GROUND TECHNOLOGIES

Geotechnical Testing Services

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GTE549-Stage 1 Contamination
7 May 2015

LOGOS PROPERTY
Suite 1202, Level 12
167 Macquarie Street,
Sydney NSW 2000

Attention: Stephen Charnock
E-mail: stephencharnock@logosproperty.com

Dear Sir,

RE: STAGE 1 CONTAMINATION ASSESSMENT **at 34 Yarrunga Street, Prestons.**

This letter presents a Stage 1 Contamination report on the inspection and testing services associated with the contamination assessment undertaken at the above project.

Should you have any questions related to this report please do not hesitate to contact the undersigned.

For and on behalf of
Ground Technologies Pty Ltd

A. Bennett
Senior Geotechnical Engineer

Reviewed By

M. Khan *AMIEAust*
Principal Engineering Officer
(Geotechnical)

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EXECUTIVE SUMMARY

This executive summary presents a synopsis of the Stage 1 Contamination Report for the site; No.34 Yarunga Street, Prestons. It is understood that the site is to be re-developped for industrial use.

The objective of the Stage 1 Contamination Report was to ascertain whether the site presents a risk to human health and/or the environment arising from any past/present activities at the site or neighbouring properties. Limited laboratory testing was undertaken to re-inforce the results of the desktop study. The conclusions of this Contamination Report are as follows:

- The site was used previously for a residential dwelling and market gardening / light agriculture.
- A review of aerial photography suggests that the neighbouring properties are rural / residential and not considered to have posed a risk for potential contamination to the site.
- A search of the NSW EPA Contaminated Land Management record of notices revealed that there were no notices issued to the subject site. No history of dangerous manufacturing utilizing heavy chemicals or metals was documented.
- According to the interpretation of the sub-surface soil profile for this site, clay soils are present beneath the site. This material would provide a relatively impermeable layer and prevent the migration of any contamination into deeper soils or groundwater.
- No industrial facilities undertaking heavy manufacturing are located within 500m of the subject site. The surrounding sites are residential / warehousing. Therfore the risk of contamination migration caused by surface run-off from adjoining sites is minimal.
- Filling was observed within the south-eastern corner of the site for the re-alignment of a drainage channel. Correspondace from council indicates that no fill was imported and the material was sourced from within the subject site.

A limited sampling and analysis program was undertaken in order to assess the nature, location and likely distribution of any contamination present at the subject site, and also any potential risk posed to human health or the environment. Test results were compared to the relevant assessment criteria, Hils D, and were well below the assessment criteria and as such, indicate a low risk of contamination throughout the site.

This report is a Stage 1 Contamination Assessment with limited chemical testing undertaken. Market gardening was observed within the desktop study. Preliminary testing indicates that the risk of contamination is low, however in accordance “Guidelines for Assessing Former Orchards and Market Gardens” Department of Environment and Conservation (NSW), it is recommended that these areas of environmental concern be further investigated for the development application process and any contaminants found be appropriately treated under a site management plan during construction.

1.0 INTRODUCTION

Ground Technologies Pty Ltd have undertaken a Stage 1 Contamination Report with limited testing and analysis as requested by Stephen Charnock of Logos Property at No.34 Yarunga Street, Prestons. It is understood that the site is to be re-developped as a commercial subdivision.

2.0 SCOPE OF WORK

The following scope of work was conducted:

- Desktop Study of the following to assist in identification of potential contamination issues:
  - Data from Environment Protection Authority
    - Scheduled premises
    - Section 35 notices
    - Unhealthy building land sites
    - Sites which are likely contaminated and not contaminated
  - Historical and current aerial photographs
  - Data from the Protection of the Environment Operations Public Register (POEO)
- Review of soils and geological maps.
- Review of councils development application records
- Site Inspection by a Geotechnical Engineer to ascertain current activities, and any visible signs of contamination.
- Collection of soil samples by a Geotechnical Engineer according to a sampling plan.
- Chemical analysis by a NATA accredited laboratory.
- Assessment of the results of the chemical analysis against the appropriate guidelines.
- Preparation of the Stage 1 Contamination Report.

3.0 SITE DESCRIPTION

The following information, presented in Table 1, describes the site.

Table 1: Summary of Site Details

Site Address	34 Yarunga Street, Prestons
Lot & Plan No.	Lot 33, 34, 35, 43 DP2359 Lot 20 DP 117483
Council Area	Liverpool City Council

The subject property is irregular in shape, measuring approximately 625m wide along the Yarunga Street frontage, and 305m deep along the Bernera Road frontage.

Figure 1 – Location of Site

The subject property covers an area of approximately 20.7ha, with the majority of it vacant and grass covered. A high point is located within lot 34, behind the metal shed, with groundslopes falling away from this point in all directions by grades of up to 3° to 7°.

Lot 33 and 35 are grass covered and vacant. High voltage power lines traverse throught the site in a north / south alignment.

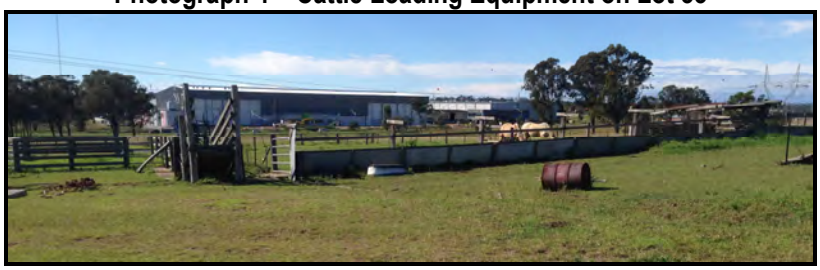
Photograph 1 – Lot 33

Lot 34 contains a signle storey residential house, a metal shed and equipment for loading cattle onto trucks within the northern (front) portion of the lots.

Photograph 2 – House on Lot 33

Photograph 3 – Shed on Lot 33

Photograph 4 – Cattle Loading Equipment on Lot 33



Lot 43 contains a metal shed located centrally within the lot

Photograph 5 – Metal Shed on Lot 43

Lot 20 of DP1173483 is predominately vacant. An old drainage line has been re-alinged within this site with a new culvert placed under Kurrajong Road.

Photograph 6 – Fill area within Lot 20

4.0 SITE HISTORY

In order to ascertain the site history, a documentary review of past and present land use at the subject site and the surrounding area has been undertaken as follows:

4.1 Land Use: Previous, Present and Proposed:

The site is currently being used for residential purposes. Annecdotal evidence suggests that the Prestons area was significantly utilized for market gardening / farming.

Liverpool City Council has two (2) Development Approvals for the subject Site;
1993 – The erection 15 Igloo Greenhouses
1993 – The erection 12 Igloo Greenhouses

4.2 Aerial Photographs:

A review of Historical Aerial Photographs was undertaken in order to provide a greater insight into the site history. A full set of aerial photographs is available within Appendix A

1947 – In 1947 the site is predominately vacant and covered in a light scattering of trees. A residential homestead has been constructed within the centre portion of the site. Adjoining sites are predominately vacant whilst the region appears to be rural / farming properties. No industrial or manufacturing plants could be identified within the aerial photograph. The subject site is highlighted in figure 2.

