

ASBESTOS ASSESSMENT REPORT

7 Hilton Street, South Tamworth NSW

Hydrox Nominees Pty Ltd – February 2013



DOCUMENT CONTROL

ASBESTOS

ASSESSMENT REPORT

7 Hilton Street South Tamworth, NSW

PREPARED FOR

Mr Patrick Leong Hydrox Nominees Pty Ltd PO Box 8000 Baulkham Hills NSW 2153

Report reference: 1201085Rpt03FinalV01_20Feb2013

Date: 20th February 2013

DISTRIBUTION AND REVISION REGISTER

Revision Number	Date	Description	Recipient	Deliverables	
1	20/02/2012	Final Report 1201085Rpt03FinalV01_20Feb2013	Geo-Logix Pty Ltd	1 electronic copy	
1	20/02/2012	Final Report 1201085Rpt03FinalV01_20Feb2013	Geo-Logix Pty Ltd	1 electronic copy	

Issued by: Geo-Logix Pty Ltd

ABN: 86 116 892 936

Jenna Seymour BSc Applied Chem. MEnvMgt Environmental Scientist

David Gregory BSc (Hons), R.G., MEIANZ CEnvP#139 Principal Geologist



EXECUTIVE SUMMARY

Geo-Logix Pty Ltd (Geo-Logix) was commissioned by Hydrox Nominees Pty Ltd (Hydrox) to conduct an asbestos assessment of fill at the property Lot C3 DP 160164 (Lot C3) located at 7 Hilton Street, South Tamworth, NSW. It is understood Hydrox is considering acquiring approximately 80% of this parcel of land to be included in a larger land holding for development into a Masters Home Improvement Centre.

The site comprised vacant land at the rear of the Tamworth Bridge Club facilities which front the eastern side of Hilton Street, South Tamworth and encompasses an area of 3500m². The site is surrounded by primarily vacant rural land to north, east and south. Residential properties exist northeast and southeast of the site.

Preliminary investigations have identified extensive filling has occurred over this area. Fill was described as gravel, sand, silt and clay with anthropogenic materials including bricks, plastic, concrete, glass, tyres, metal waste, discarded house footings and Asbestos Containing Material (ACM). Given the land area is approximately 3500m² and covered by fill as much as 4.3m thick in some locations, further assessment of asbestos content in fill was recommended to quantify possible site remediation cost.

Given the requirement for precise delineation (quantification) Geo-Logix adopted a systematic investigation with a sampling density equal to 194 sample locations / hectare. This sampling density is more than 6 times the minimum requirement for site characterisation as defined by NSW EPA (1995).

To assess for asbestos contamination Geo-Logix adopted an assessment methodology as per the WA Department of Health Guidelines for Assessment, Remediation and Management of Asbestos Contaminated Site in Western Australia (2009). The assessment consisted of:

- Excavation of 79 testpits across the site on an approximate 6.71m grid. A grid of 6.71m will define an asbestos hotspots of 7.91m circular diameter at 95% Statistical Degree of Certainty;
- Collection of one 10L sample from each relevant stratum of fill (or per 1m depth) of the wall of the testpits at each grid point. Each sample was spread out on contrasting colour material for identification of ACM. If ACM was identified the pieces were weighed to calculate the asbestos soil concentration as ACM; and
- Collection of an approximate 500mL soil sample from each relevant stratum of fill (or per 1m depth) of the wall of the testpits at each grid point for the laboratory analysis and calculation of asbestos soil concentration as Fibrous Asbestos and Asbestos Fines (FA/AF).

The results of the asbestos assessment identified a total of 17 hotspots (7.91m in diameter, varying in thickness from 0.2 - 1.0m) in 13 out of 79 locations to have ACM and/or FA/AF concentrations at or above the commercial land use assessment criteria. The volume of fill within these hotspots amounts to approximately 705m³.

ACM hotspots (455m³) may be remediated onsite and reused onsite. Hotspots defined by FA/AF (250m³) will need to be excavated and disposed to landfill as Special Waste (asbestos). At the time of reporting Tamworth Landfill gate rate for Asbestos Waste was \$185 p/tonne.



TABLE OF CONTENTS

1. INTRODUCTION
2. SITE INFORMATION
2.1 Site Identification1
2.2 Site Description1
3. PREVIOUS INVESTIGATIONS
4. DATA QUALITY OBJECTIVES
5. ASBESTOS ASSESSMENT METHODOLOGY
5.1 Fill Conceptual Model
5.2 Sampling Plan3
5.3 Summary of Works4
5.4 Soil Sampling Methodology4
5.5 Assessment Criteria4
5.6 ACM % w/w Calculation Methodology5
6. INVESTIGATION RESULTS
6.1 Site Geology5
6.2 Bulk Sampling ACM % w/w Results5
6.3 Laboratory Analytical Results6
7. DISCUSSION
8. CONCLUSIONS
9. LIMITATIONS
10. REFERENCES



FIGURES

Figure 1: Site Location Map
Figure 2: Site Map
Figure 3: Asbestos Contamination in Fill 0 – 1m Deep
Figure 4: Asbestos Contamination in Fill 1 – 2m Deep
Figure 5: Asbestos Contamination in Fill 2 – 3m Deep
Figure 6: Asbestos Contamination in Fill 3 – 4m Deep

TABLES

Table 1: Summary of Soil Analytical Data – Asbestos

ATTACHMENTS

Attachment A: Photographic Log
Attachment B: Equipment Calibration Certificates
Attachment C: Soil Testpit Logs
Attachment D: Laboratory Reports



1. INTRODUCTION

Geo-Logix Pty Ltd (Geo-Logix) was commissioned by Hydrox Nominees Pty Ltd (Hydrox) to conduct an asbestos assessment of fill located on 7 Hilton Street, South Tamworth, NSW (Figure 1). It is understood Hydrox is considering acquiring approximately 80% of this parcel of land to be included in a larger land acquisition for development into a Masters Home Improvement Centre.

The results of preliminary sampling at the subject site identified Asbestos Containing Materials (ACM) within deposits of fill applied to the land. Given the land area is approximately 3500m² and covered by fill as much as 4.3m thick in some locations, further assessment of asbestos content in fill was recommended to quantify possible site remediation cost.

2. SITE INFORMATION

2.1 Site Identification

The investigation area comprises the following properties (Figure 2):

Street Address	Lot and Deposited Plan (DP)	Approximate Area (m²)	
7 Hilton Street, South Tamworth, NSW 2340	Part Lot C3 DP 160164	3500	

Property information sourced from Title Deed information and Hydrox Nominees Pty Ltd.

2.2 Site Description

The site comprised vacant land at the rear of the Tamworth Bridge Club facilities which front the eastern side of Hilton Street, South Tamworth. The site is surrounded by primarily vacant rural land to north, east and south. Residential properties exist northeast and southeast of the site. A photographic log is presented in Attachment A.

The site covers an area of approximately 3500m². Preliminary investigations identified extensive filling has occurred over the land. The topography of the site is relatively flat across the western portion of the site with a retaining wall along the northern boundary. An embankment drops steeply at the eastern portion of the site and flattens out towards the eastern boundary. The natural topography of the land appears to moderately slope towards the east. Based on the flood plain level east of the site, the fill is estimated to be 4.3m thick at its highest point in the central northern portion of the site. Fill appears to extend past the site boundary onto the adjacent property approximately 2m past the fence line in the northeast corner and along the eastern boundary. Fill in this area is estimated at 0.8m in thick.



3. PREVIOUS INVESTIGATIONS

Preliminary investigations reported in February 2013 (Geo-Logix, 2013a; Geo-Logix, 2013b) identified the following:

- Fill has been applied to the entire area of the subject site (3500m²) and is variable in thickness to a maximum of 4.3m thick;
- Fill is described as gravel, sand, silt and clay with anthropogenic materials including bricks, plastic, ACM, concrete, glass, tyres, metal waste and discarded house footings; and
- The origin of fill and processes that resulted in its application to the land is unknown.

4. DATA QUALITY OBJECTIVES

Hydrox propose to acquire the subject site as part of a larger land holding for development into a Masters Home Improvement Centre. Preliminary investigations have identified significant filling activities have occurred on the subject site. Preliminary sampling identified ACM in fill. Given the volume of fill across the land area further investigation of asbestos content in fill is warranted to quantify possible site remediation cost for due diligence consideration.

To achieve the objective, Geo-Logix has adopted the seven step Data Quality Objective (DQO) process as described in AS 4482.1-2005, US EPA (2000) and DEC (2006).

Step 1: State the problem.

Asbestos exists in fill material over the subject site. The extent and asbestos % in fill is not known therefore the potential liability is not quantified.

Step 2: Identify the decision.

The results of fill assessment as per the methodology in Guidelines for Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia (WA DOH, 2009) indicates the asbestos % w/w in fill is below the commercial / industrial land use criteria therefore the fill can be considered suitable for reuse on-site without need for landfill disposal.

Step 3: Identify inputs into the decision.

- Identification of issues of potential environmental concern;
- Appropriate identification of COPC;
- A systematic grid based sampling and analysis program of fill across the site as per WA DOH (2009); and
- Screening sample analytical results against appropriate assessment criteria for the intended land use (Commercial/Industrial).



Step 4: Define the boundaries of the site.

The project boundary is defined as within and adjacent to the site boundary of a majority portion of 7 Hilton Street, South Tamworth NSW to a vertical depth approximately 0.3 - 1.0 mbg into native soil.

Step 5: Develop a decision rule.

The result of systematic sampling and analysis meet the following criteria;

- The ACM content in fill does not exceed 0.05% w/w asbestos as defined by field inspection; and
- The combined Fibrous Asbestos (FA) and Asbestos Fibre (AF) content in fill does not exceed 0.001% w/w as defined by lab analysis.

Step 6: Specify acceptable limits on decision errors.

The field sampling methodology, sample preservation techniques, and laboratory analytical procedures must be appropriate to provide confidence in data quality so any comparison against assessment criteria can be considered reliable. This is achieved by defining and comparing results against the Data Quality Indicators (DQIs).

Step 7: Optimise the design for obtaining data.

This is achieved by sampling plan design in consideration of the available site history information, area of investigation, contaminant behaviour in the environment, and likely spatial distribution of contamination.

5. ASBESTOS ASSESSMENT METHODOLOGY

5.1 Fill Conceptual Model

The following is a conceptual model of fill:

- Fill varies in thickness from 0.2m to as much as 4.3m thick;
- Fill is of variable composition and has been applied in uncontrolled manner;
- The origin of fill is unknown; and
- ACM has been randomly observed in fill.

Given the conceptual model and requirement for precise delineation (quantification) Geo-Logix adopted a systematic investigation with a sampling density equal to 194 sample locations / hectare. This sampling density is more than 6 times the minimum requirement for site characterisation as defined by NSW EPA (1995).

5.2 Sampling Plan

Geo-Logix undertook the following sampling plan for assessment of asbestos content in fill during January and February 2013. Sample locations are presented in Figure 3.

The asbestos assessment comprised sampling methodology as defined by WA DOH (2009):

• Excavation of 79 testpits across the site on an approximate 6.71m grid. A grid of 6.71m will identify asbestos hotspots of 7.91m circular diameter at 95% Statistical Degree of Certainty;



- Inspection of fill from each relevant stratum of fill (or per 1m depth) of the wall of the testpits at each grid point for ACM as per sample methodology (Section 5.4). Each testpit was extended at least 0.3m into native soil;
- Collection of a sample of fill from each relevant stratum of fill (or per 1m depth) of the wall of the testpits at each grid point for laboratory inspection of FA/AF; and
- The sample grid was extended beyond the boundaries of the subject site in the northeast and northwest corners where ACM was identified in fill adjacent to the site boundary.

5.3 Summary of Works

Date	Investigation Works
9 – 12 January 2013	Completed testpits A1 – A40.
4 – 6 February 2013	Completed testpits A41 – A79.

5.4 Soil Sampling Methodology

Testpits A1 – A79 were completed on an approximate 6.7m grid across the investigation area using a 20 tonne excavator. Testpits were completed to depths between 0.6 - 4.3m. Soil samples were collected directly from the excavator bucket.

The following methodology was adopted to determine ACM % w/w in fill:

- A 10L fill sample was collected over each relevant stratum (or 1m vertical thickness) of fill at each test pit location by scrapping the wall with an excavator bucket;
- The 10L fill sample was spread out on a blue plastic sheet for identification of ACM; and
- If ACM was identified the pieces were weighed using an electronic scale accurate to 0.01g. The calibration documentation for the equipment is included in Attachment B. The concentration of ACM % w/w in fill was calculated as per WA DOH methodology defined in Section 5.6.

The following methodology was adopted to determine FA/AF % w/w in fill:

• For each relevant stratum (or 1m of vertical thickness) of fill at each test pit location an approximate 500mL fill sample was placed in zip-lock plastic bags, labelled and placed in a box for transport under chain of custody conditions to a NATA Accredited Laboratory for the laboratory determination of FA/AF % w/w in fill in accordance with WA DOH.

5.5 Assessment Criteria

 WA Guidelines for Assessment, Remediation and Management of Asbestos Contaminated Site in Western Australia, Soil Asbestos Investigation Criteria for Commercial/Industrial use (WA DOH, 2009).



5.6 ACM % w/w Calculation Methodology

The concentration of asbestos in soil as ACM was estimated using the following calculation:

$$\% Soil Asbestos = \frac{\% Asbestos Content \times ACM (kg)}{Soil Volume (L) \times Soil Density \left(\frac{kg}{L}\right)}$$

Where it is assumed that:

- % Asbestos Content within ACM = 15%
- Soil density = 1.6kg/L

6. INVESTIGATION RESULTS

6.1 Site Geology

Fill material was encountered across the site from 0.2m to 4.3m in depth. The distribution of fill thickness across the site is presented in Figures 3 - 6. Generally fill over the western and central portions of the investigation area increases in thickness from the southwest corner, to the central northern portion. The greatest fill thickness was observed in the central northern portion. Fill thickness over the eastern portion of the site decreases towards the eastern boundary and southeast corner.

Fill material was observed to comprise clay, silt, sand, gravels (predominantly shale gravels) and anthropogenic materials. The anthropogenic materials varied across the site and comprised concrete footings, concrete pieces, metallic items, car parts, tyres, steel cables, bricks, glass bottles, white plasterboard sheets, asbestos cement fragments, asbestos cement pipe, and other rubbish items.

Fill material generally overlaid sandy clay and/or weathered shale. Some areas had a 0.1 - 0.2m layer of former topsoil comprising sandy silt or silt with sand.

Soil testpit logs are presented as Attachment C.

6.2 Bulk Sampling ACM % w/w Results

The results of the bulk sampling are summarised in Table 1. In summary ACM was observed at concentrations in fill above assessment criteria at the following testpit locations. ACM hotspots are defined in Figures 3 - 6.:

Fill Depth(m)	Testpit Location	Sample ID	Sample Depth (mbg)
0 – 1	A1	A1	0.0 - 1.0
	A2	A2	0.0 - 1.0
	A10	A10	0.0 - 1.0
	A25	A25	0.0 - 1.0
	A30	A30	0.0 - 1.0
	A40	A40	0.0 - 1.0
1 – 2	A10	A10/1.0	1.0 - 1.2



Fill Depth(m)	Testpit Location	Sample ID	Sample Depth (mbg)
1 – 2	A29	A29/1.0	1.0 – 2.0
	A30	A30/1.0	1.0 – 1.9
	A50	A50/1.8, A50/2.1^	1.5 – 1.8, 1.8 – 2.1^
2-3	A29	A29/2.0	2.0 - 2.4
	A50	A50/2.1^	1.8 – 2.1^
3 - 4	n/a	n/a	n/a

n/a = not applicable

^ Relevant stratum falls within multiple fill depth intervals

6.3 Laboratory Analytical Results

FA/AF was detected at concentrations above assessment criteria in five samples collected from the following testpits:

Fill Depth (m)	Sample Location	Sample ID	Sample Depth (mbg)
0 – 1	A31	A31	0.0 - 1.0
	A46	A46	0.0 - 1.0
	A51	A51	0.0 - 1.0
1 – 2	n/a	n/a	n/a
2 – 3	A28	A28/2.3^	2.3 - 3.3^
	A49	A49/2.0	1.0 – 2.0
3 - 4	A28	A28/2.3^	2.3 - 3.3^

^ Relevant stratum falls within multiple fill depth intervals

Laboratory reports are presented in Attachment D.

7. DISCUSSION

The results of the assessment indicated the following:

- ACM was detected at concentrations greater than the assessment criteria in eight test pit locations; and
- FA/AF was detected at concentrations greater than the assessment criteria in five test pit locations.

A total of 17 hotspots of 7.91m in diameter with thickness up to 1.0m were identified as presented on the following table:

Hotspot Location	Hotspot Depth (m)	Hotspot Thickness (m)	Approximate Fill Volume (m ³)	
A1	0.0 - 1.0	1.0	50	
A2	0.0 - 1.0	1.0	50	



Hotspot Location	Hotspot Depth (m)	Hotspot Thickness (m)	Approximate Fill Volume (m ³)
A10	0.0 - 1.0	1.0	50
A10	1.0 – 1.2	0.2	10
A25	0.0 - 1.0	1.0	50
A28	2.3 - 3.3	1.0	50
A29	1.0 - 2.0	1.0	50
A29	2.0 - 2.4	0.4	20
A30	0.0 - 1.0	1.0	50
A30	1.0 – 1.9	0.9	45
A31	0.0 - 1.0	1.0	50
A40	0.0 - 1.0	1.0	50
A46	0.0 - 1.0	1.0	50
A49	1.0 - 2.0	1.0	50
A50	1.5 – 1.8	0.3	15
A50	1.8 – 2.1	0.3	15
A51	0.0 - 1.0	1.0	50
		TOTAL	705

8. CONCLUSIONS

With respect to the decision rules Geo-Logix concludes the sampling program identified 17 circular hotspots (7.91m diameter; 0.2m - 1m thick) that do not meet the following criteria:

- <0.05% w/w asbestos as ACM in fill as defined by field inspection; and
- <0.001% w/w FA/AF as defined by lab inspection.

The volume of fill within these hotspots amounts to approximately 705m³. Asbestos impacted hotspots will require remediation before the site can be considered suitable for the proposed commercial land use.

ACM hotspots (455m³) may be remediated onsite and reused onsite. Hotspots defined by FA/AF (250m³) will need to be excavated and disposed to landfill as Special Waste (asbestos). At the time of reporting Tamworth Landfill gate rate for Asbestos Waste was \$185 p/tonne.

9. LIMITATIONS

This report should be read in full, and no executive summary, conclusion or other section of the report may be used or relied on in isolation, or taken as representative of the report as a whole. No responsibility is accepted by Geo-Logix, and any duty of care that may arise but for this statement is excluded, in relation to any use of any part of this report other than on this basis.



This report has been prepared for the sole benefit of and use by the Client. No other person may rely on the report for any purpose whatsoever except with Geo-Logix's express written consent. Any duty of care to third parties that would or may arise in respect of persons other than the Client, but for this statement, is excluded.

Geo-Logix owns the copyright in this report. No copies of this report are to be made or distributed by any person without express written consent to do so from Geo-Logix. If the Client provides a copy of this report to a third party, without Geo-Logix's consent, the Client indemnifies Geo-Logix against all loss, including without limitation consequential loss, damage and/or liability, howsoever arising, in connection with any use or reliance by a Third Party.

The works undertaken by Geo-Logix are based solely on the scope of works, as agreed by the Client (Scope of Works). No other investigations, sampling, monitoring works or reporting will be carried out other than as expressly provided in the Scope of Works. A COPY OF THE SCOPE OF WORKS IS AVAILABLE ON REQUEST.

To the extent permitted by law, Geo-Logix makes no warranties or representations as to the:

- suitability of the Site for any specific use, or category of use, or
- potential statutory requirements for remediation, if any, of the Site,
- approvals, if any, that may be needed in respect of any use or category of use, or
- level of remediation, if any, that is warranted to render the Site suitable for any specific use, or category of use, or
- level of ongoing monitoring of Site conditions, if any, that is required in respect of any specific use, or category of use, or

presence, extent or absence of any substance in, on or under the Site, other than as expressly stated in this report.

The conclusions stated in this report are based solely on the information, Scope of Works, analysis and data that are stated or expressly referred to in this report.

To the extent that the information and data relied upon to prepare this report has been conveyed to Geo-Logix by the Client or third parties orally or in the form of documents, Geo-Logix has assumed that the information and data are completely accurate and has not sought independently to verify the accuracy of the information or data. Geo-Logix assumes no responsibility or duty of care in respect of any errors or omissions in the information or data provided to it.

Without limiting the paragraph above, where laboratory tests have been carried out by others on Geo-Logix's behalf, the tests are reproduced in this report on the assumption that the tests are accurate. Geo-Logix has not sought independently to verify the accuracy of those tests and assumes no responsibility in respect of them.

Geo-Logix assumes no responsibility in respect of any changes in the condition of the Site which have occurred since the time when Geo-Logix gathered data and/or took samples from the Site on its site inspections dated 9 - 12 January 2013 and 4 - 6 February 2013.



Given the nature of asbestos, and the difficulties involved in identifying asbestos fibres, despite the exercise of all reasonable due care and diligence, thorough investigations may not always reveal its presence in either buildings or fill. Even if asbestos has been tested for and those tests' results do not reveal the presence of asbestos at those specific points of sampling, asbestos or asbestos containing materials may still be present at the Site, particularly if fill has been imported at any time, buildings constructed prior to 1980 have been demolished on the Site or materials from such buildings have been disposed of on the Site.

Where the Scope of Works does not include offsite investigations, Geo-Logix provides no warranty as to offsite conditions, including the extent if any to which substances in the Site may be emanating off site, and if so whether any adjoining sites have been or may be impacted by contamination originating from the Site.

Where the Scope of Works does not include the investigation, sampling, monitoring or other testing of groundwater in, on or under the Site, Geo-Logix provides no warranty or representation as to the quality of groundwater on the Site or the actual or potential migration of contamination in groundwater across or off the Site.

Subsurface site conditions are typically heterogeneous, and may change with time. Samples taken from different points on the Site may not enable inferences to be drawn about the condition of areas of the Site significantly removed from the sample points, or about the condition of any part of the Site whatsoever, in particular where the proposed inferences are to be drawn a long time after the date of the report.

Geo-Logix has prepared this report with the diligence, care and skill which a reasonable person would expect from a reputable environmental consultancy and in accordance with environmental regulatory authority and industry standards, guidelines and assessment criteria applicable as at the date of this report. Industry standards and environmental criteria change frequently, and may change at any time after the date of this report.



10. REFERENCES

Australian Standard (2005) AS 4482.1-2005 Guide to the investigation and sampling of sites with potentially contaminated soil. Part 1: Volatile and Semi-volatile compounds. Standards Australia.

Australian Standard (2005) AS 4482.2-1999 Guide to the investigation and sampling of sites with potentially contaminated soil. Part 2: Volatile substances. Standards Australia.

Geo-Logix (2013a) Phase I Environmental Site Assessment Report, 5-7 Hilton Street and 7 Scott Road, South Tamworth NSW, Geo-Logix Pty Ltd, 14 February 2013.

Geo-Logix (2013b) Environmental Due Diligence Report, 5-7 Hilton Street and 7 Scott Road, South Tamworth NSW, Geo-Logix Pty Ltd, 11 February 2013.

Google Earth (2013). Tamworth, NSW.

NSW DEC (2006) *Guidelines for NSW Site Auditor Scheme*, NSW Department of Environment and Conservation.

NSW EPA (1995) *Contaminated Sites Sampling Design Guidelines*, NSW Environmental Protection Authority.

US EPA (2000) Data Quality Objectives Process for Hazardous Wastes Site Investigations EPAQA/G-4HW, United States Environmental Protection Agency.

WA DOH (2009) Guidelines for Assessment, Remediation and Management of Asbestos Contaminated Site in Western Australia, Western Australia Department of Health, May 2009.

