					●																
26118	30/05	3.9-4.0	BH11					●																
26119	30/05	4.9-5.0	BH11					●																
26120	30/05	0.0-0.3	BH12				●			●	●	●	●			●				●				
26121	30/05	0.6-0.8	BH12					●																
26122	30/05	1.3-1.4	BH12					●																
26123	30/05	1.6-1.7	BH12					●																
26124	30/05	0.0-0.1	BH13	●			●			●	●	●	●	●		●	●			●		●		
26125	30/05	0.5-0.6	BH13				●			●	●									●				
26126	30/05	0.05-0.25	BH14	●			●			●	●			●						●		●		
26127	30/05	0.6-0.8	BH14					●																
26128	30/05	1.3-1.5	BH14					●																

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GRID REVIEW TABLE

No.	Date	Depth	Client Sample ID	Requested Analysis: BTEX by P&T	BTEX by P&T	Filtered mercury	Acid extractable mercury	ON HOLD ON HOLD	Filtered metals (M7)	Acid extractable metals (M7)	Moisture	Organochlorine Pesticides (OC)	Organophosphorus Pesticides	Polyaromatic Hydrocarbons (PAH)	Polyaromatic Hydrocarbons (PAH)	Polychlorinated Biphenyls (PCB)	pH in soil	PREP Not Reported	PREP Not Reported	PREP Not Reported	Petroleum Hydrocarbons (TPH)	Petroleum Hydrocarbons (TPH)	Volatile Halogenated Compounds (VHC)
26129	30/05	1.9-2.0	BH14					●															
26130	30/05	2.9-3.0	BH14					●															
26131	30/05	3.9-4.0	BH14					●															
26132	30/05	0.15-0.35	BH15	●			●			●	●								●		●		
26133	30/05	0.6-0.8	BH15				●			●	●								●				
26134	30/05	1.0-1.2	BH15					●															
26135	30/05	0.1-0.3	BH16				●			●	●								●				
26136	30/05	0.6-0.8	BH16	●							●								●		●		
26137	30/05	1.9-2.0	BH16	●			●			●	●			●					●		●		
26138	30/05	2.9-3.0	BH16	●			●			●	●			●					●		●		
26139	30/05	0.17-0.3	BH17	●			●			●	●			●			●		●		●		
26140	30/05	0.4-0.6	BH17				●			●	●								●				
26141	30/05	1.0-1.2	BH17					●															
26142	30/05		DUP01					●															
26143	30/05		DUP02				●			●	●								●				
26144	30/05		DUP03				●			●	●	●	●	●		●			●				
26145	30/05		DUP04	●			●			●	●			●					●		●		
26146	30/05		DUP05					●															
26147	30/05		BIT01								●			●					●				
26148	30/05		BIT02								●			●					●				
26149	30/05		SS01								●								●				
26150	30/05		MS01															●					
26186	29/05	0.6-0.8	BH06					●															
26187	29/05	0.4-0.5	HA01					●															
26188	29/05	0.5	HA04					●															
26189	30/05	1.4-1.5	BH12					●															
			Totals:	17	1	1	36	48	1	36	40	9	8	15	1	10	7	1	40	1	17	1	2

Thank you for choosing Labmark to analyse your project samples.
Additional information on www.labmark.com.au

Report Date : 1/06/2006
Report Time : 3:49:50PM

Quality, Service, Support

Sample **Receipt** Notice (SRN) for **E026815**

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GRID REVIEW TABLE

No.	Date	Depth	Client Sample ID	Requested Analysis: Volatile TPH by P&T (vTPH)	Volatile TPH by P&T (vTPH)	External Not reported	External Not reported
26075	29/05	0.05-0.15	BH04	●			
26085	29/05	0.05-0.15	BH06	●			
26088	29/05	1.0-1.1	BH06	●			
26089	29/05	0.15-0.3	BH07	●			
26091	29/05	0.16-0.25	BH08	●			
26092	29/05	0.6-0.8	BH08	●			
26096	29/05	0.17-0.3	BH09	●			
26101	29/05	0.5-0.6	HA01	●			
26104	29/05	0.5-0.6	HA02	●			●
26112	29/05		QW01		●		
26124	30/05	0.0-0.1	BH13	●			
26126	30/05	0.05-0.25	BH14	●			
26132	30/05	0.15-0.35	BH15	●			
26136	30/05	0.6-0.8	BH16	●			
26137	30/05	1.9-2.0	BH16	●			
26138	30/05	2.9-3.0	BH16	●			
26139	30/05	0.17-0.3	BH17	●			
26145	30/05		DUP04	●			
26149	30/05		SS01				●
26150	30/05		MS01			●	
			Totals:	17	1	1	2

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Additional information on www.labmark.com.au

Quality, Service, Support

Report Date : 1/06/2006
Report Time : 3:49:50PM

Sample **Receipt** Notice (SRN) for **E026815**

No.	Date	Depth	Client Sample ID	Requested Analysis: M8 - M7-F_W	M8 - M7-T_S
26065	29/05	0.05-0.2	BH01		●
26070	29/05	0.05-0.15	BH02		●
26071	29/05	0.4-0.5	BH02		●
26073	29/05	0.15-0.25	BH03		●
26075	29/05	0.05-0.15	BH04		●
26078	29/05	0.8-1.0	BH04		●
26081	29/05	0.05-0.15	BH05		●
26085	29/05	0.05-0.15	BH06		●
26088	29/05	1.0-1.1	BH06		●
26089	29/05	0.15-0.3	BH07		●
26091	29/05	0.16-0.25	BH08		●
26092	29/05	0.6-0.8	BH08		●
26096	29/05	0.17-0.3	BH09		●
26099	29/05	0.16-0.3	BH10		●
26100	29/05	0.0-0.1	HA01		●
26101	29/05	0.5-0.6	HA01		●
26102	29/05	0.0-0.1	HA02		●
26104	29/05	0.5-0.6	HA02		●
26108	29/05	0.0-0.1	HA04		●
26110	29/05	0.0-0.1	HA05		●
26112	29/05		QW01	●	
26113	30/05	0.05-0.15	BH11		●
26115	30/05	0.6-0.8	BH11		●
26120	30/05	0.0-0.3	BH12		●
26124	30/05	0.0-0.1	BH13		●
26125	30/05	0.5-0.6	BH13		●
26126	30/05	0.05-0.25	BH14		●
26132	30/05	0.15-0.35	BH15		●
26133	30/05	0.6-0.8	BH15		●
26135	30/05	0.1-0.3	BH16		●
26137	30/05	1.9-2.0	BH16		●
26138	30/05	2.9-3.0	BH16		●
26139	30/05	0.17-0.3	BH17		●

Thank you for choosing Labmark to analyse your project samples.
Additional information on www.labmark.com.au

Quality, Service, Support

Report Date : 1/06/2006
Report Time : 3:49:50PM

Sample **Receipt** Notice (SRN) for **E026815**

No.	Date	Depth	Client Sample ID	Requested Analysis																		
				M8 - M7-F_W	M8 - M7-T_S																	
26140	30/05	0.4-0.6	BH17		●																	
26143	30/05		DUP02		●																	
26144	30/05		DUP03		●																	
26145	30/05		DUP04		●																	
			Totals:	1	36																	

Thank you for choosing Labmark to analyse your project samples.
Additional information on www.labmark.com.au

HLA

CHAIN OF CUSTODY

HLA - Enviroscience Pty Limited - Sydney
Level 5, 828 Pacific Hwy
PO Box 726 Pymble NSW 2073
Gordon NSW 2072 Australia
Tel: 61 2 8484 8999
Fax: 61 2 8484 8989
E-mail: mail@syd.hla-enviro.com.au

Laboratory Details
Lab Name: Labmark
Lab Address: Unit 1, 8 Leighton Place
Contact Name: Geoff Wiser
Lab. Ref:
Tel: 9476 6533
Fax 9476 8219
Preliminary Report by: 5/6/06
Final Report by: 5/6/06
Lab Quote No:

Sampled By: Ben Pearce
HLA Project No: S4062801
Project Name: MM Group North Ryde
PO No. 1435588

Specifications:

	Yes (tick)
1. Urgent TAT required? (please circle: 24hr / 3 days) as per email to Geoff Wiser	✓
2. Fast TAT Guarantee Required?	
3. Is any sediment layer present in waters to be excluded from extractions?	
4. % extraneous material removed from samples to be reported as per NEPM 5.1.1?	
5. Special storage requirements? (details:)	
6. Shell Quality Partnership:	
7. Report Format: ☐ Fax ☐ Hardcopy ☑ Email: bpearce@hla-enviro.com.au	

Analysis Request

Lab. ID	Sample ID	Sampling Date	Matrix: soil	water	other	Preservation: filtered	acid	ice	other	Container (No. & type)	BTEX + TPH	Metals*	PAH's	OCP	OPP	PCB	SVOC	VOC	TPH	Lead	TCLP Heavy Metals	TCLP PAH's	Phenols	VHC	Speciated TPH	Other: HOLD	Other: ph
26065	BH01_0.05-0.2	29/5/06	✓					✓				✓														✓	
26066	BH01_0.4-0.6		✓					✓																		✓	
26067	BH01_1.0-1.2		✓					✓																		✓	
26068	BH01_2.0-2.2		✓					✓																		✓	
26069	BH01_2.7-2.8		✓					✓																		✓	
26070	BH02 0.05-0.15		✓					✓				✓															
26071	BH02_0.4-0.5		✓					✓				✓															
26072	BH02_1.0-1.1		✓					✓																		✓	
26073	BH03_0.15-0.25		✓					✓				✓															
26074	BH03_0.3-0.5		✓					✓																			
26075	BH04_0.05-0.15		✓					✓				✓	✓	✓	✓	✓	✓										✓
26076	BH04_0.2-0.3		✓					✓																		✓	
26077	BH04_0.4-0.5	↓	✓					✓																		✓	

* Metals Required (Delete elements not required): As Cd Cr Cu Ni Pb Zn Hg

Comments:

Lab Report No. E026815
Entry ID

Relinquished by:	Signed:	Date:	
Recieved by:	Signed:	Date:	
Relinquished by:	Signed:	Date: 31/5	
Recieved by:	Signed:	Date:	

HLA

CHAIN OF CUSTODY

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PO Box 726 Pymble NSW 2073
Gordon NSW 2072 Australia
Tel: 61 2 8484 8999
Fax: 61 2 8484 8989
E-mail: mail@syd.hla-enviro.com.au

Laboratory Details
Lab Name: Labmark
Lab Address:
Contact Name:
Lab. Ref:
Tel:
Fax
Preliminary Report by:
Final Report by:
Lab Quote No:

Sampled By: Ben Pearce
HLA Project No: 34062801
Project Name:
PO No.

Specifications: Yes (tick)

1. Urgent TAT required? (please circle: 24hr 48hr ______ days)
2. Fast TAT Guarantee Required?
3. Is any sediment layer present in waters to be excluded from extractions?
4. % extraneous material removed from samples to be reported as per NEPM 5.1.1?
5. Special storage requirements? (details: ______)
6. Shell Quality Partnership:
7. Report Format: Fax Hardcopy Email: ______

Analysis Request

Lab. ID	Sample ID	Sampling Date	Matrix: soil	Matrix: water	Matrix: other	Preservation: filtered	Preservation: acid	Preservation: ice	Preservation: other	Container (No. & type)	BTEX + TPH	Metals*	PAH's	OCP	OPP	PCB	SVOC	VOC	TPH	Lead	TCLP Heavy Metals	TCLP PAH's	Phenols	VHC	Speciated TPH	Other: HOLD	Other: pH
26078	BH04_0.8-1.0	29/5/06	✓					✓				✓															
26079	BH04_1.9-2.0		✓					✓																		✓	
26080	BH04_2.9-3.0		✓					✓																		✓	
26081	BH05_0.05-0.15		✓					✓				✓															
26082	BH05_0.4-0.5		✓					✓																		✓	
26083	BH05_0.6-0.8		✓					✓																			
26084	BH05_1.2-1.3		✓					✓																		✓	
26085	BH06_0.05-0.15		✓					✓			✓	✓	✓														✓
26086	BH06_0.4-0.5		✓					✓																		✓	
26087	BH06_0.6-0.7		✓					✓																		✓	
26088	BH06_1.0-1.1		✓					✓			✓	✓	✓			✓											✓
26089	BH07_0.15-0.3		✓					✓			✓	✓															
26090	BH07_0.6-0.75	✓	✓					✓																		✓	

* Metals Required (Delete elements not required): As Cd Cr Cu Ni Pb Zn Hg

Comments:

Lab Report No. EO26815
Esky ID

Relinquished by: Signed: Date:
Recieved by: Signed: Date:

Relinquished by: Signed: [signature] Date: 31/5
Recieved by: Signed: Date:

CHAIN OF CUSTODY

HLA

HLA - Enviroscience Pty Limited - Sydney
Level 5, 828 Pacific Hwy
PO Box 726 Pymble NSW 2073
Gordon NSW 2072 Australia
Tel: 61 2 8484 8999
Fax: 61 2 8484 8989
E-mail: mail@syd.hla-enviro.com.au

Laboratory Details
Lab Name:
Lab Address:
Contact Name:
Lab. Ref:
Tel:
Fax
Preliminary Report by:
Final Report by:
Lab Quote No:

Sampled By: Ben Pearce
HLA Project No: 54062801
Project Name:
PO No.