Figure 2 – Aerial Photograph from 1947

1970 – In 1970 the site is predominately vacant and covered in a light scattering of trees. The residential house within the centre of the site is still standing. Market Gardening appears to have been undertaken within the south-western portion of the site. No industrial or manufacturing plants could be identified within the aerial photograph. The subject site is highlighted in figure 3.

Figure 3 – Aerial Photograph from 1970

1982 – In 1982 the site is predominately vacant and covered in trees. The residential house within the centre of the site is still standing. Market Gardening appears to have been undertaken within the south-western portion of the site. No industrial or manufacturing plants could be identified within the aerial photograph. The subject site is highlighted in figure 4.

Figure 4 – Aerial Photograph from 1982

1994 – In 1994 the the original homestead, which was destroyed by fire, has been replaced by a new residential house and shed which have been constructed along the Yarunga Street frontage. The market gardening appears to have ceased and has been replaced by the green houses. No industrial or manufacturing plants could be identified within the aerial photograph. The subject site is highlighted in figure 5.

Figure 5 – Aerial Photograph from 1994

2006 – In 2006 the residential house and shed along the Yarunga Street frontage is still standing. The green houses have been removed. The remnants of market gardening can be observed within the western and south-western corners of the site. Industrial or manufacturing plants have started to be constructed within the region and new residential subdivisions have been constructed to the south of the site. The subject site is highlighted in figure 6.

Figure 5 – Aerial Photograph from 2006

2012 – In 2012 no significant changes to the land usage were observed from 2006, The subject site is highlighted in figure 7.

Figure 7 – Aerial Photograph from 2012

2015 – In 2015 no significant changes to the land usage were observed from 2006, however, the natural water course within the south-eastern corner of the site has been re-aligned and the previous channel has been backfilled. The location channel re-alignment is highlighted in figure 8.

Figure 8 – Aerial Photograph from 2015

4.3 Search of Contaminated Land Management Register (NSW EPA):

A summary of the search of the NSW EPA Contaminated Land Management record of notices for the Liverpool City Council Area can be found in Appendix C. No notices have been issued to the subject site. Two (2) sites are listed on this register however they are situated at such a distance (greater than 200m) so as not to pose a potential contamination risk to the subject property.

4.4 Search of Protection of the Environment Operations Public Register (POEO) of Licensed and Delicensed Premises:

A search of the POEO public register of licensed and delicensed premises (DECC) provided the details of 28 premises in the Liverpool City Council area (see appendix D), however no licensed or delicensed premises were located within the immediate surrounding area of the site (within 200m).

5.0 SITE CONDITION AND SURROUNDING ENVIRONMENT

A detailed walk-over of the site was conducted on 8th of April 2015. The field observations are summarised in the table below:

Table 2 – Summary of Field Observations

Parameter	Observation
Visible observations on soil contamination	No visible evidence of contamination was observed. No staining of the soils or odours were documented.
Signs of plant stress	None observed.
Presence of drums, fill or waste materials	No visible indicators of underground fuel tanks (bowsers or venting pipes).
Presence of fill	Filling was observed at the location of the channel re-alignment (see figure 7).
Quality of surface waters	No ponding was present.
Flood potential	None observed
Relevant sensitive environments	Cabramatta Creek is located approximately 200m to the west of the subject site

6.0 SITE GEOLOGY AND HYDROGEOLOGY

The 1:100,000 scale Geological Series Map of the Penrith region indicates that the subject site is underlain by Bringelly Shale of the Wianamatta Group dating back to the Middle Triassic period and generally comprises *shale, carbonaceous claystone, claystone, laminate, fine to medium grained lithic sandstone, and rare coal / tuff.*

Initial fieldwork was undertaken on the 11th of November 2014 and included one deep borehole (TS1) and eleven shallow boreholes (TS2-12) using a truck mount solid flight auger drill rig at locations shown on Figure 9.

Figure 9 – Borehole Locations

Eight (8) distinct geological units were encountered during the field investigation. These units are detailed in table 3 and the depth of each unit is detailed in table 4. Full Borehole Logs are attached in Appendix B.

Table 3 – Summary of Geological Units

UNIT	SOIL TYPE
UNIT A	TOPDRESSING: Very Silty Clay Filling, grey/brown, brown
UNIT B	FILLING: Admixed Silty Gravelly Clay, brown, grey/brown, pale grey, orange/brown
UNIT C	NATURAL: Clayey SILT (topsoil), dark brown
UNIT D	NATURAL: Silty CLAY, medium plasticity, orange/brown, very stiff to hard
UNIT E	BEDROCK: SILTSTONE, completely weathered, very low strength, pale grey
UNIT F	BEDROCK: SILTSTONE / SHALE, extremely weathered, very low to low strength, grey/brown
UNIT G	BEDROCK: SHALE, extremely weathered, low strength, grey to grey/brown
UNIT H	BEDROCK: SHALE, moderately weathered, low to medium strength, dark grey

Table 4 – Depth of each Geological Unit

Borehole	Geological Unit							
	Unit A	Unit B	Unit C	Unit D	Unit E	Unit F	Unit G	Unit H
TS1	-	-	0-0.1m	0.1-0.8m	0.8-1.1m	1.1-3.8m	3.8-7.5m	7.5-9.0m
TS2	-	-	0-0.25m	0.25-1.0m	-	-	-	-
TS3	-	-	0-0.27m	0.15-0.8m	-	-	-	-
TS4	-	-	0-0.15m	0.15-0.7m	-	-	-	-
TS5	0-0.05m	0.05-0.8m	-	-	-	-	-	-
TS6	0-0.45m	0.45-0.7m	0.7-0.9m	-	-	-	-	-
TS7	-	-	0-0.12m	0.12-0.6m	-	-	-	-
TS8	-	-	0-0.24m	0.24-0.6m	-	-	-	-
TS9	-	-	0-0.2m	0.2-0.6m	-	-	-	-
TS10	-	-	0-0.2m	0.2-0.6m	-	-	-	-
TS11	-	-	0-0.2m	0.2-0.6m	-	-	-	-
TS12	-	-	0-0.2m	0.2-0.6m	-	-	-	-

No groundwater was encountered during the course of the investigation.

6.1 Site Filling

Filling was observed within the south-eastern corner of the site for the re-alignment of a drainage channel (see figure 10). Correspondace from council indicates that no fill was imported and the material was sourced from within the subject site (See Appendix F).