FIGURES





PART MAP NSW

PART MAP SOUTH TAMWORTH

					COPYRIGHT This Figure can only be used, reproduced or published (whether in whole or in part) for the sole purpose of work associated with the	GEO-LOGIX PTY LTD	DRAWN: CHECKED		SITE LC ASBESTO	CATIO	ON MAP SESSMENT
					Environmental Due Diligence Report 7 Hilton St SOUTH TAMWORTH NSW 2340, and any such use, reproduction or publication	WARRIEWOOD NSW 22102 Ph: (02) 9979 1722	APPROVED: D G	7 Hilton Street SOUTH TAMWORTH NSW 234		WORTH NSW 2340	
ISSUE	DATE	AMENDMENTS	DRAWN	CHECKED	must acknowledge Geo-Logix as the author of the Figure.	Fax: (02) 9979 1222	DATE: 15/02/2013	SHEET SIZE: A4	PROJECT NO: 1201085	REV: 01	FIGURE 1











TABLES

Asbestos	Assessment Criteria	Sample ID Depth (m) Description Date	A1 0.0 - 1.0 Fill 9/01/2013	A2 0.0 - 1.0 Fill 9/01/2013	A3 0.0 - 0.8 Fill 9/01/2013	A4 0.0 - 0.8 Fill 9/01/2013	A5 0.0 - 0.65 Fill 9/01/2013
Systematic Bulk Samples Bulk Sample Volume (L) Bulk Sample Weight (kg)* Asbestos Observed Weight of ACM (g) Weight of Asbestos in ACM (g)** Asbestos w/w %	0.05%		10L 16kg ACM Identified 147.25 22.09 0.14	10L 16kg ACM Identified 89.33 13.40 0.08	10L 16kg ND - - -	10L 16kg ND - - -	10L 16kg ND - -
Laboratory Analysis AF/FA Detected Asbestos Type Asbestos Weight (g) Asbestos w/w %	0.001% (AF/FA)		ND - - -	ND - - -	ND - - -	ND - - -	ND - - -

Notes:

Assessment Criteria = Western Australia Deprtment of Health (2009) Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia

IS = Insufficient Sample

ND = No Asbestos Detected

ACM = Asbestos Containing Material. Products or materials that contain asbestos in an inert bound matrix such as cement or resin. Here taken to be sound material, even as frgaments and not fitting through a 7mm x 7mm sieve

FA = Friable asbestos material such as severely weathered ACM, and asbestos in the form of loose fibrous material such as insulation products

AF = Asbestos Fines

* = assumes a bulk density of 1.6

** = assumes asbestos content within asbestos cement materials of 15%

- = not applicable

Asbestos	Assessment Criteria	Sample ID Depth (m) Description Date	A6 0.0 - 0.5 Fill 9/01/2013	A7 0.0 - 0.8 Fill 9/01/2013	A8 0.0 - 0.9 Fill 9/01/2013	A9 0.0 - 1.0 Fill 9/01/2013	A10 0.0 - 1.0 Fill 9/01/2013
Systematic Bulk Samples Bulk Sample Volume (L) Bulk Sample Weight (kg)* Asbestos Observed Weight of ACM (g) Weight of Asbestos in ACM (g)** Asbestos w/w %	0.05%		10L 16kg ND - -	10L 16kg ND - -	10L 16kg ND - -	10L 16kg ND - -	10L 16kg ACM Identified 77.35 11.60 0.07
Laboratory Analysis AF/FA Detected Asbestos Type Asbestos Weight (g) Asbestos w/w %	0.001% (AF/FA)		ND - -	ND - - -	ND - - -	ND - - -	ND - - -

Notes:

Assessment Criteria = Western Australia Deprtment of Health (2009) Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia

IS = Insufficient Sample

ND = No Asbestos Detected

ACM = Asbestos Containing Material. Products or materials that contain asbestos in an inert bound matrix such as cement or resin. Here taken to be sound material, even as frgaments and not fitting through a 7mm x 7mm sieve

FA = Friable asbestos material such as severely weathered ACM, and asbestos in the form of loose fibrous material such as insulation products

AF = Asbestos Fines

* = assumes a bulk density of 1.6

** = assumes asbestos content within asbestos cement materials of 15%

- = not applicable

Asbestos	Assessment Criteria	Sample ID Depth (m) Description Date	A10/1.0 1.0 - 1.2 Fill 9/01/2013	A11 0.0 - 1.0 Fill 9/01/2013	A11/1.0 1.0 - 1.5 Fill 9/01/2013	A12 0.0 - 1.0 Fill 9/01/2013	A12/1.0 1.0 - 2.0 Fill 9/01/2013
Systematic Bulk Samples Bulk Sample Volume (L) Bulk Sample Weight (kg)* Asbestos Observed Weight of ACM (g) Weight of Asbestos in ACM (g)** Asbestos w/w %	0.05%		10L 16kg ACM Identified 57.89 8.68 0.054	10L 16kg ACM Identified 23.15 3.47 0.02	10L 16kg ND - - -	10L 16kg ND - - -	10L 16kg ND - -
Laboratory Analysis AF/FA Detected Asbestos Type Asbestos Weight (g) Asbestos w/w %	0.001% (AF/FA)		ND - - -	ND - - -	ND - - -	ND - - -	ND - - -

Notes:

Assessment Criteria = Western Australia Deprtment of Health (2009) Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia

IS = Insufficient Sample

ND = No Asbestos Detected

ACM = Asbestos Containing Material. Products or materials that contain asbestos in an inert bound matrix such as cement or resin. Here taken to be sound material, even as frgaments and not fitting through a 7mm x 7mm sieve

FA = Friable asbestos material such as severely weathered ACM, and asbestos in the form of loose fibrous material such as insulation products

AF = Asbestos Fines

* = assumes a bulk density of 1.6

** = assumes asbestos content within asbestos cement materials of 15%

- = not applicable

Asbestos	Assessment Criteria	Sample ID Depth (m) Description Date	A12/2.0 2.0 - 2.2 Fill 9/01/2013	A13 0.0 - 1.0 Fill 9/01/2013	A13/1.0 1.0 - 1.3 Fill 9/01/2013	A14 0.0 - 1.0 Fill 9/01/2013	A15 0.0 - 1.0 Fill 9/01/2013
Systematic Bulk Samples Bulk Sample Volume (L) Bulk Sample Weight (kg)* Asbestos Observed Weight of ACM (g) Weight of Asbestos in ACM (g)** Asbestos w/w %	0.05%		10L 16kg ND - -	10L 16kg ACM identified 13.75 2.06 0.01	10L 16kg ND - -	10L 16kg ND - -	10L 16kg ND - -
Laboratory Analysis AF/FA Detected Asbestos Type Asbestos Weight (g) Asbestos w/w %	0.001% (AF/FA)		ND - - -	ND - - -	ND - - -	ND - -	ND - - -

Notes:

Assessment Criteria = Western Australia Deprtment of Health (2009) Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia

IS = Insufficient Sample

ND = No Asbestos Detected

ACM = Asbestos Containing Material. Products or materials that contain asbestos in an inert bound matrix such as cement or resin. Here taken to be sound material, even as frgaments and not fitting through a 7mm x 7mm sieve

FA = Friable asbestos material such as severely weathered ACM, and asbestos in the form of loose fibrous material such as insulation products

AF = Asbestos Fines

* = assumes a bulk density of 1.6

** = assumes asbestos content within asbestos cement materials of 15%

- = not applicable

		Sample ID	A16	A17	A18	A18/1.0	A18/2.0
Asbestos	Assessment Criteria	Depth (m)	0.0 - 0.5	0.0 - 0.5	0.0 - 1.0	1.0 - 2.0	2.0 - 3.0
10000100		Description	Fill	Fill	Fill	Fill	Fill
		Date	9/01/2013	10/01/2013	10/01/2013	10/01/2013	10/01/2013
Systematic Bulk Samples Bulk Sample Volume (L)			10L	10L	10L	10L	10L
Bulk Sample Weight (kg)*			16kg	16kg	16kg	16kg	16kg
Asbestos Observed			ND	ND	ACM identified	ACM identified	ND
Weight of ACM (g)			-	-	19.16	1.35	-
Weight of Asbestos in ACM (g)**			-	-	2.87	0.20	-
Asbestos w/w %	0.05%		-	-	0.02	0.00	-
Laboratory Analysis							
AF/FA Detected			ND	ND	ND	ND	ND
Asbestos Type			-	-	-	-	-
Asbestos Weight (g)			-	-	-	-	-
Asbestos w/w %	0.001% (AF/FA)		-	-	-	-	-

Notes:

Assessment Criteria = Western Australia Deprtment of Health (2009) Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia

IS = Insufficient Sample

ND = No Asbestos Detected

ACM = Asbestos Containing Material. Products or materials that contain asbestos in an inert bound matrix such as cement or resin. Here taken to be sound material, even as frgaments and not fitting through a 7mm x 7mm sieve

FA = Friable asbestos material such as severely weathered ACM, and asbestos in the form of loose fibrous material such as insulation products

AF = Asbestos Fines

* = assumes a bulk density of 1.6

** = assumes asbestos content within asbestos cement materials of 15%

- = not applicable

Asbestos	Assessment Criteria	Sample ID Depth (m) Description Date	A18/3.0 3.0 - 4.0 Fill 10/01/2013	A19 0.0 - 0.9 Fill 10/01/2013	A20 0.0 - 0.8 Fill 10/01/2013	A21 0.0 - 1.0 Fill 10/01/2013	A22 0.0 - 0.9 Fill 10/01/2013
Systematic Bulk Samples Bulk Sample Volume (L) Bulk Sample Weight (kg)* Asbestos Observed Weight of ACM (g) Weight of Asbestos in ACM (g)** Asbestos w/w %	0.05%		10L 16kg ND - -	10L 16kg ND - -	10L 16kg ND - -	10L 16kg ACM identified 3.84 0.58 0.00	10L 16kg ND - -
Laboratory Analysis AF/FA Detected Asbestos Type Asbestos Weight (g) Asbestos w/w %	0.001% (AF/FA)		ND - -	ND - -	ND - - -	ND - -	ND - - -

Notes:

Assessment Criteria = Western Australia Deprtment of Health (2009) Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia

IS = Insufficient Sample

ND = No Asbestos Detected

ACM = Asbestos Containing Material. Products or materials that contain asbestos in an inert bound matrix such as cement or resin. Here taken to be sound material, even as frgaments and not fitting through a 7mm x 7mm sieve

FA = Friable asbestos material such as severely weathered ACM, and asbestos in the form of loose fibrous material such as insulation products

AF = Asbestos Fines

* = assumes a bulk density of 1.6

** = assumes asbestos content within asbestos cement materials of 15%

- = not applicable

		Sample ID	A23	A24	A25	A25/1.0	A26
Ashestas	Assessment Criteria	Depth (m)	0.0 - 0.8	0.0 - 1.0	0.0 - 1.0	1.0 - 1.9	0.0 - 1.0
Asbestos	Assessment officia	Description	Fill	Fill	Fill	Fill	Fill
		Date	10/01/2013	10/01/2013	10/01/2013	10/01/2013	10/01/2013
Systematic Bulk Samples Bulk Sample Volume (L)			10L	10L	10L	10L	10L
Bulk Sample Weight (kg)*			16kg	16kg	16kg	16kg	16kg
Asbestos Observed			ND	ND	ACM Identified	ACM Identified	ND
Weight of ACM (g)			-	-	108.58	3.26	-
Weight of Asbestos in ACM (g)**			-	-	16.29	0.49	-
Asbestos w/w %	0.05%		-	-	0.10	0.00	-
Laboratory Analysis							
AF/FA Detected			ND	ND	ND	ND	ND
Asbestos Type			-	-	-	-	-
Asbestos Weight (g)			-	-	-	-	-
Asbestos w/w %	0.001% (AF/FA)		-	-	-	-	-

Notes:

Assessment Criteria = Western Australia Deprtment of Health (2009) Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia

IS = Insufficient Sample

ND = No Asbestos Detected

ACM = Asbestos Containing Material. Products or materials that contain asbestos in an inert bound matrix such as cement or resin. Here taken to be sound material, even as frgaments and not fitting through a 7mm x 7mm sieve

FA = Friable asbestos material such as severely weathered ACM, and asbestos in the form of loose fibrous material such as insulation products

AF = Asbestos Fines

* = assumes a bulk density of 1.6

** = assumes asbestos content within asbestos cement materials of 15%

- = not applicable

		Sample ID	A26/1.0	A26/2.0	A27	A27/1.0	A27/1.7
Asbestos	Assessment Criteria	Deptn (m)	1.0 - 2.0	2.0 - 2.7	0.0 - 1.0	1.0 - 1.7	1.7 - 2.7
		Description	Fill	Fill	Fill	Fill	Fill
		Date	10/01/2013	10/01/2013	11/01/2013	11/01/2013	11/01/2013
Systematic Bulk Samples Bulk Sample Volume (L) Bulk Sample Weight (kg)* Asbestos Observed Weight of ACM (g) Weight of Asbestos in ACM (g)** Asbestos w/w %	0.05%		10L 16kg ND - - -	10L 16kg ND - - -	10L 16kg ND - - -	10L 16kg ND - - -	10L 16kg ND - -
Laboratory Analysis AF/FA Detected Asbestos Type Asbestos Weight (g) Asbestos w/w %	0.001% (AF/FA)		ND - - -	ND - - -	ND - - -	ND - - -	ND - - -

Notes:

Assessment Criteria = Western Australia Deprtment of Health (2009) Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia

IS = Insufficient Sample

ND = No Asbestos Detected

ACM = Asbestos Containing Material. Products or materials that contain asbestos in an inert bound matrix such as cement or resin. Here taken to be sound material, even as frgaments and not fitting through a 7mm x 7mm sieve

FA = Friable asbestos material such as severely weathered ACM, and asbestos in the form of loose fibrous material such as insulation products

AF = Asbestos Fines

* = assumes a bulk density of 1.6

** = assumes asbestos content within asbestos cement materials of 15%

- = not applicable

		Sample ID	A28	A28/1.0	A28/2.0	A28/2.3	A29
Asbestos	Assessment Criteria	Deptn (m)	0.0 - 1.0	1.0 - 2.0	2.0 - 2.3	2.3 - 3.3	0.0 - 1.0
		Description	Fill	Fill	Fill	Fill	Fill
		Date	11/01/2013	11/01/2013	11/01/2013	11/01/2013	11/01/2013
Systematic Bulk Samples Bulk Sample Volume (L) Bulk Sample Weight (kg)* Asbestos Observed Weight of ACM (g) Weight of Asbestos in ACM (g)** Asbestos w/w %	0.05%		10L 16kg ND - - -	10L 16kg ACM Identified 3.37 0.51 0.00	10L 16kg ND - - -	10L 16kg ND - - -	10L 16kg ND - - -
Laboratory Analysis AF/FA Detected Asbestos Type Asbestos Weight (g) Asbestos w/w %	0.001% (AF/FA)		ND - - -	ND - - -	ND - - -	Detected AF (fibre cement) 0.024 0.004	ND - - -

Notes:

Assessment Criteria = Western Australia Deprtment of Health (2009) Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia

IS = Insufficient Sample

ND = No Asbestos Detected

ACM = Asbestos Containing Material. Products or materials that contain asbestos in an inert bound matrix such as cement or resin. Here taken to be sound material, even as frgaments and not fitting through a 7mm x 7mm sieve

FA = Friable asbestos material such as severely weathered ACM, and asbestos in the form of loose fibrous material such as insulation products

AF = Asbestos Fines

* = assumes a bulk density of 1.6

** = assumes asbestos content within asbestos cement materials of 15%

- = not applicable

Asbestos	Assessment Criteria	Sample ID Depth (m) Description	A29/1.0 1.0 - 2.0 Fill	A29/2.0 2.0 - 2.4 Fill	A30 0.0 - 1.0 Fill	A30/1.0 1.0 - 1.9 Fill	A31 0.0 - 1.0 Fill
		Date	11/01/2013	11/01/2013	11/01/2013	11/01/2013	11/01/2013
Systematic Bulk Samples Bulk Sample Volume (L) Bulk Sample Weight (kg)* Asbestos Observed Weight of ACM (g) Weight of Asbestos in ACM (g)** Asbestos w/w %	0.05%		10L 16kg ACM Identified 66.78 10.02 0.06	10L 16kg ACM Identified 142.95 21.44 0.13	10L 16kg ACM Identified 66.28 9.94 0.06	10L 16kg ACM Identified 376.34 56.45 0.35	10L 16kg ND - - -
Laboratory Analysis AF/FA Detected Asbestos Type Asbestos Weight (g) Asbestos w/w %	0.001% (AF/FA)		ND - - -	ND - - -	ND - - -	Detected AF (loose fibres) 0.002 0.0002	Detected AF (loose fibres) 0.016 0.003

Notes:

Assessment Criteria = Western Australia Deprtment of Health (2009) Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia

IS = Insufficient Sample

ND = No Asbestos Detected

ACM = Asbestos Containing Material. Products or materials that contain asbestos in an inert bound matrix such as cement or resin. Here taken to be sound material, even as frgaments and not fitting through a 7mm x 7mm sieve

FA = Friable asbestos material such as severely weathered ACM, and asbestos in the form of loose fibrous material such as insulation products

AF = Asbestos Fines

* = assumes a bulk density of 1.6

** = assumes asbestos content within asbestos cement materials of 15%

- = not applicable

		Sample ID	A32	A33	A34	A34/1.0	A35
Asbestos	Assessment Criteria	Depth (m)	0.0 - 0.9	0.0 - 0.7	0.0 - 1.0	1.0 - 1.5	0.0 - 1.0
Assestes	Assessment officia	Description	Fill	Fill	Fill	Fill	Fill
		Date	11/01/2013	11/01/2013	11/01/2013	11/01/2013	11/01/2013
Systematic Bulk Samples Bulk Sample Volume (L) Bulk Sample Weight (kg)* Asbestos Observed Weight of ACM (g) Weight of Asbestos in ACM (g)** Asbestos w/w %	0.05%		10L 16kg ND - -	10L 16kg ND - - -	10L 16kg ND - -	10L 16kg ND - -	10L 16kg ND - -
Laboratory Analysis AF/FA Detected Asbestos Type Asbestos Weight (g) Asbestos w/w %	0.001% (AF/FA)		ND - - -	ND - - -	ND - - -	ND - - -	ND - - -

Notes:

Assessment Criteria = Western Australia Deprtment of Health (2009) Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia

IS = Insufficient Sample

ND = No Asbestos Detected

ACM = Asbestos Containing Material. Products or materials that contain asbestos in an inert bound matrix such as cement or resin. Here taken to be sound material, even as frgaments and not fitting through a 7mm x 7mm sieve

FA = Friable asbestos material such as severely weathered ACM, and asbestos in the form of loose fibrous material such as insulation products

AF = Asbestos Fines

* = assumes a bulk density of 1.6

** = assumes asbestos content within asbestos cement materials of 15%

- = not applicable

		Sample ID	A35/1.0	A35/1.5	A36	A36/1.0	A36/2.0
Ashastas	Assassment Critoria	Depth (m)	1.0 - 1.5	1.5 - 2.2	0.0 - 1.0	1.0 - 2.0	2.0 - 3.0
Aspesios	Assessment Chtena	Description	Fill	Fill	Fill	Fill	Fill
		Date	11/01/2013	11/01/2013	11/01/2013	11/01/2013	11/01/2013
Systematic Bulk Samples			101	101	101	101	10
Bulk Sample Volume (L)			10L		10L	10L	10L
Advestes Observed			току	IOKG	току		TOKY
Aspestos Observed			ND	ND	ND	ACM Identified	ACM Identified
Weight of ACM (g)			-	-	-	31.81	9.13
Weight of Asbestos in ACM (g)**			-	-	-	4.77	1.37
Asbestos w/w %	0.05%		-	-	-	0.03	0.01
Laboratory Analysis							
AF/FA Detected			ND	ND	ND	ND	ND
Asbestos Type			-	-	-	-	-
Asbestos Weight (g)			-	-	-	-	-
Asbestos w/w %	0.001% (AF/FA)		-	-	-	-	-

Notes:

Assessment Criteria = Western Australia Deprtment of Health (2009) Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia

IS = Insufficient Sample

ND = No Asbestos Detected

ACM = Asbestos Containing Material. Products or materials that contain asbestos in an inert bound matrix such as cement or resin. Here taken to be sound material, even as frgaments and not fitting through a 7mm x 7mm sieve

FA = Friable asbestos material such as severely weathered ACM, and asbestos in the form of loose fibrous material such as insulation products

AF = Asbestos Fines

* = assumes a bulk density of 1.6

** = assumes asbestos content within asbestos cement materials of 15%

- = not applicable

		Sample ID	A37	A37/1.0	A37/2.0	A38	A38/0.9
Ashestas	Assessment Criteria	Depth (m)	0.0 - 1.0	1.0 - 2.0	2.0 - 2.8	0.0 - 0.9	0.9 - 1.0
Asbestos	Assessment ontena	Description	Fill	Fill	Fill	Fill	Fill
		Date	11/01/2013	11/01/2013	11/01/2013	11/01/2013	11/01/2013
Systematic Bulk Samples Bulk Sample Volume (L) Bulk Sample Weight (kg)*			10L 16kg	10L 16kg	10L 16kg	10L 16kg	IS -
Asbestos Observed			ND	ND	ND	ND	-
Weight of Asbestos in ACM (g)**			-	-	-	-	-
Asbestos w/w %	0.05%		-	-	-	-	-
Laboratory Analysis							
AF/FA Detected			ND	ND	ND	ND	ND
Asbestos Type			-	-	-	-	-
Asbestos Weight (g)			-	-	-	-	-
Asbestos w/w %	0.001% (AF/FA)		-	-	-	-	-

Notes:

Assessment Criteria = Western Australia Deprtment of Health (2009) Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia

IS = Insufficient Sample

ND = No Asbestos Detected

ACM = Asbestos Containing Material. Products or materials that contain asbestos in an inert bound matrix such as cement or resin. Here taken to be sound material, even as frgaments and not fitting through a 7mm x 7mm sieve

FA = Friable asbestos material such as severely weathered ACM, and asbestos in the form of loose fibrous material such as insulation products

AF = Asbestos Fines

* = assumes a bulk density of 1.6

** = assumes asbestos content within asbestos cement materials of 15%

- = not applicable
| | | Sample ID | A38/1.0 | A38/2.0 | A39 | A39/1.0 | A40 |
|---|---------------------|-------------|------------|------------|----------------|------------|----------------|
| Ashastas | Assassment Critoria | Depth (m) | 1.0 - 2.0 | 2.0 - 2.7 | 0.0 - 1.0 | 1.0 - 2.0 | 0.0 - 1.0 |
| Aspesios | Assessment Chteria | Description | Fill | Fill | Fill | Fill | Fill |
| | | Date | 11/01/2013 | 11/01/2013 | 11/01/2013 | 11/01/2013 | 12/01/2013 |
| Systematic Bulk Samples
Bulk Sample Volume (L) | | | 10L | 10L | 10L | 10L | 10L |
| Bulk Sample Weight (kg)* | | | 16kg | 16kg | 16kg | 16kg | 16kg |
| Asbestos Observed | | | ND | ND | ACM Identified | ND | ACM Identified |
| Weight of ACM (g) | | | - | - | 37.18 | - | 131.62 |
| Weight of Asbestos in ACM (g)** | | | - | - | 5.58 | - | 19.74 |
| Asbestos w/w % | 0.05% | | - | - | 0.03 | - | 0.12 |
| Laboratory Analysis | | | | | | | |
| AF/FA Detected | | | ND | ND | ND | ND | ND |
| Asbestos Type | | | - | - | - | - | - |
| Asbestos Weight (g) | | | - | - | - | - | - |
| Asbestos w/w % | 0.001% (AF/FA) | | - | - | - | - | - |
| | | | | | | | |

Notes:

Assessment Criteria = Western Australia Deprtment of Health (2009) Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia

IS = Insufficient Sample

ND = No Asbestos Detected

ACM = Asbestos Containing Material. Products or materials that contain asbestos in an inert bound matrix such as cement or resin. Here taken to be sound material, even as frgaments and not fitting through a 7mm x 7mm sieve

FA = Friable asbestos material such as severely weathered ACM, and asbestos in the form of loose fibrous material such as insulation products

AF = Asbestos Fines

* = assumes a bulk density of 1.6

** = assumes asbestos content within asbestos cement materials of 15%

- = not applicable

Asbestos	Assessment Criteria	Sample ID Depth (m) Description Date	A40/1.0 1.0 - 2.0 Fill 12/01/2013	A41 0.0 - 1.0 Fill 4/02/2013	A42 0.0 - 0.4 Fill 4/02/2013	A42/0.4 0.4 - 1.0 Fill 4/02/2013	A43 0.0 - 0.4 Fill 4/02/2013
Systematic Bulk Samples Bulk Sample Volume (L) Bulk Sample Weight (kg)* Asbestos Observed Weight of ACM (g) Weight of Asbestos in ACM (g)** Asbestos w/w %	0.05%		10L 16kg ACM Identified 39.24 5.89 0.04	10L 16kg ND - -	10L 16kg ND - -	10L 16kg ND - -	10L 16kg ND - -
Laboratory Analysis AF/FA Detected Asbestos Type Asbestos Weight (g) Asbestos w/w %	0.001% (AF/FA)		ND - -	ND - - -	ND - - -	ND - - -	ND - - -

Notes:

Assessment Criteria = Western Australia Deprtment of Health (2009) Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia

IS = Insufficient Sample

ND = No Asbestos Detected

ACM = Asbestos Containing Material. Products or materials that contain asbestos in an inert bound matrix such as cement or resin. Here taken to be sound material, even as frgaments and not fitting through a 7mm x 7mm sieve

FA = Friable asbestos material such as severely weathered ACM, and asbestos in the form of loose fibrous material such as insulation products

AF = Asbestos Fines

* = assumes a bulk density of 1.6

** = assumes asbestos content within asbestos cement materials of 15%

- = not applicable

		Sample ID	A43/0.4	A44	A45	A45/1.0	A46
Asbestos	Assessment Criteria	Description	0.4 - 1.4 Fill	Fill	Fill	Fill	6.0 - 1.0 Fill
		Date	4/02/2013	4/02/2013	4/02/2013	4/02/2013	4/02/2013
Systematic Bulk Samples			101	101	101	101	101
Bulk Sample Woight (kg)*			10L	10L	10L	10L 16kg	10L
Achectes Observed			ND			ND	ACM Identified
Aspesios Observed			ND	ND	ND	ND	
Weight of Achieves in ACM (g)			-	-	-	-	22.00
Achectec w/w %	0.05%		-	-	-	-	0.02
ASDESIUS W/W %	0.05%		-	-	-	-	0.02
Laboratory Analysis							
AF/FA Detected			ND	ND	ND	ND	Detected
Asbestos Type			-	-	-	-	AF (loose fibres)
Asbestos Weight (g)			-	-	-	-	0.0223
Asbestos w/w %	0.001% (AF/FA)		-	-	-	-	0.004

Notes:

Assessment Criteria = Western Australia Deprtment of Health (2009) Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia

IS = Insufficient Sample

ND = No Asbestos Detected

ACM = Asbestos Containing Material. Products or materials that contain asbestos in an inert bound matrix such as cement or resin. Here taken to be sound material, even as frgaments and not fitting through a 7mm x 7mm sieve

FA = Friable asbestos material such as severely weathered ACM, and asbestos in the form of loose fibrous material such as insulation products

AF = Asbestos Fines

* = assumes a bulk density of 1.6

** = assumes asbestos content within asbestos cement materials of 15%

- = not applicable

TABLE 1: Summary of Soil Analytical Data Asbestos 7 Hilton Street South Tamworth, NSW

Asbestos	Assessment Criteria	Sample ID Depth (m) Description Date	A46/1.0 1.0 - 1.6 Fill 4/02/2013	A47 0.0 - 1.0 Fill 4/02/2013	A47/1.0 1.0 - 1.7 Fill 4/02/2013	A48 0.0 - 1.0 Fill 4/02/2013	A48/1.0 1.0 - 2.0 Fill 4/02/2013
Systematic Bulk Samples Bulk Sample Volume (L) Bulk Sample Weight (kg)* Asbestos Observed Weight of ACM (g) Weight of Asbestos in ACM (g)** Asbestos w/w %	0.05%		10L 16kg ND - -	10L 16kg ACM Identified 25.49 3.82 0.02	10L 16kg ND - -	10L 16kg ND - -	10L 16kg ND - -
Laboratory Analysis AF/FA Detected Asbestos Type Asbestos Weight (g) Asbestos w/w %	0.001% (AF/FA)		ND - - -	ND - - -	ND - - -	ND - -	ND - - -

Notes:

Assessment Criteria = Western Australia Deprtment of Health (2009) Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia

IS = Insufficient Sample

ND = No Asbestos Detected

ACM = Asbestos Containing Material. Products or materials that contain asbestos in an inert bound matrix such as cement or resin. Here taken to be sound material, even as frgaments and not fitting through a 7mm x 7mm sieve

FA = Friable asbestos material such as severely weathered ACM, and asbestos in the form of loose fibrous material such as insulation products

AF = Asbestos Fines

* = assumes a bulk density of 1.6

** = assumes asbestos content within asbestos cement materials of 15%

- = not applicable

		Sample ID	A49	A49/1.0	A49/2.0	A49/3.0	A50
Ashastas	Assossment Critoria	Depth (m)	0.0 - 1.0	1.0 - 2.0	2.0 - 3.0	3.0 - 3.4	0.0 - 1.0
Asbestos	Assessment Chiena	Description	Fill	Fill	Fill	Fill	Fill
		Date	4/02/2013	4/02/2013	4/02/2013	4/02/2013	4/02/2013
Systematic Bulk Samples Bulk Sample Volume (L) Bulk Sample Weight (kg)* Asbestos Observed Weight of ACM (g) Weight of Asbestos in ACM (g)** Asbestos w/w %	0.05%		10L 16kg ND - -	10L 16kg ND - - -	10L 16kg ND - -	10L 16kg ND - - -	10L 16kg ACM Identified 42.95 6.44 0.04
Laboratory Analysis AF/FA Detected Asbestos Type Asbestos Weight (g) Asbestos w/w %	0.001% (AF/FA)		ND - - -	ND - - -	Detected FA 0.057 0.007	ND - - -	ND - - -

Notes:

Assessment Criteria = Western Australia Deprtment of Health (2009) Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia

IS = Insufficient Sample

ND = No Asbestos Detected

ACM = Asbestos Containing Material. Products or materials that contain asbestos in an inert bound matrix such as cement or resin. Here taken to be sound material, even as frgaments and not fitting through a 7mm x 7mm sieve

FA = Friable asbestos material such as severely weathered ACM, and asbestos in the form of loose fibrous material such as insulation products

AF = Asbestos Fines

* = assumes a bulk density of 1.6

** = assumes asbestos content within asbestos cement materials of 15%

- = not applicable

Asbestos	Assessment Criteria	Sample ID Depth (m) Description Date	A50/1.0 1.0 - 1.5 Fill 4/02/2013	A50/1.8 1.5 - 1.8 Fill 4/02/2013	A50/2.1 1.8 - 2.1 Fill 4/02/2013	A50/2.6 2.1 - 2.6 Fill 4/02/2013	A51 0.0 - 1.0 Fill 4/02/2013
Systematic Bulk Samples Bulk Sample Volume (L) Bulk Sample Weight (kg)* Asbestos Observed Weight of ACM (g) Weight of Asbestos in ACM (g)** Asbestos w/w %	0.05%		10L 16kg ACM Identified 46.10 6.92 0.04	10L 16kg ACM Identified 285.24 42.79 0.27	10L 16kg ACM Identified 61.10 9.17 0.06	10L 16kg ACM Identified 6.56 0.98 0.01	10L 16kg ND - -
Laboratory Analysis AF/FA Detected Asbestos Type Asbestos Weight (g) Asbestos w/w %	0.001% (AF/FA)		ND - - -	ND - - -	ND - - -	ND - - -	Detected AF (loose fibres) 0.016 0.0023