Specifications:

	Yes (tick)
1. Urgent TAT required? (please circle: 24hr 48hr ____days)	
2. Fast TAT Guarantee Required?	
3. Is any sediment layer present in waters to be excluded from extractions?	
4. % extraneous material removed from samples to be reported as per NEPM 5.1.1?	
5. Special storage requirements? (details: ____)	
6. Shell Quality Partnership:	
7. Report Format: ☐ Fax ☐ Hardcopy ☐ Email: ____	

Analysis Request

Lab. ID	Sample ID	Sampling Date	Matrix: soil	water	other	Preservation: filt'ed	acid	ice	other	Container (No. & type)	BTEX + TPH	Metals*	PAH's	OCP	OPP	PCB	SVOC	VOC	TPH	Lead	TCLP Heavy Metals	TCLP PAH's	Phenols	VHC	Speciated TPH	Other: HOLD	Other: pH
26091	BH08_0.16-0.25	29/5/06	✓					✓			✓	✓												✓			✓
26092	BH08_0.6-0.8		✓					✓			✓	✓															
26093	BH08_1.3-1.4		✓					✓																	✓		
26094	BH09_1.9-2.0		✓					✓																	✓		
26095	BH08_2.9-3.0		✓					✓			✓	✓		✓		✓								✓		✓	
26096	BH09_0.17-0.3		✓					✓																	✓		
26097	BH09_0.4-0.6		✓					✓																			
26098	BH09_1.2-1.3		✓					✓																			
26099	BH10_0.16-0.3		✓					✓					✓														
26100	HA01_0.0-0.1		✓					✓					✓														
26101	HA01_0.5-0.6		✓					✓			✓	✓	✓	✓	✓	✓											
26102	HA02_0.0-0.1		✓					✓					✓														
26103	HA02_0.3-0.4	↓	✓					✓																		✓	

Lab Report No. E02G815
Easy ID

* Metals Required (Delete elements not required): As Cd Cr Cu Ni Pb Zn Hg

Comments:

Relinquished by: Signed: Date:
Recieved by: Signed: Date:

Relinquished by: Signed: Date: 31/5
Recieved by: Signed: Date:

Field_Worksheet_FORM025_Dec04

CHAIN OF CUSTODY

HLA

HLA - Enviroscliences Pty Limited - Sydney
Level 5, 828 Pacific Hwy
PO Box 726 Pymble NSW 2073
Gordon NSW 2072 Australia
Tel: 61 2 8484 8999
Fax: 61 2 8484 8989
E-mail: mail@syd.hla-enviro.com.au

Laboratory Details
Lab Name:
Lab Address:
Contact Name:
Lab. Ref:
Tel:
Fax
Preliminary Report by:
Final Report by:
Lab Quote No:

Sampled By: Ben Pearce
HLA Project No: S4062801
Project Name:
PO No.

Specifications:

	Yes (tick)
1. Urgent TAT required? (please circle: 24hr 48hr _____days)	
2. Fast TAT Guarantee Required?	
3. Is any sediment layer present in waters to be excluded from extractions?	
4. % extraneous material removed from samples to be reported as per NEPM 5.1.1?	
5. Special storage requirements? (details: _____)	
6. Shell Quality Partnership:	
7. Report Format: ☐ Fax ☐ Hardcopy ☐ Email: _____	

Analysis Request

Lab. ID	Sample ID	Sampling Date	Matrix: soil	water	other	Preservation: filt'ed	acid	ice	other	Container (No. & type)	BTEX + TPH	Metals*	PAH's	OCP	OPP	PCB	SVOC	VOC	TPH	Lead	TCLP Heavy Metals	TCLP PAH's	Phenols	VHC	Speciated TPH	Other: HOLD	Other: Asbestos
26104	HA02_0.5-0.6	29/5/06	✓					✓			✓	✓	✓	✓	✓	✓									✓	✓
26105	HA03_0.1-0.2		✓					✓																	✓	
26106	HA03_0.2-0.3		✓					✓																	✓	
26107	HA03_0.4-0.5		✓					✓																	✓	
26108	~~HA04~~ HA04_0.0-0.1		✓					✓				✓		✓	✓	✓									✓	
~~26109~~ SA 3/6	~~HA04_0.2-0.3~~		✓					✓																	✓	
26109	HA04_0.45-0.5		✓					✓																	✓	
26110	HA05_0.0-0.1		✓					✓				✓		✓	✓	✓										
26111	HA05_0.4-0.5	↓	✓					✓																		
26112	QW01	↓		✓				✓			✓	✓	✓													
26113	BH1_0.05-0.15	30/5/06	✓					✓				✓	✓												✓	
26114	BH1_0.4-0.5		✓					✓																		
26115	BH1_0.6-0.8	↓	✓					✓				✓														

* Metals Required (Delete elements not required): As Cd Cr Cu Ni Pb Zn Hg

Comments:

Lab Report No. E026815
Esky ID

Relinquished by:	Signed:	Date:	Relinquished by: Signed: Date:
Recieved by:	Signed:	Date:	Recieved by: Signed: Date: 31/5

Field_Worksheet_FORM025_Dec04

HLA

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Gordon NSW 2072 Australia
Tel: 61 2 8484 8999
Fax: 61 2 8484 8989
E-mail: mail@syd.hla-enviro.com.au

Laboratory Details
Lab Name:
Lab Address:
Contact Name:
Lab. Ref:
Tel:
Fax
Preliminary Report by:
Final Report by:
Lab Quote No:

Sampled By: Ben Pearce
HLA Project No: S4062801
Project Name:
PO No.

Specifications:

	Yes (tick)
1. Urgent TAT required? (please circle: 24hr 48hr _____days)	
2. Fast TAT Guarantee Required?	
3. Is any sediment layer present in waters to be excluded from extractions?	
4. % extraneous material removed from samples to be reported as per NEPM 5.1.1?	
5. Special storage requirements? (details: _____)	
6. Shell Quality Partnership:	
7. Report Format: ☐ Fax ☐ Hardcopy ☐ Email: _____	

Analysis Request

Lab. ID	Sample ID	Sampling Date	Matrix: soil	water	other	Preservation: filt'ed	acid	ice	other	Container (No. & type)	BTEX + TPH	Metals*	PAH's	OCP	OPP	PCB	SVOC	VOC	TPH	Lead	TCLP Heavy Metals	TCLP PAH's	Phenols	VHC	Speciated TPH	Other: HOLD	Other: ph
26116	BH11_1.9-2.0	30/5/06	✓					✓																		✓	
26117	~~BH11~~ BH11_2.9-3.0		✓					✓																		✓	
26118	BH11_3.9-4.0		✓					✓																		✓	
26119	BH11_4.9-5.0		✓					✓																		✓	
26120	BH12_0.0-0.3		✓					✓				✓		✓	✓	✓										✓	
26121	BH12_0.6-0.8		✓					✓																		✓	
26122	BH12_1.3-1.4		✓					✓																		✓	
26123	BH12_1.6-1.7		✓					✓																		✓	
26124	BH13_0.0-0.1		✓					✓			✓	✓	✓	✓	✓												✓
26125	BH13_0.5-0.6		✓					✓				✓															
26126	BH14_0.05-0.25		✓					✓			✓	✓	✓													✓	
26127	BH14_0.6-0.8		✓					✓																			
26128	BH14_1.3-1.5	↓	✓					✓																			

* Metals Required (Delete elements not required): As Cd Cr Cu Ni Pb Zn Hg

Comments:

Lab Report No. 202815
Esky ID

Relinquished by: Signed: Date:
Recieved by: Signed: Date:

Relinquished by: Signed: Date:
Recieved by: Signed: Date: 31/5

Field_Worksheet_FORM025_Dec04

HLA

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Gordon NSW 2072 Australia
Tel: 61 2 8484 8999
Fax: 61 2 8484 8989
E-mail: mail@syd.hla-enviro.com.au

Laboratory Details
Lab Name:
Lab Address:
Contact Name:
Lab. Ref:
Tel:
Fax
Preliminary Report by:
Final Report by:
Lab Quote No:

Sampled By: Ben Pearce
HLA Project No: S4062801
Project Name:
PO No.

Specifications:

	Yes (tick)
1. Urgent TAT required? (please circle: 24hr 48hr ______days)	
2. Fast TAT Guarantee Required?	
3. Is any sediment layer present in waters to be excluded from extractions?	
4. % extraneous material removed from samples to be reported as per NEPM 5.1.1?	
5. Special storage requirements? (details: ______)	
6. Shell Quality Partnership:	
7. Report Format: Fax Hardcopy Email :	

Analysis Request

Lab. ID	Sample ID	Sampling Date	Matrix: soil	Matrix: water	Matrix: other	Preservation: filt'ed	Preservation: acid	Preservation: ice	Preservation: other	Container (No. & type)	BTEX + TPH	Metals*	PAH's	OCP	OPP	PCB	SVOC	VOC	TPH	Lead	TCLP Heavy Metals	TCLP PAH's	Phenols	VHC	Speciated TPH	Other: HOLD	Other: pH
26129	BH14_1.9-2.0	30/5/06	✓					✓																		✓	
26130	BH14_2.9-3.0	↓	✓					✓																		✓	
26131	BH14_3.9-4.0		✓					✓																		✓	
26132	BH15_0.15-0.35		✓					✓			✓	✓															
26133	BH15_0.6-0.8		✓					✓				✓															
26134	BH15_1.0-1.2		✓					✓																		✓	
26135	BH16_0.1-0.3		✓					✓				✓															
26136	BH16_0.6-0.8		✓					✓			✓																
26137	BH16_1.9-2.0		✓					✓			✓	✓	✓														
26138	BH16_2.9-3.0		✓					✓			✓	✓	✓														
26139	BH17_0.17-0.3		✓					✓			✓	✓	✓														✓
26140	BH17_0.4-0.6		✓					✓				✓															
26141	BH17_1.0-1.2	✓	✓					✓																		✓	

*Metals Required (Delete elements not required): As Cd Cr Cu Ni Pb Zn Hg

Comments:

Lab Report No. EC26815
Esky ID

Relinquished by:	Signed:	Date:	Relinquished by:	Signed:	Date:
Recieved by:	Signed:	Date:	Recieved by:	Signed: [signature]	Date: 31/5

Field_Worksheet_FORM025_Dec04

CHAIN OF CUSTODY

HLA

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Gordon NSW 2072 Australia
Tel: 61 2 8484 8999
Fax: 61 2 8484 8989
E-mail: mail@syd.hla-enviro.com.au

Laboratory Details
Lab Name:
Lab Address:
Contact Name:
Lab. Ref:
Tel:
Fax
Preliminary Report by:
Final Report by:
Lab Quote No:

Sampled By: Ben Reese
HLA Project No: S4062801
Project Name:
PO No.

Specifications:

	Yes (tick)
1. Urgent TAT required? (please circle: 24hr 48hr _____days)	
2. Fast TAT Guarantee Required?	
3. Is any sediment layer present in waters to be excluded from extractions?	
4. % extraneous material removed from samples to be reported as per NEPM 5.1.17	
5. Special storage requirements? (details: _____)	
6. Shell Quality Partnership:	
7. Report Format: ☐ Fax ☐ Hardcopy ☐ Email: _____	

Analysis Request

Lab. ID	Sample ID	Sampling Date	Matrix: soil	water	other	Preservation: filtred	acid	ice	other	Container (No. & type)	BTEX + TPH	Metals*	PAH's	OCP	OPP	PCB	SVOC	VOC	TPH	Lead	TCLP Heavy Metals	TCLP PAH's	Phenols	VHC	Speciated TPH	Other: HOLD	ASBESTOS
26142.	DUP01	30/5/06	✓					✓																		✓	
26143.	DUP02		✓					✓				✓															
26144	DUP03		✓					✓				✓	✓	✓	✓	✓											
26145	DUP04		✓					✓			✓	✓	✓														
26146	DUP05	↓	✓					✓																		✓	
26147	BIT01		✓					✓					✓														
26148	BIT02	↓	✓					✓					✓														
26150	MS01				✓			✓																			✓
26149	SS01	↓	✓					✓																			✓
26186	BH06 - 0.6-0.8	29/5/06	✓																							✓	
26187	BA01 - 0.4-0.5	29/5/06	✓																							✓	
26188	HA04 - 0.5	29/5/06	✓																							✓	
26189	BH12 1.4-1.5	30/5/06	✓																							✓	

* Metals Required (Delete elements not required): As Cd Cr Cu Ni Pb Zn Hg

Comments: 4 samples added on HOLD at client request

Lab Report No. EO26815
Eddy ID

Relinquished by: Signed: Date:
Recieved by: Signed: Date:

Relinquished by: Signed: Date: 31/5
Recieved by: Signed: Date: 4:30pm

Field_Worksheet_FORM025_Dec04

Ros Schacht

From: "Geoff Weir" <geoff.weir@labmark.com.au>
To: "Ros Schacht" <ros.schacht@labmark.com.au>
Sent: Thursday, 1 June 2006 7:47 AM
Subject: Fw: Additional analysis (S4062801)

Labmark Pty Ltd

Phone : (02) 9476 6533
Fax : (02) 9476 8219
website: www.labmark.com.au

----- Original Message -----
From: Ben Pearce
To: Geoff Weir
Sent: Wednesday, May 31, 2006 5:50 PM
Subject: Additional analysis (S4062801)

Job No.
E026815.

Hi Geoff,

Could you please conduct the following additional analyses on the samples submitted today (HLA project S4062801 – MM Group North Ryde).