7.0 SUMMARY OF POTENTIAL SOURCES OF CONTAMINATION

A search of the NSW EPA Contaminated Land Management record of notices revealed that there were no notices issued to the subject site. No history of dangerous manufacturing utilizing heavy chemicals or metals was documented. No history of heavy chemicals or metals storage was documented. No industrial facilities undertaking heavy manufacturing are located within 500m of the subject site. The surrounding sites are residential / warehousing. Therefore, the risk of contamination migration caused by surface run-off from adjoining sites is minimal. The neighbouring properties are rural residential and not considered to have posed a risk for potential contamination to the site.

According to the interpretation of the sub-surface soil profile for this site, clay soils are present beneath the site. This material would provide a relatively impermeable layer and prevent the migration of any contamination into deeper soils or groundwater.

The subject site appears to have been used for significant market gardening. A review of aerial photography supports this assumption. With reference to "Contaminated Sites – Guidelines for Assessing Former Orchards and Market Gardens. Department of Environment and Conservation (NSW) 2005", the contaminants of concern within site used for market gardening are Metals (Arsenic, Copper, Lead) and Organochlorine Pesticides (OCP).

Figure 10 – Location of Market Gardening and Filling

8.0 SAMPLING & ANALYSIS PLAN AND SAMPLING METHODOLOGY

A limited sampling and analysis program was undertaken in order to assess the nature, location and likely distribution of any contamination present at the subject site, and also any potential risk posed to human health or the environment. Test results were compared to the relevant assessment criteria (see Section 10.0). Three (3) samples were recovered from within the site concentrating in the market garden areas.

Each sample location was excavated utilizing a truck mount drill rig to a depth of 0.2m (TS2, TS4 & TS8). The samples were collected from the auger using a stainless steel trowel, which had been decontaminated prior to use to prevent cross contamination occurring. Three (3) samples were extracted from the natural clayey silt material encountered.

The samples were placed in 250g laboratory prepared glass jars which were capped using Teflon-sealed screw caps and then placed in a chilled container. The sample jars were transported to our Hoxton Park office and placed in a

refrigerator. The following day the samples were forwarded to ALS Pty Ltd (ALS) for analysis along with a Chain of Custody which was subsequently returned to confirm the receipt of all samples.

9.0 LABORATORY QUALITY ASSESSMENT AND QUALITY CONTROL

9.1 Laboratory Accreditation

ALS are accredited by the National Association of Testing Authorities (NATA) for the analyses carried out and are also accredited for compliance with ISO/IEC 17025.

9.2 Sample Holding Times

The holding times for samples at ALS are presented in the table below, along with the allowable holding time, detailed in Schedule B (3) of the National Environment Protection (Assessment of Site Contamination) Measure (NEPM, 1999):

Table 5 – Sample Holding Times

Laboratory	Analyte	Date Sampled	Date Received	Date of Extraction/ Analysis	Holding Time	Allowable Holding Time
ALS	Metals	8/4/2015	8/4/2015	13/4/2015	5 days	6 months*
	Pesticides	8/4/2015	8/4/2015	14/4/2015	5 days	14 days

Note (*) Metals excludes Mercury which has a holding time of 28 days.

9.3 Analytical Methods Used and Practical Quantitation Limits

The analytical methods and practical quantitation limits (PQL)/level of reporting (LOR) used by ALS are indicated on the test certificates located in Appendix E.

9.4 Laboratory Blank Results

During each analytical method reagents are carried through the preparation / extraction / digestion procedure. A reagent blank is prepared and analysed with every batch of samples plus with each new batch of solvent prior to use to ensure that there are no interferences with the test results.

Blank samples were analysed by ALS for metals and pesticides. The reported blank concentrations were below the relevant PQL/LOR.

9.5 Laboratory Control Standards

A known matrix spiked with compound(s) representative of the target analytes is used to document the laboratories performance. This is known as the Laboratory Control Standard (LCS). The LCS is analysed with the sample batch and the resultant concentrations reported as a percentage recovery of the expected concentration.

At ALS, the LCS was analysed for the same suite of analytes as the submitted samples (heavy metals, OCP and OPP) and the results are summarised in the table 4 below:

Table 6 – Quallty Control Spikes Summary

Laboratory	Analyte	Percentage Recovery (%)	Acceptance Criteria	Comments
ALS	Metals	99-117%	70-130%	Achieved
	Pesticides	71-108%	60-140%	Achieved

The results from the LCS analysis met the acceptance criteria.

10.0 BASIS FOR ASSESMENT CRITERIA

The Assessment criteria used in this investigation have been obtained from the National Environment Protection (Assessment of Site Contamination) Measure (NEPM, 2013). This document presents risk-based Health Investigation Levels based on a variety of exposure settings for a number of organic and inorganic contaminants. To assess the risk to human health the results of the laboratory analysis are compared against the Health Investigation Levels (HIL) for the exposure setting; 'Commercial / Industrial' ('D').

The selected assessment criteria used in this assessment are summarized on table 7 below:

Table 7 – Site Assessment Criteria

Contaminant	Health Based Investigation Level (HIL'D')
Arsenic (total)	3,000
Cadmium	900
Chromium	3,600
Copper	240,000
Lead	1,500
Mercury	730
Nickel	6,000
Zinc	400,000
Aldrin + Dieldrin	45
Chlordane	530
Endosulfan	2,000
Endrin	100
Heptachlor	50
Methoxychlor	2,500
DDD+DDE+DDT	3,600

11.0 RESULTS

11.1 Laboratory Test Results – Heavy Metals

Test results are tabulated and presented below (Tables 8) along with the relevant assessment criteria. Laboratory test certificates are located in Appendix E.

Table 8: Heavy Metal Test Results

Location	Sample No.	Depth (m)	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Zinc
TS2	E1	0.2m	15	<1	15	24	50	<0.1	8	181
TS4	E2	0.2m	8	<1	17	36	21	<0.1	19	52
TS8	E3	0.2m	8	<1	20	30	28	<0.1	13	52
NEPM Health Investigation Level HILs			**3000**	**900**	**3600**	**240000**	**1500**	**730**	**6000**	**400000**

Heavy metal concentrations for Arsenic, Cadmium, Chromium, Copper, Lead, Mercury, Nickel and Zinc are presented in Table 8. The concentrations of all metals were well below the relevant assessment criteria (HILs D). Preliminary testing indicates that there is a low risk that the heavy metal concentrations present in the soil profile are likely to pose a risk to human health or the environment under a 'Commercial / Industrial' setting.

11.2 Laboratory Test Results – Pesticides

Test results are tabulated and presented below (Tables 9) along with the relevant assessment criteria. Laboratory test certificates are located in Appendix E.