Notes:

Assessment Criteria = Western Australia Deprtment of Health (2009) Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia

IS = Insufficient Sample

ND = No Asbestos Detected

ACM = Asbestos Containing Material. Products or materials that contain asbestos in an inert bound matrix such as cement or resin. Here taken to be sound material, even as frgaments and not fitting through a 7mm x 7mm sieve

FA = Friable asbestos material such as severely weathered ACM, and asbestos in the form of loose fibrous material such as insulation products

AF = Asbestos Fines

* = assumes a bulk density of 1.6

** = assumes asbestos content within asbestos cement materials of 15%

- = not applicable

		Sample ID	A51/1.0	A51/1.8	A52	A52/0.55	A52/1.8
Ashestos	Assessment Criteria	Depth (m)	1.0 - 1.8	1.8 - 2.1	0.0 - 0.55	0.55 - 1.8	1.8 - 2.2
10000100		Description	Fill	Fill	Fill	Fill	Fill
		Date	4/02/2013	4/02/2013	5/02/2013	5/02/2013	5/02/2013
Systematic Bulk Samples Bulk Sample Volume (L) Bulk Sample Weight (kg)* Asbestos Observed Weight of ACM (g) Weight of Asbestos in ACM (g)** Asbestos w/w %	0.05%		10L 16kg ND - -	10L 16kg ND - - -	10L 16kg ND - -	10L 16kg ND - -	10L 16kg ND - -
Laboratory Analysis AF/FA Detected Asbestos Type Asbestos Weight (g) Asbestos w/w %	0.001% (AF/FA)		ND - - -	ND - - -	ND - - -	ND - - -	ND - - -

Notes:

Assessment Criteria = Western Australia Deprtment of Health (2009) Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia

IS = Insufficient Sample

ND = No Asbestos Detected

ACM = Asbestos Containing Material. Products or materials that contain asbestos in an inert bound matrix such as cement or resin. Here taken to be sound material, even as frgaments and not fitting through a 7mm x 7mm sieve

FA = Friable asbestos material such as severely weathered ACM, and asbestos in the form of loose fibrous material such as insulation products

AF = Asbestos Fines

* = assumes a bulk density of 1.6

** = assumes asbestos content within asbestos cement materials of 15%

- = not applicable

		Sample ID	A53	A53/1.0	A53/2.0	A54	A54/1.0
Ashestas	Assessment Criteria	Depth (m)	0.0 - 1.0	1.0 - 2.0	2.0 - 3.0	0.0 - 1.0	1.0 - 2.0
Aspesios	Assessment Criteria	Description	Fill	Fill	Fill	Fill	Fill
		Date	5/02/2013	5/02/2013	5/02/2013	5/02/2013	5/02/2013
Systematic Bulk Samples Bulk Sample Volume (L) Bulk Sample Weight (kg)* Asbestos Observed Weight of ACM (g) Weight of Asbestos in ACM (g)** Asbestos w/w %	0.05%		10L 16kg ND - - -	10L 16kg ND - - -	10L 16kg ND - - -	10L 16kg ND - - -	10L 16kg ND - -
Laboratory Analysis AF/FA Detected Asbestos Type Asbestos Weight (g) Asbestos w/w %	0.001% (AF/FA)		ND - - -	ND - - -	ND - - -	ND - - -	ND - - -

Notes:

Assessment Criteria = Western Australia Deprtment of Health (2009) Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia

IS = Insufficient Sample

ND = No Asbestos Detected

ACM = Asbestos Containing Material. Products or materials that contain asbestos in an inert bound matrix such as cement or resin. Here taken to be sound material, even as frgaments and not fitting through a 7mm x 7mm sieve

FA = Friable asbestos material such as severely weathered ACM, and asbestos in the form of loose fibrous material such as insulation products

AF = Asbestos Fines

* = assumes a bulk density of 1.6

** = assumes asbestos content within asbestos cement materials of 15%

- = not applicable

Asbestos	Assessment Criteria	Sample ID Depth (m) Description Date	A54/2.0 2.0 - 3.0 Fill 5/02/2013	A55 0.0 - 0.9 Fill 5/02/2013	A55/0.9 0.9 - 1.9 Fill 5/02/2013	A55/1.9 1.9 - 3.0 Fill 5/02/2013	A56 0.0 - 0.5 Fill 5/02/2013
Systematic Bulk Samples Bulk Sample Volume (L) Bulk Sample Weight (kg)* Asbestos Observed Weight of ACM (g) Weight of Asbestos in ACM (g)** Asbestos w/w %	0.05%		10L 16kg ACM Identified 37.64 5.65 0.04	10L 16kg ND - -	10L 16kg ND - -	10L 16kg ND - -	10L 16kg ND - -
Laboratory Analysis AF/FA Detected Asbestos Type Asbestos Weight (g) Asbestos w/w %	0.001% (AF/FA)		ND - -	ND - - -	ND - - -	ND - - -	ND - -

Notes:

Assessment Criteria = Western Australia Deprtment of Health (2009) Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia

IS = Insufficient Sample

ND = No Asbestos Detected

ACM = Asbestos Containing Material. Products or materials that contain asbestos in an inert bound matrix such as cement or resin. Here taken to be sound material, even as frgaments and not fitting through a 7mm x 7mm sieve

FA = Friable asbestos material such as severely weathered ACM, and asbestos in the form of loose fibrous material such as insulation products

AF = Asbestos Fines

* = assumes a bulk density of 1.6

** = assumes asbestos content within asbestos cement materials of 15%

- = not applicable

		Sample ID	A56/0.5	A56/1.5	A56/2.5	A57	A57/1.0
Ashestas	Assessment Criteria	Depth (m)	0.5 - 1.5	1.5 - 2.5	2.5 - 3.5	0.0 - 1.0	1.0 - 2.0
Asbestos	Assessment ontena	Description	Fill	Fill	Fill	Fill	Fill
		Date	5/02/2013	5/02/2013	5/02/2013	5/02/2013	5/02/2013
Systematic Bulk Samples Bulk Sample Volume (L) Bulk Sample Weight (kg)* Asbestos Observed Weight of ACM (g) Weight of Asbestos in ACM (g)** Asbestos w/w %	0.05%		10L 16kg ND - -	10L 16kg ND - - -	10L 16kg ND - -	10L 16kg ND - -	10L 16kg ND - -
Laboratory Analysis AF/FA Detected Asbestos Type Asbestos Weight (g) Asbestos w/w %	0.001% (AF/FA)		ND - - -	ND - - -	ND - - -	ND - - -	ND - - -

Notes:

Assessment Criteria = Western Australia Deprtment of Health (2009) Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia

IS = Insufficient Sample

ND = No Asbestos Detected

ACM = Asbestos Containing Material. Products or materials that contain asbestos in an inert bound matrix such as cement or resin. Here taken to be sound material, even as frgaments and not fitting through a 7mm x 7mm sieve

FA = Friable asbestos material such as severely weathered ACM, and asbestos in the form of loose fibrous material such as insulation products

AF = Asbestos Fines

* = assumes a bulk density of 1.6

** = assumes asbestos content within asbestos cement materials of 15%

- = not applicable

Asbestos	Assessment Criteria	Sample ID Depth (m) Description	A58 0.0 - 1.0 Fill	A58/1.0 1.0 - 1.9 Eill	A59 0.0 - 0.7 Eill	A59/0.7 0.7 - 1.7	A60 0.0 - 0.9
		Date	5/02/2013	5/02/2013	5/02/2013	5/02/2013	5/02/2013
Systematic Bulk Samples Bulk Sample Volume (L) Bulk Sample Weight (kg)* Asbestos Observed Weight of ACM (g) Weight of Asbestos in ACM (g)** Asbestos w/w %	0.05%		10L 16kg ND - -	10L 16kg ND - - -	10L 16kg ND - - -	10L 16kg ND - - -	10L 16kg ACM Identified 27.86 4.18 0.03
Laboratory Analysis AF/FA Detected Asbestos Type Asbestos Weight (g) Asbestos w/w %	0.001% (AF/FA)		ND - - -	ND - - -	ND - - -	ND - - -	ND - - -

Notes:

Assessment Criteria = Western Australia Deprtment of Health (2009) Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia

IS = Insufficient Sample

ND = No Asbestos Detected

ACM = Asbestos Containing Material. Products or materials that contain asbestos in an inert bound matrix such as cement or resin. Here taken to be sound material, even as frgaments and not fitting through a 7mm x 7mm sieve

FA = Friable asbestos material such as severely weathered ACM, and asbestos in the form of loose fibrous material such as insulation products

AF = Asbestos Fines

* = assumes a bulk density of 1.6

** = assumes asbestos content within asbestos cement materials of 15%

- = not applicable

Asbestos	Assessment Criteria	Sample ID Depth (m) Description Date	A61 0.0 - 0.4 Fill 5/02/2013	A62 0.0 - 0.4 Fill 5/02/2013	A63 0.0 - 1.0 Fill 5/02/2013	A64 0.0 - 0.8 Fill 5/02/2013	A65 0.0 - 1.0 Fill 5/02/2013
Systematic Bulk Samples Bulk Sample Volume (L) Bulk Sample Weight (kg)* Asbestos Observed Weight of ACM (g) Weight of Asbestos in ACM (g)** Asbestos w/w %	0.05%		10L 16kg ND - -	10L 16kg ND - -	10L 16kg ND - -	10L 16kg ND - -	10L 16kg ND - -
Laboratory Analysis AF/FA Detected Asbestos Type Asbestos Weight (g) Asbestos w/w %	0.001% (AF/FA)		ND - -	ND - - -	ND - -	ND - - -	ND - - -

Notes:

Assessment Criteria = Western Australia Deprtment of Health (2009) Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia

IS = Insufficient Sample

ND = No Asbestos Detected

ACM = Asbestos Containing Material. Products or materials that contain asbestos in an inert bound matrix such as cement or resin. Here taken to be sound material, even as frgaments and not fitting through a 7mm x 7mm sieve

FA = Friable asbestos material such as severely weathered ACM, and asbestos in the form of loose fibrous material such as insulation products

AF = Asbestos Fines

* = assumes a bulk density of 1.6

** = assumes asbestos content within asbestos cement materials of 15%

- = not applicable

		Sample ID Depth (m)	A66 0.0 - 1.0	A67	A67/0.6 0.6 - 0.95	A68 0.0 - 0.7	A69 0.0 - 0.9
Asbestos	Assessment Criteria	Description	Fill	Fill	Fill	Fill	Fill
		Date	5/02/2013	5/02/2013	5/02/2013	5/02/2013	5/02/2013
Systematic Bulk Samples Bulk Sample Volume (L)			10L	10L	10L	10L	10L
Bulk Sample Weight (kg)*			16kg	16kg	16kg	16kg	16kg
Asbestos Observed			ND	ND	ND	ACM Identified	ACM Identified
Weight of ACM (g)			-	-	-	22.18	24.35
Weight of Asbestos in ACM (g)**			-	-	-	3.33	3.65
Asbestos w/w %	0.05%		-	-	-	0.02	0.02
Laboratory Analysis							
AF/FA Detected			ND	ND	ND	ND	ND
Asbestos Type			-	-	-	-	-
Asbestos Weight (g)			-	-	-	-	-
Asbestos w/w %	0.001% (AF/FA)		-	-	-	-	-

Notes:

Assessment Criteria = Western Australia Deprtment of Health (2009) Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia

IS = Insufficient Sample

ND = No Asbestos Detected

ACM = Asbestos Containing Material. Products or materials that contain asbestos in an inert bound matrix such as cement or resin. Here taken to be sound material, even as frgaments and not fitting through a 7mm x 7mm sieve

FA = Friable asbestos material such as severely weathered ACM, and asbestos in the form of loose fibrous material such as insulation products

AF = Asbestos Fines

* = assumes a bulk density of 1.6

** = assumes asbestos content within asbestos cement materials of 15%

- = not applicable

Asbestos	Assessment Criteria	Sample ID Depth (m) Description Date	A70 0.0 - 0.8 Fill 5/02/2013	A71 0.0 - 0.3 Fill 6/02/2013	A72 0.0 - 0.7 Fill 6/02/2013	A73 0.0 - 0.35 Fill 6/02/2013	A74 0.0 - 0.4 Fill 6/02/2013
Systematic Bulk Samples Bulk Sample Volume (L) Bulk Sample Weight (kg)* Asbestos Observed Weight of ACM (g) Weight of Asbestos in ACM (g)** Asbestos w/w %	0.05%		10L 16kg ACM Identified 45.71 6.86 0.04	10L 16kg ND - -	10L 16kg ND - -	10L 16kg ND - -	10L 16kg ND - -
Laboratory Analysis AF/FA Detected Asbestos Type Asbestos Weight (g) Asbestos w/w %	0.001% (AF/FA)		ND - -	ND - - -	ND - - -	ND - - -	ND - - -

Notes:

Assessment Criteria = Western Australia Deprtment of Health (2009) Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia

IS = Insufficient Sample

ND = No Asbestos Detected

ACM = Asbestos Containing Material. Products or materials that contain asbestos in an inert bound matrix such as cement or resin. Here taken to be sound material, even as frgaments and not fitting through a 7mm x 7mm sieve

FA = Friable asbestos material such as severely weathered ACM, and asbestos in the form of loose fibrous material such as insulation products

AF = Asbestos Fines

* = assumes a bulk density of 1.6

** = assumes asbestos content within asbestos cement materials of 15%

- = not applicable

Asbestos	Assessment Criteria	Sample ID Depth (m) Description Date	A75 0.0 - 0.3 Topsoil 6/02/2013	A76 0.0 - 0.2 Fill 6/02/2013	A77 0.0 - 0.4 Topsoil 6/02/2013	A78 0.0 - 0.2 Topsoil 6/02/2013	A79 0.0 - 0.5 Fill 6/02/2013
Systematic Bulk Samples Bulk Sample Volume (L) Bulk Sample Weight (kg)* Asbestos Observed Weight of ACM (g) Weight of Asbestos in ACM (g)** Asbestos w/w %	0.05%		10L 16kg ND - -	10L 16kg ND - -	10L 16kg ND - -	10L 16kg ND - -	10L 16kg ND - -
Laboratory Analysis AF/FA Detected Asbestos Type Asbestos Weight (g) Asbestos w/w %	0.001% (AF/FA)		ND - -	ND - - -	ND - - -	ND - -	ND - - -

Notes:

Assessment Criteria = Western Australia Deprtment of Health (2009) Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia

IS = Insufficient Sample

ND = No Asbestos Detected

ACM = Asbestos Containing Material. Products or materials that contain asbestos in an inert bound matrix such as cement or resin. Here taken to be sound material, even as frgaments and not fitting through a 7mm x 7mm sieve

FA = Friable asbestos material such as severely weathered ACM, and asbestos in the form of loose fibrous material such as insulation products

AF = Asbestos Fines

* = assumes a bulk density of 1.6

** = assumes asbestos content within asbestos cement materials of 15%

- = not applicable

ATTACHMENT A



Plate 1 – Concrete cricket pitch and the central portion of the site from the western boundary.



Plate 2 – The northeast corner of the site.



Plate 3 – The southeast portion of the site.



Plate 4 – The southern boundary of the site with the western portion beyond.



Plate 5 – Fill material with testpit A1.



Plate 6 – ACM observed within fill material from Testpit A1.



Plate 7 – Concrete footings observed in testpit A13.



Plate 8 – The central eastern portion of the site with the eastern boundary beyond.



Plate 9 – Fill material in testpit A36.



Plate 10 – Fill material in testpit A25.



Plate 11 – Fill materials in testpit A30.



Plate 12 – Fill materials in testpit A35.



Plate 13 – Grid Locations east of the northeast corner of the site.

ATTACHMENT B



sales@weigh.com.au

www.weigh.com.au

25th January 2013

Geo Logix Att: Jenna Seymour Unit 2309 4 Daydream Street Warriewood NSW 2103

Dear Jenna,

RE: CALIBRATION OF SCALES

This letter serves to confirm that the scale 600g to 0.1g as per invoice no: 3615 and 3636 was calibrated to NMI specifications before leaving our premises in both instances.

Yours sincerely

Bill

Gary Spilkin DIRECTOR

ATTACHMENT C

Depth (m)	Test Pit ID Total Depth (m) Date	A1 1.50 9/01/2013	A2 1.50 9/01/2013	A3 1.30 9/01/2013	A4 1.40 9/01/2013	A5 1.20 9/01/2013	A6 1.10 9/01/2013
Surface							
0 0.1 0.2 0.3 0.4		Fill - 10VP 5/4 moderate vellowish brown, 40% clay	Fill - 10YP 5/4 moderate vellowich brown 40% clay	Fill - 10YR 5/4 moderate yellowish brown, 40% clay and silt, 20% sand, 40% gravel, loose, dry, glass, namer shale.	Fill - 5YR 4/4 moderate brown, 40% clay and silt, 20% sand, 40% gravel, dense, dry, shale gravels.	Fill - 5YR 4/4 moderate brown and 10YR 6/6 dark yellowish orange, 40% clay and silt, 20% sand, 40% gravel, dry, damp, shale gravels.	Fill - SYR 4/4 moderate brown and 10YR 6/6 dark yellowish orange, 40% clay and silt, 20% sand, 40% gravel, dense, dry, shale gravels, bricks, glass.
0.5 0.6 0.7		and silt, 20% sand, 40% gravel, loose, dy, bricks, fibro cement frgaments, shale gravels.	nan stilt, 20% sand, 40% gravat i over, 40% and and stilt, 20% sand, 40% gravat losse, dry, bricks, fibro cement fragments, shale gravels.	popor, ondo.		Silt with Sand - 10YR 2/2 dusky yellowish brown, 80% clay and silt, 20% sand, soft, dry, low plasticity,	
0.8					Silt with Sand - 10YR 2/2, 80% clay and silt, 20% sand, soft, dry, low plas, former topsoil.	Sandy Lean Clay - 10YR 6/6 dark yellowish brown	Weathered Shale
0.9				Sandy Lean Clay - 5YR 5/6 light brown and 5YR 4/4		silt, 30% sand, firm, damp, low plasticity.	
1.1				moderate brown, 70% clay and silt, 30% sand, firm, damp, low plasticity.	Sandy Lean Clay - 10YR 6/6 dark yellowish brown and 10YR 6/2 pale vellowish brown, 70% clay and	Weathered Shale	
1.2		Sandy Lean Clay - 5YR 5/6 light brown and 5YR 4/4 moderate brown, 70% clay and silt, 30% sand, firm, damp, low plasticity.	Sandy Lean Clay - 5YR 5/6 light brown and 5YR 4/4 moderate brown, 70% clay and silt, 30% sand, firm, damp, low plasticity.		silt, 30% sand, firm, damp, low plasticity.		
1.3							
1.4							
1.8							
2.0							
2.2							
2.4							
2.6							
2.8							
3.0							
3.2							
3.4							
3.6							
3.8							
3.9							
4.0							
4.2							

Depth (m)	Test Pit ID Total Depth (m) Date	A7 1.30 9/01/2013	A8 1.60 9/01/2013	A9 1.60 9/01/2013	A10 1.70 9/01/2013	A11 2.00 9/01/2013	A12 2.90 9/01/2013
Surface							
Surface 0 0.1 0.2 0.3 0.4 0.5 0.6 0.7		Fill - 5YR 4/4 moderate brown and 10YR 6/6 dark yellowish orange, 40% clay and silt, 20% sand, 40% gravel, dense, dry, shale gravels, brick, concrete.	Fill - 5YR 4/4 moderate brown and 10YR 6/6 dark yellowish orange, 40% clay and silt, 20% sand, 40% gravel, dense, dry, shale gravels, brick, concrete.	Fill - 5YR 4/4 moderate brown and 10YR 6/6 dark yellowish orange, 40% clay and silt, 20% sand, 40% gravel, dense, dry, shale gravels, brick.	Fill - 5YR 4/4 moderate brown and 10YR 6/6 dark yellowish orange, 40% clay and silt, 20% sand, 40% gravel, dense, dry, shale gravels, bricks from 0.5 - 0.8m, fibro cement fragments, concrete.	Fill - 5YR 4/4 moderate brown , 40% clay and silt, 20% sand, 40% gravel, loose, dry, shale gravels, bricks, fibro cement fragments.	
0.8		Sandy Lean Clay - 10YR 6/6 dark yellowish brown and 10YR 6/2 pale yellowish brown, 70% clay and					Fill - 5YR 4/4 moderate brown, 40% clay and silt, 20% sand, 40% gravel, loose, dry, shale gravels,
1.0		silt, 30% sand, firm, damp, low plasticity.			-		bricks.
1.1		Weathered Shale	Sandy Lean Clay - 10YR 6/6 dark yellowish brown and 10YR 6/2 pale yellowish brown, 70% clay and	Sandy Lean Clay - 10VP 6/6 dark vallowish brown			
1.2			silt, 30% sand, firm, damp, low plasticity.	and 10YR 6/2 pale yellowish brown, 70% clay and silt, 30% sand, firm, damp, low plasticity.			
1.3					Sandy Lean Clay - 10YR 6/6 dark yellowish brown and 10YR 6/2 pale yellowish brown, 70% clay and		
1.4			Weathered Shale		silt, 30% sand, firm, damp, low plasticity.		
1.6						Sandy Lean Clay - 10YR 6/6 dark yellowish brown and 5YR 4/4 moderate brown, 70% clay and silt,	
1.8						30% sano, tirm, damp, iow plasticity.	
2.0							
2.2							Sandy Lean Clay - 10YR 6/6 dark yellowish brown and 10YR 6/2 pale yellowish brown, 70% clay and
2.4							silt, 30% sand, firm, damp, low plasticity.
2.8							Weathered Shale
3.0							
3.2							
3.4							
3.6							
3.8							
3.9							
4.0							
4.2							

Depth (m)	Test Pit ID Total Depth (m) Date	A13 2.00 9/01/2013	A14 1.90 9/01/2013	A15 1.40 9/01/2013	A16 1.00 9/01/2013	A17 1.00 10/01/2013	A18 4.30 10/01/2013
Surface							
0 0.1							
0.2					Fill - 5YR 4/4 moderate brown , 40% clay and silt,	Fill - 5YR 4/4 moderate brown , 40% clay and silt,	
0.3					concrete footings, fibro cement fragment, bricks.	20% sand, 40% gravel, loose, dry, shale gravels.	
0.4			Fill - 5YR 4/4 moderate brown 40% clay and silt	Fill - 5YR 4/4 moderate brown 40% clay and soil			
0.5			20% sand, 40% gravel, loose, dry, shale gravels, fibro cement fragment, bricks.	20% sand, 40% gravel, loose, dry, shale gravels, concrete footings, fibro cement fragment, bricks.			
0.6		Fill - 5YR 4/4 moderate brown , 40% clay and silt, 20% sand, 40% gravel, loose, dry, concrete					
0.7		footings, bricks, fibro cement fragments.			Weathered Shale	Weathered Shale	
0.8							
0.9							
1.0			Silt with Sand - 10YR 2/2 dusky yellowish brown,	Silt with Sand - 10YR 2/2, 80% clay and silt, 20% sand, soft, dry, low plas, former topsoil.			
1.1			80% clay and silt, 20% sand, soft, dry, low plasticity, former topsoil.				
1.2				Weathered Shale			Fill - 5YR 4/4 moderate brown , 40% clay and silt,
1.3		Silt with Sand - 10YR 2/2, 80% clay and silt, 20% sand, soft, dry, low plas, former topsoil.					20% sand, 40% gravel, loose, dry, shale gravels, bricks, metal wires, steel cables, paper, tyres, fibro
1.4			Weathered Shale				cement fragments, white plasterboard.
1.6		Weathered Shale					
1.8				-			
2.0							
2.2							
2.4							
2.6							
2.0							
3.0							
3.4							
3.6							
3.8							
3.9							Fill - 10YR 6/6, 5YR 5/6, 5YR 4/4, 70 % clay and
4.0							silt, 30% sand, 10% gravel, soft, damp, basalt.
4.2							Weathered Shale

Depth (m)	Test Pit ID Total Depth (m) Date	A19 1.40 10/01/2013	A20 1.70 10/01/2013	A21 1.50 10/01/2013	A22 1.40 10/01/2013	A23 1.30 10/01/2013	A24 1.50 10/01/2013
Surface							
0 0.1 0.2 0.3		Fill - 5YR 4/4 moderate brown, 60% clay and silt, 20% sand, 20% gravel, soft, damp, low plascity,	Fill - 5YR 4/4 moderate brown, 60% day and silt, 20% sand, 20% gravel, soft, damp, shale gravels, minor brick and glass.			Fill - 5YR5/6 light brown, 60% clay and silt, 30% sand, 10% gravel, firm, dry, low plasticity, shale gravels.	
0.4 0.5 0.6		medium brown, metal, brick.		Fill - 5YR 4/4 moderate brown, 60% clay and silt, 20% sand, 20% gravel, soft, damp, shale gravels, concrete pieces.	Fill - 5VR 4/4 moderate brown, 40% clay and silt, 20% sand, 40% gravel, moderate density, damp, shale gravels, concrete pieces.	Fill - 5YR 5/2 pale brown, 20% clay and silt, 20% sand, 60% gravel, loose, dry, shale.	Fill - 5YR 4/4 moderate brown, 40% clay and silt, 20% sand, 40% gravel, loose, dry, shale gravels, rounded gravels, steel cable, steel rods.
0.7			sand, 60% gravel, dense, dry, shale gravels.				
0.8		sand, 60% gravel, dense, dry, shale gravels, glass.					
0.9							Fill - 5YR 5/2 pale brown, 20% clay and silt, 20% sand, 60% gravel, dense, dry, shale gravels,
1.0						Weathered Shale	
1.1		Weathered Shale	Weathered Shale		Weathered Shale		
1.2				Weathered Shale			Weathered Shale
1.3							
1.4							
1.8							
2.0							
2.2							
2.4							
2.6							
2.8							
3.0							
3.2							
3.4							
3.6							
3.8							
3.9							
4.0							
4.2							

Total Depth (m) Date	2.60 10/01/2013	A26 3.30 10/01/2013	A27 3.70 11/01/2013	A28 3.50 11/01/2013	A29 3.10 11/01/2013	A30 2.50 11/01/2013
						[
	Fill - 5YR 4/4 moderate brown, 40% clay and silt,		Fill EVD 4/4 mederate brown 40% alow and ait			
	20% sand, 40% gravel, loose, dry, shale gravels, tyres, concrete footings, large metal sheets,		20% sand, 40% gravel, loose, dry, shale gravels,			Fill - 5YR 4/4 moderate brown, 40% clay and silt,
	concrete pipe, steel rods, metallic items, rubber, white plasterboard.		basalt gravels, brick.	Fill - 5YR 4/4 moderate brown, 40% clay and silt,	Fill - 5YR 4/4 moderate brown, 40% clay and silt,	white plaster board, fibro cement fragments, metal,
		Fill - 5YR 4/4 moderate brown, 40% clay and silt, 20% sand 40% gravel loose dry - damp shale		20% sand, 40% gravel, loose, dry, shale gravels, metallic items, paper, glass, white plasterboard.	20% sand, 40% gravel, loose, dry, shale gravels, fibro cement fragments, white plasterboard, bricks,	gialo botilos, roundos granolo.
		gravels, bricks, tyres, metal, concrete, concrete			metallic items, tyres.	
		F.L1				
	Fill - 5YR 5/2 pale brown, 20% clay and silt, 20%			-		
	sand, 60% gravel, dense dry, snale gravels.		Fill FVD 4/4 mederate brown 400/ alou and ait			
	Westbard Shale		20% sand, 40% gravel, loose, dry - damp, shale			Weathered Shale
	Weathered Shale		pipe, fibro cement fragments.			
				Fill - 5YR 4/4 moderate brown, 40% clay and silt,	Weathered Shale	
		Weathered Shale		20% sand, 40% gravel, loose, dry, shale gravels, brick.		
			Weathered Shale			
					1	
				Weathered Shale		
					4	
	Total Depth (m) Date	Total Depth (m) 2.60 Date 10/01/2013 	Total Depth (m) 2.80 3.30 Date 10/01/2013 10/01/2013 Fill - SYR 4/4 moderate brown, 40% clay and all, 20% sand, 40% gravel, loose, dry, shale gravels, byres, concrete pipe, siteel rods, metallic items, rubber, white plasterboard. Fill - SYR 4/4 moderate brown, 40% clay and all, 20% sand, 40% gravel, loose, dry, shale gravels, byres, concrete pipe, siteel rods, metallic items, rubber, white plasterboard. Fill - SYR 5/2 pale brown, 20% clay and sill, 20% sand, 60% gravel, dense dry, shale gravels. Weathered Shale	Total Depth (m) 2.60 3.30 3.70 Date 1001/2013 1001/2013 1101/2013 Image: Strain St	Test Deprint 240 3.00 3.70 3.00 Deprint 0.001/2013 0.01/2013 0.01/2013 0.01/2013 Deprint 0.001/2013 0.01/2013 0.01/2013 0.01/2013 Fill - SYR 44 moderate brown, 40% clay and sit, 20% sand, 40% gravel, boos, 67% shale gravel, 20% sand, 40% gravel, boos, 67% shale gravel, 30% sand, 40% gravel, 50% sand, 40%	State Print 2.00 100/071 2.00 100/071 1.00 100/071 1.00 100/071 1.00 100/071 1.00/071 <t< td=""></t<>