BH08_0.16-0.25 – VHCs

And

BH09_0.17-0.3 – VHCs

Kind Regards

Ben Pearce
Environmental Scientist
HLA-Envirosciences Pty Limited
Level 5, 828 Pacific Hwy
Gordon NSW 2072
PO Box 726 Pymble NSW 2073 Australia
T +61 2 8484 8999
F +61 2 8484 8989
www.hla-enviro.com.au

Received by
01/06/06.
7:50am

HLA

CHAIN OF CUSTODY

HLA - Enviroscience Pty Limited - Sydney
Level 5, 828 Pacific Hwy
PO Box 726 Pymble NSW 2073
Gordon NSW 2072 Australia
Tel: 61 2 8484 8999
Fax: 61 2 8484 8989
E-mail: mail@syd.hla-enviro.com.au

Laboratory Details
Lab Name: ALS
Lab Address: 277 Woodpark Rd Smithfield
Contact Name: Greg Vogel
Lab. Ref:
Tel: 87848555
Fax 8784-8500
Preliminary Report by: 5/6/06
Final Report by: 5/6/06
Lab Quote No:

Sampled By: Ben Pearce
HLA Project No: SA062801
Project Name: MM Group North Ryde
PO No. 143589

Specifications: 3 day turn around as per conversation with Greg Vogel

	Yes (tick)
1. Urgent TAT required? (please circle: 24hr 48hr _____days)	
2. Fast TAT Guarantee Required?	
3. Is any sediment layer present in waters to be excluded from extractions?	
4. % extraneous material removed from samples to be reported as per NEPM 5.1.1?	
5. Special storage requirements? (details: _____)	
6. Shell Quality Partnership:	
7. Report Format: ☐ Fax ☐ Hardcopy ☐ Email : _____	

Analysis Request

Lab. ID	Sample ID	Sampling Date	Matrix: soil	water	other	Preservation: filt'ed	acid	ice	other	Container (No. & type)	BTEX + TPH	Metals*	PAH's	OCP	OPP	PCB	SVOC	VOC	TPH	Lead	TCLP Heavy Metals	TCLP PAH's	Phenols	VHC	Speciated TPH	Other
~~TRIP02~~	TRIP02 (1)	30/5/06	✓					✓			✓	✓	✓													
~~TRIP03~~	TRIP03 (2)	↓	✓					✓			✓	✓	✓	✓	✓	✓										

ALS Environmental
Sydney
Work Order
ES0606610
Report Version: WOLabel 1.01
Telephone : 61-2-87848555

* Metals Required (Delete elements not required): As Cd Cr Cu Ni Pb Zn Hg

Comments:

Lab Report No.

Esky ID

Relinquished by: Ben Pearce	Signed:	Date: 31/5/06	
Recieved by: T.B. 45.	Signed:	Date:	
Relinquished by:	Signed:	Date:	
Recieved by: Sonya Stephens	Signed: ALS.	Date: 31-5-6. 15:45pm.	

Field_Worksheet_FORM025_Dec04

AUSTRALIAN LABORATORY SERVICES PTY LTD ABN 84 009 936 029
277-289 Woodpark Road Smithfield NSW 2164 Australia
Telephone: 61-2-87848555 Facsimile: 61-2-87848500 http://www.alsenviro.com/

ALS Environmental

SAMPLE RECEIPT NOTIFICATION (SRN)

Comprehensive report

Client Details

Client	:	**HLA-ENVIROSCIENCES PTY LTD**
Contact	:	**MR BEN PEARCE**
Address	:	P O BOX 726 PYMBLE NSW AUSTRALIA 2073
Project	:	**S4062801**
Order number	:	**143589**
C-O-C Number	:	**- Not provided -**
Site	:	**MN GROUP NTH RYD**
Sampler	:	**BP**
E-mail	:	bpearce@hla-enviro.com.au
Telephone	:	02 8484 8999
Facsimile	:	02 8484 8989

Laboratory Details

Laboratory	:	**ALS Environmental Sydney**
Manager	:	**Greg Vogel**
Address	:	277-289 Woodpark Road Smithfield NSW Australia 2164
Quote number	:	ES20050036
Work order	:	**ES0606610**
E-mail	:	Greg.Vogel@alsenviro.com
Telephone	:	61-2-87848555
Facsimile	:	61-2-87848500

Dates

Date Samples Received	:	31 May 2006
SRA Issue Date	:	31 May 2006
Scheduled Reporting Date	:	**5 Jun 2006**

Delivery Details

Mode of Delivery	:	Carrier.	**Temperature**	:	CHILLED - Ice present
No. of coolers/boxes	:	1 HARD	**No. of samples** - **Received**		2
Security Seal	:	Intact.	- **Analysed**		2

Comments

- **Samples received in appropriately pretreated and preserved containers.**
- **Sample(s) have been received within recommended holding times.**
- **Sample(s) requiring volatile organic compound analysis received in airtight containers (ZHE).**

- Analytical work for this work order will be conducted at ALSE Sydney.
- Sample Disposal - Aqueous (14 days), Solid (90 days) from date of completion of work order.
- Please direct any queries related to sample condition / numbering / breakages to Nazeeh Aoun.
- Please direct any turn around / technical queries to the laboratory contact designated above.
- When the sampling time is not supplied on the COC documentation, ALSE defaults the sampling time to that of the COC 'relinquishment' time (if supplied). If this also is not supplied, ALSE defaults the sampling time to the 'time of receipt at Laboratory'.

Client	: HLA-ENVIROSCIENCES PTY LTD	**Work Order**	: ES0606610
Project	: S4062801	**ALS Quote Reference**	: ES20050036

Summary of Sample(s) / Container(s) and Requested Analysis

Some items described below may be part of a laboratory process neccessary for the execution of client requested tasks. Packages may contain additional analyses, such as moisture and preparation tasks, that form an implicit part of that package.

ALS Sample ID.	Client Sample ID - Sample Date	**Requested Analysis**									
		S-02 - SOIL 8 Metals (incl. Digestion)	**S-07 - SOIL** TPH/BTEX/PAH (SIM)	**S-16 - SOIL** TPH/BTX/PAH/OC/OP/PCB/8Metals							
ES0606610-001	**TRIP 02 - 30 May 2006**	]	]								
ES0606610-002	**TRIP 03 - 30 May 2006**			]							
	Total(s) :	**1**	**1**	**1**							

Client	: HLA-ENVIROSCIENCES PTY LTD	**Work Order**	: ES0606610
Project	: S4062801	**ALS Quote Reference**	: ES20050036

Requested Reports

l **MR BEN PEARCE**

- A4 - Certificate of Analysis - NEPM format	Email	bpearce@hla-enviro.com.au
- A4 - Quality Control Report - NEPM format	Email	bpearce@hla-enviro.com.au
- A4 - Interpretive Quality Control Report - NEPM format	Email	bpearce@hla-enviro.com.au
- ENMRG Export Format	Email	bpearce@hla-enviro.com.au
- ESDAT Export Format	Email	bpearce@hla-enviro.com.au
- Chain of Custody Acknowledgement	Email	bpearce@hla-enviro.com.au
- A4 - Sample Receipt Notification - Comprehensive format	Email	bpearce@hla-enviro.com.au
- Invoice	Email	bpearce@hla-enviro.com.au

l **THE RESULTS ADDRESS**

- A4 - Certificate of Analysis - NEPM format	Email	syd.als@hla-enviro.com.au
- A4 - Quality Control Report - NEPM format	Email	syd.als@hla-enviro.com.au
- A4 - Interpretive Quality Control Report - NEPM format	Email	syd.als@hla-enviro.com.au
- ENMRG Export Format	Email	syd.als@hla-enviro.com.au
- ESDAT Export Format	Email	syd.als@hla-enviro.com.au
- Chain of Custody Acknowledgement	Email	syd.als@hla-enviro.com.au
- A4 - Sample Receipt Notification - Comprehensive format	Email	syd.als@hla-enviro.com.au

Sample Container(s) / Preservation Non-Compliance Log

All comparisons are made against pretreatment/preservation AS, APHA, USEPA standards.

l **No sample container / preservation non-compliance exist.**

ALS Environmental

INTERPRETIVE QUALITY CONTROL REPORT

Client	:	**HLA-ENVIROSCIENCES PTY LTD**	**Laboratory**	:	ALS Environmental Sydney	**Page**	: **1 of 5**
Contact	:	MR BEN PEARCE	**Contact**	:	Greg Vogel		
Address	:	P O BOX 726 PYMBLE NSW AUSTRALIA 2073	**Address**	:	277-289 Woodpark Road Smithfield NSW Australia 2164	**Work order**	: **ES0606610**
						Amendment No.	:
Project	:	S4062801 MM Group North Ryde	**Quote number**	:	EN/004/05	**Date received**	: 31 May 2006
Order number	:	143589				**Date issued**	: 6 Jun 2006
C-O-C number	:	- Not provided -					
Site	:	MN GROUP NTH RYD					
E-mail	:	bpearce@hla-enviro.com.au	**E-mail**	:	Greg.Vogel@alsenviro.com	**No. of samples**	
Telephone	:	02 8484 8999	**Telephone**	:	61-2-87848555	**Received**	: 2
Facsimile	:	02 8484 8989	**Facsimile**	:	61-2-87848500	**Analysed**	: 2

This Interpretive Quality Control Report was issued on 6 Jun 2006 for the ALS work order reference ES0606610 and supersedes any previous reports with this reference.
This report contains the following information:

- Analysis Holding Time Compliance
- Quality Control Type Frequency Compliance
- Summary of all Quality Control Outliers
- Brief Method Summaries

ALS Environmental

Interpretive Quality Control Report - Analysis Holding Time

The following report summarises extraction / preparation and analysis times and compares with recommended holding times. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. Information is also provided re the sample container (preservative) from which the sample aliquot was taken. Elapsed time to analysis represents time from sampling where no extraction / digestion is involved or time from extraction / digestion where this is present. For composite samples, sampling date/time is taken as that of the oldest sample contributing to that composite. Sample date/time for laboratory produced leaches are taken from the completion date/time of the leaching process. Outliers for holding time are based on USEPA SW846, APHA, AS and NEPM (1999). Failed outliers, refer to the 'Summary of Outliers'.

Matrix Type: SOIL ***Analysis Holding Time and Preservation***

Method / **Container /** Client Sample ID(s)	**Date Sampled**	**Extraction / Preparation**			**Analysis**		
		Date extracted	Due for extraction	Pass?	Date analysed	Due for analysis	Pass?
EA055-103: Moisture Content							
Soil Glass Jar - Unpreserved							
TRIP 02, TRIP 03	**30 May 2006**	----	----	----	**2 Jun 2006**	6 Jun 2006	Pass
EG005T: Total Metals by ICP-AES							
Soil Glass Jar - Unpreserved							
TRIP 02, TRIP 03	**30 May 2006**	**3 Jun 2006**	26 Nov 2006	Pass	**5 Jun 2006**	26 Nov 2006	Pass
EG035T: Total Mercury by FIMS							
Soil Glass Jar - Unpreserved							
TRIP 02, TRIP 03	**30 May 2006**	**3 Jun 2006**	27 Jun 2006	Pass	**5 Jun 2006**	27 Jun 2006	Pass
EP066: Polychlorinated Biphenyls (PCB)							
Soil Glass Jar - Unpreserved							
TRIP 03	**30 May 2006**	**1 Jun 2006**	13 Jun 2006	Pass	**2 Jun 2006**	11 Jul 2006	Pass
EP068: Pesticides by GCMS							
Soil Glass Jar - Unpreserved							
TRIP 03	**30 May 2006**	**1 Jun 2006**	13 Jun 2006	Pass	**2 Jun 2006**	11 Jul 2006	Pass
EP071: TPH - Semivolatile Fraction							
Soil Glass Jar - Unpreserved							
TRIP 02, TRIP 03	**30 May 2006**	**1 Jun 2006**	13 Jun 2006	Pass	**2 Jun 2006**	11 Jul 2006	Pass
EP075(SIM): PAH/Phenols (SIM)							
Soil Glass Jar - Unpreserved							
TRIP 02, TRIP 03	**30 May 2006**	**1 Jun 2006**	13 Jun 2006	Pass	**2 Jun 2006**	11 Jul 2006	Pass
EP080: TPH Volatiles/BTEX							
Soil Glass Jar - Unpreserved							
TRIP 02, TRIP 03	**30 May 2006**	**1 Jun 2006**	13 Jun 2006	Pass	**1 Jun 2006**	13 Jun 2006	Pass

Interpretive Quality Control Report - Frequency of Quality Control Samples

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which this work order was processed. Actual rate should be greater than or equal to the expected rate.