Table 9: Pesticides and PCB's

Location	Sample No.	Depth (m)	Aldrin + Dieldrin	Chlordane	Endosulfan	Endrin	Heptachlor	Mothoxychlor	DDD+DDE+DDT
TS2	E1	0.2m	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05
TS4	E2	0.2m	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05
TS8	E3	0.2m	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05
NEPM Health Investigation Level HILs			**45**	**530**	**2000**	**100**	**50**	**2500**	**3600**

The Organochlorine Pesticides concentrations, presented in Table 9, were below the relevant assessment criteria (HILs D). Preliminary testing indicates that there is a low risk that Organochlorine Pesticide concentrations present in the soil profile likely to pose a risk to human health or the environment under a 'Commercial / Industrial' setting.

12.0 CONCLUSIONS AND RECOMMENDATIONS

The conclusions of this Contamination Report are as follows:

- The site was used previously for a residential dwelling and market gardening / light agriculture.
- A review of aerial photography suggests that the neighbouring properties are rural / residential and not considered to have posed a risk for potential contamination to the site.
- A search of the NSW EPA Contaminated Land Management record of notices revealed that there were no notices issued to the subject site. No history of dangerous manufacturing utilizing heavy chemicals or metals was documented.
- According to the interpretation of the sub-surface soil profile for this site, clay soils are present beneath the site. This material would provide a relatively impermeable layer and prevent the migration of any contamination into deeper soils or groundwater.
- No industrial facilities undertaking heavy manufacturing are located within 500m of the subject site. The surrounding sites are residential / warehousing. Therfore the risk of contamination migration caused by surface run-off from adjoining sites is minimal.

A limited sampling and analysis program was undertaken in order to assess the nature, location and likely distribution of any contamination present at the subject site, and also any potential risk posed to human health or the environment. Test results were compared to the relevant assessment criteria, Hils D, and were well below the assessment criteria and as such, indicate a low risk of contamination throughout the site.

This report is a Stage 1 Contamination Assessment with limited chemical testing undertaken. Market gardening was observed within the desktop study, and filling of an unknown origin was identified. Preliminary testing indicates that the risk of contamination is low, however in accordance “Guidelines for Assessing Former Orchards and Market Gardens” Department of Environment and Conservation (NSW), it is recommended that these areas of environmental concern be further investigated for the development application process and any contaminants found be appropriately treated under a site management plan during construction.

Figure 11 – Areas of Environmental Concern

REFERENCES:

Contaminated Sites – Guidelines for Assessing Former Orchards and Market Gardens. Department of Environment and Conservation (NSW) 2005.

Contaminated Sites – Guidelines for Assessing Service Stations. NSW Environment Protection Authority (EPA) 1994

Contaminated Sites – Guidelines for Consultants Reporting on Contaminated Sites. NSW Environment Protection Authority (EPA) 2000.

Contaminated Sites – Sampling Design Guidelines. NSW Environment Protection Authority (EPA) 1995

Geology of Wollongong – Port Hacking 1:100000 Geological Series Sheet 9029-9199, 1st Edition. Geological Survey of NSW Department of Minerals and Energy 1985.

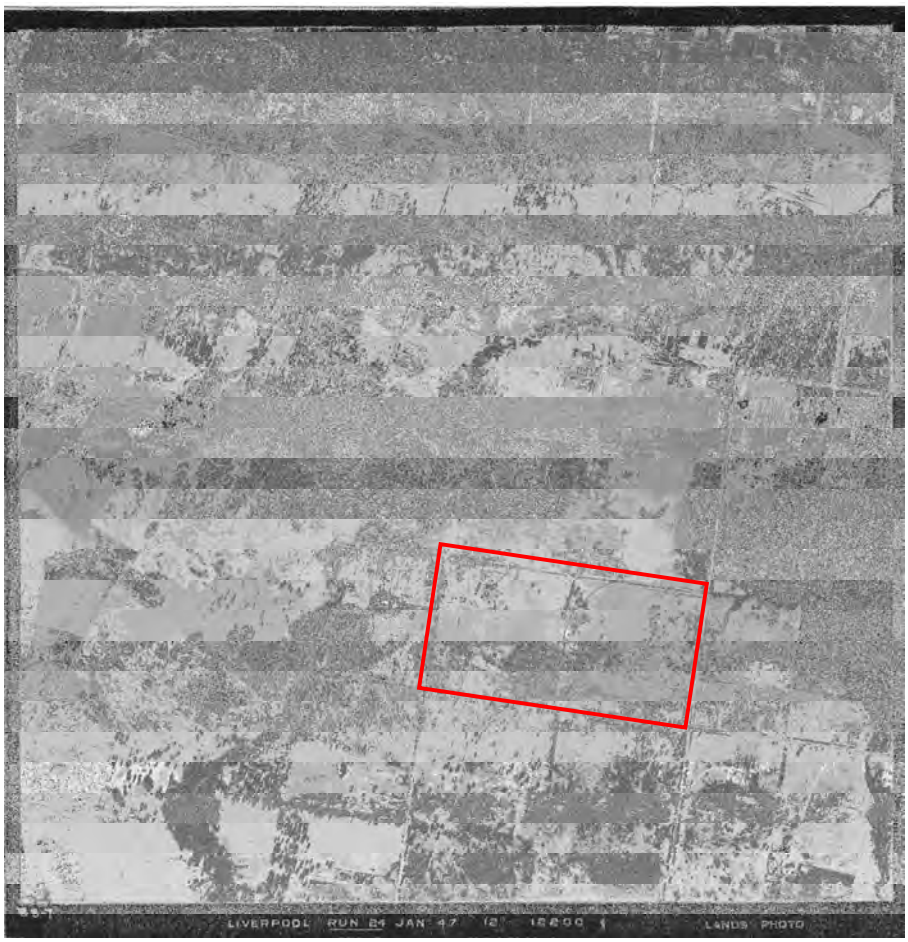
Managing Land Contamination: Planning Guidelines SEPP55 – Remediation of Land - Department of Urban Affairs and Planning and Environment Protection Authority (DUAP and EPA) 1998.

National Environment Protection (Assessment of Site Contamination) Measure – National Environmental Protection Council 1999.