Depth (m)	Test Pit ID Total Depth (m) Date	A31 1.50 11/01/2013	A32 1.40 11/01/2013	A33 1.50 11/01/2013	A34 2.00 11/01/2013	A35 2.80 11/01/2013	A36 3.50 11/01/2013
Surface							
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7		Fill - 5YR 4/4 moderate brown, 40% clay and silt, 20% sand, 40% gravel, loose, dry, shale gravels, white plaster board, fibre coment fragments, metal, plastic.	Fill - 10YR 4/2 moderate brown, 40% clay and silt, 20% sand, 40% gravel, moderate density, damp, shale gravels, some white plaster board, fibro cement fragments, brick, basait gravels, ceramic tiles.	Fill - SYR 4/4 moderate brown, 40% clay and silt, 20% sand, 40% gravel, loose, dry, shale gravels, metal, engine part, fibro cement fragments, bricks.	Fill - 5YR 4/4 moderate brown, 40% clay and silt, 20% sand, 40% gravel, loose, dry, shale gravels,		
0.8					metal, fibro cement fragments, concrete pieces, white plasterboard.	Fill - 5YR 4/4 moderate brown, 40% clay and silt, 20% sand, 40% gravel, loose, dry, shale gravels, metal, fibro cement fragments, bricks, steel pylons, white plasterboard from 1.5m.	
1.0 1.1 1.2		Weathered Shale	Weathered Shale	Weathered Shale			Fill - 5YR 4/4 moderate brown, 40% clay and silt, 20% sand, 40% gravel, loose, dry, shale gravels, metal, engine part, fibro cement fragments, bricks.
1.4							
1.6 1.8					Weathered Shale		
2.0							
2.2 2.4 2.6						Weathered Shale	
2.8							
3.0 3.2							Weathered Shale
3.6 3.8							
3.9 4.0 4.2							

Depth (m)	Test Pit ID Total Depth (m) Date	A37 3.30 11/01/2013	A38 2.70 11/01/2013	A39 2.50 11/01/2013	A40 2.50 12/01/2013	A41 1.50 4/02/2013	A42 1.30 4/02/2013
Surface							
0						Fill - 10YR 2/2, 40% clay and silt, 40% sand, 20% gravel, loose, damp.	
0.1							Fill - 5YR 4/4 moderate brown, 60% clay and silt,
0.2							shale gravels.
0.3							
0.4		Fill - 5YR 5/6 light brown and 5YR 4/4 moderate brown, 60% clay and silt, 20% sand, 20% gravel,	Fill - 5YK 5/6 light brown and 5YK 4/4 moderate brown, 60% clay and silt, 20% sand, 20% gravel, act, demonstrate and silt, 20% sand, 20% gravel, brown and silt, 20% sand, 20% gravel,			Fill - 5YR 4/4 moderate brown, 50% clay and silt,	
0.5		soft, damp, shale gravels, bricks, fibro cement fragments (two).	son, damp, snale gravels, some blicks.			20% sand, 30% gravel, firm, damp, sandy clay with shale gravels, large concrete footings, metal	
0.6						drums, bricks.	Fill - 10YR 6/2 pale yellowish brown, 10YR 6/6 dark yellowish orange and 5YR4/4 moderate brown, 40%
0.7							clay and silt, 20% sand, 60% gravel, dense, dry, shale gravel, concrete.
0.8				Fill - 5YR 4/4 moderate brown, 40% clay and silt, 20% sand, 40% gravel, loose, dry, shale gravels, characteristic for the second	Fill - 5YR 4/4 moderate brown, 40% clay and silt, 20% sand, 40% gravel, loose, dry, shale gravels,		-
0.9			Fill - White plasterboard	noro cement ragments, concrete, metal, bricks.	noro cement tragments, concrete, metal, bricks.		
1.0				-		Silty Gravel with Sand - 5YR 3/2, 40% clay and silt, 20% sand, 40% gravel, dry, former topsoil.	
1.1							Weathered Shale
1.2						Weathered Shale	
1.3							
1.4		Fill - 5YR 4/4 moderate brown, 40% clay and silt.	Fill - 5YR 4/4 moderate brown, 40% clay and silt.				
1.6		20% sand, 40% gravel, loose, dry, shale gravels, metal, steel rod and wires at 2.0m within testpit - not	20% sand, 40% gravel, loose, dry, shale gravels, fibro cement fragments, bricks, glass bottles.				
1.8		at sample point.					
2.0							
2.2				Weathered Shale	Weathered Shale		
2.4							
2.6				-			
2.8			Weathered Shale				
3.0		Weathered Shale					
3.2							
3.4							
3.6							
3.8							
3.9							
4.0							
4.2							

Depth (m)	Test Pit ID Total Depth (m) Date	A43 1.40 4/02/2013	A44 1.20 4/02/2013	A45 1.80 4/02/2013	A46 2.00 4/02/2013	A47 2.00 4/02/2013	A48 2.00 4/02/2013
Surface							
0							
0.1		Fill - 10YR 4/2 dark yellowish brown, 40% clay and					
0.2		silt, 20% sand, 40% gravel, soft, damp, shale gravels, bricks.					
0.3			Fill - 5YR 4/4 moderate brown and 10YR 4/2 dark				
0.4			gravel, soft, damp, low plasticity, shale gravels, hricks				
0.5				Fill - 5YR 4/4 moderate brown and 10YR 4/2 dark			
0.6				gravel, soft, damp, low plasticity, shale gravels, metal fibro piece	Fill - 5YR 4/4 moderate brown and 10YR 4/2 dark		
0.7				metal, noro piece.	gravel, soft, damp, low plasticity, shale gravels, bricke glass metal	Fill - 5YR 4/4 moderate brown and 10YR 4/2 dark yellowish brown, 40% clay and silt, 20% sand, 40%	Fill EVP 4/4 moderate brown 60% alow and silt
0.8		Fill - 10YR 6/2 pale yellowish brown, 10YR 6/6 dark	Fill - 10YR 6/2, 40% clay and silt, 20% sand, 60%		bricks, gidas, metai.	gravel, moderate density, damp - dry, fibro, glass, metal, brick, plasterboard.	20% sand, 20% gravels soft, damp - dry, slag in top
0.9		40% clay and silt, 20% sand, 60% gravel, dense, dry shale gravels	gravel, dense, dry, shale gravels.				tile.
1.0		aly, onalo gravolo.	Weathered Shale				
1.1							
1.2				Fill - 10YR 6/2 pale yellowish brown, 40% clay and			
1.3				silt, 20% sand, 60% gravel, dense, dry, shale gravels.			
1.4		Weathered Shale			Fill - 10YR 6/2, 40% clay and silt, 20% sand, 60%		
1.6				Weathered Shale	g		
1.8					Weathered Shale	Weathered Shale	
2.0							Sandy Lean Clay with Gravel - 10YR 5/4 moderate
2.2							yellowish brown, soft, dry, low plasticity.
2.4							
2.6							
2.8							
3.0							
3.2							
3.4							
3.6							
3.8							
3.9							
4.0							
4.2							

Depth (m)	Test Pit ID Total Depth (m) Date	A49 3.90 4/02/2013	A50 3.10 4/02/2013	A51 2.60 4/02/2013	A52 2.50 5/02/2013	A53 3.50 5/02/2013	A54 3.50 5/02/2013
Surface	Buto	1011010	1021010	1011010	01021010	0/01/2010	0.021010
0 0.1 0.2 0.3 0.4 0.5					Fill - 5YR 4/4 moderate brown, 60% clay and silt, 20% sand, 20% gravel, soft, damp, moderate plasticity, pebbles, shale gravels, brick.	Fill - 5YR 4/4 moderate brown, 60% clay and silt, 20% sand, 20% gravel, soft, damp, moderate plasticity, shale gravles, bricks.	Fill - 5YR 4/4 moderate brown, 40% clay and silt, 20% sand, 40% gravel, soft, damp, moderate plasticity, bricks, shale gravels.
0.6 0.7 0.8 0.9			Fill - SYR 4/4 moderate brown, 60% day and silt, 20% sand, 20% gravel, soft, damp - dry, slag in top 0.1m, fibro, bricks, fibro pipe, concrete pipes, steel, steel rope, metal drum.	Fill - SYR 4/4 moderate brown, 40% clay and silt, 20% sand, 40% gravel, firm, damp, low plasticity, shale gravels, glassm steel ropes, metal drum, tyresm bricks, fibro, fibro pipe (significant), white plasterboard.			
1.0 1.1 1.2 1.3 1.4 1.6		Fill - 5YR 4/4 moderate brown, 40% clay and silt, 20% sand, 40% gravel, moderate density, damp - dry, bricks, large steel pylons, car parts, tyres, steel poles, glass, shale gravels, white plasterboard, 5+ fibro pieces.	Fill - 10R4/6 moderate reddish brown and 10R 6/6 moderate reddish orange, 20% clay and silt, 50%		Fill - SYR 4/4 moderate brown, 40% clay and silt, 20% sand, 40% gravel, soft, damp, low plasticity, shale gravels, bricks, fibro.	Fill - 5YR 4/4 moderate brown and 10YR 6/6 dark yellowish brown, 40% clay and silt, 20% sand, 40% gravel, firm, dry, shale gravels, bricks.	Fill - 5YR 4/4 moderate brown and 10YR 6/6 dark yellowish brown, 40% clay and silt, 20% sand, 40% gravel, firm, dry, shale gravels, bricks, plastic.
1.8			sand, 30% gravel, loose, dry, fibro, glass, shale, Fill - 10YR 6/2 pale yellowish brown, 60% sand, 40% gravel, ash?, slag.	Fill - 10R4/6 moderate reddish brown and 10R 6/6 moderate reddish orange, 20% clay and silt, 50% cand .20% arguet lease dre large engette slab ti	Fill - 10YR 6/2 pale yellowish brown, 60% sand,		
2.2 2.4			Fill - 5YR 4/4 moderate brown, 40% clay and silt, 20% sand, 40% gravel, dense, dry, shale gravels.	Sano, 30% graver, ioose, ory, rareg concrete siab at Weathered Shale	40% gravel, ioose, dry, snale gravels. Weathered Shale - 20% sand, 30% gravels, very weathered.	Fill - 10YR 4/2 dark yellowish brown, 60% clay and silt, 20% sand and 20% gravel, soft, damp, moderate plasticity.	Fill - 10YR 4/2 dark yellowish brown, 60% clay and siti, 20% sand and 20% gravel, soft, damp, moderate losticity, third, brick, shale cravels
2.6 2.8			Weathered Shale			Sandy Lean Clay - 10YR 6/6, 10YR 6/2 pale yellowish brown, firm, damp, moderate plastcity.	moderate prasticity, noro, onok, smale gravois.
3.0 3.2						Weathered Shale	Weathered Shale
3.4 3.6 3.8		Weathered Shale					
3.9 4.0							
4.2							
Depth (m)	Test Pit ID Total Depth (m) Date	A55 3.40 5/02/2013	A56 3.90 5/02/2013	A57 2.50 5/02/2013	A58 2.30 5/02/2013	A59 2.10 5/02/2013	A60 1.20 5/02/2013
--------------------------	--	---	---	--	---	---	---
Surface							
0 0.1 0.2 0.3			Fill - 5YR 4/4 moderate brown, 40% clay and silt, 20% sand, 40% gravel, soft, damp, moderate plasticity, shale gravels, fibro.	Fill - SYR 4/4 moderate brown, 60% clay and silt, 20% sand, 20% gravel, soft, damp, low plasticity, brick.		Fill - 10YR 5/4 moderate yellowish brown, 60% clay and silt, 20% sand, 20% gravel, firm, damp, low	Fill - SYR 4/4 moderate brown, 60% clay and silt,
0.4 0.5 0.6		20% sand, 40% gravel, soft, damp, moderate plasticity, bricks, shale gravels, fibro.		-	Fill - 5YR 4/4 moderate brown, 60% clay and silt, 20% sand, 20% gravel, soft, damp, moderate plasticity.		20% sand, 20% gravel, firm, damp, low plasticity, shale gravels, brick, concrete and fibro cement fragment.
0.7 0.8 0.9				Fill - 5YR 4/4 moderate brown and 10YR 6/6 dark yellowish orange, 40% clay and silt, 20% sand, 40%			
1.0 1.1		Fill EVD 4/4 moderate brown and 10VD 6/6 dark	Fill - 5YR 4/4 moderate brown and 10YR 6/6 dark ferate brown and 10YR 6/6 dark vellowish brown, 40% clay and silt, 20% sand, 40%		9	Fill - 5YR 4/4 moderate brown and 10YR 6/6 dark yellowish orange, 40% clay and silt, 20% sand, 40% gravel, loose, dry, shale gravels.	Weathered Shale
1.2 1.3 1.4 1.6		gravel, firm, dry, shale gravels, bricks, metal, glass.	ellowish brown, 40% clay and silt, 20% sand, 40% gravel, firm, dry, shale gravels, glass, ceramic tile.	f	Fill 10YR 4/2 dark yellowish brown, 60% clay and siit, 20% sand, 20% gravel, soft, damp, moderate plasticity, shale gravels, glass bottle, concrete pieces, concrete slab at 1.0m.		
1.8						Weathered Shale	
2.2		Fill - 10YR 4/2 dark yellowish brown, 60% clay and silt. 20% sand and 20% gravel, soft, damp.		Weathered Shale - 30% sand, 20% gravels, very weathered.	Weathered Shale		
2.4 2.6		moderate plasticity, brick, shale gravels, fibro, slag within testpit at 2.0m not at sample point.					
2.8 3.0			Fill - 10YR 4/2 dark yellowish brown, 60% clay and silt, 20% sand and 20% gravel, soft, damp, moderate plasticity, shale gravels, black clay with coal within testit and at sample point				
3.2 3.4		Weathered Shale		_			
3.6 3.8			Weathered Shale				
3.9				-			
4.2							

Depth (m)	Test Pit ID Total Depth (m) Date	A61 0.90 5/02/2013	A62 1.20 5/02/2013	A63 1.60 5/02/2013	A64 1.40 5/02/2013	A65 1.50 5/02/2013	A66 1.70 5/02/2013	
Surface								
0.1		Fill - 5YR 4/4 moderate brown, 60% clay and silt,	Fill - 5YR 4/4 moderate brown and 10YR 6/6 dark vellowish orange, 40% clav and silt, 20% sand, 40%					
0.2		20% sand, 20% gravel, sort, damp, low plasticity, shale gravels, brick.	gravel, dense, damp, shale gravels, bricks, concrete.					
0.3					Fill - 5YR 4/4 moderate brown, 40% clav and silt.			
0.4		Sandy Silt - 10YR 4/2 dark yellowish brown, 70%		Fill - 5YR 4/4 moderate brown, 60% clay and silt,	20% sand, 40% gravel, dense, damp, shale gravels.	Fill - 5YR 4/4 moderate brown, 30% silt and clay,	Fill - 5YR 4/4 moderate brown and 10YR 6/6 dark	
0.5		clay and silt, 20% sand, 10% gravel, soft, damp, low plasticity, shale gravels, former topsoil.	Silt with Sand - 10YR 2/2 dusky yellowish brown, 80% clay and silt, 20% sand, soft, damp, low	20% sand, 20% gravel, firm, damp, low plasticity, shale gravels, bricks, concrete.		10% sand, 60% gravel, loose, damp, many large concrete slabs, bricks.	gravel, dense, damp, shale gravels, brick, charcoal.	
0.6			plasticity, former topsoil.					
0.7		Weathered Shale						
0.8					Silt with Sand - 10YR 2/2 dusky yellowish brown,			
0.9			Weathered Shale		80% clay and silt, 20% sand, soft, damp, low plasticity, former topsoil.			
1.0				Silt with Sand - 10YR 2/2 dusky yellowish brown,	Sandy Lean Clay - 10YR 6/6 dark yellowish orange and 10YR 6/2 pale vellowish brown, 60% clay and	Weathered Shale - 30% sand, 20% gravel, verv	Silt with Sand - 10YR 2/2, 80% clay and silt, 20% sand, soft, damp, low plas, former topsoil.	
1.1				80% clay and silt, 20% sand, soft, damp, low plasticity, former topsoil.	silt, 30% sand and 10% gravel, firm, damp, low plasticity.	weathered.		
1.2				Sandy Lean Clay - 10YR 6/6 dark yellowish orange	Masth and Ohala		Weathered Shale - 30% sand, 20% gravel, very	
1.3				and 10YR 6/2 pale yellowish brown, 60% clay and silt, 30% sand and 10% gravel, firm, damp, low	Weathered Shale	Weathered Shale	weathered.	
1.4				plasticity.			W(seth set of Objects	
1.6				Weathered Shale			weathered Shale	
1.8								
2.0								
2.2								
2.4								
2.6								
2.8								
3.0								
3.2								
3.4								
3.6								
3.8								
3.9								
4.0								
4.2								

Depth (m)	Test Pit ID Total Depth (m) Date	A67 1.45 5/02/2013	A68 1.20 5/02/2013	A69 1.60 5/02/2013	A70 1.50 5/02/2013	A71 0.60 6/02/2013	A72 1.00 6/02/2013
Surface							
0 0.1 0.2 0.3		Fill - 5YR 4/4 moderate brown and 10YR 6/6 dark yellowish brown, 40% silt and clay, 20% sand, 40% gravel, dense, damp, shale gravels, brick.	Fill - 10YR 5/4 moderate yellowish brown, 40% clay and silt, 20% sand, 40% gravel, loose, damp, brick, shale	Eill 10VP 5/4 moderate vellowich brown 40% clav	Fill - 10YR 5/4 moderate yellowish brown, 40% clay and sill 20% cand 40% cravel loose damp	Sandy Silt - 10YR 4/2 dark yellowish brown, 60% clay and silt, 30% sand, 10% gravel, moderate density, damp, shale gravels, topsoil. Sandy Lean Clay - 10YR 6/6 dark yellowish orange	Fill - 10YR 5/47 moderate yellowish brown, 40% clay and silt, 20% sand, 40% gravel, moderate density drv shale ravels, bricks
0.4 0.5 0.6			Sitero.	and silt, 20% sand, 40% gravel, loose, damp, bricks at 0.6m, shale gravels.	concrete, brick, hose, glass bottle, fibro.	and 10YR 6/2 pale yellowish brown, 70% clay and silt, 30% sand, soft, dry, low plasticity.	density, ary, since granes, prices.
0.8		Fill - 101K 4/2 dark yellowish prown and 101K 6/6 dark yellowish brown, 20% clay and slit, 20% sand, 60% gravel, moderatley dense, dry, shale gravels.	Silt with Sand - 10YR 2/2 dusky yellowish brown, 60% clay and silt, 20% sand, 20% gravel, soft, dry, low plasticity, shale gravels, former topsoil.		Silt with Sand - 10YR 2/2 dusky yellowish brown, 60% clay and silt, 20% sand, 20% gravel, soft, dry,		Sandy Lean Clay - 10YR 6/6 dark yellowish orange and 10YR 6/2 pale yellowish brown, 70% clay and silt, 30% sand, soft, damp, low plasticity.
1.0		Silt with Sand - 10YR 2/2, 80% clay and silt, 20% sand, soft, dry, low plas, former topsoil.	Weathered Shale	Silt with Sand - 10YR 2/2 dusky yellowish brown, 60% clay and silt, 20% sand, 20% gravel, soft, dry, low plasticity, shale gravels, former topsoil.	low plasticity, shale gravels, former topsoil.		
1.2 1.3		Sandy Lean Clay - 10YR 6/6 dark yellowish orange and 10YR 6/2 pale yellowish brown, 70% clay and silt, 30% sand, stiff, damp, low plasticity.		Weathered Shale	Weathered Shale		
1.4 1.6							
1.8 2.0							
2.4							
2.8 3.0							
3.2 3.4							
3.6 3.8							
3.9 4.0 4.2							

Depth (m)	Test Pit ID Total Depth (m) Date	A73 0.65 6/02/2013	A74 0.80 6/02/2013	A75 0.60 6/02/2013	A76 0.80 6/02/2013
Surface					
0 0.1		Sandy Silt - 10YR 4/2 dark yellowish brown, 60% clay and silt, 30% sand, 10% gravel, moderate density, damp, shale gravels, topsoil.	Fill - 5YR 4/4 moderate brown, 60% clay and silt, 30% sand, 10% gravel, moderate density, dry.	Sandy Silt - 10YR 4/2 dark yellowish brown, 60% clay and silt, 30% sand, 10% gravel, moderate densitiv, du, shale cravels former tonsoil	Fill - 10YR 4/2 dark yellowish brown, 60% clay and silt, 30% sand, 10% gravel, moderate density, dry, shale gravels.
0.2 0.3			Fill - 10YR 5/4 moderate yellowish brown, 40% clay and silt, 20% sand, 40% gravel, moderate density, dry, shale gravels, bricks.	densky, dry, snale gravels, torrier topson.	Fill - 10YR5/4 moderate yellowish brown, 20%
0.4 0.5		Sandy Lean Clay - 5YR 5/6 light brown and 10YR 6/2 pale yellowish brown, 70% clay and silt, 30% sand, soft, damp, low plasticity.	Sandy Silt - 10YR 4/2 dark yellowish brown, 60% clay and silt, 30% sand, 10% gravel, moderate	Sandy Lean Clay - 10YR 5/4 moderate yellowish brown, 80% clay and silt, 20% sand, soft, dry, low plasticity.	sand, 80% gravel, loose, dry, shale gravels.
0.6			density, dry, shale gravels, former, topsoil. Sandy Lean Clay - 10YR 5/4 moderate yellowish brown, 80% clay and silt 20% sand soft dry, low		Sandy Lean Clay - 10YR 6/6 dark yellowish orange and 5YR 4/4 moderate brown, 70% clay and silt, 30% sand soft dry low plasticity
0.7			plasticity.		constant, con, any, for problemy.
0.9					
1.0					
1.1					
1.2					
1.3					
1.6					
1.8					
2.0					
2.2					
2.4					
2.6					
3.0					
3.2					
3.4					
3.6					
3.8					
4.0					
4.2					

Dep	pth (m)	Test Pit ID Total Depth (m) Date	A77 1.00 6/02/2013	A78 0.80 6/02/2013	A79 1.00 6/02/2013	
Surface						
0 0.1			Sandy Silt - 10YR 4/2 dark yellowish brown, 50%	Sandy Silt - 10YR 4/2 dark yellowish brown, 50% clay and silt, 30% sand, 20% gravel, soft, dry, large shale gravels, topsoil.		
0.2			clay and silt, 30% sand, 20% gravel, soft, dry, large shale gravels, topsoil.	Sandy Lean Clay - 5YR 4/4, 70% clay and silty, 30% sand soft dry low plasticity	Fill - 10YR 4/2 dark yellowish brown, 40% clay and silt, 20% sand, 40% gravel, damp to dry, soft, shale	
0.3				5078 Sand, Son, dry, low plasticity.	gravels.	
0.4			Sandy Lean Clay - 5YR 4/4 moderate brown, 70%			
0.5			clay and silt, 30% sand, soft, dry, low plasticity.	Weathered Shale		
0.6					Sandy Silt - 10YR 2/2 dusky yellowish brown, 70% clay and silt, 20% sand, 10% gravel, soft, dry.	
0.7						
0.8			Weathered Shale		Sandy Lean Clay - 10YR 5/4 moderate yellowish brown 70% clay and silty 30% sand soft dry low	
0.9					plasticity.	
1.0						
1.1						
1.2						
1.3						
1.4						
1.6						
1.8						
2.0						
2.2						
2.4						
2.6						
2.8						
3.0						
3.2						
3.4						
3.6						
3.8						
3.9						
4.0						
4.2						

ATTACHMENT D



Geo-Logix P/L Bld Q2 Level 3, 2309/4 Daydream St Warriewood NSW 2102 WORLD RECOGNISED ACCREDITATION Certificate of Analysis

NATA Accredited Accreditation Number 1261 Site Number 18217

Accredited for compliance with ISO/IEC 17025. The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention:

Client Reference Received Date

Report

365264-S 1201085 Jan 14, 2013

Jenna Seymour

Client Sample ID			A1	A2	A3	A4
Sample Matrix			Soil	Soil	Soil	Soil
mgt-LabMark Sample No.			S13-Ja03981	S13-Ja03982	S13-Ja03983	S13-Ja03984
Date Sampled			Jan 09, 2013	Jan 09, 2013	Jan 09, 2013	Jan 09, 2013
Test/Reference	LOR	Unit				
Asbestos (% weight as per WA Guidelines)			See attached	See attached	See attached	See attached

Client Sample ID			A5	A6	A7	A8
Sample Matrix			Soil	Soil	Soil	Soil
mgt-LabMark Sample No.			S13-Ja03985	S13-Ja03986	S13-Ja03987	S13-Ja03988
Date Sampled			Jan 09, 2013	Jan 09, 2013	Jan 09, 2013	Jan 09, 2013
Test/Reference	LOR	Unit				
Asbestos (% weight as per WA Guidelines)			See attached	See attached	See attached	See attached

Client Sample ID			A9	A10	A10/1.0	A11
Sample Matrix			Soil	Soil	Soil	Soil
mgt-LabMark Sample No.			S13-Ja03989	S13-Ja03990	S13-Ja03991	S13-Ja03992
Date Sampled			Jan 09, 2013	Jan 09, 2013	Jan 09, 2013	Jan 09, 2013
Test/Reference	LOR	Unit				
Asbestos (% weight as per WA Guidelines)			See attached	See attached	See attached	See attached

Client Sample ID			A11/1.0	A12	A12/1.0	A12/2.0
Sample Matrix			Soil	Soil	Soil	Soil
mgt-LabMark Sample No.			S13-Ja03993	S13-Ja03994	S13-Ja03995	S13-Ja03996
Date Sampled			Jan 09, 2013	Jan 09, 2013	Jan 09, 2013	Jan 09, 2013
Test/Reference	LOR	Unit				
Asbestos (% weight as per WA Guidelines)			See attached	See attached	See attached	See attached



Client Sample ID			A13	A13/1.0	A14	A15
Sample Matrix			Soil	Soil	Soil	Soil
mgt-LabMark Sample No.			S13-Ja03997	S13-Ja03998	S13-Ja03999	S13-Ja04000
Date Sampled			Jan 09, 2013	Jan 09, 2013	Jan 09, 2013	Jan 09, 2013
Test/Reference	LOR	Unit				
Asbestos (% weight as per WA Guidelines)			See attached	See attached	See attached	See attached