Matrix Type: SOIL ***Frequency of Quality Control Samples***

Quality Control Sample Type / Method	Count		Rate (%)		Quality Control Specification
	QC	Regular	Actual	Expected	
Laboratory Duplicates (DUP)					
EA055-103: Moisture Content	1	2	**50.0**	**10.0**	NEPM 1999 Schedule B(3) and ALSE QCS3 requirement
EG005T: Total Metals by ICP-AES	2	20	**10.0**	**10.0**	NEPM 1999 Schedule B(3) and ALSE QCS3 requirement
EG035T: Total Mercury by FIMS	1	10	**10.0**	**10.0**	NEPM 1999 Schedule B(3) and ALSE QCS3 requirement
EP066: Polychlorinated Biphenyls (PCB)	1	1	**100.0**	**10.0**	NEPM 1999 Schedule B(3) and ALSE QCS3 requirement
EP068: Pesticides by GCMS	1	2	**50.0**	**10.0**	NEPM 1999 Schedule B(3) and ALSE QCS3 requirement
EP071: TPH - Semivolatile Fraction	2	18	**11.1**	**10.0**	NEPM 1999 Schedule B(3) and ALSE QCS3 requirement
EP075(SIM): PAH/Phenols (SIM)	2	18	**11.1**	**10.0**	NEPM 1999 Schedule B(3) and ALSE QCS3 requirement
EP080: TPH Volatiles/BTEX	1	2	**50.0**	**10.0**	NEPM 1999 Schedule B(3) and ALSE QCS3 requirement
Laboratory Control Samples (LCS)					
EG005T: Total Metals by ICP-AES	1	20	**5.0**	**5.0**	NEPM 1999 Schedule B(3) and ALSE QCS3 requirement
EG035T: Total Mercury by FIMS	1	10	**10.0**	**5.0**	NEPM 1999 Schedule B(3) and ALSE QCS3 requirement
EP066: Polychlorinated Biphenyls (PCB)	1	1	**100.0**	**5.0**	NEPM 1999 Schedule B(3) and ALSE QCS3 requirement
EP068: Pesticides by GCMS	1	2	**50.0**	**5.0**	NEPM 1999 Schedule B(3) and ALSE QCS3 requirement
EP071: TPH - Semivolatile Fraction	1	18	**5.6**	**5.0**	NEPM 1999 Schedule B(3) and ALSE QCS3 requirement
EP075(SIM): PAH/Phenols (SIM)	1	18	**5.6**	**5.0**	NEPM 1999 Schedule B(3) and ALSE QCS3 requirement
EP080: TPH Volatiles/BTEX	1	2	**50.0**	**5.0**	NEPM 1999 Schedule B(3) and ALSE QCS3 requirement
Method Blanks (MB)					
EG005T: Total Metals by ICP-AES	1	20	**5.0**	**5.0**	NEPM 1999 Schedule B(3) and ALSE QCS3 requirement
EG035T: Total Mercury by FIMS	1	10	**10.0**	**5.0**	NEPM 1999 Schedule B(3) and ALSE QCS3 requirement
EP066: Polychlorinated Biphenyls (PCB)	1	1	**100.0**	**5.0**	NEPM 1999 Schedule B(3) and ALSE QCS3 requirement
EP068: Pesticides by GCMS	1	2	**50.0**	**5.0**	NEPM 1999 Schedule B(3) and ALSE QCS3 requirement
EP071: TPH - Semivolatile Fraction	1	18	**5.6**	**5.0**	NEPM 1999 Schedule B(3) and ALSE QCS3 requirement
EP075(SIM): PAH/Phenols (SIM)	1	18	**5.6**	**5.0**	NEPM 1999 Schedule B(3) and ALSE QCS3 requirement
EP080: TPH Volatiles/BTEX	1	2	**50.0**	**5.0**	NEPM 1999 Schedule B(3) and ALSE QCS3 requirement
Matrix Spikes (MS)					
EG005T: Total Metals by ICP-AES	1	20	**5.0**	**5.0**	NEPM 1999 Schedule B(3) and ALSE QCS3 requirement
EG035T: Total Mercury by FIMS	1	10	**10.0**	**5.0**	NEPM 1999 Schedule B(3) and ALSE QCS3 requirement
EP066: Polychlorinated Biphenyls (PCB)	1	1	**100.0**	**5.0**	NEPM 1999 Schedule B(3) and ALSE QCS3 requirement
EP068: Pesticides by GCMS	1	2	**50.0**	**5.0**	NEPM 1999 Schedule B(3) and ALSE QCS3 requirement
EP071: TPH - Semivolatile Fraction	1	18	**5.6**	**5.0**	NEPM 1999 Schedule B(3) and ALSE QCS3 requirement
EP075(SIM): PAH/Phenols (SIM)	1	18	**5.6**	**5.0**	NEPM 1999 Schedule B(3) and ALSE QCS3 requirement
EP080: TPH Volatiles/BTEX	1	2	**50.0**	**5.0**	NEPM 1999 Schedule B(3) and ALSE QCS3 requirement

Interpretive Quality Control Report - Summary of Outliers

Outliers : Quality Control Samples

The following report highlights outliers flagged on the 'Quality Control Report'. Surrogate recovery limits are static and based on USEPA SW846 or ALS-QWI/EN/38 (in the absence of specific USEPA limits). - Anonymous - Client Sample IDs refer to samples which are not specifically part of this work order but formed part of the QC process lot.

Non-surrogates

ALS QC Lot	Matrix Type	Laboratory Sample ID	Client Sample ID	Analyte	Data	Limits	Comment
Laboratory Control Samples (LCS)							
EP068A: Organochlorine Pesticides (OC)	SOIL	240723-002	----	4,4'-DDD	71.8 %	72.4-109 %	Recovery less than lower control limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons	SOIL	240355-002	----	Naphthalene	105 %	87-103 %	Recovery greater than upper control limit
				Pyrene	105 %	75-105 %	Recovery greater than upper control limit
				Dibenz(a,h)anthracene	76.4 %	77-107 %	Recovery less than lower control limit

- **For all matrices, no RPD recovery outliers occur for the duplicate analysis.**
- **For all matrices, no method blank result outliers occur.**
- **For all matrices, no matrix spike recoveries breaches occur.**

Surrogates

ALS QC Lot	Matrix Type	Laboratory Sample ID	Client Sample ID	Analyte	Data	Limits	Comment
Surrogates							
EP075(SIM)S: Phenolic Compound Surrogates	SOIL	ES0606610-001	TRIP 02	Phenol-d6	115 %	24-113 %	Recovery greater than upper data quality objective

Outliers : Analysis Holding Time

The following report highlights outliers within this 'Interpretive Quality Control Report - Analysis Holding Time'.

- **No holding time outliers occur.**

Outliers : Frequency of Quality Control Samples

The following report highlights outliers within this 'Interpretive Quality Control Report - Frequency of Quality Control Samples'.

- **No frequency outliers occur.**

Method Reference Summary

The analytical procedures used by ALS Environmental are based on established internationally-recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house procedure are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported herein. Reference methods from which ALSE methods are based are provided in parenthesis.

Matrix Type: SOIL ***Method Reference Summary***

Preparation Methods

EN69 : Hot Block Digest for metals in soils sediments and sludges - USEPA 200.2 Mod. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM (1999) Schedule B(3) (Method 202)

ORG16 : Methanolic Extraction of Soils for Purge and Trap - (USEPA SW 846 - 5030A) 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.

ORG17A : Tumbler Extraction of Solids (Option A - Concentrating) - In-house, Mechanical agitation (tumbler). 20g of sample, Na2SO4 and surrogate are extracted with 150mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.

ORG17B : Tumbler Extraction of Solids (Option B - Non-concentrating) - In-house, Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 20mL 1:1 DCM/Acetone by end over end tumble. The solvent is transferred directly to a GC vial for analysis.

Analytical Methods

EA055-103 : Moisture Content - A gravimetric procedure based on weight loss over a 12 hour drying period at 103-105 degrees C. This method is compliant with NEPM (1999) Schedule B(3) (Method 102)

EG005T : Total Metals by ICP-AES - (APHA 20th ed., 3120; USEPA SW 846 - 6010) (ICPAES) Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM (1999) Schedule B(3)

EG035T : Total Mercury by FIMS - AS 3550, APHA 3112 Hg - B (Flow-injection (SnCl2)(Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM (1999) Schedule B(3)

EP066 : Polychlorinated Biphenyls (PCB) - (USEPA SW 846 - 8270B) Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (1999) Schedule B(3) (Method 504)

EP068 : Pesticides by GCMS - (USEPA SW 846 - 8270B) Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM (1999) Schedule B(3) (Method 504,505)

EP071 : TPH - Semivolatile Fraction - (USEPA SW 846 - 8015A) Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C36. This method is compliant with NEPM (1999) Schedule B(3) (Method 506.1)

EP075(SIM) : PAH/Phenols (SIM) - (USEPA SW 846 - 8270B) Extracts are analysed by Capillary GC/MS in Selective Ion Mode (SIM) and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (1999) Schedule B(3) (Method 502 and 507)

EP080 : TPH Volatiles/BTEX - (USEPA SW 846 - 8260B) Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (1999) Schedule B(3) (Method 501)

ALS Environmental

QUALITY CONTROL REPORT

Client	:	**HLA-ENVIROSCIENCES PTY LTD**	**Laboratory**	:	ALS Environmental Sydney	**Page**	: **1 of 14**
Contact	:	MR BEN PEARCE	**Contact**	:	Greg Vogel		
Address	:	P O BOX 726 PYMBLE NSW AUSTRALIA 2073	**Address**	:	277-289 Woodpark Road Smithfield NSW Australia 2164	**Work order**	: **ES0606610**
						Amendment No.	:
Project	:	S4062801 MM Group North Ryde	**Quote number**	:	EN/004/05	**Date received**	: 31 May 2006
Order number	:	143589				**Date issued**	: 6 Jun 2006
C-O-C number	:	- Not provided -					
Site	:	MN GROUP NTH RYD					
E-mail	:	bpearce@hla-enviro.com.au	**E-mail**	:	Greg.Vogel@alsenviro.com	**No. of samples**	
Telephone	:	02 8484 8999	**Telephone**	:	61-2-87848555	**Received**	: 2
Facsimile	:	02 8484 8989	**Facsimile**	:	61-2-87848500	**Analysed**	: 2

This final report for the ALSE work order reference ES0606610 supersedes any previous reports with this reference.

Results apply to the samples as submitted. All pages of this report have been checked and approved for release.

This report contains the following information:

- Laboratory Duplicates (DUP); Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Samples (LCS); Recovery and Acceptance Limits
- Matrix Spikes (MS); Recovery and Acceptance Limits

Work order specific comments

EP068, EP075(SIM): LCS recovery for various organic analytes fall outside ALS dynamic control limits, However they are within the acceptance criteria based on USEPA SW-846.

ALSE - Excellence in Analytical Testing

NATA Accredited Laboratory - 825

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

Accredited for compliance with ISO/IED 17025

This document has been digitally signed by those names that appear on this report and are the authorised signatories. Digital signing has been carried out in compliance with procedures specified in 21 CFR Part 11.

Signatory	Department
Peter Dickenson	Inorganics - NATA 825 (10911 - Sydney)
Rassem Ayoubi	Organics - NATA 825 (10911 - Sydney)
Sarah Millington	Inorganics - NATA 825 (10911 - Sydney)

ALS Environmental

Quality Control Report - Laboratory Duplicates (DUP)

The quality control term **Laboratory Duplicate** refers to an intralaboratory split sample randomly selected from the sample batch. Laboratory duplicates provide information on method precision and sample heterogeneity.
- Anonymous - Client Sample IDs refer to samples which are not specifically part of this work order but formed part of the QC process lot. *Abbreviations:* ***LOR*** = *Limit of Reporting,* ***RPD*** = *Relative Percent Difference.*
* Indicates failed QC. The permitted ranges for the RPD of Laboratory Duplicates (relative percent deviation) are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting:- Result < 10 times LOR, no limit - Result between 10 and 20 times LOR, 0% - 50% - Result > 20 times LOR, 0% - 20%

Matrix Type: SOIL ***Laboratory Duplicates (DUP) Report***

Laboratory Sample ID	*Client Sample ID*	*Analyte name*	*LOR*	*Original Result*	*Duplicate Result*	*RPD*
EA055: Moisture Content						
EA055: Moisture Content - (QC Lot: 220228)				**%**	**%**	**%**
ES0606610-001	TRIP 02	Moisture Content (dried @ 103°C)	1.0 %	11.1	11.1	0.0
EG005T: Total Metals by ICP-AES						
EG005T: Total Metals by ICP-AES - (QC Lot: 220970)				**mg/kg**	**mg/kg**	**%**
ES0606534-037	Anonymous	Arsenic	5 mg/kg	6	9	44.9
		Cadmium	1 mg/kg	<1	<1	0.0
		Chromium	2 mg/kg	10	11	11.2
		Copper	5 mg/kg	31	29	6.8
		Lead	5 mg/kg	50	52	5.8
		Nickel	2 mg/kg	7	5	30.0
		Zinc	5 mg/kg	49	52	6.2
ES0606632-021	Anonymous	Arsenic	5 mg/kg	9	8	0.0
		Cadmium	1 mg/kg	<1	<1	0.0
		Chromium	2 mg/kg	16	15	0.0
		Copper	5 mg/kg	22	22	0.0
		Lead	5 mg/kg	13	10	18.9
		Nickel	2 mg/kg	56	55	0.0
		Zinc	5 mg/kg	254	249	2.1
EG035T: Total Mercury by FIMS						
EG035T: Total Mercury by FIMS - (QC Lot: 220971)				**mg/kg**	**mg/kg**	**%**
ES0606534-037	Anonymous	Mercury	0.1 mg/kg	0.2	0.2	0.0
EP066: Polychlorinated Biphenyls (PCB)						
EP066: Polychlorinated Biphenyls (PCB) - (QC Lot: 220201)				**mg/kg**	**mg/kg**	**%**
ES0606610-002	TRIP 03	Total Polychlorinated biphenyls	0.10 mg/kg	<0.10	<0.10	0.0
EP068A: Organochlorine Pesticides (OC)						
EP068A: Organochlorine Pesticides (OC) - (QC Lot: 220200)				**mg/kg**	**mg/kg**	**%**