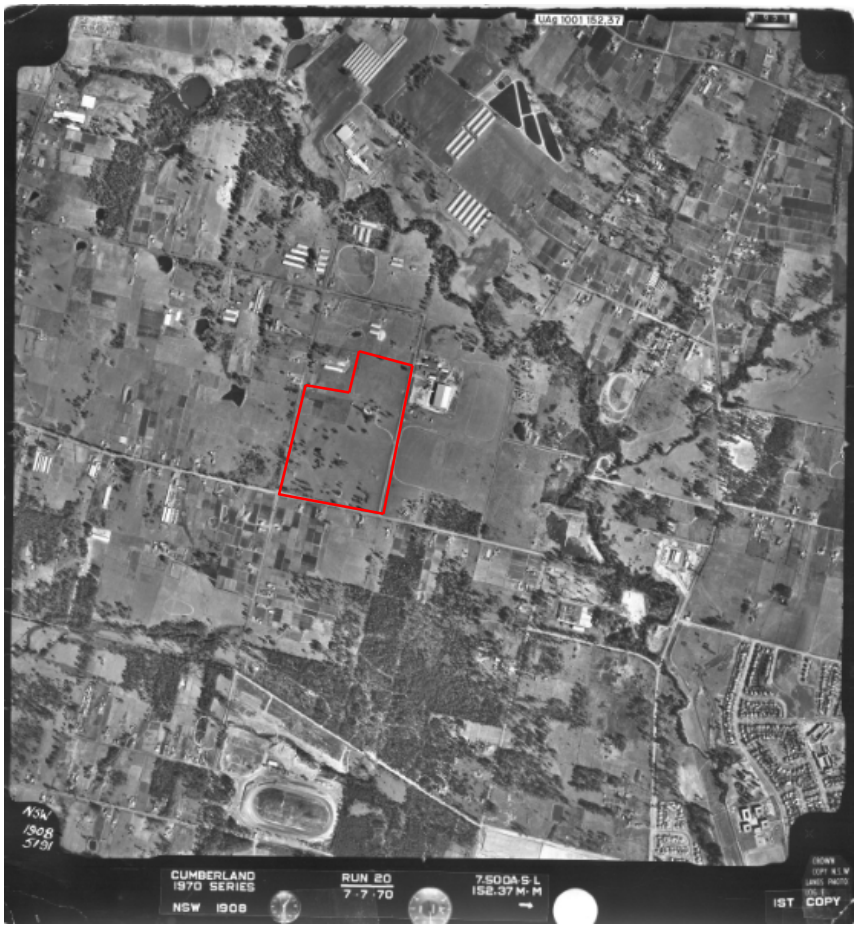
APPENDIX A

AERIAL PHOTOGRAPHS

Aerial Photograph - 1947



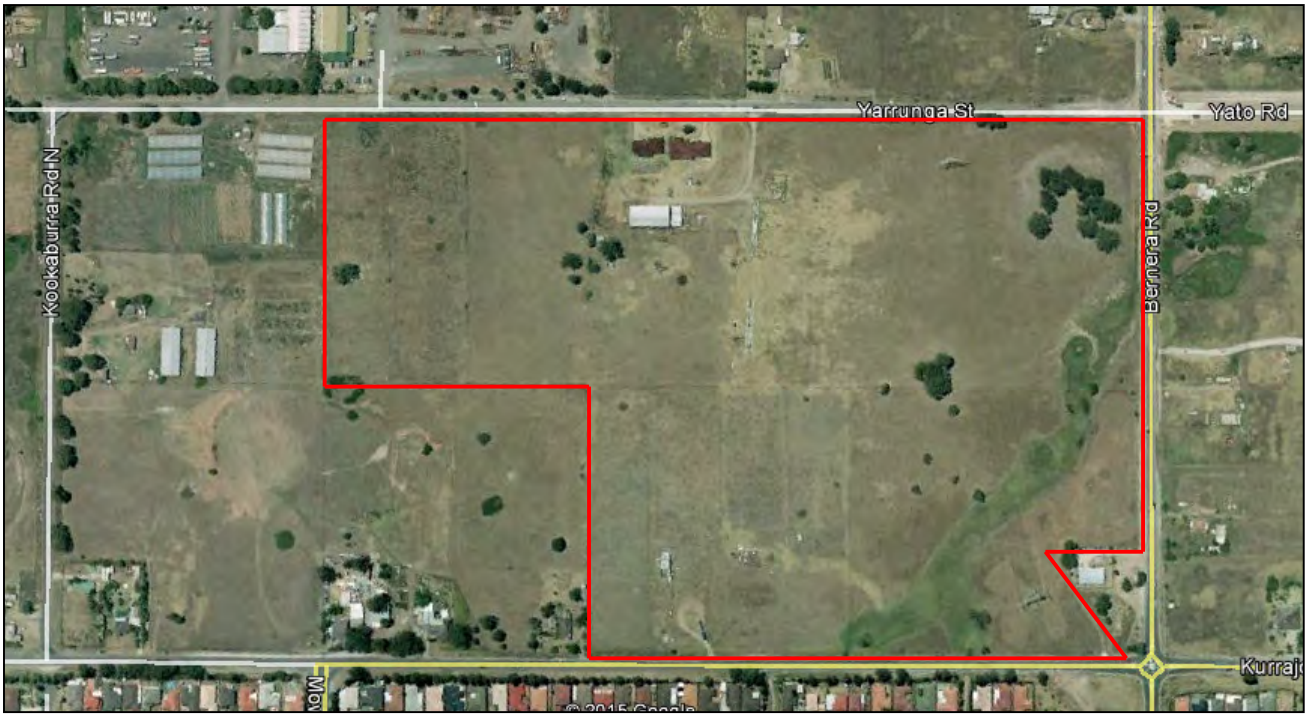
Aerial Photograph - 1970



Aerial Photograph - 1982

Aerial Photograph - 1994

Aerial Photograph - 2006



Aerial Photograph - 2014

APPENDIX B

BOREHOLE LOGS

BOREHOLE LOG REPORT

GROUND TECHNOLOGIES

Ground Technologies Pty Ltd
ABN 25 089 213 294
PO Box 1121 Green Valley NSW 2168
Ph: (02) 8783 8200
Fax: (02) 8783 8210
Email: lab@groundtech.com.au

Job No.	**GTE458**
Hole ID.	**BH 01**
Hole Depth:	9.00 m
Sheet:	1 of 2

Project Name:	**PROPOSED INDUSTRIAL SUB-DIVISION**	Start Date:	**10/11/2014**
Location / Site:	**34 Yarrunga Road, Prestons**		
Client:	**AWJ Civil Pty Ltd**	Easting :	-
Drill Method:	**Solid Flight Auger**	Northing :	-
Equipment:	**Toyota Landcruiser Mounted 4WD Rig**	Ground Level :	**approx. RL 50.0m**

WATER	DEPTH (m)	USCS Symbol	GRAPHIC LOG	SOIL DESCRIPTION (SOIL TYPE, COLOUR, MOISTURE, CONSISTENCY)	REMARKS
				Start Surface: **Grassed**	
		TOPSOIL		Clayey SILT; low plasticity, dark brown, moist, firm.	
		CI		Silty CLAY; with minor ironstone gravel,medium plasticity, orange brown, moist, very stiff to hard	
	0.5				
		BEDROCK		SILTSTONE; completely weathered, pale brown mottled pale grey, dry, very low strength	
	1				
		BEDROCK		SILTSTONE/SHALE with interbedded SANDSTONE lenses; extremely weathered, fine to medium grained, grey - brown to brown, dry, very low to low strength	assessed as generally easy to excavate using mid-sized excavator with toothed digging bucket
	1.5				
	2				
	2.5				
	3				
	3.5				
		BEDROCK		SHALE; extremely weathered, highly fractured, grey to grey brown, dry, low strength	assessed as can be excavated using mid-sized excavator with toothed digging bucket with difficulty. Ripper attachment will required. easily rippable with dozer
	4				
	4.5			***Continued over page on Sheet 2.....***	