Client Sample ID			A16	A17	A18	A18/1.0
Sample Matrix			Soil	Soil	Soil	Soil
mgt-LabMark Sample No.			S13-Ja04001	S13-Ja04002	S13-Ja04003	S13-Ja04004
Date Sampled			Jan 09, 2013	Jan 10, 2013	Jan 10, 2013	Jan 10, 2013
Test/Reference	LOR	Unit				
Asbestos (% weight as per WA Guidelines)			See attached	See attached	See attached	See attached

Client Sample ID			A18/2.0	A18/3.0	A19	A20
Sample Matrix			Soil	Soil	Soil	Soil
mgt-LabMark Sample No.			S13-Ja04005	S13-Ja04006	S13-Ja04007	S13-Ja04008
Date Sampled			Jan 10, 2013	Jan 10, 2013	Jan 10, 2013	Jan 10, 2013
Test/Reference	LOR	Unit				
Asbestos (% weight as per WA Guidelines)			See attached	See attached	See attached	See attached

Client Sample ID			A21	A22	A23	A24
Sample Matrix			Soil	Soil	Soil	Soil
mgt-LabMark Sample No.			S13-Ja04009	S13-Ja04010	S13-Ja04011	S13-Ja04012
Date Sampled			Jan 10, 2013	Jan 10, 2013	Jan 10, 2013	Jan 10, 2013
Test/Reference	LOR	Unit				
Asbestos (% weight as per WA Guidelines)			See attached	See attached	See attached	See attached

Client Sample ID			A25	A25/1.0	A26	A26/1.0
Sample Matrix			Soil	Soil	Soil	Soil
mgt-LabMark Sample No.			S13-Ja04013	S13-Ja04014	S13-Ja04015	S13-Ja04016
Date Sampled			Jan 10, 2013	Jan 10, 2013	Jan 10, 2013	Jan 10, 2013
Test/Reference	LOR	Unit				
Asbestos (% weight as per WA Guidelines)			See attached	See attached	See attached	See attached



Client Sample ID			A26/2.0	A27	A27/1.0	A27/1.7
Sample Matrix			Soil	Soil	Soil	Soil
mgt-LabMark Sample No.			S13-Ja04017	S13-Ja04018	S13-Ja04019	S13-Ja04020
Date Sampled			Jan 10, 2013	Jan 11, 2013	Jan 11, 2013	Jan 11, 2013
Test/Reference	LOR	Unit				
Asbestos (% weight as per WA Guidelines)			See attached	See attached	See attached	See attached

Client Sample ID			A28	A28/1.0	A28/2.0	A28/2.3
Sample Matrix			Soil	Soil	Soil	Soil
mgt-LabMark Sample No.			S13-Ja04021	S13-Ja04022	S13-Ja04023	S13-Ja04024
Date Sampled			Jan 11, 2013	Jan 11, 2013	Jan 11, 2013	Jan 11, 2013
Test/Reference	LOR	Unit				
Asbestos (% weight as per WA Guidelines)			See attached	See attached	See attached	See attached

Client Sample ID			A29	A29/1.0	A29/2.0	A30
Sample Matrix			Soil	Soil	Soil	Soil
mgt-LabMark Sample No.			S13-Ja04025	S13-Ja04026	S13-Ja04027	S13-Ja04028
Date Sampled			Jan 11, 2013	Jan 11, 2013	Jan 11, 2013	Jan 11, 2013
Test/Reference	LOR	Unit				
Asbestos (% weight as per WA Guidelines)			See attached	See attached	See attached	See attached

Client Sample ID			A30/1.0	A31	A32	A33
Sample Matrix			Soil	Soil	Soil	Soil
mgt-LabMark Sample No.			S13-Ja04029	S13-Ja04030	S13-Ja04031	S13-Ja04032
Date Sampled			Jan 11, 2013	Jan 11, 2013	Jan 11, 2013	Jan 11, 2013
Test/Reference	LOR	Unit				
Asbestos (% weight as per WA Guidelines)			See attached	See attached	See attached	See attached

Client Sample ID			A34	A34/1.0	A35	A35/1.0
Sample Matrix			Soil	Soil	Soil	Soil
mgt-LabMark Sample No.			S13-Ja04033	S13-Ja04034	S13-Ja04035	S13-Ja04036
Date Sampled			Jan 11, 2013	Jan 11, 2013	Jan 11, 2013	Jan 11, 2013
Test/Reference	LOR	Unit				
Asbestos (% weight as per WA Guidelines)			See attached	See attached	See attached	See attached



Client Sample ID			A35/1.5	A36	A36/1.0	A36/2.0
Sample Matrix			Soil	Soil	Soil	Soil
mgt-LabMark Sample No.			S13-Ja04037	S13-Ja04038	S13-Ja04039	S13-Ja04040
Date Sampled			Jan 11, 2013	Jan 11, 2013	Jan 11, 2013	Jan 11, 2013
Test/Reference	LOR	Unit				
Asbestos (% weight as per WA Guidelines)			See attached	See attached	See attached	See attached

Client Sample ID			A37	A37/1.0	A37/2.0	A38
Sample Matrix			Soil	Soil	Soil	Soil
mgt-LabMark Sample No.			S13-Ja04041	S13-Ja04042	S13-Ja04043	S13-Ja04044
Date Sampled			Jan 11, 2013	Jan 11, 2013	Jan 11, 2013	Jan 11, 2013
Test/Reference	LOR	Unit				
Asbestos (% weight as per WA Guidelines)			See attached	See attached	See attached	See attached

Client Sample ID			A38/0.9	A38/1.0	A39	A39/1.0
Sample Matrix			Soil	Soil	Soil	Soil
mgt-LabMark Sample No.			S13-Ja04045	S13-Ja04046	S13-Ja04047	S13-Ja04048
Date Sampled			Jan 11, 2013	Jan 11, 2013	Jan 11, 2013	Jan 11, 2013
Test/Reference	LOR	Unit				
Asbestos (% weight as per WA Guidelines)			See attached	See attached	See attached	See attached

Client Sample ID			A40	A40/1.0	F1	F2
Sample Matrix			Soil	Soil	Soil	Soil
mgt-LabMark Sample No.			S13-Ja04049	S13-Ja04050	S13-Ja04051	S13-Ja04052
Date Sampled			Jan 12, 2013	Jan 12, 2013	Jan 14, 2013	Jan 14, 2013
Test/Reference	LOR	Unit				
Asbestos (% weight as per WA Guidelines)			See attached	See attached	See attached	See attached

	-		
Client Sample ID			A38/2.0
Sample Matrix			Soil
mgt-LabMark Sample No.			S13-Ja04067
Date Sampled			Jan 14, 2013
Test/Reference	LOR	Unit	
Asbestos (% weight as per WA Guidelines)			See attached



Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.

Description

Testing Site

Extracted

Holding Time



Sydney Unit F6, Building F 16 Mars Road Lane Cove West NSW 2066 Phone : +61 2 9900 8400 NATA # 1261 Site # 18217

Company Na Address: Client Job No	me: Geo-Log Bld Q2 L Warriewo NSW 210 .: 1201085	ix P/L evel 3, 2309/4 D ood 02	Daydream St			Order No.: Report #: Phone: Fax:	260401 365264 02 9979 1722 02 9979 1222	Received: Due: Priority: Contact Name:	Jan 14, 2013 12:40 PM Jan 21, 2013 5 Day Jenna Seymour
		Sample Detail			Asbestos (% weight as per WA Guidelines)	ПОН		IIIgt-Labk	nan onen manager. Jean neng
Laboratory who	ere analysis is co	onducted							
Melbourne Lab	oratory - NATA S	Site # 1254 & 14	271						
Sydney Labora	tory - NATA Site	# 18217				х			
Brisbane Labo	ratory - NATA Si	te # 20794							
External Labor	atory				Х				
Sample ID	Sample Date	Sampling Time	Matrix	LAB ID					
A1	Jan 09, 2013		Soil	S13-Ja03981	Х				
A2	Jan 09, 2013		Soil	S13-Ja03982	Х				
A3	Jan 09, 2013		Soil	S13-Ja03983	X				
A4	Jan 09, 2013		Soil	S13-Ja03984	Х				
A5	Jan 09, 2013		Soil	S13-Ja03985	Х				
A6	Jan 09, 2013		Soil	S13-Ja03986	Х				
A7	Jan 09, 2013		Soil	S13-Ja03987	Х				
A8	Jan 09, 2013		Soil	S13-Ja03988	Х				
A9	Jan 09, 2013		Soil	S13-Ja03989	Х				
A10	Jan 09, 2013		Soil	S13-Ja03990	Х				



Sydney Unit F6, Building F 16 Mars Road Lane Cove West NSW 2066 Phone : +61 2 9900 8400 NATA # 1261 Site # 18217

Company Name:Geo-Logix P/LAddress:Bld Q2 Level 3, 2309/4 Daydream St Warriewood NSW 2102Client Job No.:1201085						Or Re Ph Fa	rder No.: eport #: none: ax:	260401 365264 02 9979 1722 02 9979 1222	Received: Due: Priority: Contact Name: mgt-LabM	Jan 14, 2013 12:40 PM Jan 21, 2013 5 Day Jenna Seymour Jark Client Manager: Jean Heng
		Sample Detail			Asbestos (% weight as per WA Guidelines)	НОГД				
Laboratory whe	ere analysis is o	conducted								
Melbourne Lab	oratory - NATA	Site # 1254 & 142	271							
Sydney Labora	tory - NATA Sit	te # 18217				Х				
Brisbane Labor	ratory - NATA S	Site # 20794								
External Labora	atory	1			X					
A10/1.0	Jan 09, 2013		Soil	S13-Ja03991	X					
A11	Jan 09, 2013		Sol	S13-Ja03992	X					
A11/1.0	Jan 09, 2013		Soll	S13-Ja03993	X	_				
A12/1 0	Jan 09, 2013		<u>Soll</u>	S13-Ja03994		_				
A12/1.0	Jan 09, 2013		Soil	S13-J203995		_				
A12/2.0	120109, 2013		Soil	S13-J203990		-				
A13/1 0	1an 09, 2013		Soil	S13-Ja03997						
A13/1.0	Jan 09, 2013		Soil	S13-Ja03990	X					
A15	Jan 09, 2013		Soil	S13-Ja04000	X					
A16	Jan 09, 2013		Soil	S13-Ja04001	X					



Sydney Unit F6, Building F 16 Mars Road Lane Cove West NSW 2066 Phone : +61 2 9900 8400 NATA # 1261 Site # 18217

Company Nar Address: Client Job No	Company Name:Geo-Logix P/LAddress:Bld Q2 Level 3, 2309/4 Daydream St Warriewood NSW 2102Client Job No.:1201085						rder No.: eport #: none: ax:	260401 365264 02 9979 1722 02 9979 1222	Received: Due: Priority: Contact Name:	Jan 14, 2013 12:40 PM Jan 21, 2013 5 Day Jenna Seymour
									mgt-LabM	ark Client Manager: Jean Heng
		Sample Detail			Asbestos (% weight as per WA Guidelines)	HOLD				
Laboratory who	ere analysis	is conducted								
Melbourne Lab	oratory - NA	TA Site # 1254 & 14	271							
Sydney Labora	atory - NATA	Site # 18217				Х				
Brisbane Labo	ratory - NAT	A Site # 20794								
External Labor	atory		I		X					
A17	Jan 10, 201	3	Soil	S13-Ja04002	X					
A18	Jan 10, 201	3	Soil	S13-Ja04003	X					
A18/1.0	Jan 10, 201	3	Soil	S13-Ja04004	X					
A18/2.0	Jan 10, 201	3	Soil	S13-Ja04005	X					
A18/3.0	Jan 10, 201	3	Soil	S13-Ja04006	X					
A19	Jan 10, 201	3	Soil	S13-Ja04007	X					
A20	Jan 10, 201	3	Soil	S13-Ja04008	X					
A21	Jan 10, 201	3	Soil	S13-Ja04009	X					
A22	Jan 10, 201	3	Soil	S13-Ja04010	X					
A23	Jan 10, 201	3	Soil	S13-Ja04011	X					
A24	Jan 10, 201	3	Soil	S13-Ja04012	Х					



Sydney Unit F6, Building F 16 Mars Road Lane Cove West NSW 2066 Phone : +61 2 9900 8400 NATA # 1261 Site # 18217

Company Name:Geo-Logix P/LAddress:Bld Q2 Level 3, 2309/4 Daydream St Warriewood NSW 2102Client Job No.:1201085						Or Re Ph Fa	rder No.: port #: none: ix:	260401 365264 02 9979 1722 02 9979 1222	Received: Due: Priority: Contact Name:	Jan 14, 2013 12:40 PM Jan 21, 2013 5 Day Jenna Seymour
					Asbestos Guideline	HOLD				
		Sample Detail			(% weight as per WA S)					
Laboratory who	ere analysis i	s conducted								
Melbourne Lab	oratory - NA	A Site # 1254 & 14	271							
Sydney Labora	atory - NATA	Site # 18217				Х				
Brisbane Labo	oratory - NATA	Site # 20794								
External Labor	ratory				X					
A25	Jan 10, 2013		Soil	S13-Ja04013	X					
A25/1.0	Jan 10, 2013		Soll	S13-Ja04014						
A26/1 0	Jan 10, 2013		Soil	S13-Ja04015	x					
A26/2.0	Jan 10, 2013		Soil	S13-Ja04017	X					
A27	Jan 11, 2013		Soil	S13-Ja04018	X					
A27/1.0	Jan 11, 2013		Soil	S13-Ja04019	X					
A27/1.7	Jan 11, 2013		Soil	S13-Ja04020	X					
A28	Jan 11, 2013		Soil	S13-Ja04021	Х					
A28/1.0	Jan 11, 2013		Soil	S13-Ja04022	Х					
A28/2.0	Jan 11, 2013		Soil	S13-Ja04023	Х					



Sydney Unit F6, Building F 16 Mars Road Lane Cove West NSW 2066 Phone : +61 2 9900 8400 NATA # 1261 Site # 18217

Company Na Address: Client Job No	me: Geo-Lo Bld Q2 Warrie NSW 2 0.: 120108	ogix P/L Level 3, 2309/4 Daydream wood 102 35	St		Order No.: Report #: Phone: Fax:	260401 365264 02 9979 1722 02 9979 1222	Received: Due: Priority: Contact Name:	Jan 14, 2013 12:40 PM Jan 21, 2013 5 Day Jenna Seymour
							mgt-Labl	Mark Client Manager: Jean Heng
		Sample Detail		Asbestos (% weight as per WA Guidelines)	НОГО			
Laboratory who	ere analysis is	conducted						
Melbourne Lab	oratory - NATA	Site # 1254 & 14271						
Sydney Labora	tory - NATA Si	te # 18217			X			
Brisbane Labo	ratory - NATA	Site # 20794						
	lop 11 2012	Coil	S12 1004024					
A29	Jan 11, 2013	Soil	S13-Ja04024	x				
A29/1.0	Jan 11, 2013	Soil	S13-Ja04026	x				
A29/2.0	Jan 11, 2013	Soil	S13-Ja04027	X				
A30	Jan 11, 2013	Soil	S13-Ja04028	X				
A30/1.0	Jan 11, 2013	Soil	S13-Ja04029	X				
A31	Jan 11, 2013	Soil	S13-Ja04030	Х				
A32	Jan 11, 2013	Soil	S13-Ja04031	х				
A33	Jan 11, 2013	Soil	S13-Ja04032	X				
A34	Jan 11, 2013	Soil	S13-Ja04033	X				
A34/1.0	Jan 11, 2013	Soil	S13-Ja04034	Х				



Sydney Unit F6, Building F 16 Mars Road Lane Cove West NSW 2066 Phone : +61 2 9900 8400 NATA # 1261 Site # 18217

Company Name: Address: Client Job No.:	Geo-Logix P/L Bld Q2 Level 3, 2309/4 Da Warriewood NSW 2102 1201085	ydream St			Order No.: Report #: Phone: Fax:	260401 365264 02 9979 1722 02 9979 1222	Received: Due: Priority: Contact Name: mgt-LabM	Jan 14, 2013 12:40 PM Jan 21, 2013 5 Day Jenna Seymour Jark Client Manager: Jean Heng
	Sample Detail			Asbestos (% weight as per WA Guidelines)	НОГР			
Laboratory where an	alysis is conducted							
Melbourne Laborato	ry - NATA Site # 1254 & 142	71						
Sydney Laboratory -	NATA Site # 18217				x			
Brisbane Laboratory	/ - NATA Site # 20794							
External Laboratory				Х				
A35 Jan 1	11, 2013	Soil	S13-Ja04035	X				
A35/1.0 Jan 1	11, 2013	50II Soil	S13-Ja04036	X				
A36 Jan 1	11,2013	Soil	S13-J204037					
$\Delta 36/1.0$ Jan 1	11,2013	Soil	S13-Ja04038	X				
A36/2.0 .lan 1	11, 2013	Soil	S13-Ja04040	X				
A37 Jan 1	11. 2013	Soil	S13-Ja04041	X				
A37/1.0 Jan 1	11, 2013	Soil	S13-Ja04042	X				
A37/2.0 Jan 1	11, 2013	Soil	S13-Ja04043	X				
A38 Jan 1	11, 2013	Soil	S13-Ja04044	X				
A38/0.9 Jan 1	11, 2013	Soil	S13-Ja04045	Х				



Sydney Unit F6, Building F 16 Mars Road Lane Cove West NSW 2066 Phone : +61 2 9900 8400 NATA # 1261 Site # 18217

Company Name Address: Client Job No.:	Company Name:Geo-Logix P/LAddress:Bld Q2 Level 3, 2309/4 Daydream St Warriewood NSW 2102Client Job No.:1201085						260401 365264 02 9979 1722 02 9979 1222	Received: Due: Priority: Contact Name: mgt-LabN	Jan 14, 2013 12:40 PM Jan 21, 2013 5 Day Jenna Seymour Jark Client Manager: Jean Heng
		Sample Detail		Asbestos (% weight as per WA Guidelines)	НОГД				
Laboratory where	e analysis is co	onducted							
Melbourne Labor	atory - NATA S	ite # 1254 & 14271							
Sydney Laborato	ory - NATA Site	# 18217			Х				
Brisbane Laborat	tory - NATA Sit	e # 20794							
External Laborato	ory	0.1	040 1-040 10	X					
A38/1.0 Ja	an 11, 2013	Soil	S13-Ja04046						
A39/1 0	an 11, 2013	Soil	S13-Ja04047	x					
A40	an 12, 2013	Soil	S13-Ja04049	x					
A40/1.0 Ja	an 12, 2013	Soil	S13-Ja04050	X					
F1 Ja	an 14, 2013	Soil	S13-Ja04051	X					
F2 Ja	an 14, 2013	Soil	S13-Ja04052	X					
F3 Ja	an 14, 2013	Soil	S13-Ja04065		Х				
A38/2.0 Ja	an 14, 2013	Soil	S13-Ja04067	Х					

SLabMark ENVIRONMENTAL LABORATORIES

mgt-LabMark Internal Quality Control Review

General

- 1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples are included in this QC report where applicable. Additional QC data may be available on request.
- 2. All soil results are reported on a dry basis, unless otherwise stated.
- 3. Actual PQLs are matrix dependant. Quoted PQLs may be raised where sample extracts are diluted due to interferences.
- 4. Results are uncorrected for matrix spikes or surrogate recoveries.
- 5. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
- 6. Samples were analysed on an 'as received' basis. 7. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample Receipt Acknowledgment.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported. Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

**NOTE: pH duplicates are reported as a range NOT as RPD

UNITS

 mg/kg: milligrams per Kilogram
 mg/l: milligrams per litre

 ug/l: micrograms per litre
 ppm: Parts per million

 ppb: Parts per billion
 %: Percentage

 org/100ml: Organisms per 100 millilitres
 NTU: Units

 MPN/100mL: Most Probable Number of organisms per 100 millilitres
 Hercentage

TERMS

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery
CRM	Certified Reference Material - reported as percent recovery
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands.
	In the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
Batch Duplicate	A second piece of analysis from a sample outside of the clients batch of samples but run within the laboratory batch of analysis.
Batch SPIKE	Spike recovery reported on a sample from outside of the clients batch of samples but run within the laboratory batch of analysis.
USEPA	United States Environment Protection Authority
APHA	American Public Health Association
ASLP	Australian Standard Leaching Procedure (AS4439.3)
TCLP	Toxicity Characteristic Leaching Procedure
coc	Chain of Custody
SRA	Sample Receipt Advice
СР	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC was performed on samples not pertaining to this report, however QC is representative of the sequence or batch that client samples were analysed within

QC - ACCEPTANCE CRITERIA

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries : Recoveries must lie between 50-150% - Phenols 20-130%.

QC DATA GENERAL COMMENTS

- 1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
- 1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or
- contaminant levels within the sample, high moisture content or insufficient sample provided.
 2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
- 3. Organochlorine Pesticide analysis where reporting LCS data, Toxophene & Chlordane are not added to the LCS.
- 4. Organochlorine Pesticide analysis where reporting Spike data, Toxophene is not added to the Spike.
- Total Recoverable Hydrocarbons where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
- 6. pH and Free Chlorine analysed in the laboratory Analysis on this test must begin within 30 minutes of sampling. Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
- 7. Recovery Data (Spikes & Surrogates) where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
- 8. Polychlorinated Biphenyls are spiked only using Arochlor 1260 in Matrix Spikes and LCS's.
- 9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
- 10. Duplicate RPD's are calculated from raw analytical data thus it is possible to have two sets of data.



Comments

Please note: Asbestos analysed by ASET (Job : ASET32074/35254/1-27 and ASET32074/35254/28-73) Accreditation : 14484

Sam	nlo	Inter	vritv
Sam	pie.	nnei	41 ILY

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Organic samples had Teflon liners	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Authorised By

Jean Heng

Client Services

-5

Dr. Bob Symons Laboratory Manager Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Uncertainty data is available on request

mgt-LabMark shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall mgt-LabMark be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

AUSTRALIAN SAFER ENVIRONMENT & TECHNOLOGY PTY LTD

ABN 36 088 095 112

Our ref : ASET32074/ 35254 / 1 - 27 Your ref : 365264 NATA Accreditation No: 14484

20 February 2013

MGT- Labmark Environmental Pty Ltd Unit F3, Building F, 16 Mars Road Lane Cove NSW 2066

Attn: Dr Robert Symons Laboratory & Technical Manager

Dear Robert

Asbestos Identification

This report presents the results of twenty seven of seventy three samples, forwarded by MGT- Labmark Environmental Pty Ltd on 15 January 2013, for analysis for asbestos. As requested by MGT-Labmark Environmental Pty Ltd, only AF & FA have been reported. This report supersedes the report issued on 17 January 2013.

1.Introduction:Twenty seven samples forwarded were examined and analysed for the presence of FA and AF categories 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 and Australian Standard AS 4964-2004.)

> This report is consistent with the analytical procedures and reporting recommendations in the Western Australia Guidelines for the Assessment Remediation and Management of Asbestos contaminated sites in Western Australia

 3. Results : Sample No. 1. ASET32074 / 35254 / 1. 365264 - A1 - Ja03981. Approx dimensions 12.0 cm x 12.0 cm x 5.0 cm The sample consisted of a mixture of clayish soil, stones, plant matter and fragments of plaster, cement and brick. No AF or FA categories of asbestos have been detected.

> Sample No. 2. ASET32074 / 35254 / 2. 365264 - A2- Ja03982. Approx dimensions 12.0 cm x 12.0 cm x 4.95 cm The sample consisted of a mixture of clayish soil, stones, plant matter and fragments of plaster and brick.

No AF or FA categories of asbestos have been detected.

Sample No. 3. ASET32074 / 35254 / 3. 365264 - A3 - Ja03983. Approx dimensions 12.0 cm x 5.25 cm x 10.5 cm The sample consisted of a mixture of clayish soil, stones, plant matter and fragments of plaster and brick. No asbestos detected.

Sample No. 4. ASET32074 / 35254 / 4. 365264 - A4 - Ja03984. Approx dimensions 8.0 cm x 8.0 cm x 4.5 cm The sample consisted of a mixture of clayish soil, stones, plant matter and fragments of plaster and brick. No asbestos detected.

SUITE 710 / 90 GEORGE STREET, HORNSBY NSW 2077 – P.O. BOX 1644 HORNSBY WESTFIELD NSW 1635 PHONE: (02) 99872183 FAX: (02)99872151 EMAIL: <u>aset@bigpond.net.au</u> WEBSITE: <u>www.Ausset.com.au</u>



Sample No. 5. ASET32074 / 35254 / 5. 365264 - A5 - Ja03985.

Approx dimensions 10.0 cm x 8.0 cm x 5.0 cm The sample consisted of a mixture of clayish soil, stones, plant matter and fragments of plaster, shale and cement like material. No asbestos detected.

Sample No. 6. ASET32074 / 35254 / 6. 365264 - A6 - Ja03986.

Approx dimensions 12.0 cm x 10.0 cm x 5.25 cm The sample consisted of a mixture of clayish soil, stones, plant matter and fragments of plaster, shale and brick. No asbestos detected.

Sample No. 7. ASET32074 / 35254 / 7. 365264 - A7 - Ja03987. Approx dimensions 12.0 cm x 12.0 cm x 5.0 cm The sample consisted of a mixture of clayish soil, stones, plant matter and fragments of plaster, shale and brick. No asbestos detected.

Sample No. 8. ASET32074 / 35254 / 8. 365264 - A8 - Ja03988.

Approx dimensions 12.0 cm x 12.0 cm x 5.25 cm The sample consisted of a mixture of clayish soil, stones, plant matter and fragments of shale, plaster and brick.

No asbestos detected.

Sample No. 9. ASET32074 / 35254 / 9. 365264 - A9 - Ja03989.

Approx dimensions 12.0 cm x 10.0 cm x 5.0 cm The sample consisted of a mixture of clayish soil, stones, plant matter and fragments of shale and plaster.

No asbestos detected.

Sample No. 10. ASET32074 / 35254 / 10. 365264 - A10 - Ja03990.

Approx dimensions 12.0 cm x 10.0 cm x 5.0 cm

The sample consisted of a mixture of clayish soil, stones, plant matter and fragments of plaster, paint flakes and brick.

No AF or FA categories of asbestos have been detected.

Sample No. 11. ASET32074 / 35254 / 11. 365264 - A10/1.0 - Ja03991. Approx dimensions 10.0 cm x 12.0 cm x 4.95 cm The sample consisted of a mixture of clayish soil, stones, plant matter and fragments of plaster.

No AF or FA categories of asbestos have been detected.

Sample No. 12. ASET32074 / 35254 / 12. 365264 - A11 - Ja03992.

Approx dimensions 12.0 cm x 11.0 cm x 5.0 cm

The sample consisted of a mixture of clayish soil, stones, plant matter and fragments of shale and plaster.

No asbestos detected.

Sample No. 13. ASET32074 / 35254 / 13. 365264 - A12 - Ja03994. Approx dimensions 12.0 cm x 10.0 cm x 5.0 cm The sample consisted of a mixture of clayish soil, stones, plant matter and fragments of plaster, shale and brick. No asbestos detected.



Sample No. 14. ASET32074 / 35254 / 14. 365264 - A12/1.0 - Ja03995.

Approx dimensions 10.0 cm x 12.0 cm x 4.95 cm The sample consisted of a mixture of clayish soil, stones, plant matter and fragments of shale and plaster. **No asbestos detected.**

Sample No. 15. ASET32074 / 35254 / 15. 365264 - A12/2.0 - Ja03996.

Approx dimensions 12.0 cm x 10.0 cm x 4.75 cm

The sample consisted of a mixture of clayish soil, stones, plant matter and fragments of shale and plaster.

No asbestos detected.

Sample No. 16. ASET32074 / 35254 / 16. 365264 - A13- Ja03997. Approx dimensions 12.0 cm x 12.0 cm x 4.75 cm The sample consisted of a mixture of clayish soil, stones, plant matter and fragments of plaster, shale and brick. No asbestos detected.

Sample No. 17. ASET32074 / 35254 / 17. 365264 - A13/1.0 - Ja03998.