Matrix Type: SOIL

Laboratory Duplicates (DUP) Report

Laboratory Sample ID	Client Sample ID	Analyte name	LOR	Original Result	Duplicate Result	RPD
EP068A: Organochlorine Pesticides (OC) - continued						
EP068A: Organochlorine Pesticides (OC) - (QC Lot: 220200) - continued				mg/kg	mg/kg	%
ES0606610-002	TRIP 03	alpha-BHC	0.05 mg/kg	<0.05	<0.05	0.0
		Hexachlorobenzene (HCB)	0.05 mg/kg	<0.05	<0.05	0.0
		beta-BHC	0.05 mg/kg	<0.05	<0.05	0.0
		gamma-BHC	0.05 mg/kg	<0.05	<0.05	0.0
		delta-BHC	0.05 mg/kg	<0.05	<0.05	0.0
		Heptachlor	0.05 mg/kg	<0.05	<0.05	0.0
		Aldrin	0.05 mg/kg	<0.05	<0.05	0.0
		Heptachlor epoxide	0.05 mg/kg	<0.05	<0.05	0.0
		trans-Chlordane	0.05 mg/kg	<0.05	<0.05	0.0
		alpha-Endosulfan	0.05 mg/kg	<0.05	<0.05	0.0
		cis-Chlordane	0.05 mg/kg	<0.05	<0.05	0.0
		Dieldrin	0.05 mg/kg	<0.05	<0.05	0.0
		4,4'-DDE	0.05 mg/kg	<0.05	<0.05	0.0
		Endrin	0.05 mg/kg	<0.05	<0.05	0.0
		beta-Endosulfan	0.05 mg/kg	<0.05	<0.05	0.0
		4,4'-DDD	0.05 mg/kg	<0.05	<0.05	0.0
		Endrin aldehyde	0.05 mg/kg	<0.05	<0.05	0.0
		Endosulfan sulfate	0.05 mg/kg	<0.05	<0.05	0.0
		4,4'-DDT	0.2 mg/kg	<0.2	<0.2	0.0
		Endrin ketone	0.05 mg/kg	<0.05	<0.05	0.0
		Methoxychlor	0.2 mg/kg	<0.2	<0.2	0.0
EP068B: Organophosphorus Pesticides (OP)						
EP068B: Organophosphorus Pesticides (OP) - (QC Lot: 220200)				mg/kg	mg/kg	%
ES0606610-002	TRIP 03	Dichlorvos	0.05 mg/kg	<0.05	<0.05	0.0
		Demeton-S-methyl	0.05 mg/kg	<0.05	<0.05	0.0
		Monocrotophos	0.2 mg/kg	<0.2	<0.2	0.0
		Dimethoate	0.05 mg/kg	<0.05	<0.05	0.0
		Diazinon	0.05 mg/kg	<0.05	<0.05	0.0
		Chlorpyrifos-methyl	0.05 mg/kg	<0.05	<0.05	0.0

ALS Environmental

Matrix Type: SOIL

Laboratory Duplicates (DUP) Report

Laboratory Sample ID	Client Sample ID	Analyte name	LOR	Original Result	Duplicate Result	RPD
EP068B: Organophosphorus Pesticides (OP) - continued						
EP068B: Organophosphorus Pesticides (OP) - (QC Lot: 220200) - continued				mg/kg	mg/kg	%
ES0606610-002	TRIP 03	Parathion-methyl	0.2 mg/kg	<0.2	<0.2	0.0
		Malathion	0.05 mg/kg	<0.05	<0.05	0.0
		Fenthion	0.05 mg/kg	<0.05	<0.05	0.0
		Chlorpyrifos	0.05 mg/kg	<0.05	<0.05	0.0
		Parathion	0.2 mg/kg	<0.2	<0.2	0.0
		Pirimphos-ethyl	0.05 mg/kg	<0.05	<0.05	0.0
		Chlorfenvinphos	0.05 mg/kg	<0.05	<0.05	0.0
		Bromophos-ethyl	0.05 mg/kg	<0.05	<0.05	0.0
		Fenamiphos	0.05 mg/kg	<0.05	<0.05	0.0
		Prothiofos	0.05 mg/kg	<0.05	<0.05	0.0
		Ethion	0.05 mg/kg	<0.05	<0.05	0.0
		Carbophenothion	0.05 mg/kg	<0.05	<0.05	0.0
		Methyl Azinphos	0.05 mg/kg	<0.05	<0.05	0.0
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons						
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - (QC Lot: 219923)				mg/kg	mg/kg	%
ES0606560-001	Anonymous	Naphthalene	0.5 mg/kg	<0.5	<0.5	0.0
		Acenaphthylene	0.5 mg/kg	<0.5	<0.5	0.0
		Acenaphthene	0.5 mg/kg	<0.5	<0.5	0.0
		Fluorene	0.5 mg/kg	<0.5	<0.5	0.0
		Phenanthrene	0.5 mg/kg	<0.5	<0.5	0.0
		Anthracene	0.5 mg/kg	<0.5	<0.5	0.0
		Fluoranthene	0.5 mg/kg	<0.5	<0.5	0.0
		Pyrene	0.5 mg/kg	<0.5	<0.5	0.0
		Benz(a)anthracene	0.5 mg/kg	<0.5	<0.5	0.0
		Chrysene	0.5 mg/kg	<0.5	<0.5	0.0
		Benzo(b)fluoranthene	0.5 mg/kg	<0.5	<0.5	0.0
		Benzo(k)fluoranthene	0.5 mg/kg	<0.5	<0.5	0.0
		Benzo(a)pyrene	0.5 mg/kg	<0.5	<0.5	0.0
		Indeno(1,2,3,cd)pyrene	0.5 mg/kg	<0.5	<0.5	0.0

Matrix Type: SOIL

Laboratory Duplicates (DUP) Report

Laboratory Sample ID	Client Sample ID	Analyte name	LOR	Original Result	Duplicate Result	RPD
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - continued						
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - (QC Lot: 219923) - continued				mg/kg	mg/kg	%
ES0606560-001	Anonymous	Dibenz(a,h)anthracene	0.5 mg/kg	<0.5	<0.5	0.0
		Benzo(g,h,i)perylene	0.5 mg/kg	<0.5	<0.5	0.0
ES0606571-009	Anonymous	Naphthalene	0.5 mg/kg	<0.5	<0.5	0.0
		Acenaphthylene	0.5 mg/kg	<0.5	<0.5	0.0
		Acenaphthene	0.5 mg/kg	<0.5	<0.5	0.0
		Fluorene	0.5 mg/kg	<0.5	<0.5	0.0
		Phenanthrene	0.5 mg/kg	<0.5	<0.5	0.0
		Anthracene	0.5 mg/kg	<0.5	<0.5	0.0
		Fluoranthene	0.5 mg/kg	<0.5	<0.5	0.0
		Pyrene	0.5 mg/kg	<0.5	<0.5	0.0
		Benz(a)anthracene	0.5 mg/kg	<0.5	<0.5	0.0
		Chrysene	0.5 mg/kg	<0.5	<0.5	0.0
		Benzo(b)fluoranthene	0.5 mg/kg	<0.5	<0.5	0.0
		Benzo(k)fluoranthene	0.5 mg/kg	<0.5	<0.5	0.0
		Benzo(a)pyrene	0.5 mg/kg	<0.5	<0.5	0.0
		Indeno(1,2,3,cd)pyrene	0.5 mg/kg	<0.5	<0.5	0.0
		Dibenz(a,h)anthracene	0.5 mg/kg	<0.5	<0.5	0.0
		Benzo(g,h,i)perylene	0.5 mg/kg	<0.5	<0.5	0.0
EP080/071: Total Petroleum Hydrocarbons						
EP080/071: Total Petroleum Hydrocarbons - (QC Lot: 219924)				mg/kg	mg/kg	%
ES0606560-001	Anonymous	C10 - C14 Fraction	50 mg/kg	<50	<50	0.0
		C15 - C28 Fraction	100 mg/kg	<100	<100	0.0
		C29 - C36 Fraction	100 mg/kg	<100	<100	0.0
ES0606571-009	Anonymous	C10 - C14 Fraction	50 mg/kg	<50	<50	0.0
		C15 - C28 Fraction	100 mg/kg	<100	140	35.7
		C29 - C36 Fraction	100 mg/kg	<100	<100	0.0
EP080/071: Total Petroleum Hydrocarbons - (QC Lot: 219966)				mg/kg	mg/kg	%
ES0606610-002	TRIP 03	C6 - C9 Fraction	2 mg/kg	<2	<2	0.0
EP080: BTEX						

ALS Environmental

Matrix Type: SOIL

Laboratory Duplicates (DUP) Report

Laboratory Sample ID	*Client Sample ID*	*Analyte name*	*LOR*	*Original Result*	*Duplicate Result*	*RPD*
EP080: BTEX - continued						
EP080: BTEX - (QC Lot: 219966)				mg/kg	mg/kg	%
ES0606610-002	TRIP 03	Benzene	0.2 mg/kg	<0.2	<0.2	0.0
		Toluene	0.2 mg/kg	<0.2	<0.2	0.0
		Ethylbenzene	0.2 mg/kg	<0.2	<0.2	0.0
		meta- & para-Xylene	0.2 mg/kg	<0.2	<0.2	0.0
		ortho-Xylene	0.2 mg/kg	<0.2	<0.2	0.0

ALS Environmental

Quality Control Report - Method Blank (MB) and Laboratory Control Samples (LCS)

The quality control term **Method / Laboratory Blank** refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC type is to monitor potential laboratory contamination. The quality control term **Laboratory Control Sample (LCS)** refers to a known, interference free matrix spiked with target analytes or certified reference material. The purpose of this QC type is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of actual laboratory data. Abbreviations: LOR = Limit of reporting.

Matrix Type: SOIL

Method Blank (MB) and Laboratory Control Samples (LCS) Report

		Method blank result	*Actual Results*		*Recovery Limits*	
			Spike concentration	*Spike Recovery*	*Dynamic Recovery Limits*	
Analyte name	*LOR*			*LCS*	*Low*	*High*
EG005T: Total Metals by ICP-AES						
EG005T: Total Metals by ICP-AES - (QC Lot: 220970)		mg/kg	mg/kg	%	%	%
Arsenic	5 mg/kg	----	13.1	110	70	130
	5 mg/kg	<5	----	----	----	----
Cadmium	1 mg/kg	----	2.76	98.5	70	130
	1 mg/kg	<1	----	----	----	----
Chromium	2 mg/kg	----	60.9	102	70	130
	2 mg/kg	<2	----	----	----	----
Copper	5 mg/kg	----	54.7	104	70	130
	5 mg/kg	<5	----	----	----	----
Lead	5 mg/kg	----	55.2	96.3	70	130
	5 mg/kg	<5	----	----	----	----
Nickel	2 mg/kg	----	54.8	106	70	130
	2 mg/kg	<2	----	----	----	----
Zinc	5 mg/kg	----	104	98.3	70	130
	5 mg/kg	<5	----	----	----	----
EG035T: Total Mercury by FIMS						
EG035T: Total Mercury by FIMS - (QC Lot: 220971)		mg/kg	mg/kg	%	%	%
Mercury	0.1 mg/kg	----	1.4	95.2	70	130
	0.1 mg/kg	<0.1	----	----	----	----
EP066: Polychlorinated Biphenyls (PCB)						
EP066: Polychlorinated Biphenyls (PCB) - (QC Lot: 220201)		mg/kg	mg/kg	%	%	%
Total Polychlorinated biphenyls	0.1 mg/kg	----	0.5	83.7	66	121
	0.10 mg/kg	<0.10	----	----	----	----
EP068A: Organochlorine Pesticides (OC)						
EP068A: Organochlorine Pesticides (OC) - (QC Lot: 220200)		mg/kg	mg/kg	%	%	%

ALS Environmental

Matrix Type: SOIL

Method Blank (MB) and Laboratory Control Samples (LCS) Report

Analyte name	LOR	Method blank result	Actual Results: Spike concentration	Actual Results: Spike Recovery LCS	Recovery Limits: Dynamic Recovery Limits Low	Recovery Limits: Dynamic Recovery Limits High
EP068A: Organochlorine Pesticides (OC) - continued						
EP068A: Organochlorine Pesticides (OC) - (QC Lot: 220200) - continued		mg/kg	mg/kg	%	%	%
4,4'-DDD	0.05 mg/kg	----	0.25	71.8	72.4	109
	0.05 mg/kg	<0.05	----	----	----	----
4,4'-DDE	0.05 mg/kg	----	0.25	89.0	73.6	107
	0.05 mg/kg	<0.05	----	----	----	----
4,4'-DDT	0.2 mg/kg	----	0.25	118	62.1	125
	0.2 mg/kg	<0.2	----	----	----	----
Aldrin	0.05 mg/kg	----	0.25	86.0	73.3	108
	0.05 mg/kg	<0.05	----	----	----	----
alpha-BHC	0.05 mg/kg	----	0.25	81.7	77.5	109
	0.05 mg/kg	<0.05	----	----	----	----
alpha-Endosulfan	0.05 mg/kg	----	0.25	87.2	71.5	112
	0.05 mg/kg	<0.05	----	----	----	----
beta-BHC	0.05 mg/kg	----	0.25	83.1	73.1	110
	0.05 mg/kg	<0.05	----	----	----	----
beta-Endosulfan	0.05 mg/kg	----	0.25	83.4	73.8	112
	0.05 mg/kg	<0.05	----	----	----	----
cis-Chlordane	0.05 mg/kg	----	0.25	90.0	70.8	111
	0.05 mg/kg	<0.05	----	----	----	----
delta-BHC	0.05 mg/kg	----	0.25	86.2	67.1	113
	0.05 mg/kg	<0.05	----	----	----	----
Dieldrin	0.05 mg/kg	----	0.25	85.9	72.7	109
	0.05 mg/kg	<0.05	----	----	----	----
Endosulfan sulfate	0.05 mg/kg	----	0.25	95.0	68.5	115
	0.05 mg/kg	<0.05	----	----	----	----
Endrin	0.05 mg/kg	----	0.25	91.7	65.8	107
	0.05 mg/kg	<0.05	----	----	----	----
Endrin aldehyde	0.05 mg/kg	----	0.25	84.0	72.2	114
	0.05 mg/kg	<0.05	----	----	----	----
Endrin ketone	0.05 mg/kg	----	0.25	108	71.1	114
	0.05 mg/kg	<0.05	----	----	----	----