Logged by: **M. Elmir** Date: **10/11/14** Checked By: **M. Elmir** Date: **10/11/14**

BOREHOLE LOG REPORT

GROUND TECHNOLOGIES

Ground Technologies Pty Ltd
ABN 25 089 213 294
PO Box 1121 Green Valley NSW 2168
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Job No.	**GTE458**
Hole ID.	**BH 01**
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Sheet:	2 of 2

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Client:	**AWJ Civil Pty Ltd**	Easting :	-
Drill Method:	**Solid Flight Auger**	Northing :	-
Equipment:	**Toyota Landcruiser Mounted 4WD Rig**	Ground Level :	**approx. RL 50.0m**

WATER	DEPTH (m)	USCS Symbol	GRAPHIC LOG	SOIL DESCRIPTION (SOIL TYPE, COLOUR, MOISTURE, CONSISTENCY)	REMARKS
				Start Surface: **Grassed**	
				continued from previous page - Sheet 1.....	
				SHALE; extremely weathered, highly fractured, grey to grey brown, dry, low strength	assessed as can be excavated using mid-sized excavator with toothed digging bucket with difficulty. Ripper attachment will required. easily rippable with dozer
	5				
	5.5				
	6				
	6.5				
	7				
	7.5	BEDROCK		SHALE; moderately weathered, slightly fractured, dark grey, dry, low to medium strength	assessed as difficult to excavate using excavator and ripper attach-ment. Rock hammers required. rippable with D8 Dozer
	8				
	8.5				
	9			*BOREHOLE TERMINATED AT 9.0m BEGL*	

Logged by: **M. Elmir** Date: **10/11/14** Checked By: **M. Elmir** Date: **10/11/14**

TOPSOIL LOG REPORT

GROUND TECHNOLOGIES

Ground Technologies Pty Ltd
ABN 25 089 213 294
PO Box 1121 Green Valley NSW 2168
Ph: (02) 8783 8200
Fax: (02) 8783 8210
Email: lab@groundtech.com.au

Job No. **GTE458**

Sheet: 1 of 1

Project Name:	**PROPOSED INDUSTRIAL SUB-DIVISION**	Start Date:	**10/11/2014**
Location / Site:	**34 Yarrunga Road, Prestons**		
Client:	**AWJ Civil Pty Ltd**	Easting :	-
Drill Method:	**Solid Flight Auger**	Northing :	-
Equipment:	**Toyota Landcruiser Mounted 4WD Rig**	Ground Level :	**EXISTING**

BOREHOLE	DEPTH	DISCRIPTION
2	**0 - 0.25m** 0.25 - 1.00m	**TOPSOIL: Clayey SILT, Dark Brown** NATURAL: Silty CLAY, medium plasticity,orange brown
3	**0 - 0.27m** 0.27 - 0.80m	**TOPSOIL: Clayey SILT, Dark Brown** NATURAL: Silty CLAY, medium plasticity,orange brown
4	**0 - 0.15m** 0.15 - 0.70m	**TOPSOIL: Clayey SILT, Dark Brown** NATURAL: Silty CLAY, medium plasticity,orange brown
5	**0 - 0.05m** 0.05 - 0.80m	**TOP DRESSING: very Silty Clay Filling, grey brown - brown** FILLING: Admixed Silty Gravelly Clay, grey brown/pale grey/orange brown
6	**0 - 0.45m** 0.45 - 0.70m 0.70 - 0.90m	**TOP DRESSING: very Silty Clay/Clayey Silt Filling, dark brown** FILLING: Admixed Silty Clay with some Gravel, brown NATURAL: Silty CLAY, medium plasticity,orange brown
7	**0 - 0.12m** 012 - 0.60m	**TOPSOIL: Clayey SILT, Dark Brown** NATURAL: Silty CLAY, medium plasticity,orange brown
8	**0 - 0.24m** 0.24 - 0.60m	**TOPSOIL: Clayey SILT, Dark Brown** NATURAL: Silty CLAY, medium plasticity,orange brown
9	**0 - 0.20m** 0.20 - 0.60m	**TOPSOIL: Clayey SILT, Dark Brown** NATURAL: Silty CLAY, medium plasticity,orange brown
10	**0 - 0.20m** 0.20 - 0.60m	**TOPSOIL: Clayey SILT, Dark Brown** NATURAL: Silty CLAY, medium plasticity,orange brown
11	**0 - 0.20m** 0.20 - 0.60m	**TOPSOIL: Clayey SILT, Dark Brown** NATURAL: Silty CLAY, medium plasticity,orange brown
12	**0 - 0.20m** 0.20 - 0.60m	**TOPSOIL: Clayey SILT, Dark Brown** NATURAL: Silty CLAY, medium plasticity,orange brown

Logged by: **M. Elmir** Date: **10/11/14** Checked By: **M. Elmir** Date: **10/11/14**

APPENDIX C

SEARCH RESULTS OF EPA CONTAMINATED LAND REGISTER

Search results

Your search for: LGA: Liverpool City Council

Matched 12 notices relating to 2 sites.

Search Again Refine Search

Suburb	Address	Site Name	Notices related to this site
Chipping Norton	85-107 Alfred Road	Australian Chemical Refiners	3 current
Moorebank	Bapaume Road	ABB Australia	1 current and 8 former