Approx dimensions 12.0 cm x 11.0 cm x 5.0 cm The sample consisted of a mixture of clayish soil, stones, plant matter and fragments of plaster, shale and brick. **No asbestos detected.**

No asbestos detected.

Sample No. 18. ASET32074 / 35254 / 18. 365264 - A14 - Ja03999. Approx dimensions 10.0 cm x 10.0 cm x 5.0 cm The sample consisted of a mixture of clayish soil, stones, plant matter and fragments of plaster, shale and brick. No asbestos detected.

Sample No. 19. ASET32074 / 35254 / 19. 365264 - A15 - Ja04000.

Approx dimensions 12.0 cm x 11.0 cm x 5.0 cm The sample consisted of a mixture of clayish soil, stones, plant matter and fragments of shale, plaster and brick. **No asbestos detected.**

Sample No. 20. ASET32074 / 35254 / 20. 365264 - A16 - Ja04001. Approx dimensions 12.0 cm x 12.0 cm x 4.65 cm The sample consisted of a mixture of clayish soil, stones, plant matter and fragments of plaster, shale and brick. No asbestos detected.

Sample No. 21. ASET32074 / 35254 / 21. 365264 - A17 - Ja04002. Approx dimensions 12.5 cm x 12.5 cm x 5.65 cm The sample consisted of a mixture of clayish soil, stones, plant matter and fragments of shale and plaster.

No asbestos detected.

Sample No. 22. ASET32074 / 35254 / 22. 365264 - A18 - Ja04003. Approx dimensions 12.5 cm x 12.5 cm x 5.5 cm The sample consisted of a mixture of clayish soil, stones, plant matter and fragments of plaster.

No AF or FA categories of asbestos have been detected.



Sample No. 23. ASET32074 / 35254 / 23. 365264 - A18/1.0 - Ja04004. Approx dimensions 12.0 cm x 12.0 cm x 5.0 cm The sample consisted of a mixture of clayish soil, stones, plant matter and fragments of plaster, shale and brick. No asbestos detected.

Sample No. 24. ASET32074 / 35254 / 24. 365264 - A18/2.0 - Ja04005. Approx dimensions 12.0 cm x 12.0 cm x 5.0 cm The sample consisted of a mixture of clayish soil, stones, plant matter and fragments of plaster, shale and brick. No asbestos detected.

Sample No. 25. ASET32074 / 35254 / 25. 365264 - A18/3.0 - Ja04006. Approx dimensions 12.5 cm x 12.5 cm x 6.0 cm The sample consisted of a mixture of clayish soil, stones, plant matter and fragments of plaster, shale and brick. No asbestos detected.

Sample No. 26. ASET32074 / 35254 / 26. 365264 - A19 - Ja04007. Approx dimensions 12.0 cm x 12.0 cm x 5.25 cm The sample consisted of a mixture of clayish soil, stones, plant matter and fragments of shale and plaster. No asbestos detected.

Sample No. 27. ASET32074 / 35254 / 27. 365264 - A20 - Ja04008. Approx dimensions 12.5 cm x 12.5 cm x 6.0 cm The sample consisted of a mixture of clayish soil, stones, plant matter and fragments of plaster. No asbestos detected.

Analysed and reported by,

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



This document is issued in accordance with NATA's Accreditation requirements. Accredited for compliance with ISO/IEC 17025.

The approx; weights given above can be used only as a guide. They do not represent absolute weights of each kind of asbestos as it is impossible to extract all loose fibres from soil and other asbestos containing building material samples using this method. However above figures may be used as closest approximations to the exact values in each case. Estimation and/ or reporting of asbestos fibre weights in asbestos containing materials and soil is out of the Scope of the NATA Accreditation. NATA Accreditation covers only the qualitative part of the results reported.



ACM - Asbestos Containing Material - Products or materials that contain asbestos in an inert bound matrix such as cement or resin. Here taken to be sound material, even as fragments and not fitting through a 7mm X 7 mm sieve.

- AF -Includes asbestos free fibres, small fibre bundles and also ACM fragments that pass through a 7mm X 7 mm sieve.
- FA -Friable asbestos material such as severely weathered ACM, and asbestos in the form of loose fibrous material such as insulation products.

AUSTRALIAN SAFER ENVIRONMENT & TECHNOLOGY PTY LTD

ABN 36 088 095 112

Our ref : ASET32074/ 35254 / 28 - 73 Your ref : 365264 NATA Accreditation No: 14484

20 February 2013

MGT- Labmark Environmental Pty Ltd Unit F3, Building F, 16 Mars Road Lane Cove NSW 2066

Attn: Dr Robert Symons Laboratory & Technical Manager

Dear Robert

Asbestos Identification

This report presents the results of forty six of seventy three samples, forwarded by MGT- Labmark Environmental Pty Ltd on 15 January 2013, for analysis for asbestos. As requested by MGT- Labmark Environmental Pty Ltd only AF & FA have been reported. This report supersedes the report issued on 14 February 2013.

1.Introduction:Forty six samples forwarded were examined and analysed for the presence of FA and AF categories 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 and Australian Standard AS 4964-2004.)

This report is consistent with the analytical procedures and reporting recommendations in the Western Australia Guidelines for the Assessment Remediation and Management of Asbestos contaminated sites in Western Australia.

 3. Results : Sample No. 28. ASET32074 / 35254 / 28. A21 - Ja04009. Approx dimensions 11.3 cm x 10.4 cm x 10.2 cm The sample consisted of a mixture of soil, stones, plant matter, fragments of plaster, plastic and bitumen. No asbestos detected.

> Sample No. 29. ASET32074 / 35254 / 29. A22 - Ja04010. Approx dimensions 11.5 cm x 11.2 cm x 10.4 cm The sample consisted of a mixture of soil, stones, plant matter, fragments of plaster, brick and shale. No asbestos detected.

Sample No. 30. ASET32074 / 35254 / 30. A23 - Ja04011. Approx dimensions 11.6 cm x 10.4 cm x 10.2 cm The sample consisted of a mixture of soil, stones, plant matter, fragments of glass, corroded metal and shale. No asbestos detected.

Sample No. 31. ASET32074 / 35254 / 31. A24 - Ja04012. Approx dimensions 11.5 cm x 10.4 cm x 10.3 cm The sample consisted of a mixture of soil, stones, plant matter, fragments of plaster, brick and shale. No asbestos detected.

SUITE 710 / 90 GEORGE STREET, HORNSBY NSW 2077 – P.O. BOX 1644 HORNSBY WESTFIELD NSW 1635 PHONE: (02) 99872183 FAX: (02)99872151 EMAIL: aset@bigpond.net.au WEBSITE: www.Ausset.com.au



Sample No. 32. ASET32074 / 35254 / 32. A25 - Ja04013.

Approx dimensions 10.8 cm x 10.6 cm x 9.3 cm The sample consisted of a mixture of soil, stones, plant matter, synthetic mineral fibres, fragments of plaster, corroded metal and shale. **No asbestos detected.**

Sample No. 33. ASET32074/ 35254/ 33. A25/1.0 - Ja04014.

Approx dimensions 10.7 cm x 10.6 cm x 9.5 cm The sample consisted of a mixture of soil, stones, plant matter, synthetic mineral fibres, fragments of plaster material containing synthetic mineral fibres, cement, corroded metal, brick and shale.

No asbestos detected.

Sample No. 34. ASET32074 / 35254 / 34. A26/1.0 - Ja04016. Approx dimensions 9.6 cm x 9.4 cm x 8.2 cm The sample consisted of a mixture of clayish soil, stones, plant matter and fragments of plaster. No asbestos detected.

Sample No. 35. ASET32074 / 35254 / 35. A26/2.0 - Ja04017.

Approx dimensions 9.4 cm x 9.3 cm x 8.7 cm The sample consisted of a mixture of clayish soil, stones and plant matter. **No asbestos detected.**

Sample No. 36. ASET32074 / 35254 / 36. A27 - Ja04018.

Approx dimensions 9.7 cm x 9.3 cm x 8.5 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster, cement brick and shale. **No asbestos detected.**

Sample No. 37. ASET32074 / 35254 / 37. A27/1.0 - Ja04019.

Approx dimensions 9.5 cm x 8.6 cm x 8.4 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster, corroded metal, brick, cement and shale.

No AF or FA categories of asbestos have been detected.

Sample No. 38. ASET32074 / 35254 / 38. A28 - Ja04021.

Approx dimensions 9.4 cm x 8.7 cm x 8.5 cm

The sample consisted of a mixture of clayish soil, stones, plant matter, synthetic mineral fibres, fragments of cement, plaster material containing synthetic mineral fibres, brick and shale.

No asbestos detected.

Sample No. 39. ASET32074 / 35254 / 39. A28/1.0 - Ja04022.

Approx dimensions 9.3 cm x 8.5 cm x 8.4 cm

The sample consisted of a mixture of clayish soil, stones, plant matter, synthetic mineral fibres, fragments of plaster material containing synthetic mineral fibres, brick and shale. **No asbestos detected.**

Sample No. 40. ASET32074 / 35254 / 40. A28/2.0 - Ja04023. Approx dimensions 9.6 cm x 8.8 cm x 8.7 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster, brick and shale.

No asbestos detected.



Sample No. 41. ASET32074 / 35254 / 41. A28/2.3 - Ja04024.

Approx dimensions 9.4 cm x 8.3 cm x 7.8 cm

The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of fibre plaster cement*, plaster, corroded metal, brick, cement and shale. Chrysotile* (Estimated approximate weight = 0.024g) asbestos detected. Estimated approximate total asbestos weight of AF (Fibre plaster Cement

< 7mm x 7mm) = 0.024g.

Approximate total weight of soil = 612.0g. Estimated approximate w/w % = 0.004%

Sample No. 42. ASET32074 / 35254 / 42. A29 - Ja04025.

Approx dimensions 9.4 cm x 8.7 cm x 8.6 cm

The sample consisted of a mixture of clayish soil, stones, plant matter, synthetic mineral fibres, fragments of plaster material containing synthetic mineral fibres, bitumen, brick and shale.

No asbestos detected.

Sample No. 43. ASET32074 / 35254 / 43. A29/1.0 - Ja04026.

Approx dimensions 9.6 cm x 8.5 cm x 8.2 cm

The sample consisted of a mixture of soil, stones, plant matter, synthetic mineral fibres, fragments of plaster material containing synthetic mineral fibres, corroded metal, brick, glass and shale.

No asbestos detected.

Sample No. 44. ASET32074 / 35254 / 44. A29/2.0 - Ja04027.

Approx dimensions 9.2 cm x 8.7 cm x 8.4 cm

The sample consisted of a mixture of soil, stones, plant matter, synthetic mineral fibres, fragments of plaster material containing synthetic mineral fibres, glass and shale. No AF or FA categories of asbestos have been detected.

Sample No. 45. ASET32074 / 35254 / 45. A30 - Ja04028.

Approx dimensions 9.7 cm x 9.2 cm x 8.4 cm

The sample consisted of a mixture of clayish soil, stones, plant matter, synthetic mineral fibres, fragments of plaster material containing synthetic mineral fibres, brick and shale. No AF or FA categories of asbestos have been detected.

Sample No. 46. ASET32074 / 35254 / 46. A30/1.0 - Ja04029.

Approx dimensions 9.8 cm x 9.7 cm x 9.6 cm

The sample consisted of a mixture of clayish soil, stones, plant matter, synthetic mineral fibres, fibres^, fragments of plaster material containing synthetic mineral fibres, corroded metal, glass and shale.

Chrysotile^{\wedge} (Estimated approximate weight = 0.002g) asbestos detected. Approximate total asbestos weight of AF (Loose fibres) = 0.002g. Approximate total weight of soil = 927.0g. Estimated approximate w/w % = 0.0002%

Sample No. 47. ASET32074 / 35254 / 47. A31 - Ja04030.

Approx dimensions 8.7 cm x 8.6 cm x 8.2 cm

The sample consisted of a mixture of clayish soil, stones, plant matter, synthetic mineral fibres, fibres^, fragments of plaster material containing synthetic mineral fibres and corroded metal.

Chrysotile^{\wedge} (Estimated approximate weight= 0.016g) asbestos detected. Approximate total asbestos weight of AF (Loose fibres) = 0.016g. Approximate total weight of soil = 621.0g. Estimated approximate w/w % = 0.0026%



Sample No. 48. ASET32074 / 35254 / 48. A32 - Ja04031.

Approx dimensions 10.6 cm x 9.3 cm x 8.5 cm

The sample consisted of a mixture of clayish soil, stones, plant matter, synthetic mineral fibres, fragments of plaster material containing synthetic mineral fibres and brick. **No asbestos detected.**

Sample No. 49. ASET32074 / 35254 / 49. A33 - Ja04032.

Approx dimensions 9.2 cm x 8.6 cm x 8.5 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of ceramic tile, plaster, brick, cement and shale. **No asbestos detected.**

Sample No. 50. ASET32074 / 35254 / 50. A34 - Ja04033.

Approx dimensions 10.4 cm x 9.6 cm x 9.2 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster, ceramic tile, brick, cement and shale. **No asbestos detected.**

Sample No. 51. ASET32074 / 35254 / 51. A34/1.0 - Ja04034.

Approx dimensions 11.2 cm x 10.7 cm x 9.6 cm

The sample consisted of a mixture of clayish soil, stones, plant matter, synthetic mineral fibres, fragments of plaster material containing synthetic mineral fibres, glass, brick, cement and shale.

No asbestos detected.

Sample No. 52. ASET32074 / 35254 / 52. A35 - Ja04035.

Approx dimensions 10.7 cm x 9.8 cm x 9.6 cm The sample consisted of a mixture of clayish soil, stones, plant matter, synthetic mineral fibres, fragments of plaster material containing synthetic mineral fibres, corroded metal, brick, glass, cement and shale.

No asbestos detected.

Sample No. 53. ASET32074 / 35254 / 53. A35/1.0 - Ja04036.

Approx dimensions 9.4 cm x 9.3 cm x 8.7 cm

The sample consisted of a mixture of soil, stones, plant matter, synthetic mineral fibres and fragments of plaster material containing synthetic mineral fibres. **No asbestos detected.**

Sample No. 54. ASET32074 / 35254 / 54. A35/1.5 - Ja04037.

Approx dimensions 10.8 cm x 10.6 cm x 9.7 cm

The sample consisted of a mixture of clayish soil, stones, plant matter, synthetic mineral fibres and fragments of plaster material containing synthetic mineral fibres. **No asbestos detected.**

Sample No. 55. ASET32074 / 35254 / 55. A36 - Ja04038.

Approx dimensions 9.7 cm x 9.5 cm x 9.1 cm

The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster and brick.

No asbestos detected.

Sample No. 56. ASET32074 / 35254 / 56. A36/1.0 - Ja04039.

Approx dimensions 10.2 cm x 9.6 cm x 8.8 cm

The sample consisted of a mixture of clayish soil, stones, plant matter, synthetic mineral fibres, fragments of plaster material containing synthetic mineral fibres, corroded metal, brick and shale.

No asbestos detected.



Sample No. 57. ASET32074 / 35254 / 57. A36/2.0 - Ja04040.

Approx dimensions 10.2 cm x 9.6 cm x 8.8 cm

The sample consisted of a mixture of clayish soil, stones, plant matter, synthetic mineral fibres, fragments of plaster material containing synthetic mineral fibres, corroded metal, brick, glass and shale. **No asbestos detected.**

Sample No. 58. ASET32074 / 35254 / 58. A37 - Ja04041.

Approx dimensions 10.3 cm x 9.8 cm x 9.7 cm

The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster, brick and shale.

No asbestos detected.

Sample No. 59. ASET32074 / 35254 / 59. A38 - Ja04044.

Approx dimensions 10.5 cm x 9.8 cm x 9.6 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster and shale.

No asbestos detected.

Sample No. 60. ASET32074 / 35254 / 60. A38/0.9 - Ja04045.

Approx dimensions 9.7 cm x 9.2 cm x 8.3 cm The sample consisted of a mixture of soil, stones, plant matter, synthetic mineral fibres, fragments of plaster material containing synthetic mineral fibres and shale. **No asbestos detected.**

Sample No. 61. ASET32074 / 35254 / 61. A38/1.0 - Ja04046.

Approx dimensions 9.7 cm x 8.6 cm x 8.4 cm The sample consisted of a mixture of soil, stones, plant matter, synthetic mineral fibres, fragments of plaster material containing synthetic mineral fibres and shale. **No asbestos detected.**

Sample No. 62. ASET32074 / 35254 / 62. A39 - Ja04047.

Approx dimensions 9.1 cm x 8.6 cm x 8.5 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster, brick, cement and shale. **No asbestos detected.**

Sample No. 63. ASET32074 / 35254 / 63. A40 - Ja04049. Approx dimensions 9.3 cm x 8.7 cm x 8.5 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster, corroded metal, brick and shale. No asbestos detected.

Sample No. 64. ASET32074 / 35254 / 64. A40/1.0 - Ja04050. Approx dimensions 10.2 cm x 9.7 cm x 8.9 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster , corroded metal and shale. No asbestos detected.

Sample No. 65. ASET32074 / 35254 / 65. F1 - Ja04051. Approx dimensions 5.6 cm x 5.3 cm x 4.8 cm The sample consisted of fragments and powder of soft plaster material containing synthetic mineral fibres. No asbestos detected.



Sample No. 66. ASET32074 / 35254 / 66. F2 - Ja04052.

Approx dimensions 5.2 cm x 3.4 cm x 1.1 cm The sample consisted of fragments and powder of soft plaster material containing synthetic mineral fibres.

No asbestos detected.

Sample No. 67. ASET32074 / 35254 / 67. A11/1.0 - Ja03993.

Approx dimensions 10.3 cm x 9.7 cm x 9.2 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster, brick and shale. **No asbestos detected.**

Sample No. 68. ASET32074 / 35254 / 68. A26 - Ja04015.

Approx dimensions 9.8 cm x 9.7 cm x 9.5 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster, brick, glass and shale. **No asbestos detected.**

Sample No. 69. ASET32074 / 35254 / 69. A37/1.0 - Ja04042.

Approx dimensions 10.1 cm x 9.7 cm x 9.4 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster, brick and shale. **No asbestos detected.**

Sample No. 70. ASET32074 / 35254 / 70. A37/2.0 - Ja04043. Approx dimensions 9.7 cm x 9.2 cm x 8.4 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster, corroded metal, brick and shale.

No asbestos detected.

Sample No. 71. ASET32074 / 35254 / 71. A39/1.0 - Ja04048. Approx dimensions 10.7 cm x 10.2 cm x 9.6 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster, corroded metal, brick, cement and shale. No asbestos detected.

Sample No. 72. ASET32074 / 35254 / 72. A38/2.0 - Ja04067. Approx dimensions 9.7 cm x 9.6 cm x 9.1 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster material containing synthetic mineral fibres, corroded metal, brick, glass and shale. No asbestos detected.

Sample No. 73. ASET32074 / 35254 / 73. A27/1.7 - Ja04020. Approx dimensions 9.7 cm x 9.6 cm x 9.4 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster, brick, cement and shale.

Analysed and reported by,

Laxman Dias. BSc Analyst / Approved Identifier Approved Signatory



This document is issued in accordance with NATA's Accreditation requirements. Accredited for compliance with ISO/IEC 17025.



The approx; weights given above can be used only as a guide. They do not represent absolute weights of each kind of asbestos as it is impossible to extract all loose fibres from soil and other asbestos containing building material samples using this method. However above figures may be used as closest approximations to the exact values in each case. Estimation and/ or reporting of asbestos fibre weights in asbestos containing materials and soil is out of the Scope of the NATA Accreditation. NATA Accreditation covers only the qualitative part of the results reported.

ACM - Asbestos Containing Material - Products or materials that contain asbestos in an inert bound matrix such as cement or resin. Here taken to be sound material, even as fragments and not fitting through a 7mm X 7 mm sieve.

- AF -Includes asbestos free fibres, small fibre bundles and also ACM fragments that pass through a 7mm X 7 mm sieve.
- FA -Friable asbestos material such as severely weathered ACM, and asbestos in the form of loose fibrous material such as insulation products.
- ^ denotes loose fibres of relevant asbestos types detected in soil/dust.



 Melbourne

 3-5 Kingston Town Close

 Oakleigh Vic 3166

 Phone : +61 3 8564 5000

 NATA # 1261

 Site # 1254 & 14271

Sydney Unit F6, Building F 16 Mars Road Lane Cove West NSW 2066 Phone : +61 2 9900 8400 NATA # 1261 Site # 18217 Brisbane 1/21 Smallwood Place Murarrie QLD 4172 Phone : +61 7 3902 4600 NATA # 1261 Site # 20794

Sample Receipt Advice

Jenna Seymour
1201085
Not provided
5 Day
Jan 14, 2013 12:40 PM
365264

Geo-Logix P/

Sample information

Company name

- A detailed list of analytes logged into our LIMS, is included in the attached summary table.
- Sample Temperature of a random sample selected from the batch as recorded by mgt-LabMark Sample Receipt : 24.5 degrees Celsius.
- All samples have been received as described on the above COC.
- ☑ COC has been completed correctly.
- Attempt to chill was evident.
- Appropriately preserved sample containers have been used.
- All samples were received in good condition.
- Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.
- ☑ Organic samples had Teflon liners.
- Some samples have been subcontracted.
- N/A Custody Seals intact (if used).

Notes

Asbestos ID as per WA Guidelines conducted by ASET | F1 and F2 sent to ASET for analysis as per client confirmation | F3 placed on HOLD as per client confirmation | Extra samples A27/2.0 labelled as A37/2.0, A38/2.0 allocated WA asbestos analysis, A39/2.0 labelled as A39/1.0 as per client confirmation | Two bags received for samples A11 - one bag labelled as A11/1.0, A25 - sample bag containing plasterboard material labelled as A25 and the other A26, A27/1.0 - one bag labelled as A37/1.0, as per client confirmation |

Contact notes

If you have any questions with respect to these samples please contact:

Jean Heng on Phone : (+61) (2) 9900 8400 or by e.mail: jean.heng@mgtlabmark.com.au

Results will be delivered electronically via e.mail to Jenna Seymour - jseymour@geo-logix.com.au.







Sydney Unit F6, Building F 16 Mars Road Lane Cove West NSW 2066 Phone : +61 2 9900 8400 NATA # 1261 Site # 18217

Company Nar Address: Client Job No	ne: Geo-Logi Bld Q2 Li Warriewo NSW 210 .: 1201085	ix P/L evel 3, 2309/4 D ood)2	aydream St			Oi Re Př Fa	rder No.: eport #: hone: ax:	260401 365264 02 9979 1722 02 9979 1222	Received: Due: Priority: Contact Name:	Jan 14, 2013 12:40 PM Jan 21, 2013 5 Day Jenna Seymour
		Sample Detail			Asbestos (% weight as per WA Guidelines)	HOLD			ingt-Labi	And onen manager. Jean neng
Laboratory whe	ere analysis is co	onducted					1			
Melbourne Labo	oratory - NATA S	Site # 1254 & 14	271							
Sydney Laborat	tory - NATA Site	# 18217				Х	Į			
Brisbane Labor	atory - NATA Sit	te # 20794					l			
External Labora	atory		1		Х					
Sample ID	Sample Date	Sampling Time	Matrix	LAB ID						
A1	Jan 09, 2013		Soil	S13-Ja03981	Х		1			
A2	Jan 09, 2013		Soil	S13-Ja03982	Х		Į			
A3	Jan 09, 2013		Soil	S13-Ja03983	Х		l			
A4	Jan 09, 2013		Soil	S13-Ja03984	Х		Į			
A5	Jan 09, 2013		Soil	S13-Ja03985	Х		Į			
A6	Jan 09, 2013		Soil	S13-Ja03986	Х		Į			
A7	Jan 09, 2013		Soil	S13-Ja03987	Х		Į			
A8	Jan 09, 2013		Soil	S13-Ja03988	Х		Į			
A9	Jan 09, 2013		Soil	S13-Ja03989	Х		Į			
A10	Jan 09, 2013		Soil	S13-Ja03990	Х		ļ			



Sydney Unit F6, Building F 16 Mars Road Lane Cove West NSW 2066 Phone : +61 2 9900 8400 NATA # 1261 Site # 18217

Company Nar Address: Client Job No	Company Name:Geo-Logix P/LAddress:Bld Q2 Level 3, 2309/4 Daydream St Warriewood NSW 2102Client Job No.:1201085					Order No.: Report #: Phone: Fax:	260401 365264 02 9979 1722 02 9979 1222	Received: Due: Priority: Contact Name:	Jan 14, 2013 12:40 PM Jan 21, 2013 5 Day Jenna Seymour
Sample Detail						НОГО		IIIgt-Labk	ian onent Manager, Jean neng
Laboratory where analysis is conducted									
Melbourne Laboratory - NATA Site # 1254 & 14271									
Sydney Laboratory - NATA Site # 18217						X			
Brisbane Laboratory - NATA Site # 20794									
External Laboratory					X				
A10/1.0	Jan 09, 2013	So	bil	S13-Ja03991	X				
A11 A11/1 0	Jan 09, 2013			513-Ja03992	X				
A11/1.0	Jan 09, 2013			S13-J203993					
A12/1 0	Jan 09, 2013		nil	S13-Ja03994	X				
A12/2.0	Jan 09, 2013	50	bil	S13-Ja03996	X				
A13	Jan 09, 2013	S	pil	S13-Ja03997	X				
A13/1.0	Jan 09, 2013	S	pil	S13-Ja03998	X				
A14	Jan 09, 2013	S	pil	S13-Ja03999	X				
A15	Jan 09, 2013	S	bil	S13-Ja04000	Х				
A16	Jan 09, 2013	So	bil	S13-Ja04001	Х				



Sydney Unit F6, Building F 16 Mars Road Lane Cove West NSW 2066 Phone : +61 2 9900 8400 NATA # 1261 Site # 18217

Company Nan Address: Client Job No.	Company Name:Geo-Logix P/LAddress:Bld Q2 Level 3, 2309/4 Daydream StWarriewoodNSW 2102Client Job No.:1201085					Order No.: Report #: Phone: Fax:		260401 365264 02 9979 1722 02 9979 1222	Received: Due: Priority: Contact Name: mgt-LabM	Jan 14, 2013 12:40 PM Jan 21, 2013 5 Day Jenna Seymour ark Client Manager: Jean Heng
Sample Detail						НОГД				
Laboratory where analysis is conducted							1			
Melbourne Laboratory - NATA Site # 1254 & 14271							1			
Sydney Laboratory - NATA Site # 18217						Х				
Brisbane Laboratory - NATA Site # 20794							l			
External Laboratory					X		Į			
A17	Jan 10, 2013		Soil	S13-Ja04002	X		Į			
A18	Jan 10, 2013		Soil	S13-Ja04003	X		ļ			
A18/1.0	Jan 10, 2013		Soil	S13-Ja04004	X		Į			
A18/2.0	Jan 10, 2013		Soil	S13-Ja04005	X		Į			
A18/3.0	Jan 10, 2013		Soil	S13-Ja04006	X	-+	Į			
A19	Jan 10, 2013		Soil	S13-Ja04007	X		ļ			
A20	Jan 10, 2013	;	Soil	S13-Ja04008	X	-+	Į			
A21	Jan 10, 2013	;	Soil	S13-Ja04009	X	-+	Į			
A22	Jan 10, 2013		Soil	S13-Ja04010	X	-+	Į			
A23	Jan 10, 2013		Soil	S13-Ja04011	X	$ \rightarrow $	l			
A24	Jan 10, 2013		Soil	S13-Ja04012	Х		l			


Sydney Unit F6, Building F 16 Mars Road Lane Cove West NSW 2066 Phone : +61 2 9900 8400 NATA # 1261 Site # 18217