ALS Environmental

Matrix Type: SOIL

Method Blank (MB) and Laboratory Control Samples (LCS) Report

Analyte name	LOR	Method blank result	Actual Results: Spike concentration	Actual Results: Spike Recovery LCS	Recovery Limits: Dynamic Recovery Limits Low	Recovery Limits: Dynamic Recovery Limits High
EP068A: Organochlorine Pesticides (OC) - continued						
EP068A: Organochlorine Pesticides (OC) - (QC Lot: 220200) - continued		mg/kg	mg/kg	%	%	%
gamma-BHC	0.05 mg/kg	----	0.25	83.8	73.1	110
	0.05 mg/kg	<0.05	----	----	----	----
Heptachlor	0.05 mg/kg	----	0.25	105	74.8	107
	0.05 mg/kg	<0.05	----	----	----	----
Heptachlor epoxide	0.05 mg/kg	----	0.25	87.1	74	108
	0.05 mg/kg	<0.05	----	----	----	----
Hexachlorobenzene (HCB)	0.05 mg/kg	----	0.25	80.6	69.6	108
	0.05 mg/kg	<0.05	----	----	----	----
Methoxychlor	0.2 mg/kg	----	0.25	104	56.8	137
	0.2 mg/kg	<0.2	----	----	----	----
trans-Chlordane	0.05 mg/kg	----	0.25	88.6	74.6	108
	0.05 mg/kg	<0.05	----	----	----	----
EP068B: Organophosphorus Pesticides (OP)						
EP068B: Organophosphorus Pesticides (OP) - (QC Lot: 220200)		mg/kg	mg/kg	%	%	%
Methyl Azinphos	0.05 mg/kg	----	0.25	100	33.1	144
	0.05 mg/kg	<0.05	----	----	----	----
Bromophos-ethyl	0.05 mg/kg	----	0.25	87.0	66.5	112
	0.05 mg/kg	<0.05	----	----	----	----
Carbophenothion	0.05 mg/kg	----	0.25	90.8	67.8	108
	0.05 mg/kg	<0.05	----	----	----	----
Chlorfenvinphos	0.05 mg/kg	----	0.25	89.6	54.5	132
	0.05 mg/kg	<0.05	----	----	----	----
Chlorpyrifos	0.05 mg/kg	----	0.25	86.8	75	109
	0.05 mg/kg	<0.05	----	----	----	----
Chlorpyrifos-methyl	0.05 mg/kg	----	0.25	88.0	72.2	107
	0.05 mg/kg	<0.05	----	----	----	----
Demeton-S-methyl	0.05 mg/kg	----	0.25	69.1	57.7	123
	0.05 mg/kg	<0.05	----	----	----	----
Diazinon	0.05 mg/kg	----	0.25	85.7	72.9	108
	0.05 mg/kg	<0.05	----	----	----	----

Matrix Type: SOIL

Method Blank (MB) and Laboratory Control Samples (LCS) Report

Analyte name	LOR	Method blank result	Actual Results: Spike concentration	Actual Results: Spike Recovery LCS	Recovery Limits: Dynamic Recovery Limits Low	Recovery Limits: Dynamic Recovery Limits High
EP068B: Organophosphorus Pesticides (OP) - continued						
EP068B: Organophosphorus Pesticides (OP) - (QC Lot: 220200) - continued		mg/kg	mg/kg	%	%	%
Dichlorvos	0.05 mg/kg	----	0.25	78.9	64	117
	0.05 mg/kg	<0.05	----	----	----	----
Dimethoate	0.05 mg/kg	----	0.25	85.2	60.7	117
	0.05 mg/kg	<0.05	----	----	----	----
Ethion	0.05 mg/kg	----	0.25	88.1	58.9	116
	0.05 mg/kg	<0.05	----	----	----	----
Fenamiphos	0.05 mg/kg	----	0.25	83.4	48.8	118
	0.05 mg/kg	<0.05	----	----	----	----
Fenthion	0.05 mg/kg	----	0.25	84.6	72.5	107
	0.05 mg/kg	<0.05	----	----	----	----
Malathion	0.05 mg/kg	----	0.25	98.2	61.6	121
	0.05 mg/kg	<0.05	----	----	----	----
Monocrotophos	0.2 mg/kg	----	0.25	81.0	46.9	125
	0.2 mg/kg	<0.2	----	----	----	----
Parathion	0.2 mg/kg	----	0.25	89.8	65.2	116
	0.2 mg/kg	<0.2	----	----	----	----
Parathion-methyl	0.2 mg/kg	----	0.25	93.2	68	109
	0.2 mg/kg	<0.2	----	----	----	----
Pirimphos-ethyl	0.05 mg/kg	----	0.25	86.1	66.3	118
	0.05 mg/kg	<0.05	----	----	----	----
Prothiofos	0.05 mg/kg	----	0.25	86.9	73	111
	0.05 mg/kg	<0.05	----	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons						
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - (QC Lot: 219923)		mg/kg	mg/kg	%	%	%
Acenaphthene	0.5 mg/kg	----	4	105	87	105
	0.5 mg/kg	<0.5	----	----	----	----
Acenaphthylene	0.5 mg/kg	----	4	104	85	107
	0.5 mg/kg	<0.5	----	----	----	----
Anthracene	0.5 mg/kg	----	4	99.8	88	107
	0.5 mg/kg	<0.5	----	----	----	----

Matrix Type: SOIL

Method Blank (MB) and Laboratory Control Samples (LCS) Report

Analyte name	LOR	Method blank result	Actual Results: Spike concentration	Actual Results: Spike Recovery LCS	Recovery Limits: Dynamic Recovery Limits Low	Recovery Limits: Dynamic Recovery Limits High
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - continued						
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - (QC Lot: 219923) - continued		mg/kg	mg/kg	%	%	%
Benz(a)anthracene	0.5 mg/kg	----	4	96.7	85	100
	0.5 mg/kg	<0.5	----	----	----	----
Benzo(a)pyrene	0.5 mg/kg	----	4	98.7	83	108
	0.5 mg/kg	<0.5	----	----	----	----
Benzo(b)fluoranthene	0.5 mg/kg	----	4	86.1	68	112
	0.5 mg/kg	<0.5	----	----	----	----
Benzo(g,h,i)perylene	0.5 mg/kg	----	4	89.0	76	109
	0.5 mg/kg	<0.5	----	----	----	----
Benzo(k)fluoranthene	0.5 mg/kg	----	4	120	70	129
	0.5 mg/kg	<0.5	----	----	----	----
Chrysene	0.5 mg/kg	----	4	104	84	111
	0.5 mg/kg	<0.5	----	----	----	----
Dibenz(a,h)anthracene	0.5 mg/kg	----	4	76.4	77	107
	0.5 mg/kg	<0.5	----	----	----	----
Fluoranthene	0.5 mg/kg	----	4	104	87	105
	0.5 mg/kg	<0.5	----	----	----	----
Fluorene	0.5 mg/kg	----	4	103	85	105
	0.5 mg/kg	<0.5	----	----	----	----
Indeno(1,2,3,cd)pyrene	0.5 mg/kg	----	4	82.8	76	110
	0.5 mg/kg	<0.5	----	----	----	----
Naphthalene	0.5 mg/kg	----	4	105	87	103
	0.5 mg/kg	<0.5	----	----	----	----
Phenanthrene	0.5 mg/kg	----	4	104	85	113
	0.5 mg/kg	<0.5	----	----	----	----
Pyrene	0.5 mg/kg	----	4	105	75	105
	0.5 mg/kg	<0.5	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons						
EP080/071: Total Petroleum Hydrocarbons - (QC Lot: 219924)		mg/kg	mg/kg	%	%	%
C10 - C14 Fraction	50 mg/kg	----	200	106	79	112
	50 mg/kg	<50	----	----	----	----

Matrix Type: SOIL

Method Blank (MB) and Laboratory Control Samples (LCS) Report

Analyte name	*LOR*	*Method blank result*	*Actual Results*		*Recovery Limits*	
			Spike concentration	*Spike Recovery*	*Dynamic Recovery Limits*	
				LCS	*Low*	*High*
EP080/071: Total Petroleum Hydrocarbons - continued						
EP080/071: Total Petroleum Hydrocarbons - (QC Lot: 219924) - continued		mg/kg	mg/kg	%	%	%
C15 - C28 Fraction	100 mg/kg	----	200	96.4	84	108
	100 mg/kg	<100	----	----	----	----
C29 - C36 Fraction	100 mg/kg	----	200	99.0	76	117
	100 mg/kg	<100	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons - (QC Lot: 219966)		mg/kg	mg/kg	%	%	%
C6 - C9 Fraction	2 mg/kg	----	26	106	80	119
	2 mg/kg	<2	----	----	----	----
EP080: BTEX						
EP080: BTEX - (QC Lot: 219966)		mg/kg	mg/kg	%	%	%
Benzene	0.2 mg/kg	----	1	107	80	118
	0.2 mg/kg	<0.2	----	----	----	----
Ethylbenzene	0.2 mg/kg	----	1	112	80	120
	0.2 mg/kg	<0.2	----	----	----	----
meta- & para-Xylene	0.2 mg/kg	----	2	113	79	119
	0.2 mg/kg	<0.2	----	----	----	----
ortho-Xylene	0.2 mg/kg	----	1	111	80	119
	0.2 mg/kg	<0.2	----	----	----	----
Toluene	0.2 mg/kg	----	1	90.7	81	119
	0.2 mg/kg	<0.2	----	----	----	----

Quality Control Report - Matrix Spikes (MS)

The quality control term **Matrix Spike (MS)** refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC type is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQO's). 'Ideal' recovery ranges stated may be waived in the event of sample matrix interferences. - Anonymous - Client Sample IDs refer to samples which are not specifically part of this work order but formed part of the QC process lot. *Abbreviations:* ***LOR*** *= Limit of Reporting,* ***RPD*** *= Relative Percent Difference.*

* Indicates failed QC

Matrix Type: SOIL

Matrix Spike (MS) Report

					Actual Results		Recovery Limits	
					Sample Result	Spike Recovery	Static Limits	
Analyte name	*Laboratory Sample ID*	*Client Sample ID*	*LOR*	*Spike Concentration*		*MS*	*Low*	*High*
EG005T: Total Metals by ICP-AES								
EG005T: Total Metals by ICP-AES - (QC Lot: 220970)				mg/kg	mg/kg	%	%	%
Arsenic	ES0606534-037	Anonymous	5 mg/kg	50	6	100	70	130
Cadmium			1 mg/kg	50	<1	97.6	70	130
Chromium			2 mg/kg	50	10	106	70	130
Copper			5 mg/kg	250	31	104	70	130
Lead			5 mg/kg	250	50	92.4	70	130
Nickel			2 mg/kg	50	7	106	70	130
Zinc			5 mg/kg	250	49	89.0	70	130
EG035T: Total Mercury by FIMS								
EG035T: Total Mercury by FIMS - (QC Lot: 220971)				mg/kg	mg/kg	%	%	%
Mercury	ES0606534-037	Anonymous	0.1 mg/kg	5	0.2	83.2	70	130
EP066: Polychlorinated Biphenyls (PCB)								
EP066: Polychlorinated Biphenyls (PCB) - (QC Lot: 220201)				mg/kg	mg/kg	%	%	%
Total Polychlorinated biphenyls	ES0606610-002	TRIP 03	0.1 mg/kg	0.5	<0.10	82.1	70	130
EP068A: Organochlorine Pesticides (OC)								
EP068A: Organochlorine Pesticides (OC) - (QC Lot: 220200)				mg/kg	mg/kg	%	%	%
gamma-BHC	ES0606610-002	TRIP 03	0.05 mg/kg	0.25	<0.05	83.2	75.65	110.44
Heptachlor			0.05 mg/kg	0.25	<0.05	80.2	72.2	106.71
Aldrin			0.05 mg/kg	0.25	<0.05	86.6	77.54	107.0
Dieldrin			0.05 mg/kg	0.25	<0.05	82.0	76.37	109.7
Endrin			0.05 mg/kg	1	<0.05	71.3	68.51	119.47
4,4'-DDT			0.20 mg/kg	1	<0.2	79.3	67.12	118.10
EP068B: Organophosphorus Pesticides (OP)								
EP068B: Organophosphorus Pesticides (OP) - (QC Lot: 220200)				mg/kg	mg/kg	%	%	%

ALS Environmental

Matrix Type: SOIL

Matrix Spike (MS) Report

					Actual Results		Recovery Limits	
					Sample Result	Spike Recovery	Static Limits	
Analyte name	*Laboratory Sample ID*	*Client Sample ID*	*LOR*	*Spike Concentration*		*MS*	*Low*	*High*
EP068B: Organophosphorus Pesticides (OP) - continued								
EP068B: Organophosphorus Pesticides (OP) - (QC Lot: 220200) - continued				mg/kg	mg/kg	%	%	%
Diazinon	ES0606610-002	TRIP 03	0.05 mg/kg	0.25	<0.05	84.8	75.85	107.06
Chlorpyrifos-methyl			0.05 mg/kg	0.25	<0.05	83.6	74.84	107.91
Pirimphos-ethyl			0.05 mg/kg	0.25	<0.05	79.8	67.98	109.42
Bromophos-ethyl			0.05 mg/kg	0.25	<0.05	82.2	74.94	107.37
Prothiofos			0.05 mg/kg	0.25	<0.05	82.6	75.45	106.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - (QC Lot: 219923)				mg/kg	mg/kg	%	%	%
Acenaphthene	ES0606560-001	Anonymous	0.5 mg/kg	10	<0.5	116	70	130
Pyrene			0.5 mg/kg	10	<0.5	118	70	130
EP080/071: Total Petroleum Hydrocarbons								
EP080/071: Total Petroleum Hydrocarbons - (QC Lot: 219924)				mg/kg	mg/kg	%	%	%
C10 - C14 Fraction	ES0606560-001	Anonymous	50 mg/kg	700	<50	100	70	130
C15 - C28 Fraction			100 mg/kg	3400	<100	107	70	130
C29 - C36 Fraction			100 mg/kg	3600	<100	105	70	130
EP080/071: Total Petroleum Hydrocarbons - (QC Lot: 219966)				mg/kg	mg/kg	%	%	%
C6 - C9 Fraction	ES0606610-002	TRIP 03	2 mg/kg	26	<2	101	70	130
EP080: BTEX								
EP080: BTEX - (QC Lot: 219966)				mg/kg	mg/kg	%	%	%
Benzene	ES0606610-002	TRIP 03	0.2 mg/kg	2.5	<0.2	105	70	130
Toluene			0.2 mg/kg	2.5	<0.2	107	70	130
Ethylbenzene			0.2 mg/kg	2.5	<0.2	113	70	130
meta- & para-Xylene			0.2 mg/kg	2.5	<0.2	114	70	130
ortho-Xylene			0.2 mg/kg	2.5	<0.2	109	70	130