21 April 2015

APPENDIX D

SEARCH OF POEO REGISTER OF LICENSED AND DELICENSED PREMISES

Organisation Name	Location Address	Suburb	Local Govt Area	Fee-Based Activity
BORAL BRICKS PTY LTD	235 MARTIN ROAD	BADGERYS CREEK	LIVERPOOL	Ceramics production
INGHAMS ENTERPRISES PTY. LIMITED	LOT 23 BADGERYS CREEK ROAD	BADGERYS CREEK	LIVERPOOL	Bird accommodation
AUSTRALIAN NATIVE LANDSCAPES PTY LTD	210 MARTIN ROAD	BADGERYS CREEK	LIVERPOOL	Waste storage - other types of waste
LEPPINGTON PASTORAL CO PTY LTD	1675 THE NORTHERN ROAD	BRINGELLY	LIVERPOOL	Dairy animal accommodation
ONESTEEL RECYCLING PTY LIMITED	53-57 RIVERSIDE ROAD	CHIPPING NORTON	LIVERPOOL	Scrap metal processing
VERTIKOTE CORP. PTY LTD	85 GOVERNOR MACQUARIE DRIVE	CHIPPING NORTON	LIVERPOOL	Metal waste generation
BENEDICT RECYCLING PTY LIMITED	33-37 Riverside Road	CHIPPING NORTON	LIVERPOOL	Recovery of general waste
INGHAMS ENTERPRISES PTY. LIMITED	KURRAJONG ROAD	HOXTON PARK	LIVERPOOL	Slaughtering or processing animals
ROADS AND MARITIME SERVICES	Between Brooks Road, Ingleburn and	INGLEBURN	LIVERPOOL	Road construction
BRANDOWN PTY. LIMITED	LOT 90 ELIZABETH DRIVE	KEMPS CREEK	LIVERPOOL	Land-based extractive activity
PRYSMIAN POWER CABLES & SYSTEMS AUSTRALIA	1 HEATHCOTE ROAD	LIVERPOOL	LIVERPOOL	Metal coating
LIVERPOOL CITY COUNCIL	-	LIVERPOOL	LIVERPOOL	Other activities
BAE SYSTEMS AUSTRALIA LOGISTICS PTY LTD	Moorebank Road	LIVERPOOL	LIVERPOOL	Dangerous goods production
JOHN HOLLAND PTY LTD	Bigge Street	LIVERPOOL	LIVERPOOL	Railway systems activities
EPIC MINING PTY LIMITED	275 Adams Road	LUDDENHAM	LIVERPOOL	Other Land-Based Extraction
C&M MASONRY PRODUCTS PTY LTD	20 KELSO CRES	MOOREBANK	LIVERPOOL	Concrete works
BERESFORD CONCRETE PRODUCTS PTY LTD	2 FIELD CLOSE	MOOREBANK	LIVERPOOL	Concrete works
ABEL METAL SERVICES PTY LTD	16-18 KELSO CRESCENT	MOOREBANK	LIVERPOOL	Crushing, grinding or separating
JOYCE FOAM PTY LTD	5-9 BRIDGES ROAD	MOOREBANK	LIVERPOOL	Plastic resins production
BENEDICT INDUSTRIES PTY LIMITED	146 NEWBRIDGE ROAD	MOOREBANK	LIVERPOOL	Crushing, grinding or separating
MOOREBANK AEROSOL FILLERS PTY LIMITED	11 CUNNINGHAM STREET	MOOREBANK	LIVERPOOL	Dangerous goods production
SPHERE HEALTHCARE PTY. LIMITED	10-12 CHURCH ROAD	MOOREBANK	LIVERPOOL	Chemical production waste generation
BENEDICT INDUSTRIES PTY LIMITED	146 Newbridge Road	MOOREBANK	LIVERPOOL	Waste storage - waste tyres
TRANSPACIFIC INDUSTRIES PTY. LTD.	22 Centenary Avenue	MOOREBANK	LIVERPOOL	Waste storage - hazardous, restricted solid, liquid, clinical and related waste
ABB AUSTRALIA PTY LIMITED	Bapaume Road	MOOREBANK	LIVERPOOL	Non-thermal treatment of hazardous and other waste
Nulon Products Australia Pty Limited	17 Yulong Close	MOOREBANK	LIVERPOOL	Chemical storage waste generation
Nulon Products Australia Pty Limited	17 Yulong Close	MOOREBANK	LIVERPOOL	Petroleum products and fuel production
SYDNEY GALVANIZING PTY LIMITED	2/12 ASH ROAD	PRESTONS	LIVERPOOL	Metal waste generation
STATE ASPHALTS NSW PTY LTD	65-75 Yarrawa Street	PRESTONS	LIVERPOOL	Waste storage - other types of waste

APPENDIX E

LABORATORY TEST CERTIFICATES

CHAIN OF CUSTODY

ALS Laboratory: please tick →

ADELAIDE 21 Burma Road Pooraka SA 5095 Ph: 08 8359 0890 E: adelaide@alsglobal.com
BRISBANE 32 Shand Street Stafford QLD 4053 Ph: 07 3243 7222 E: samples.brisbane@alsglobal.com
GLADSTONE 48 Callemondah Drive Clinton QLD 4680 Ph: 07 7471 5500 E: gladstone@alsglobal.com
MACKAY 78 Harbour Road Mackay QLD 4740 Ph: 07 4944 0177 E: mackay@alsglobal.com
MELBOURNE 2-4 Westall Road Springvale VIC 3171 Ph: 03 8549 9600 E: samples.melbourne@alsglobal.com
MUDGEE 27 Sydney Road Mudgee NSW 2850 Ph: 02 6372 6735 E: mudgee mail@alsglobal.com
NEWCASTLE 5 Rose Gum Road Warabrook NSW 2304 Ph: 02 4968 9433 E: samples.newcastle@alsglobal.com
NOWRA 4/13 Geary Place North Nowra NSW 2541 Ph: 02 4423 2063 E: nowra@alsglobal.com
PERTH 10 Hod Way Malaga WA 6090 Ph: 08 9209 7555 E: samples.perth@alsglobal.com
SYDNEY 277-289 Woodpark Road Smithfield NSW 2164 Ph: 02 8784 8555 E: samples.sydney@alsglobal.com
TOWNSVILLE 14-16 Desma Court Bohle QLD 4818 Ph: 07 4796 0600 E: townsville environmental@alsglobal.com
WOLLONGONG 99 Kenny Street Wollongong NSW 2500 Ph: 02 4225 3125 E: portkembla@alsglobal.com

CLIENT: Ground Technologies	TURNAROUND REQUIREMENTS: ☒ Standard TAT (List due date): 3 day	FOR LABORATORY USE ONLY (Circle)	
OFFICE: 55 Fifteenth Ave West Hoxton	(Standard TAT may be longer for some tests e.g. Ultra Trace Organics) ☐ Non Standard or urgent TAT (List due date):	Custody seal intact	Y N NA
PROJECT: GTE549 PRESTONS	ALS QUOTE NO.: SY-554-14	Free ice / frozen ice bricks present upon receipt	Y N NA
ORDER NUMBER:	COC SEQUENCE NUMBER (Circle) COC: 1 2 3 4 5 6 7	Random Sample Temperature on Receipt	
PROJECT MANAGER: M. Elmir	CONTACT PH: 0414 805 603 OF: 1 2 3 4 5 6 7	Cooler comments	
SAMPLER: M. Elmir	SAMPLER MOBILE:		
COC emailed to ALS? (YES / NO)	EDD FORMAT (or default):		
Email Reports to (will default to PM if no other addresses are listed): moustafa@groundtech.com.au			
Email Invoice to (will default to PM if no other addresses are listed): moustafa@groundtech.com.au			

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
M. Elmir	Frame ALS		
DATE/TIME: 8/4/15	DATE/TIME: 8.4.15 1255	DATE/TIME:	DATE/TIME:

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

ALS USE	SAMPLE DETAILS MATRIX: SOLID (S) WATER (W)			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).								Additional Information
LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL CONTAINERS	8 Metals	OCP suite S-12							Comments on likely contaminant levels, dilutions, or samples requiring specific QC analysis etc.
1	E1	8/4/15	Soil	Teflon capped glass Jar	1									
2	E2	↓	↓	↓	1									
3	E3	↓	↓	↓	1									
TOTAL														

TAT

Environmental Division
Sydney
Work Order
ES1507963

Telephone : +61-2-8784 8555

Water Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserved Plastic; AG = Amber Glass Unpreserved; AP = Airfreight Unpreserved Plastic
V = VOA Vial HCl Preserved; VB = VOA Vial Sodium Bisulphate Preserved; VS = VOA Vial Sulfuric Preserved; AV = Airfreight Unpreserved Vial SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass; Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bag for Acid Sulphate Soils; B = Unpreserved Bag.