Company Nar Address: Client Job No	ne: Geo-Lo Bld Q2 Warriew NSW 2 ⁻ .: 120108	gix P/L Level 3, 2309/4 Da vood 102 5	ydream St			O R P F	Order No.: Report #: Phone: ax:	260401 365264 02 9979 1722 02 9979 1222	Received: Due: Priority: Contact Name: mgt-l abM	Jan 14, 2013 12:40 PM Jan 21, 2013 5 Day Jenna Seymour Jark Client Manager: Jean Heng
		Sample Detail			Asbestos (% weight as per WA Guidelines)	НОГЪ				
Laboratory whe	ere analysis is o	conducted					-			
Melbourne Labo	oratory - NATA	Site # 1254 & 142	71]			
Sydney Laborat	tory - NATA Sit	e # 18217				Х	1			
Brisbane Labor	atory - NATA S	ite # 20794					1			
External Labora	atory			1	Х		1			
A25	Jan 10, 2013		Soil	S13-Ja04013	X		4			
A25/1.0	Jan 10, 2013	-	Soil	S13-Ja04014	X		4			
A26	Jan 10, 2013		Soil	S13-Ja04015	X		4			
A26/1.0	Jan 10, 2013		Soil	S13-Ja04016	X		4			
A26/2.0	Jan 10, 2013		Soil	S13-Ja04017	X		4			
A27	Jan 11, 2013		Soil	S13-Ja04018	X		4			
A27/1.0	Jan 11, 2013		Soil	S13-Ja04019	X		4			
A27/1.7	Jan 11, 2013		Soil	S13-Ja04020	X		4			
A28	Jan 11, 2013		Soil	S13-Ja04021	X		4			
A28/1.0	Jan 11, 2013		Soil	S13-Ja04022	X		4			
A28/2.0	Jan 11, 2013		Soil	S13-Ja04023	Х					



Sydney Unit F6, Building F 16 Mars Road Lane Cove West NSW 2066 Phone : +61 2 9900 8400 NATA # 1261 Site # 18217

Company Nan Address: Client Job No.	ne: Geo-Log Bld Q2 I Warriew NSW 21	gix P/L Level 3, 2309/4 Day vood 102 5	ydream St			Order No Report # Phone: Fax:	D.: ::	260401 365264 02 9979 1722 02 9979 1222	Received: Due: Priority: Contact Name: mɑt-LabM	Jan 14, 2013 12:40 PM Jan 21, 2013 5 Day Jenna Seymour Mark Client Manager: Jean Heng
		Sample Detail			Asbestos (% weight as per WA Guidelines)	НОГР				
Laboratory whe	re analysis is o	conducted								
Melbourne Labo	oratory - NATA	Site # 1254 & 142	71							
Sydney Laborat	ory - NATA Sit	e # 18217				x				
Brisbane Labora	atory - NATA S	ite # 20794								
External Labora	itory	· ·		1	Х					
A28/2.3	Jan 11, 2013		Soil	S13-Ja04024	Х					
A29	Jan 11, 2013		Soil	S13-Ja04025	Х					
A29/1.0	Jan 11, 2013	· · · · · · · · · · · · · · · · · · ·	Soil	S13-Ja04026	Х					
A29/2.0	Jan 11, 2013	ļ	Soil	S13-Ja04027	X					
A30	Jan 11, 2013	ļ	Soil	S13-Ja04028	X					
A30/1.0	Jan 11, 2013	· · · · · · · · · · · · · · · · · · ·	Soil	S13-Ja04029	X					
A31	Jan 11, 2013	· · · · · · · · · · · · · · · · · · ·	Soil	S13-Ja04030	X					
A32	Jan 11, 2013		Soil	S13-Ja04031	Х					
A33	Jan 11, 2013		Soil	S13-Ja04032	Х					
A34	Jan 11, 2013	5	Soil	S13-Ja04033	Х					
A34/1.0	Jan 11, 2013		Soil	S13-Ja04034	Х					



Sydney Unit F6, Building F 16 Mars Road Lane Cove West NSW 2066 Phone : +61 2 9900 8400 NATA # 1261 Site # 18217

Company Nar Address: Client Job No	ne: Geo-Lo Bld Q2 Warriev NSW 2 .: 120108	gix P/L Level 3, 2309/4 Da vood 102 5	ydream St			Order No.: Report #: Phone: Fax:	260401 365264 02 9979 1722 02 9979 1222	Received: Due: Priority: Contact Name: mgt-l abM	Jan 14, 2013 12:40 PM Jan 21, 2013 5 Day Jenna Seymour
		Sample Detail			Asbestos (% weight as per WA Guidelines)	НОГР			
Laboratory whe	ere analysis is o	conducted							
Melbourne Lab	oratory - NATA	Site # 1254 & 142	71						
Sydney Labora	tory - NATA Sit	te # 18217				Х			
Brisbane Labor	atory - NATA S	Site # 20794							
External Labora	atory				Х				
A35	Jan 11, 2013		Soil	S13-Ja04035	X				
A35/1.0	Jan 11, 2013		Soil	S13-Ja04036	X				
A35/1.5	Jan 11, 2013		Soll	S13-Ja04037	X				
A36	Jan 11, 2013		5011	S13-Ja04038	X				
A36/1.0	Jan 11, 2013		5011 Coll	S13-Ja04039	X				
A30/2.0	Jan 11, 2013		5011 Soil	S13-Ja04040	X				
A37/1 0	Jan 11, 2013		5011 Soil	S13-Ja04041					
A37/1.0	Jan 11, 2013		5011 Soil	S13-Ja04042					
A31/2.U	Jan 11, 2013		Soil	S13-Ja04043					
A38/0.9	Jan 11, 2013		Soil	S13-Ja04044	X				



Sydney Unit F6, Building F 16 Mars Road Lane Cove West NSW 2066 Phone : +61 2 9900 8400 NATA # 1261 Site # 18217

Company Na Address: Client Job No	me: Geo-Lo Bld Q2 Warriew NSW 2 ⁻ o.: 120108	gix P/L Level 3, 2309/4 Day /ood 102 5	dream St			Order No.: Report #: Phone: Fax:	260401 365264 02 9979 1722 02 9979 1222	Received: Due: Priority: Contact Name: mgt-Lat	Jan 14, 2013 12:40 PM Jan 21, 2013 5 Day Jenna Seymour Mark Client Manager: Jean Heng
		Sample Detail			Asbestos (% weight as per WA Guidelines)	HOLD			
Laboratory wh	ere analysis is o	conducted							
Melbourne Lat	ooratory - NATA	Site # 1254 & 1427	'1						
Sydney Labora	atory - NATA Sit	e # 18217				X			
Brisbane Labo	oratory - NATA S	ite # 20794							
External Labor	ratory			1	Х				
A38/1.0	Jan 11, 2013	s	oil	S13-Ja04046	X				
A39	Jan 11, 2013	S S	oil	S13-Ja04047	X				
A39/1.0	Jan 11, 2013	S S	oil	S13-Ja04048	X				
A40	Jan 12, 2013	S S	oil	S13-Ja04049	X				
A40/1.0	Jan 12, 2013	S S	oil	S13-Ja04050	X				
F1	Jan 14, 2013	S	oil	S13-Ja04051	X				
F2	Jan 14, 2013	S	oil	S13-Ja04052	X				
F3	Jan 14, 2013	S	oil	S13-Ja04065		X			
A38/2.0	Jan 14, 2013	S	oil	S13-Ja04067	Х				

Geo-Log Building Q2, L 2309/4 Davdr	ix Pty Ltd .evel 3	Proj	ject Mana	ager	11	<u>Je</u>	M	2	CHAIN OF CUSTOR	Y						Pag Pur	e chas	e Oi	of rder	No:	-	Z	26	00	48	2-1		#	36	520	4
Warriewood,	NSW 2102	Con	ntact ema	ail:	ľ	Se	en	na	Mageo-logix.co	m.0	a					Quo	ote R	efer	ence):											
ABN: 86 116 892 9	936	Proj	ject Nam	e:	J	`	5		0	_						Sen	d In	oice	e to:		acc	oun	ts@	geo	-logi	x.co	om.ai	<u>u</u>			
P: (02) 9979 17 F: (02) 9979 12	22 22	Proj	ject Num	ber:	12	20	10	ÐS	Date Submitted: _ []	4/1	11:	3				ТАТ	req	uireo	d:		4	3	L			-					
							SIN'S		ANALYSIS REQ	UIR	ED													12.2					and the		
						Mat	rix			1												-			-	M	<u>\</u>		_		
Lab ID	Sample ID		Date	soil	water	air	oaint, filters	other	Comments	COMPOSITE	TPH - C6 - C9	TPH - C10 - C36	vocs	втех	PAHs	PCBs	OCPs	OPPs	PCBs	Phenols	Metals - Lead	Metals - Specify	Metals - M8	TCLP	MOD AN	Asherbas			Hold		
Ja039(81	M	8	1113	X																		_			X				7		
82	R2			1																					X						
83	A3																								x						
84	A4																								Х						
85	AS																								X						
86	AG																								X						
87	A7																								X						
88	AB																								X						
89	A9																								X						
00	AIO																								X						
91	AIDID																								×						
92	AN																								×						
93	AII/1.0																								X						
94	AD.																								×						
95	A12/1.0																								X						
96	A12/2.0																								×						
470	AIZ	V	/	1																					X						

Metals**(circle) As, Cd, Cr, Cu, Ni, Pb, Zn, Hg, Cr⁶⁺, Cr³⁺, Fe²⁺, Fe³⁺, Be, B, Al, V, Mn, Fe, Co, Se, Sr, Sn, Mo, Ag, Ba, TI, Bi, Sb

Chain of Custody Seymon Date/Time: 14/11/13 Signature Received by: <u>SUE</u> Date/Time: <u>14/1/13</u>Signature: _____ 24:5 14/1/13 12-40PM Relinquished by PM_04 Chain of Custody

Geo-Log Building Q2, L 2309/4 Daydr Warriewood, I	ix Pty Ltd .evel 3 eam St NSW 2102	Project Man Contact ema	ager: ail:	ل ال ال	er	vc m	a Se au	CHAIN OF CUSTO Cynowr r @ Geo-logix (s	DY - <u>0</u> M	.CL	u				Page Purc Quo	e :hase te Re	Orc	of ler N nce:	 o:	1	2t	a	10	>1			_	#3	6526	,4
ABN: 86 116 892 9	936	Project Nam	e:	J	U)									Send	d Invo	oice	to:	ŝ	acco	unt	s@g	eo-l	ogi>	.cor	n.au				
P: (02) 9979 17 F: (02) 9979 12	22 22	Project Num	ber:	12	01	Ø-	35	Date Submitted:	4/1	/13					ТАТ	requ	ired		-	St	d									
-1-4-1-47								ANALYSIS REC	QUIR	ED	No.								調講											
				N	Mati	rix	1				(0						_			_	>			9	N		_	_		
Lah ID	Sample ID	Date	oil	/ater	.=	aint, filters	ther	Comments	OMPOSITE	PH - C6 - C9	PH - C10 - C30	ocs	тех	AHs	CBs	CPs	PPs	CBs	henols	etals - Lead	etals - Specify	etals - M8	CLP CLP	HUDH	al a sta			old		
98	AP3/1-0	911/12	×	5	0	<u>a</u>	0	Comments	0	F	F	>	8		•	0	0	<u>a</u>	•	Σ	Σ	Σ	F	X	~	-		프		
99	ALL		1																					$\overline{\mathbf{x}}$			+	_		
504000	AIS																_							x						
01	AI6	V		-															+		1			Y						
02	AIT	10/1/13																					ľ	X						
03	K18																							X						
04	A18/10																						ľ.	X				_		
05	A18 2.0																							X						
30	A18/30																						1	X						
O:f	A19																							X						
68	A20																							X						
09	A21																							×						
10	A22																							Х						
N	A23																							X						
N	A24																							\times						
13	A25																							X						
14	A25/10	\vee	1																					\times						

Metals**(circle) As, Cd, Cr, Cu, Ni, Pb, Zn, Hg, Cr⁶⁺, Cr³⁺, Fe²⁺, Fe³⁺, Be, B, Al, V, Mn, Fe, Co, Se, Sr, Sn, Mo, Ag, Ba, TI, Bi, Sb

Chain of Custody

Received by: SUE Date/Time: 14/1/13 Signature: 200. Relinquished by: J. Seymon Date/Time: 14/1/13 Signature: PM_04 Chain of Custody

Geo-Log Building Q2, L	ix Pty Ltd	Project Mana	ager:	5	Ēn	unc	2 <	CHAIN OF CUSTOD	Y						Pag Pur	e chas	e O	of der	No:		26	04	Ð				ŧ	#2	652	.64
Warriewood, I	NSW 2102	Contact ema	il:	15	ier	w	2	ure geo-logix.	is	25	h.	cu	l		Quo	ote R	efer	ence	:											
ABN: 86 116 892 9	936	Project Name	e: 🤇	厂		0		0							Sen	d Inv	/oic	e to:		acco	ount	ts@g	geo-	logi	x.cor	n.au				
P: (02) 9979 17	22	Project Num	ber:	120	010	R	35	Date Submitted: 1	ŧ١	13	3				ТАТ	req	uire	d:		5	Ac	X								
F: (02) 9979 12	22							ANALYSIS REQU	/ JIR	ED								are the								ST. SHE				
				N	latri	ix																		2	5					
Lab ID	Sample ID	Date	soil	water	air	paint, filters	other	Comments	COMPOSITE	грн - С6 - С9	TPH - C10 - C36	vocs	втех	PAHs	PCBs	OCPs	SPPs	PCBs	Phenols	Metals - Lead	Metals - Specify	Metals - M8	TCLP	WA DON	Adestos			Hold		
15	A26	10/1/13	X																_					X				_		
16	A26/1.0		1																					X						
(7	A26 2.0	1																						X						
(4	AZZ	11/1/13																						×						
19	AZ71.0																		_					χ						
20	A27/1.7																							X						
21	A28																							X						
22	A28/1.0																							Х						
23	A28/2.0																							χ						
24	A28/23																							X						
25	X29																							X						
26	A29/1.0																							Х						
27	A29/2°0																							X						
2%	A20																							X						
29	A30/1-0																							X						
30	A31'																							X						
31	X32		V																					X						

Metals**(circle) As, Cd, Cr, Cu, Ni, Pb, Zn, Hg, Cr ⁶⁺, Cr ³⁺, Fe ²⁺, Fe ³⁺, Be, B, Al, V, Mn, Fe, Co, Se, Sr, Sn, Mo, Ag, Ba, TI, Bi, Sb

Chain of Custody

Relinquished by: <u>J. Supmon</u> Date/Time: <u>4/1/13</u> Signature: <u>Received by:</u> <u>SUE</u> Date/Time: <u>14/1/13</u> Signature: <u>27:5</u> 14/1/<u>1</u>13 12-40 pM

Geo-Log Building Q2, L 2309/4 Daydr Warriewood,	jix Pty Ltd _evel 3 ream St NSW 2102	Project Mana Contact ema	ager: il:	1	Je	nv	$\frac{\alpha}{m}$	CHAIN OF CUSTOD Seymour	γ X.C	jan and a start	\mathcal{D}	a	и		Pag Pur Que	e chas	e Or	of der	No:	8		26	,0401		#	365264
ABN: 86 116 892	936	Project Name	e:	7		J									Sen	d Inv	/oice	e to:		acco	ount	s@g	geo-logix.com.	au		
P: (02) 9979 17 F: (02) 9979 12	22	Project Num	ber:	17	20	10	85	3 Date Submitted: <u>14</u>	-11	13	>				ТАТ	req	uirec	1:		8	to	l				
								ANALYSIS REQ	UIRI	ED							清清									
					Mat	rix																	m			
Lab ID	Sample ID	Date	soil	water	air	paint. filters	other	Comments	COMPOSITE	грн - С6 - С9	TPH - C10 - C36	/ocs	зтех	PAHs	cBs	OCPs	OPPs	cBs	henols	Metals - Lead	Metals - Specify	Metals - M8	MADOH .		Hold	
32	A33	11/113	X									-		-						_	_	-	X		-	
33	A34		Ì																				X			
34	A34 1.0																						X			
35	A35								and the second s														X			
B	A25/1.0																						X			
37	A35/1.5																						×			
38	ABG																						×			
39	A36/1.0																						X			
40	A36/20								6														$\boldsymbol{\lambda}$			
41	A37																						x			
42	137/10																						X			
43	A37/2.0																						\times			
44	A38																						\times			
45	A38/09									_													X			
46	A39/1.0																						×			
47	1239																						X			
48	A39/10	V	\checkmark	1																			×			

Metals**(circle) As, Cd, Cr, Cu, Ni, Pb, Zn, Hg, Cr⁶⁺, Cr³⁺, Fe²⁺, Fe³⁺, Be, B, Al, V, Mn, Fe, Co, Se, Sr, Sn, Mo, Ag, Ba, TI, Bi, Sb

Chain of Custody Relinquished by: J. SUE Date/Time: 14/1/13 Signature: Received by: SUE Date/Time/4/1/13 Signature: _ 24.5 14/1/13 12-40, W.

Geo-Log Building Q2, L 2309/4 Davdro	ix Pty Ltd Level 3 eam St	Project Mana	ger:	-	Jei	V	a	CHAIN OF CUSTOD Seymoer	Υ -						Pag Pure	e chas	e Or	of der l	No:		26	01	40	21			-	#	3652	- 64
Warriewood, I	NSW 2102	Contact emai	il:	is	ei	m	Ol.	10 900-1001x.10	M.	a	U				Quo	te R	efere	ence	:		_									
ABN: 86 116 892 9	936	Project Name	e:	5		, 		0 0	-						Sen	d In	voice	e to:		acc	ount	ts@	geo	-log	ix.co	m.au	!			
P: (02) 9979 172 F: (02) 9979 122	22 22	Project Numb	oer:	12	20	<u>1C</u>	08	<u>5</u> Date Submitted: <u>/4</u>	‡/!,	/r=	3	and a second			TAT	req	uired	1:		8	ld		110		-					
					Mati	rix		ANALYSIS REQ	UIR 1	ĘD					area vera					No. Se	i selitar		-		0			leros.		
Lab ID	Sample ID	Date	soil	water	air	z baint, filters	other	Comments	COMPOSITE	TPH - C6 - C9	TPH - C10 - C36	vocs	втех	PAHs	PCBs	ocps	OPPs	PCBs	Phenols	Metals - Lead	Metals - Specify	Metals - M8	TCLP	WA DOH	Asbestos)			Hold		
49	A4O	12/1/13	X																					X						
50	A40/00	12/1/13	X			<u> </u>	1																	X				_		
				_		╞	\vdash		_		_																			
				\vdash	-	\vdash	╞				-																			
				-	-	+	╞				-							_										_		
			-	\vdash	-	+	┢				+							_						-			_	_		
				\vdash	\vdash	+	┢				\vdash							_						-			+	_		
				-	+	+	+				-																-	-		
						+					\square																+			
											\square																			

Metals**(circle) As, Cd, Cr, Cu, Ni, Pb, Zn, Hg, Cr ⁶⁺, Cr ³⁺, Fe ²⁺, Fe ³⁺, Be, B, Al, V, Mn, Fe, Co, Se, Sr, Sn, Mo, Ag, Ba, TI, Bi, Sb

Chain of Custody Relinquished by: J. Seynow Date/Time: 14/1/13 Signature: Received by: SUE Date/Time/4/1/3 Signature: LW.

#365264.

From: Jenna Seymour [mailto:jseymour@geo-logix.com.au]
Sent: Monday, 14 January 2013 4:09 PM
To: Enviro Syd
Cc: Jean Heng; James Gould
Subject: 1201085 - sample instructions

Hi James,

Please see instructions below on notes supplied in Summary:

Asbestos ID as per WA Guidelines conducted by ASET |

F1 and F2 allocated asbestos analysis as per email from Jenna Seymour - sample dates as date relinquished unless specified otherwise - third unlabelled bag containing plaster board received - labelled F3 and placed on HOLD - do all these bags contain plasterboard like material? Are any of these a soil sample? Please place all on hold.

Extra samples received and placed on HOLD = A27/2.0 register as A37/2.0 run for asbestos, A38/2.0 run for asbestos, A39/2.0 register as A39/1.0 run for asbestos

Samples not received = A11/1.0 see below double bag, A26 this will be one of the two bags for A25. A25 will have pieces of white plaster board through the sample. Can you decipher from the two? Maybe my 6 looks like a 5?, A27/1.7 fine, A37/1.0 see below double bag, A37/2.0 see above extra sample, A39/1.0 – see above extra sample analysis cancelled |

Two bags received for samples A11 please register one of the bags as A11/2 and run for asbestos, A25 see above samples not received, A27/1.0 register one as A237/1.0 and run both for asbestos |

Thanks

Jenna Seymour BSc Applied Chem. MEnvMgt ENVIRONMENTAL SCIENTIST



GEO_LOGIX

Geo-Logix Pty Ltd Building Q2, Level 3 Unit 2309 / 4 Daydream Street Warriewood NSW 2102

P: 02 9979 1722 F: 02 9979 1222



#365264

From: Jenna Seymour [mailto:jseymour@geo-logix.com.au]
Sent: Tuesday, 15 January 2013 10:22 AM
To: Sample Receipt 1 Syd
Cc: Enviro Syd
Subject: RE: 1201085 - sample instructions

Hi MGT,

The samples F1, F2, F3 that are currently on hold, can I please have F1 and F2 analysed for percentage of asbestos in the material? F3 on hold.

Thanks

Jenna Seymour BSc Applied Chem MEnvMgt ENVIRONMENTAL SCIENTIST

Geo-Logix Pty Ltd Building Q2, Level 3 Unit 2309 / 4 Daydream Street Warriewood NSW 2102

P: 02 9979 1722 **F**: 02 9979 1222 **M**: 0402 933 344

www.geo-logix.com.au

AUSTRALIAN SAFER ENVIRONMENT & TECHNOLOGY PTY LTD

ABN 36 088 095 112

Our ref: ASET32275/ 35455 / 1 - 17 Your ref: 1201085 NATA Accreditation No: 14484

14 February 2013

Geo-Logix Pty Ltd Building Q, Level 3, 2309/4 Daydream Street Warriewood NSW 2102

Attn: Ms Jenna Seymour

Dear Jenna,

Asbestos Identification

This report presents the results of seventeen from sixty-nine samples, forwarded by Geo-Logix Pty Ltd on 8 February 2013, for analysis for asbestos. As requested by Geo-Logix Pty Ltd, only AF and FA been reported. This report supersedes the report issued on 12 February 2013.

1.Introduction: Seventeen 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 and Australian Standard AS 4964-2004.)

> This report is consistent with the analytical procedures and reporting recommendations in the Western Australia Guidelines for the Assessment Remediation and Management of Asbestos contaminated sites in Western Australia.

3. Results : Sample No. 1. ASET32275 / 35455 / 1. A41
 Approx dimensions 9.2 cm x 9.1 cm x 5.0 cm
 The sample consisted of a mixture of clayish soil, stones, plant matter and fragments of plaster.
 No asbestos detected.

Sample No. 2. ASET32275 / 35455 / 2. A42 Approx dimensions 10.5 cm x 10.0 cm x 5.5 cm The sample consisted of a mixture of clayish soil, stones, plant matter and fragments of plaster. No asbestos detected.

Sample No. 3. ASET32275 / 35455 / 3. A42/0.4 Approx dimensions 8.1 cm x 8.0 cm x 5.1 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster, brick like material and glass. No asbestos detected.

Sample No. 4. ASET32275 / 35455 / 4. A43 Approx dimensions 9.4 cm x 9.0 cm x 4.8 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster and brick. No asbestos detected.

SUITE 710 / 90 GEORGE STREET, HORNSBY NSW 2077 – P.O. BOX 1644 HORNSBY WESTFIELD NSW 1635 PHONE: (02) 99872183 FAX: (02)99872151 EMAIL: <u>aset@bigpond.net.au</u> WEBSITE: <u>www.Ausset.com.au</u>

OCCUPATIONAL HEALTH & SAFETY STUDIES • INDOOR AIR QUALITY SURVEYS • HAZARDOUS MATERIAL SURVEYS • RADIATION SURVEYS • ASBESTOS SURVEYS ASBESTOS DETECTION & IDENTIFICATION • REPAIR & CALIBRATION OF SCIENTIFIC EQUIPMENT • AIRBORNE FIBRE & SILICA MONITORING



Sample No. 5. ASET32275 / 35455 / 5. A43/0.4

Approx dimensions 10.5 cm x 10.4 cm x 6.4 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster, bitumen and glass. No asbestos detected.

Sample No. 6. ASET32275 / 35455 / 6. A44

Approx dimensions 12.1 cm x 12.0 cm x 6.0 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster, brick and glass. No asbestos detected.

Sample No. 7. ASET32275 / 35455 / 7. A45

Approx dimensions 11.0 cm x 10.0 cm x 6.0 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster and glass.

No asbestos detected.

Sample No. 8. ASET32275 / 35455 / 8. A45/1.0

Approx dimensions 9.0 cm x 8.5 cm x 5.5 cm The sample consisted of a mixture of clayish soil, stones, plant matter and fragments of plaster. No asbestos detected.

Sample No. 9. ASET32275 / 35455 / 9. A46

Approx dimensions 9.0 cm x 9.0 cm x 5.5 cm The sample consisted of a mixture of clayish soil, stones, fibres^, plant matter, fragments of plaster, cement and brick. Chrysotile^{*} (Estimated approximate weight= 0.0223g) asbestos detected. Estimated approximate total weight of AF = 0.0223gApproximate total weight of soil = 615.0g Estimated approximate w/w = 0.004%

Sample No. 10. ASET32275 / 35455 / 10. A46/1.0 Approx dimensions 12.0 cm x 11.0 cm x 6.0 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster, cement, brick and shale like material. No asbestos detected.

Sample No. 11. ASET32275 / 35455 / 11. A47 Approx dimensions 10.5 cm x 10.0 cm x 5.5 cm The sample consisted of a mixture of clayish soil, stones, synthetic mineral fibres, plant matter, fragments of plaster and glass. No asbestos detected.

Sample No. 12. ASET32275 / 35455 / 12. A47/1.0 Approx dimensions 12.0 cm x 11.0 cm x 5.0 cm The sample consisted of a mixture of clavish soil, stones, plant matter, fragments of plaster, cement, brick, paint flakes and bitumen. No asbestos detected.

Sample No. 13. ASET32275 / 35455 / 13. A48 Approx dimensions 10.0 cm x 9.5 cm x 5.6 cm The sample consisted of a mixture of clayish soil, stones, synthetic mineral fibres, plant matter, fragments of plaster, cement, brick and bitumen.

No asbestos detected.



Sample No. 14. ASET32275 / 35455 / 14. A48/1.0

Approx dimensions 12.0 cm x 11.3 cm x 5.2 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster, cement, brick, bitumen, glass and shale like material. **No asbestos detected.**

Sample No. 15. ASET32275 / 35455 / 15. A49

Approx dimensions 12.1 cm x 11.7 cm x 5.7 cm The sample consisted of a mixture of clayish soil, stones, synthetic mineral fibres, plant matter, fragments of plaster and brick. **No asbestos detected.**

Sample No. 16. ASET32275 / 35455 / 16. A49/1.0

Approx dimensions 11.0 cm x 10.5 cm x 6.0 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster, cement and brick. **No asbestos detected.**

Sample No. 17. ASET32275 / 35455 / 17. A49/2.0 Approx dimensions 12.5 cm x 12.5 cm x 6.5 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster, cement, brick, soft fibre plaster[#] and corroded metal. Chrysotile[#] (Estimated approximate weight= 0.05g) asbestos and Amosite[#] (Estimated approximate weight= 0.007g) asbestos detected. Estimated approximate total weight of asbestos = 0.057g Approximate total weight of FA = 0.332g Approximate total weight of soil = 823.0g Estimated approximate w/w = 0.007%

Analysed and reported by,

Nisansala Maddage. BSc(Hons) Environmental Scientist/Approved Identifier

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



This document is issued in accordance with NATA's Accreditation requirements. Accredited for compliance with ISO/IEC 17025.