Appendix D

HLA Enviroscience
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MONITORING WELL LOG BH01/MW01

PROJECT NUMBER S4062801
PROJECT NAME Austaland Industrial No.122 Pty Ltd
LOCATION 396 Lane Cove Road, Macquarie Park
DRILLING METHOD Solid flight auger/Push tube
SAMPLING METHOD Solid flight auger/Push tube
SURFACE ELEVATION
WELL HEAD/TOC
LOGGED BY B. Pearce
COMMENTS

DATE 29/05/2006
BLANK 50mm Class 18 uPVC Casing
SCREEN 50mm Class 18 uPVC Factory Slotted Screen
GRAVEL PACK 2-3mm graded sand
SANITARY SEAL/BENTONITE Bentonite pellets
STABILISED WATER LEVEL
GROUND WATER ELEVATION

PID (ppm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
28.4			BH01_0.05-0.2	✳			Bitumen	0.05	Cement
							SAND with minor gravel (Fill), dry, very dense, olive brown, no odour	0.20	
38.7			BH01_0.4-0.6				SILTY CLAY, (CL), dry, very stiff, low to medium plasticity, brown grey, no odour		Bentonite Blank Casing
1			BH01_1.0-1.2		1.0			1.20	
							SILTY CLAY with minor gravel (CL), dry, hard, low plasiticity, brown grey, no odour		Filter Pack Screen
0.5			BH01_2.0-2.2		2.0			2.20	
							WEATHERED SHALE, dry, brown		
42.6			BH01_2.7-2.8					2.80	
							Refusal on Shale @ 2.8mbgs Total Depth: 2.80 m		

BORING / WELL CONSTRUCTION LOG S4062801_BORELOGS_2JUN06.GPJ HLA_SYD.GDT 22/06/06

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Gordon NSW 2073
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LOG OF SOIL BORING

BH02

PROJECT NUMBER S4062801
PROJECT NAME Austaland Industrial No.122 Pty Ltd
LOCATION 396 Lane Cove Road, Macquarie Park
DRILLING METHOD Push tube
SAMPLING METHOD Push tube
LOGGED BY B. Pearce
COMMENTS

DATE 29/05/2006
SURFACE ELEVATION
STABILISED WATER LEVEL
GROUND WATER ELEVATION

PID (ppm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
ND			BH02_ 0.05-0.15	✳			SILTY SAND with minor gravel (Fill), dry, dense, olive grey, no odour	0.40
36.6			BH02_ 0.4-0.5	✳			SILTY CLAY, (CL), dry, very stiff, low to medium plasticity, brown grey, no odour, refusal on shale @ 1.1m	
7.2			BH02_ 1.0-1.1		1.0			1.10
							Refusal on shale @ 1.1mbgs Total Depth: 1.10 m	

LOG OF SOIL BORING S4062801_BORELOGS_2JUN06.GPJ HLA_SYD.GDT 22/06/06

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LOG OF SOIL BORING

BH03

PROJECT NUMBER S4062801
PROJECT NAME Austaland Industrial No.122 Pty Ltd
LOCATION 396 Lane Cove Road, Macquarie Park
DRILLING METHOD Push tube
SAMPLING METHOD Push tube
LOGGED BY B. Pearce
COMMENTS IS = Insufficient sample volume

DATE 29/05/2006
SURFACE ELEVATION
STABILISED WATER LEVEL
GROUND WATER ELEVATION

PID (ppm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
							Concrete	0.15
IS			BH03_ 0.15-0.25	*			SAND (Fill), dry, dense, pale yellow, no odour	0.20
IS			BH03_ 0.3-0.5				SILTY CLAY with minor gravel (Fill), soft, slightly moist, low plasticity, grey brown, gravel, reworked natural soil	0.50
							Refusal on shale @ 0.5mbgs Total Depth: 0.50 m	

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LOG OF SOIL BORING

BH04

PROJECT NUMBER S4062801
PROJECT NAME Austaland Industrial No.122 Pty Ltd
LOCATION 396 Lane Cove Road, Macquarie Park
DRILLING METHOD Solid flight auger/Push tube
SAMPLING METHOD Solid flight auger/Push tube
LOGGED BY B. Pearce
COMMENTS IS = Insufficient sample volume

DATE 29/05/2006
SURFACE ELEVATION
STABILISED WATER LEVEL
GROUND WATER ELEVATION

PID (ppm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
42.8			BH04_ 0.05-0.15	*			Bitumen	0.05
IS			BH04_ 0.2-0.3				SILTY SAND (Fill), dry, dense, olive grey, blue metal gravels, no odour	
IS			BH04_ 0.4-0.5					
44.7			BH04_ 0.8-1.0	*	1.0		SILTY CLAY (CL), dry to slightly moist, stiff, low plasticity, light brown, no odour	0.80
40.7			BH04_ 1.9-2.0		2.0		WEATHERED SHALE, dry, light brown	1.80
44			BH04_ 2.9-3.0		3.0		Limit of investigation @ 3.0mbgs Total Depth: 3.00 m	3.00

LOG OF SOIL BORING S4062801_BORELOGS_2JUN06.GPJ HLA_SYD.GDT 22/06/06

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LOG OF SOIL BORING

BH05

PROJECT NUMBER S4062801
PROJECT NAME Austaland Industrial No.122 Pty Ltd
LOCATION 396 Lane Cove Road, Macquarie Park
DRILLING METHOD Solid flight auger/Push tube
SAMPLING METHOD Solid flight auger/Push tube
LOGGED BY B. Pearce
COMMENTS

DATE 29/05/2006
SURFACE ELEVATION
STABILISED WATER LEVEL
GROUND WATER ELEVATION

PID (ppm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
							Bitumen	0.05
43.2			BH05_ 0.05-0.15	✳			GRAVELLY SAND (Fill), dry,dense, grey, blue metal gravels, no odour	
15			BH05_ 0.4-0.5					0.60
63.5			BH05_ 0.6-0.8				SILTY CLAY, (CL), dry, stiff, low to medium plasticity, grey/brown, no odour	
					1.0			1.10
12.5			BH05_ 1.2-1.3				WEATHERED SHALE, dry, grey/brown, minor ironstone bands	1.30
							Refusal on shale @ 1.3mbgs Total Depth: 1.30 m	

LOG OF SOIL BORING S4062801_BORELOGS_2JUN06.GPJ HLA_SYD.GDT 22/06/06

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LOG OF SOIL BORING

BH06

PROJECT NUMBER S4062801
PROJECT NAME Austaland Industrial No.122 Pty Ltd
LOCATION 396 Lane Cove Road, Macquarie Park
DRILLING METHOD Push tube
SAMPLING METHOD Push tube
LOGGED BY B. Pearce
COMMENTS

DATE 29/05/2006
SURFACE ELEVATION
STABILISED WATER LEVEL
GROUND WATER ELEVATION

PID (ppm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
							Bitumen	0.05
3.8			BH06_ 0.05-0.15	✳			SILTY SAND, (Fill), dry, dense, orange/grey, gravel, no odour	
2.7			BH06_ 0.4-0.5					
			BH06_ 0.6-0.7					0.60
							SILTY CLAY (CL), dry, very stiff to hard, low plasticity, grey/brown, ironstone bands	
4.1			BH06_ 1.0-1.1	✳	1.0			
								1.10
							Refusal on shale @ 1.1mbgs Total Depth: 1.10 m	

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LOG OF SOIL BORING

BH07

PROJECT NUMBER S4062801
PROJECT NAME Austaland Industrial No.122 Pty Ltd
LOCATION 396 Lane Cove Road, Macquarie Park
DRILLING METHOD Push tube
SAMPLING METHOD Push tube
LOGGED BY B. Pearce
COMMENTS

DATE 29/05/2006
SURFACE ELEVATION
STABILISED WATER LEVEL
GROUND WATER ELEVATION

PID (ppm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
							Concrete	0.15
28			BH07_ 0.15-0.3	✳			SAND with minor gravel (Fill), dry, dense, orange, minor sandstone gravels, no odour	0.20
							WEATHERED SHALE, dry, grey/minor brown	
4.8			BH07_ 0.6-0.75					0.75
							Refusal on shale @ 0.75mbgs Total Depth: 0.75 m	

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LOG OF SOIL BORING

BH08

PROJECT NUMBER S4062801
PROJECT NAME Austaland Industrial No.122 Pty Ltd
LOCATION 396 Lane Cove Road, Macquarie Park
DRILLING METHOD Solid flight auger/Push tube
SAMPLING METHOD Solid flight auger/Push tube
LOGGED BY B. Pearce
COMMENTS IS = Insufficient sample volume

DATE 29/05/2006
SURFACE ELEVATION
STABILISED WATER LEVEL
GROUND WATER ELEVATION

PID (ppm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
							Concrete	0.16
IS			BH08_ 0.16-0.25	*			SAND with minor gravel (Fill), slightly moist, dense, orange yellow, sandstone gravel, no odour	0.25
							SILTY CLAY (CL), dry, stiff, low plasticity, orange grey	
44.5			BH08_ 0.6-0.8	*				
					-1.0			1.00
							WEATHERED SHALE, dry, brown	
39			BH08_ 1.3-1.4					
IS			BH08_ 1.9-2.0		-2.0			
33.5			BH08_ 2.9-3.0		-3.0			3.00
							Limit of investigation @ 3.0mbgs Total Depth: 3.00 m	

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LOG OF SOIL BORING

BH09

PROJECT NUMBER S4062801
PROJECT NAME Austaland Industrial No.122 Pty Ltd
LOCATION 396 Lane Cove Road, Macquarie Park
DRILLING METHOD Push tube
SAMPLING METHOD Push tube
LOGGED BY B. Pearce
COMMENTS

DATE 29/05/2006
SURFACE ELEVATION
STABILISED WATER LEVEL
GROUND WATER ELEVATION

PID (ppm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
							Concrete	0.17
30			BH09_ 0.17-0.3	*			SAND with minor gravel (Fill), slightly moist, dense, yellow orange, gravel, no odour	0.30
							SILTY CLAY (CL), dry, stiff, low plasticity, brown	0.50
32.7			BH09_ 0.4-0.6				WEATHERED SHALE, dry, grey, minor ironstone	
					1.0			
15.7			BH09_ 1.2-1.3					1.30
							Refusal on shale @ 1.3mbgs Total Depth: 1.30 m	

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LOG OF SOIL BORING

BH10

PROJECT NUMBER S4062801
PROJECT NAME Austaland Industrial No.122 Pty Ltd
LOCATION 396 Lane Cove Road, Macquarie Park
DRILLING METHOD Push tube
SAMPLING METHOD Push tube
LOGGED BY B. Pearce
COMMENTS

DATE 29/05/2006
SURFACE ELEVATION
STABILISED WATER LEVEL
GROUND WATER ELEVATION

PID (ppm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
							Concrete	0.16
10.4			BH10_ 0.16-0.3	*			SAND with minor gravel (Fill), slightly moist, dense, orange/yellow sandstone gravels	0.30
							Refusal on sandstone fill @ 0.3mbgs Total Depth: 0.30 m	

LOG OF SOIL BORING S4062801_BORELOGS_2JUN06.GPJ HLA_SYD.GDT 22/06/06

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MONITORING WELL LOG BH11/MW02

PROJECT NUMBER S4062801
PROJECT NAME Austaland Industrial No.122 Pty Ltd
LOCATION 396 Lane Cove Road, Macquarie Park
DRILLING METHOD Solid flight auger/Push tube
SAMPLING METHOD Solid flight auger/Push tube
SURFACE ELEVATION
WELL HEAD/TOC
LOGGED BY B. Pearce
COMMENTS IS = Insufficient sample volume

DATE 30/05/2006
BLANK 50mm Class 18 uPVC Casing
SCREEN 50mm Class 18 uPVC Factory Slotted Screen
GRAVEL PACK 2-3mm graded sand
SANITARY SEAL/BENTONITE Bentonite pellets
STABILISED WATER LEVEL
GROUND WATER ELEVATION

PID (ppm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
IS			BH11_0.05-0.15	*			Bitumen	0.05
							SILTY SAND with minor gravel (Fill), dry, dense, olive grey, blue metal gravels, no odour	
IS			BH11_0.4-0.5					0.50
20.9			BH11_0.6-0.8	*			SILTY CLAY (CL), dry, stiff, low to medium plasticity, grey/brown, no odour	
					1.0			1.20
							WEATHERED SHALE, dry, grey pink/brown grey	
11.8			BH11_1.9-2.0		2.0			
IS			BH11_2.9-3.0		3.0			3.20
							SHALE, dry, brown grey	
10.7			BH11_3.9-4.0		4.0			
15.4			BH11_4.9-5.0		5.0			5.00
							Refusal on shale @ 5.0mbgs Total Depth: 5.00 m	