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES1507963**	Page	: 1 of 5
Client	: **GROUND TECHNOLOGIES**	Laboratory	: Environmental Division Sydney
Contact	: MR MOUSTAFA ELMIR	Contact	: Client Services
Address	: PO BOX 1121 GREEN VALLEY NSW,AUSTRALIA 2168	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: moustafa@groundtech.com.au	E-mail	: sydney@alsglobal.com
Telephone	: +61 02 8783 8200	Telephone	: +61-2-8784 8555
Facsimile	: ----	Facsimile	: +61-2-8784 8500
Project	: GTE549 PRESTONS	QC Level	: NEPM 2013 Schedule B(3) and ALS QCS3 requirement
Order number	: ----		
C-O-C number	: ----	Date Samples Received	: 08-APR-2015
Sampler	: M. ELMIR	Issue Date	: 13-APR-2015
Site	: ----		
		No. of samples received	: 3
Quote number	: SY/554/14	No. of samples analysed	: 3

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. All pages of this report have been checked and approved for release.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

NATA Accredited Laboratory 825

Accredited for compliance with ISO/IEC 17025.

Signatories

This document has been electronically signed by the authorized signatories indicated below. Electronic signing has been carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Celine Conceicao	Senior Spectroscopist	Sydney Inorganics
Pabi Subba	Senior Organic Chemist	Sydney Organics

General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	E1	E2	E3	----	----
				Client sampling date / time	[08-APR-2015]	[08-APR-2015]	[08-APR-2015]	----	----
Compound	CAS Number	LOR	Unit		ES1507963-001	ES1507963-002	ES1507963-003	----	----
EA055: Moisture Content									
Moisture Content (dried @ 103°C)	----	1.0	%		**2.8**	**15.8**	**16.4**	----	----
EG005T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		**15**	**8**	**8**	----	----
Cadmium	7440-43-9	1	mg/kg		<1	<1	<1	----	----
Chromium	7440-47-3	2	mg/kg		**15**	**17**	**20**	----	----
Copper	7440-50-8	5	mg/kg		**24**	**36**	**30**	----	----
Lead	7439-92-1	5	mg/kg		**50**	**21**	**28**	----	----
Nickel	7440-02-0	2	mg/kg		**8**	**19**	**13**	----	----
Zinc	7440-66-6	5	mg/kg		**181**	**52**	**52**	----	----
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	<0.1	<0.1	----	----
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
beta-BHC	319-85-7	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
gamma-BHC	58-89-9	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
delta-BHC	319-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Heptachlor	76-44-8	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Aldrin	309-00-2	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
^ **Total Chlordane (sum)**	----	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Dieldrin	60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
^ **Endosulfan (sum)**	115-29-7	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
4.4`-DDT	50-29-3	0.2	mg/kg		<0.2	<0.2	<0.2	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	E1	E2	E3	----	----
				Client sampling date / time	[08-APR-2015]	[08-APR-2015]	[08-APR-2015]	----	----
Compound	CAS Number	LOR	Unit		ES1507963-001	ES1507963-002	ES1507963-003	----	----
EP068A: Organochlorine Pesticides (OC) - Continued									
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	----	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
^ Sum of DDD + DDE + DDT	----	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	----	----
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	----	----
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	----	----
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.1	%		101	95.2	95.7	----	----
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.1	%		100	99.2	97.7	----	----

Surrogate Control Limits

Sub-Matrix: **SOIL**		Recovery Limits (%)	
Compound	*CAS Number*	*Low*	*High*
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	49	147
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	35	143

APPENDIX F

CORRESPONDANCE FROM LIVERPOOL COUNCIL

Anthony

One further matter on the report. We received this correspondence below today. Please would you remove the reference in the report to imported fill.

Thanks

Stephen

From: Trent Iliffe
Sent: Wednesday, 6 May 2015 2:02 PM
To: Stephen Charnock
Subject: FW: 2015-05-06 E - To J Camilleri Re - fill material to repair disturbed area in your property off Kurrajong Road, Prestons

fyi

From: Bishop, Gavin [mailto:Gavin.Bishop@colliers.com]
Sent: Wednesday, 6 May 2015 1:14 PM
To: Trent Iliffe
Subject: FW: 2015-05-06 E - To J Camilleri Re - fill material to repair disturbed area in your property off Kurrajong Road, Prestons

Trent,

Please see below email from Liverpool Council. There was no imported fill brought onsite.

regards

Gavin Bishop
National Director
Industrial
Dir +61 2 9840 0233 | Mob +61 401 146 051 | View My Profile
Main +61 2 9840 0222 | Fax +61 2 9761 7433 | vCard
Level 8, 20 Smith Street, | Parramatta, NSW 2150 | Australia

From: Joe camilleri [mailto:joe@camilleri.com.au]
Sent: Wednesday, 6 May 2015 9:02 AM
To: Bishop, Gavin
Subject: FW: 2015-05-06 E - To J Camilleri Re - fill material to repair disturbed area in your property off Kurrajong Road, Prestons

Hi Gavin

Enclosed is the response I received from Council. They said that no certification was required as the material was not brought in from outside.

Regards
Joe

From: Mir Sadique Hossain [mailto:ASSETRE@liverpool.nsw.gov.au]
Sent: 6 May 2015 8:48 AM
To: Joe camilleri
Subject: 2015-05-06 E - To J Camilleri Re - fill material to repair disturbed area in your property off Kurrajong Road, Prestons

Hi Joe,

As discussed, site owned material was used to repair the disturbed area which was obtained from the channel dug inside your property and clean topsoil was obtained from Bernera Road.

Hope this satisfactory. Should you have any more query please feel free to discuss with me.

Regards

Mir Sadique Hossain
Program Engineer - Roads
Infrastructure & Environment

Liverpool City Council
1 Hoxton Park Rd, Liverpool NSW 2170
Phone 9821 9542
Mobile 0417 430 709
Fax 9821 9333

Creating our future together

From: Joe camilleri [mailto:joe@camilleri.com.au]
Sent: Thursday, 30 April 2015 10:08 AM
To: Mir Sadique Hossain
Subject: FW: Kurrajong Rd

Hi Mir

Hope your well.

Just following up on something. When we had those discussions in 2012 and 2013 about the drainage works on our property Council had organised to have fill brought in to repair the disturbed area. Can we be provided with certification that the fill imported to the site is clean.

Can you give me an idea of when we can expect to receive the certification.

Regards Joe