The approx; weights given above can be used only as a guide. They do not represent absolute weights of each kind of asbestos as it is impossible to extract all loose fibres from soil and other asbestos containing building material samples using this method. However above figures may be used as closest approximations to the exact values in each case. Estimation and/ or reporting of asbestos fibre weights in asbestos containing materials and soil is out of the Scope of the NATA Accreditation. NATA Accreditation only covers the qualitative part of the results reported.



ACM - Asbestos Containing Material - Products or materials that contain asbestos in an inert bound matrix such as cement or resin. Here taken to be sound material, even as fragments and not fitting through a 7mm X 7 mm sieve.

- AF -Includes asbestos free fibres, small fibre bundles and also ACM fragments that pass through a 7mm X 7 mm sieve.
- FA -Friable asbestos material such as severely weathered ACM, and asbestos in the form of loose fibrous material such as insulation products.

^ denotes loose fibres of relevant asbestos types detected in soil/dust.

* denotes asbestos detected in ACM in bonded form.

[#]denote asbestos detected in easily crumbling plaster material

AUSTRALIAN SAFER ENVIRONMENT & TECHNOLOGY PTY LTD

ABN 36 088 095 112

Our ref : ASET32275/ 35455 / 18 - 69 Your ref : 1201085 NATA Accreditation No: 14484

11 February 2013

Geo-Logix Pty Ltd Building Q2, Level 3 Unit 2309/4 Daydream Street Warriewood NSW 2102

Attn: Ms Jenna Seymour

Dear Jenna

Asbestos Identification

This report presents the results of fifty two of sixty nine samples, forwarded by Geo-Logix Pty Ltd on 8 February 2013, for analysis for asbestos. As requested by Geo-Logix Pty Ltd, only AF and FA have been reported. This report supersedes the report issued earlier today.

1.Introduction: Fifty two 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 and Australian Standard AS 4964-2004.)

This report is consistent with the analytical procedures and reporting recommendations in the Western Australia Guidelines for the Assessment Remediation and Management of Asbestos contaminated sites in Western Australia.

 3. Results : Sample No. 18. ASET32275 / 35455 / 18. A50. Approx dimensions 9.4 cm x 9.2 cm x 8.6 cm The sample consisted of a mixture of clayish soil, stones and plant matter. No asbestos detected.

> Sample No. 19. ASET32275 / 35455 / 19. A50/1.0. Approx dimensions 9.7 cm x 8.7 cm x 8.6 cm The sample consisted of a mixture of clayish soil, stones, plant matter, synthetic mineral fibres, fragments of plaster, cement and brick. No asbestos detected.

> Sample No. 20. ASET32275 / 35455 / 20. A50/1.8. Approx dimensions 9.4 cm x 9.1 cm x 8.4 cm The sample consisted of a mixture of clayish soil, stones, plant matter, synthetic mineral fibres, fragments of plaster, cement and shale. No asbestos detected.

> Sample No. 21. ASET32275 / 35455 / 21. A50/2.1. Approx dimensions 9.6 cm x 8.6 cm x 8.4 cm The sample consisted of a mixture of clayish soil, stones, plant matter, synthetic mineral fibres, fragments of plaster, cement, brick and glass. No asbestos detected.

SUITE 710 / 90 GEORGE STREET, HORNSBY NSW 2077 – P.O. BOX 1644 HORNSBY WESTFIELD NSW 1635 PHONE: (02) 99872183 FAX: (02)99872151 EMAIL: <u>aset@bigpond.net.au</u> WEBSITE: <u>www.Ausset.com.au</u>



Sample No. 22. ASET32275 / 35455 / 22. A50/2.6.

Approx dimensions 9.1 cm x 8.8 cm x 8.5 cm The sample consisted of a mixture of clayish soil, stones, plant matter, synthetic mineral fibres, fragments of plaster, cement, glass and brick. **No asbestos detected.**

Sample No. 23. ASET32275 / 35455 / 23. A51.

Approx dimensions 9.4 cm x 8.5 cm x 8.3 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fibres^, fragments of plaster, cement, shale, corroded metal and brick. Chrysotile^ (Approximate weight = 0.016g) asbestos detected. Approximate total asbestos weight of AF = 0.016g. Approximate total weight of soil = 688.0g. Approximate w/w % = 0.0023%

Sample No. 24. ASET32275 / 35455 / 24. A51/1.0. Approx dimensions 9.4 cm x 9.3 cm x 8.6 cm The sample consisted of a mixture of clayish soil, stones, plant matter, synthetic mineral fibres, fragments of plaster, cement, glass, shale and brick. No asbestos detected.

Sample No. 25. ASET32275 / 35455 / 25. A51/1.8.

Approx dimensions 8.7 cm x 8.6 cm x 8.5 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster, cement and shale. **No asbestos detected.**

Sample No. 26. ASET32275 / 35455 / 26. A52.

Approx dimensions 9.1 cm x 8.6 cm x 8.4 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster, cement and shale. **No asbestos detected.**

Sample No. 27. ASET32275 / 35455 / 27. A52/0.55.

Approx dimensions 8.9 cm x 8.6 cm x 8.5 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster, shale and brick. **No asbestos detected.**

Sample No. 28. ASET32275 / 35455 / 28. A52/1.8.

Approx dimensions 9.1 cm x 8.7 cm x 8.5 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster, bitumen and shale. **No asbestos detected.**

Sample No. 29. ASET32275 / 35455 / 29. A53.

Approx dimensions 9.2 cm x 8.6 cm x 8.4 cm The sample consisted of a mixture of clayish soil, stones, plant matter and fragments of shale.

No asbestos detected.

Sample No. 30. ASET32275 / 35455 / 30. A53/1.0. Approx dimensions 9.3 cm x 8.5 cm x 8.4 cm

The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster, cement and shale. No asbestos detected



Sample No. 31. ASET32275 / 35455 / 31. A53/2.0.

Approx dimensions 9.2 cm x 8.7 cm x 8.3 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of glass and shale.

No asbestos detected.

Sample No. 32. ASET32275 / 35455 / 32. A54.

Approx dimensions 9.4 cm x 8.5 cm x 8.2 cm The sample consisted of a mixture of clayish soil, stones, plant matter, synthetic mineral fibres, fragments of plaster, cement and shale. **No asbestos detected.**

Sample No. 33. ASET32275/ 35455/ 33. A54/1.0.

Approx dimensions 9.3 cm x 8.9 cm x 8.7 cm The sample consisted of a mixture of clayish soil, stones, plant matter, synthetic mineral fibres, fragments of plaster and shale. **No asbestos detected.**

Sample No. 34. ASET32275 / 35455 / 34. A54/2.0.

Approx dimensions 8.7 cm x 8.5 cm x 8.4 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster, brick and shale. **No asbestos detected.**

Sample No. 35. ASET32275 / 35455 / 35. A55.

Approx dimensions 9.2 cm x 8.7 cm x 7.4 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster and shale.

No asbestos detected.

Sample No. 36. ASET32275 / 35455 / 36. A55/0.9.

Approx dimensions 8.9 cm x 8.5 cm x 8.2 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster, brick and shale. **No asbestos detected.**

Sample No. 37. ASET32275 / 35455 / 37. A55/1.9.

Approx dimensions 9.3 cm x 8.7 cm x 8.5 cm The sample consisted of a mixture of clayish soil, stones, plant matter, synthetic mineral fibres, fragments of plaster, cement, brick and shale. **No asbestos detected.**

Sample No. 38. ASET32275 / 35455 / 38. A56.

Approx dimensions 9.3 cm x 8.3 cm x 8.2 cm The sample consisted of a mixture of clayish soil, stones, plant matter, synthetic mineral fibres, fragments of plaster and shale. **No asbestos detected.**

Sample No. 39. ASET32275 / 35455 / 39. A56/0.5. Approx dimensions 9.1 cm x 8.5 cm x 8.3 cm

The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster and shale.

No asbestos detected.



Sample No. 40. ASET32275 / 35455 / 40. A56/1.5.

Approx dimensions 9.6 cm x 9.2 cm x 8.5 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster, brick, glass and shale. No asbestos detected.

Sample No. 41. ASET32275 / 35455 / 41. A56/2.5.

Approx dimensions 9.3 cm x 8.6 cm x 8.5 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster, brick and shale. No asbestos detected.

Sample No. 42. ASET32275 / 35455 / 42. A57.

Approx dimensions 9.1 cm x 8.6 cm x 8.4 cm The sample consisted of a mixture of clayish soil, stones, plant matter and fragments of shale. No asbestos detected.

Sample No. 43. ASET32275 / 35455 / 43. A57/1.0.

Approx dimensions 8.9 cm x 8.7 cm x 8.6 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster, brick and shale. No asbestos detected.

Sample No. 44. ASET32275 / 35455 / 44. A58.

Approx dimensions 9.2 cm x 8.9 cm x 8.5 cm The sample consisted of a mixture of clayish soil, stones, plant matter and fragments of shale. No asbestos detected.

Sample No. 45. ASET32275 / 35455 / 45. A58/1.0.

Approx dimensions 9.1 cm x 8.7 cm x 8.5 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster, cement and shale. No asbestos detected.

Sample No. 46. ASET32275 / 35455 / 46. A59.

Approx dimensions 9.2 cm x 8.5 cm x 8.1 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster and shale. No asbestos detected.

Sample No. 47. ASET32275 / 35455 / 47. A59/0.7.

Approx dimensions 9.3 cm x 8.6 cm x 8.5 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster, brick and shale. No asbestos detected.

Sample No. 48. ASET32275 / 35455 / 48. A60.

Approx dimensions 9.4 cm x 8.7 cm x 8.4 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster and shale.

No asbestos detected.



Sample No. 49. ASET32275 / 35455 / 49. A61.

Approx dimensions 8.8 cm x 8.7 cm x 8.6 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster and shale.

No asbestos detected.

Sample No. 50. ASET32275 / 35455 / 50. A62.

Approx dimensions 9.1 cm x 8.6 cm x 7.5 cm The sample consisted of a mixture of clayish soil, stones, plant matter and fragments of shale. **No asbestos detected.**

Sample No. 51. ASET32275 / 35455 / 51. A63.

Approx dimensions 8.9 cm x 8.6 cm x 8.4 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster, brick and shale. **No asbestos detected.**

Sample No. 52. ASET32275 / 35455 / 52. A64. Approx dimensions 9.2 cm x 8.7 cm x 8.3 cm The sample consisted of a mixture of clayish soil, stones, plant matter and fragments of shale. No asbestos detected.

Sample No. 53. ASET32275 / 35455 / 53. A65. Approx dimensions 9.1 cm x 8.6 cm x 8.5 cm The sample consisted of a mixture of clayish soil, stones, plant matter and fragments of shale. No asbestos detected.

Sample No. 54. ASET32275 / 35455 / 54. A66. Approx dimensions 9.2 cm x 8.7 cm x 8.4 cm The sample consisted of a mixture of clayish soil, stones, plant matter and fragments of shale. No asbestos detected.

Sample No. 55. ASET32275 / 35455 / 55. A67. Approx dimensions 9.2 cm x 9.1 cm x 8.2 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of cement and shale. No asbestos detected.

Sample No. 56. ASET32275 / 35455 / 56. A67/0.6. Approx dimensions 9.2 cm x 8.7 cm x 8.4 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster and shale. No asbestos detected.

Sample No. 57. ASET32275 / 35455 / 57. A68. Approx dimensions 9.1 cm x 8.6 cm x 8.5 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster, brick and shale. No asbestos detected.

Sample No. 58. ASET32275 / 35455 / 58. A69. Approx dimensions 9.4 cm x 8.5 cm x 8.3 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster, brick, cement and shale. No asbestos detected.



Sample No. 59. ASET32275 / 35455 / 59. A70.

Approx dimensions 8.9 cm x 8.7 cm x 8.6 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster, brick and shale. No asbestos detected.

Sample No. 60. ASET32275 / 35455 / 60. A71.

Approx dimensions 9.3 cm x 8.7 cm x 8.6 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster, brick and shale. No asbestos detected.

Sample No. 61. ASET32275 / 35455 / 61. A72.

Approx dimensions 8.9 cm x 8.6 cm x 8.5 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster and shale.

No asbestos detected.

Sample No. 62. ASET32275 / 35455 / 62. A73.

Approx dimensions 9.1 cm x 8.7 cm x 8.5 cm The sample consisted of a mixture of clayish soil, stones, plant matter and fragments of shale. No asbestos detected.

Sample No. 63. ASET32275 / 35455 / 63. A74. Approx dimensions 9.2 cm x 8.6 cm x 8.5 cm The sample consisted of a mixture of clayish soil, stones, plant matter and fragments of shale. No asbestos detected.

Sample No. 64. ASET32275 / 35455 / 64. A75.

Approx dimensions 9.3 cm x 8.5 cm x 8.4 cm The sample consisted of a mixture of clayish soil, stones, plant matter and fragments of shale. No asbestos detected.

Sample No. 65. ASET32275 / 35455 / 65. A76. Approx dimensions 8.9 cm x 8.8 cm x 8.5 cm The sample consisted of a mixture of clayish soil, stones, plant matter and fragments of shale. No asbestos detected.

Sample No. 66. ASET32275 / 35455 / 66. A77. Approx dimensions 9.1 cm x 8.7 cm x 8.4 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster, glass and shale. No asbestos detected.

Sample No. 67. ASET32275 / 35455 / 67. A78. Approx dimensions 9.4 cm x 8.5 cm x 8.3 cm The sample consisted of a mixture of clayish soil, stones, plant matter and fragments of shale. No asbestos detected.

Sample No. 68. ASET32275 / 35455 / 68. A79. Approx dimensions 9.2 cm x 8.6 cm x 8.5 cm The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of glass and shale. No asbestos detected.



Sample No. 69. ASET32275 / 35455 / 69. A49/3.0. Approx dimensions 9.3 cm x 8.4 cm x 8.1 cm The sample consisted of a mixture of clayish soil, stones, plant matter, synthetic mineral fibres, fragments of plaster, cement, glass, brick and shale. No asbestos detected.

Analysed and reported by,

Laxman Dias. BSc Analyst / Approved Identifier Approved Signatory



This document is issued in accordance with NATA's Accreditation requirements. Accredited for compliance with ISO/IEC 17025.

The approx; weights given above can be used only as a guide. They do not represent absolute weights of each kind of asbestos as it is impossible to extract all loose fibres from soil and other asbestos containing building material samples using this method. However above figures may be used as closest approximations to the exact values in each case. Estimation and/ or reporting of asbestos fibre weights in asbestos containing materials and soil is out of the Scope of the NATA Accreditation. NATA Accreditation covers only the qualitative part of the results reported.

ACM - Asbestos Containing Material - Products or materials that contain asbestos in an inert bound matrix such as cement or resin. Here taken to be sound material, even as fragments and not fitting through a 7mm X 7 mm sieve.

- AF -Includes asbestos free fibres, small fibre bundles and also ACM fragments that pass through a 7mm X 7 mm sieve.
- FA -Friable asbestos material such as severely weathered ACM, and asbestos in the form of loose fibrous material such as insulation products.
- ^ denotes loose fibres of relevant asbestos types detected in soil/dust.
- * denotes asbestos detected in ACM in bonded form.

	Geo-Log Building Q2, L 2309/4 Daydre Warriewood, N ABN: 86 116 892 9	ix Pty Ltd evel 3 eam St NSW 2102 136	Project Ma Contact en Project Na	nager:, nail: me:		èn Sei	<u>nc</u> Jm	2	CHAIN OF CUSTOD Seymour Weglo-lagix	Y	94 1	n.C	ru			Page Purc Quot Send	hase te Ref	AS Orde	6 <u>4</u> F <u>4</u> F <u>8</u> F <u>8</u>	[3 - 4 : <u>aci</u>	2 2 M	27 00 (<u>a</u> nts@	5/3 40° he	54 7 <u>^</u> gix.cc	555	<u></u>		68
	P: (02) 9979 172 F: (02) 9979 122	22	Project Nu	mber:	1	2.0	010	8	Date Submitted:	1/2	-17	3			•	ΤΑΤι	requi	red:			ſe	B	12	12/	13			•
									ANALYSIS REQ	JIR	ED											_						wator
						Matr	ix				······																\leq	as per
	Lab ID	Sample ID	Date	soil	water	air	paint, filters	other	Comments	COMPOSITE	ТРН - С6 - С9	ТРН - С10 - С36	vocs	ВТЕХ	PAHs	PCBs	ocps	OPPs	PCBs	Metals - Lead	Matale - Snarify	Metals - M8	TCLP	Aspestos			Hold	corvesponda
-		741	41413	^					·														3	<u>د</u>				
	2	A42	<u> </u>	X														·					×	·				
-	3	A42/0.4		X																.*			X	:				
/	4	A43'		_ X											a e				Si in				×					
-	5	A43/0.4		X		s.,						, s	÷					N					>	:				
	6	A44		X									-			IU	14		•				×	2				
-	7	A45		×															700		PI	ΓΨ)		Ł				
	8	A45/1.0		入											Í		7[U	Щ	ALL.		\mathbb{N}						
and the second second	9	A46		X			r'									1Ur			FFB	20	13			×				
	10	A46/1.0		入												N	U				+7	兙	y v	c				
	- n	8473		X												\mathbb{N}	hte	T	四			200		ĸ		1.1		
_	12	A47/1.0		X														-					X	2				
N	13	A48		X		-																		5				
** ****	· 14	A48/10		×																			K	-		_		
	15	A49	•	X																1			X					
-	16	A49/1.0		×	-																1		×					
	17	A49/2:0	1	X																			X	5 .				
~	Metals**(circle) As, Cd, Cr, Cu, Ni, F	Pb, Zn, Hg, Cr	⁶⁺ , Cr ³⁺ ,	Fe ²	⁺, Fe [:]	³⁺ , Be,	B, A	Al, V, Mn, Fe, Co, Se, Sr, Sn, Mo, Ag, Ba Chain of Cust	a, TI, E odv	Bi, St)		1											·i			
	Relinquished by	y:	Da	ite/Time:			s	Signal	ature: Receive	d by: _		h	M	hik	< <i>k</i>		Date/	Time:	2.	3 S P	Ms	lignati	ure:	MA)		_	
	PM_04 Chain of Custo	ody								_												1. 1.						12th March 2009

l	Geo-Logi Building Q2, Le	ix Pty Ltd evel 3 arm St	Project Mana	ger: <u>J</u>	ienna	CH Se	AIN OF CUSTOD	Y					Pag	ge rchas	2 se Or	of _⊂ der No	}	26	0409			
1	Warriewood, N	NSW 2102	Contact emai	I: <u>`</u>	seyn	our	·Qqeo-logix		∽ ∧∕	י ה	cu	ノ	Qu	ote R	efere	ence:	<u> </u>	Ua	hen			
,	ABN: 86 116 892 9	36	Project Name	\sim									Sei	nd Inv	voice	to:	acco	ounts(@geo-logix.com.	au		
I	P: (02) 9979 172	22	Project Numb	oer: <u>\2</u>	0108	35	Date Submitted:	2	13				TA	T req	uired	:	C	OB	12/2/13			
	F: (02) 9979 122	22					ANALYSIS REQU	UR	ED										· ·]			
Γ				M	latrix																• (\)	a Doll
					<u>ی</u>			ш	63	C36							p	acify				aren
					filte			OSIT	C6 - 0	C10 -						<u>u</u>	- Le	- Sp.	M SO F		as	er la
	Lab ID	Sample ID	Date	soil vater	air Daint	other	Comments	COMP	- H-	H	/ocs	3TEX	PAHs PCBs	DCPs	SPPs	CBs	Metals	Aetals	Vetals	말	corres	pondua
_		470	1/2/13																			
1	19	A50/1.0		X															X			
1	20	A50/1.8	1	Х															X			
_	21	R50/2-1		X															X			
	22	A50/2.6		X															X			
4	23	ASIZ		X															Ϋ́			
1	24	A51/1.0		X													nat	6	x			
-	25	A51/1.8	\checkmark	X										<u>[</u>]]	Ш	1111	Ш		X			
	26	A52	51213	X			·						W	A 9	FE	B 20	13		X			
•	27	A52/0.55		X										υυ	` .							
-	28	A52/1.8		X									Шп	50	50							
1	29	A53							,										X			
4	30	A53/1.0		<u>λ</u>															×		4	
	- 31	A53/2.0	· 	X					-										X		-	
1	32	A54		X		-															-	
1	33	A54/1.0		X	-														X		4	
1	-39	154/2.0	Ψ	×																		
_	Metals**(circle)) As, Cd, Cr, Cu, Ni, F	Pb, Zn, Hg, Cr ⁶⁺ ,	Cr ³⁺ , Fe ²⁺ ,	Fe ³⁺ , Be, B	, AI, V, M	n, Fe, Co, Se, Sr, Sn, Mo, Ag, Ba	a, TI, B	Bi, Sb												-	
		9. S. S. S.					Chain of Cust	ody	7								100 () (1100 AU)					
	Relinquished by	: J Seyne	Date/		13 sig	nature:	Received	d by: _		Au	1 Ar	ĸA		_ Dat	ie/Tim	e:_ え *	35P	Migna	ature: Mad o	<u> </u>		
	PM_04 Chain of Custo	ody				C																12th March 2009

Geo-Logix Pty Ltd Building Q2, Level 3	Project Mana	ager:	Ter	no	S	CHAIN OF CUSTOD	Y						Page Purc	hase	of 4			26	OL	109					
2309/4 Daydream St Warriewood NSW 2102	Contact ema	il•	100	1 m	101	mageo-logix.	(0	Μ	.Qu	L			Quot	e Rei	erence		N	Лa	he	n					
ABN: 86 116 892 936	Project Nam	e: \	<u>م</u> ر	Ũ			Ŭ						Send	l Invo	ice to:	-	acco	ounts	Øgeo	logia		au			
P: (02) 9979 1722	Project Num	her [.]	120	2010	85	Date Submitted: 7	121	13					TAT	requi	red:		(6	2PS	12	12	12				
F: (02) 9979 1222		-		<u> </u>			1							lequi	icu.	-				<u> </u>					
		T	Mat	riv	· · · · ·	ANALYSIS REQ	UIR	ED																Wadon	
									36									Ϊţ				Ť.		as per	-0
				filters			SITE	00 0-0	10-0								Lead	Spec	ΩW				T	Correspon	200 M
		=	ater	int, 1	her		OMPO	0 H	H-C	SCs	Щ	Rs	Bs	sd	Ps Bs	enols	etals -	etals -	LP L	besto	H		Ξ		
Lab ID Sample ID	Date	°s No	Š id	ba ba	ŏ	Comments	8	Ē	<u> </u>	>	BT	PA	2	8	9 5	Å	Me	We		\§	$/ \downarrow$		오		
NTE/00	743	v																		X					
36 100/09							-				-														
39 450/1-9		X		-										DI	TAT	\widehat{h}				X			·		
A 56		X			-			-			-		77		<u>Ilin</u>	HH				x		_			
39 (456/0*	-			-			-			5	M	م. م	14	-0 (Ernc		++			X		-			
40 A96/1:1	_											n	8 F	rb_	20	-T	+			X					
41 456/2.	>	X									(\mathbb{N})			GE	TI					X			+		
V 42 NOT										-	774	Π		Comp or	m m en .					X	*				
V 43 N 57/1.C	,								-		-m 17	,eee								X		_		· · ·	
AA NSY		X					- -		1 .											X V					
V 45 NOO/ -		X	•					-	-					_			3								
46 AS7	\neg	X			-															$\hat{\mathbf{k}}$		_			
V ++ A3 9/0.	*														-										
49 NO								· . · .												Ŷ					
V T NOI							- -							•											
51 263		Ŷ															 			X					
	•	1~						L	I						·									1.	
Metals**(circle) As, Cd, Cr, Cu, N	, Pb, Zn, Hg, Cr ⁶⁺ ,	Cr ³⁺ , F	e ²⁺, Fe	e ³⁺ , Be,	, B, Al	, V, Mn, Fe, Co, Se, Sr, Sn, Mo, Ag, Ba	a, TI, E	3i, St	2											-					
		-				Chain of Cust	ody	/									- ANIL 3 (2012)								
Relinquished by:	mon Date	Time: _	7/2	13;	Signat		d by:		A	u	AL	ik k	\$	Date/	Time:	z.3	Spr	Signa	ture:	(H	2-	~			
PM_04 Chain of Custody			<u> </u>			00												<u> </u>						12th Mar	rch 2009

	Geo-Log Building Q2, L 2309/4 Daydro Warriewood, I	ix Pty Ltd evel 3 eam St NSW 2102	Project Mana Contact ema	nger: il:	Jer I se	una engr	а ИС	CHAIN OF CUSTOD Seynaw w@geo-logix	• ۲	ðv	N.0	u			Page Purc Quot	hase	‡_o e Ord eferei	of ler N nce:	<u>+</u> •:	2 M	26 al	01 he	for n]				
	ABN: 86 116 892 9	936	Project Name	e: `					- (1.4	2				Send	d Inv	oice	to:	<u>ac</u>	cou	ints(@ge	eo-logi	x.cor	<u>n.au</u>		_	
	P: (02) 9979 172	22	Project Num	ber: <u> </u>	20	104	35	Date Submitted:	12	l^{1}	5				TAT	requ	ired:			4		ž (COE	5 12	2/2	-/1	3	WaDoy
	1. (02) 0010 12							ANALYSIS REQI	UIRI	ED																		as
1	- <u></u>				Mat	rix							·											·			_	nor
4					-	t, filters			POSITE	- C6 - C9	- C10 - C36								ols	s - Lead	s - Specify	s - M8	stos			1		correspondence
	Lab ID	Sample ID	Date	soil	wate	pain	othe	Comments	COM	ТРН	TPH	voc	BTE)	PAHs	PCB PCB	ŐČ	OPP	PCBs	Phen	Meta	Meta	Meta	Asbe				PIOH	
7	52	AST	143																				X	\mathbb{Z}				
1	53	A65		X																			X					
Л	54	A66		X				·	·														X					
1	55	A67		X		-										1	1	×					X					
И	56	A67/0.6		x			-									Ľ,	4	R	20	5.			X					
1	57	A68		X												X	n	******	44	Ŵ	2~	De.	X					
	58	A69		X										ć	ÚČ,	2	° Ø.	F.	0	19 - A	6	\mathbb{D}) 🗙					
-	59	A70	4	X									5	Ĩ	~~~	24	37		70	17.17		i ji	X	·				
-	60	A71	6/2/13	X													0000	Q.	\rightarrow		â!	1	X					
1	61	A72	1	X														000	30.00 W	<u>X</u>	Y		×					
	62	173		x																	'		X					
and the second	63	A74		X																			X					
Л	64	175		X							-												X					
	ь5	A76		x																			x					
	- 66	A77		X																			X					
	67	A78		X			<u> </u>	N. State of the second s																				
	68	A79	1	X																			X					
	Metals**(circle) As, Cd, Cr, Cu, Ni, F	[–] Pb, Zn, Hg, Cr ⁶⁺ ,	Cr ³⁺ , F	e ²⁺, Fe	³⁺ , Be	e, B, A	N, V, Mn, Fe, Co, Se, Sr, Sn, Mo, Ag, Ba Chain of Cust	a, TI, E tody	Bi, Sb)		1 1															
	Relinquished by	Jegno	U Date/	Time:	2/1	3	Signa		d by: _			tu	1 Ar	.ĸ/	A	Date	/Time	: <u>2</u>	.35	PHP	, Signa	ature:	:(ΨQ	<u>~</u>	_		
	PM 04 Chain of Custo							\vee -																				12th March 2009

FIN_04 Chain of Custody	PM	_04	Chain	of	Custody
-------------------------	----	-----	-------	----	---------



GEO_LOGIX PTY LTD

ABN 86 116 892 936

Building Q2, Level 3 Suite 2309, 4 Daydream Street Warriewood NSW 2102

> Phone 02 9979 1722 Fax 02 9979 1222

Email info@geo-logix.com.au Web www.geo-logix.com.au