WELL DIAGRAM: Cement; Blank Casing; Bentonite; Filter Pack; Screen

BORING / WELL CONSTRUCTION LOG S4062801_BORELOGS_2JUN06.GPJ HLA_SYD.GDT 22/06/06

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LOG OF SOIL BORING

BH12

PROJECT NUMBER S4062801
PROJECT NAME Austaland Industrial No.122 Pty Ltd
LOCATION 396 Lane Cove Road, Macquarie Park
DRILLING METHOD Push tube
SAMPLING METHOD Push tube
LOGGED BY B. Pearce
COMMENTS IS = Insufficient sample volume

DATE 30/05/2006
SURFACE ELEVATION
STABILISED WATER LEVEL
GROUND WATER ELEVATION

PID (ppm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
17.8			BH12_ 0.0-0.3	*			CLAYEY SILT with minor gravel (ML) dry, soft, low plasticity, brown, minor gravels	
								0.60
15.1			BH12_ 0.6-0.8				SILT CLAY (CL), dry, stiff, low to medium plasticity, minor ironstone and shale	
					1.0			
7.3			BH12_ 1.3-1.4					
IS			BH12_ 1.6-1.7					
								1.70
							Refusal on shale @ 1.7mbgs Total Depth: 1.70 m	

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LOG OF SOIL BORING — BH13

PROJECT NUMBER S4062801
PROJECT NAME Austaland Industrial No.122 Pty Ltd
LOCATION 396 Lane Cove Road, Macquarie Park
DRILLING METHOD Solid flight auger/Push tube
SAMPLING METHOD Solid flight auger/Push tube
LOGGED BY B. Pearce
COMMENTS

DATE 30/05/2006
SURFACE ELEVATION
STABILISED WATER LEVEL
GROUND WATER ELEVATION

PID (ppm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
4.5			BH13_ 0.0-0.1	✳			SANDY SILT (Fill), dry, medium density, grey brown, some roots	0.15
							SILTY SAND with minor gravel (Fill), dry, medium density, grey brown, sandstone gravels	
1.9			BH13_ 0.5-0.6	✳				0.60
							Refusal on shale @ 0.6mbgs Total Depth: 0.60 m	

LOG OF SOIL BORING S4062801_BORELOGS_2JUN06.GPJ HLA_SYD.GDT 22/06/06

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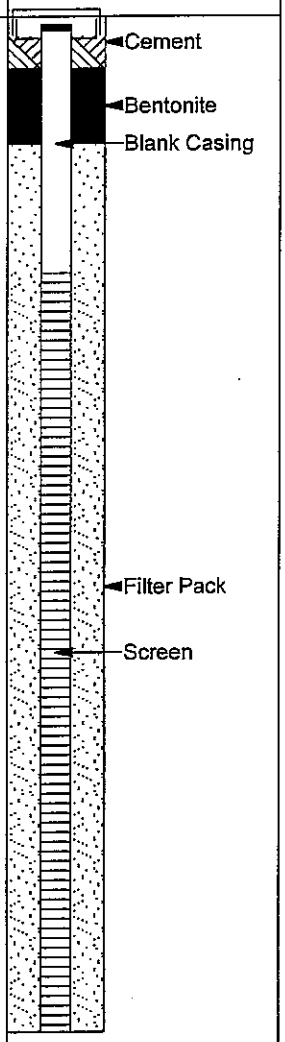
MONITORING WELL LOG BH14/MW03

PROJECT NUMBER S4062801
PROJECT NAME Austaland Industrial No.122 Pty Ltd
LOCATION 396 Lane Cove Road, Macquarie Park
DRILLING METHOD Solid flight auger/Push tube
SAMPLING METHOD Solid flight auger/Push tube
SURFACE ELEVATION
WELL HEAD/TOC
LOGGED BY L O'Hea
COMMENTS

DATE 30/05/2006
BLANK 50mm Class 18 uPVC Casing
SCREEN 50mm Class 18 uPVC Factory Slotted Screen
GRAVEL PACK 2-3mm graded sand
SANITARY SEAL/BENTONITE Bentonite pellets
STABILISED WATER LEVEL
GROUND WATER ELEVATION

PID (ppm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
IS			BH14_ 0.05-0.25	✳			Bitumen	0.05
							GRAVELLY SAND (Fill), dry, dense, red brown, blue metal gravels	0.25
30.9			BH14_ 0.6-0.8				SILTY CLAY (CL), slightly moist, stiff to hard, low to medium plasticity	
					1.0			
25.1			BH14_ 1.3-1.5					
								1.60
							WEATERED SHALE, slightly moist, brown red	
30			BH14_ 1.9-2.0		2.0			
								2.50
							SHALE, slightly moist to dry, brown red	
15.8			BH14_ 2.9-3.0		3.0			
26.2			BH14_ 3.9-4.0		4.0			4.00
							Refusal on shale @ 4.0mbgs Total Depth: 4.00 m	



BORING / WELL CONSTRUCTION LOG S4062801_BORELOGS_2JUN06.GPJ HLA_SYD.GDT 22/06/06

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Gordon NSW 2073
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LOG OF SOIL BORING

BH15

PROJECT NUMBER S4062801
PROJECT NAME Austaland Industrial No.122 Pty Ltd
LOCATION 396 Lane Cove Road, Macquarie Park
DRILLING METHOD Push tube
SAMPLING METHOD Push tube
LOGGED BY B. Pearce
COMMENTS

DATE 30/05/2006
SURFACE ELEVATION
STABILISED WATER LEVEL
GROUND WATER ELEVATION

PID (ppm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
							Concrete	0.15
11.9			BH15_ 0.15-0.35	*			SAND with minor gravel (Fill), slightly moist, dense, orange white, sandstone gravels and ironstones	0.35
32.9			BH15_ 0.6-0.8	*			SILTY CLAY (CL), slightly moist, stiff to hard, low to medium plasticity, orange white, ironstone gravels	
28.3			BH15_ 1.0-1.2		1.0			1.20
							Limit of investigation @ 1.2mbgs Total Depth: 1.20 m	

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MONITORING WELL LOG BH16/MW04

PROJECT NUMBER S4062801
PROJECT NAME Austaland Industrial No.122 Pty Ltd
LOCATION 396 Lane Cove Road, Macquarie Park
DRILLING METHOD Solid flight auger/Push tube
SAMPLING METHOD Solid flight auger/Push tube
SURFACE ELEVATION
WELL HEAD/TOC
LOGGED BY B. Pearce
COMMENTS

DATE 30/05/2006
BLANK 50mm Class 18 uPVC Casing
SCREEN 50mm Class 18 uPVC Factory Slotted Screen
GRAVEL PACK 2-3mm graded sand
SANITARY SEAL/BENTONITE Bentonite pellets
STABILISED WATER LEVEL
GROUND WATER ELEVATION

PID (ppm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH	WELL DIAGRAM
			BH16_0.1-0.3	✳			Bitumen	0.05	Cement
15.1							SAND with minor gravel (FILL), dry, dense, olive grey, minor blue metal gravels	0.30	Bentonite
							SILTY CLAY (CL), dry to slightly moist, stiff to hard, low plasticity, grey/red brown		Blank Casing
12.6			BH16_0.6-0.8	✳					
					1.0				
								1.30	
							WEATHERED SHALE, slightly moist, grey/brown, strong hydrocarbon odour		Filter Pack
115			BH16_1.9-2.0	✳					Screen
					2.0				
								2.40	
							SHALE, slightly moist, grey/brown, hydrocarbon odour		
26			BH16_2.9-3.0	✳				3.00	
					3.0		Refusal on shale @ 3.0mbgs Total Depth: 3.00 m		

BORING / WELL CONSTRUCTION LOG S4062801_BORELOGS_2JUN06.GPJ HLA_SYD.GDT 22/06/06

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LOG OF SOIL BORING

BH17

PROJECT NUMBER S4062801
PROJECT NAME Austaland Industrial No.122 Pty Ltd
LOCATION 396 Lane Cove Road, Macquarie Park
DRILLING METHOD Push tube
SAMPLING METHOD Push tube
LOGGED BY B. Pearce
COMMENTS

DATE 30/05/2006
SURFACE ELEVATION
STABILISED WATER LEVEL
GROUND WATER ELEVATION

PID (ppm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
							Concrete	0.17
15.3			BH17_ 0.17-0.3	✳			SAND with minor gravel (Fill), dry, dense, orange/grey, sandstone gravels	
27.2			BH17_ 0.4-0.6	✳				0.50
							SILTY SAND with minor gravel (CL), slightly moist, stiff ,low to medium plasticity, brown to grey orange, ironstone gravels	
20.9			BH17_ 1.0-1.2		1.0			1.20
							Refusal on shale @ 1.2mbgs Total Depth: 1.20 m	

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LOG OF SOIL BORING

HA01

PROJECT NUMBER S4062801
PROJECT NAME Austaland Industrial No.122 Pty Ltd
LOCATION 396 Lane Cove Road, Macquarie Park
DRILLING METHOD Hand Auger
SAMPLING METHOD Grab
LOGGED BY S.Hay
COMMENTS

DATE 29/05/2006
SURFACE ELEVATION
STABILISED WATER LEVEL
GROUND WATER ELEVATION

PID (ppm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
0			HA01_ 0.0-0.1	✳			SILT, (Fill), dry, dense, black/grey, roots & rootlets, no odour	0.40
0			HA01_ 0.5-0.6	✳			SILT, (Fill), dry, dense, black/grey, sandstone gravel, no odour	0.60
							Limit of investigation @ 0.6mbgs Total Depth: 0.60 m	

LOG OF SOIL BORING S4062801_BORELOGS_2JUN06.GPJ HLA_SYD.GDT 22/06/06

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LOG OF SOIL BORING

HA02

PROJECT NUMBER S4062801
PROJECT NAME Austaland Industrial No.122 Pty Ltd
LOCATION 396 Lane Cove Road, Macquarie Park
DRILLING METHOD Hand Auger
SAMPLING METHOD Grab
LOGGED BY S.Hay
COMMENTS

DATE 29/05/2006
SURFACE ELEVATION
STABILISED WATER LEVEL
GROUND WATER ELEVATION

PID (ppm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
0			HA02_ 0.0-0.1	✳			SILT, (Fill), dry, dense, black/grey, roots & rootlets, no odour	0.30
0			HA02_ 0.3-0.4				SILT, (Fill), dry, dense, black/grey, sandstone gravel & cobbles, no odour	0.60
0			HA02_ 0.5-0.6	✳				
							Limit of investigation @ 0.6mbgs Total Depth: 0.60 m	

LOG OF SOIL BORING S4062801_BORELOGS_2JUN06.GPJ HLA_SYD.GDT 22/06/06

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LOG OF SOIL BORING

HA03

PROJECT NUMBER S4062801
PROJECT NAME Austaland Industrial No.122 Pty Ltd
LOCATION 396 Lane Cove Road, Macquarie Park
DRILLING METHOD Hand Auger
SAMPLING METHOD Grab
LOGGED BY S.Hay
COMMENTS

DATE 29/05/2006
SURFACE ELEVATION
STABILISED WATER LEVEL
GROUND WATER ELEVATION

PID (ppm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
							Bitumen	0.10
17.5			HA03_ 0.1-0.2				GRAVELLY SAND, (Fill), dry, dense, no odour	0.20
2.8			HA03_ 0.2-0.3				SANDY CLAY (SC), slightly moist, medium stiffness, medium plasticity grey mottled orange, ironstone gravel	0.40
2.8			HA03_ 0.4-0.5				SANDY CLAY (SC), dry, very stiff, low plasticity, grey mottled red, ironstone gravel	0.50
							Refusal on hard clay @ 0.5mbgs Total Depth: 0.50 m	

LOG OF SOIL BORING S4062801_BORELOGS_2JUN06.GPJ HLA_SYD.GDT 22/06/06

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LOG OF SOIL BORING

HA04

PROJECT NUMBER S4062801
PROJECT NAME Austaland Industrial No.122 Pty Ltd
LOCATION 396 Lane Cove Road, Macquarie Park
DRILLING METHOD Hand Auger
SAMPLING METHOD Grab
LOGGED BY S.Hay
COMMENTS

DATE 29/05/2006
SURFACE ELEVATION
STABILISED WATER LEVEL
GROUND WATER ELEVATION

PID (ppm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
0			HA04_ 0.0-0.1	✳			SILT, (Fill), slightly moist, dense, black/grey, roots & rootlets, brick fragments and sandstone gravel, no odour	0.40
							SILTY SAND (Fill), slightly moist, medium density, black, no odour	0.45
5.5			HA04_ 0.45-0.5				SANDY CLAY (SC), dry, very stiff, low plasticity, grey mottled red, ironstone gravel	0.50
7.4							Refusal on hard clay @ 0.5mbgs Total Depth: 0.50 m	

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LOG OF SOIL BORING

HA05

PROJECT NUMBER S4062801
PROJECT NAME Austaland Industrial No.122 Pty Ltd
LOCATION 396 Lane Cove Road, Macquarie Park
DRILLING METHOD Hand Auger
SAMPLING METHOD Grab
LOGGED BY S.Hay
COMMENTS

DATE 29/05/2006
SURFACE ELEVATION
STABILISED WATER LEVEL
GROUND WATER ELEVATION

PID (ppm)	BLOW COUNTS	RECOVERY	SAMPLE NUMBER	ANALYSED	DEPTH (m BGL)	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH
3.8			HA05_ 0.0-0.1				SILTY SAND, (Fill), dry, very loose, light brown/grey, sandstone gravel, no odour	0.40
8.8			HA05_ 0.4-0.5				SANDY CLAY (SC), dry, hard, low plasticity, light brown, ironstone gravel	0.50
							Refusal on hard clay @ 0.5mbgs	0.60
							Total Depth: 0.60 m	