APEC Environmental Ltd.
9 Telford Court,
Dunkirk Lea, Chester Gate,
Chester CH1 6LT
Tel: 01244 851753 Fax: 01244 851752
Website: www.APECuk.com

UKAS TESTING 2136 UKAS INSPECTION 347

Client: DCC Housing Services
64 Brighton Road
Rhyl
Denbighshire
LL18 3HP

Surveyor: [redacted]
Date of Survey: 12 January 2009
Report Reference: CH/9/2/112/MP
Date of Report: 09 February 2009
Purpose of Survey: Type 2
Compliance with
The Control of Asbestos
Regulations 2006.

Report on Survey of Asbestos Materials at

48 Clawdd Poncen
Corwen
Denbighshire

Note

APEC Environmental holds UKAS inspection body accreditation to ISO 17020 in relation to surveying for asbestos in premises and also testing accreditation to ISO 17025 for sampling and analysis of suspect asbestos-containing materials. Copies of in-house methods employed during surveying, bulk sampling and analysis are available upon request, along with our UKAS accreditation schedules.

1.0 SURVEY RESULTS

Site: 48 Clawdd Poncen, Corwen, Denbighshire

Date of survey: 12 January 2009

1.1 Asbestos Register

Location (refer to plan)	Material description	Sample Numbers	Asbestos Type[4]	Quantity[1]	Accessibility[6]	Condition	Risk Assessment Scores [2,5]					Summary Recommendations	Re-inspection Frequency[3]
							M	D	ST	AT	Total		
External	Soffits - Insulation board	9/1/B/12/GB7	Amosite	Through out	Medium	Fair	2	1	1	2	6	Manage & Review (See Section 1.3)	6 Months
	Redundant flue & elbow to garden - Cement	9/1/B/12/GB8	Chrysotile	3.5LM	High	Fair	1	1	1	1	4	Remove & Dispose (See Section 1.3)	-
	Damp proof course - Bitumen	9/1/B/12/GB9	No Asbestos Detected	-	-	-	-	-	-	-	-	-	-
	Bitumen on flat roof to front of property	9/1/B/12/GB10	No Asbestos Detected	-	-	-	-	-	-	-	-	-	-
	Canopy over front door - Insulation board (as soffits)	Refer to Sample 9/1/B/12/GB7	Amosite (Strongly Presumed)	1.5m^2	High	Fair	2	1	1	2	6	Manage & Review (See Section 1.3)	6 Months
G.01 Front Hall	Floor - Vinyl floor tiles and bitumen adhesive	9/1/B/12/GB1	Chrysotile	3m^2	High	Good	1	0	0	1	2	Manage & Review (See Section 1.3)	12 Months
G.02 Living Room	Ceiling - Textured coating	9/1/B/12/GB2	Chrysotile	21m^2	High	Good	1	0	0	1	2	Manage & Review (See Section 1.3)	12 Months
	Floor - Vinyl floor tiles and bitumen adhesive (as Front Hall)	Refer to Sample 9/1/B/12/GB1	Chrysotile (Strongly Presumed)	21m^2	High	Good	1	0	0	1	2	Manage & Review (See Section 1.3)	12 Months

Notes:-

1) Quantity is expressed as area (m^2), volume (m^3), length (m) or number of items as appropriate. All quantities given are approximate.
2) Risk category is as defined in Section 5 of this report, and is based on the risk material risk assessment algorithm detailed in MDHS100
3) Re-inspection frequency is the suggested maximum period at which asbestos-containing materials are re-inspected by a suitably competent person
4) Refer to bulk sample analysis record.
5) Abbreviations – **M** = Product Type, **D** = Damage, **ST** = Surface Treatment, **AT** = Asbestos Type
6) **Low** – difficult to reach, **Medium** – some effort required to reach (ladder etc), **High** – within easy reach

1.0 SURVEY RESULTS

Site: 48 Clawdd Poncen, Corwen, Denbighshire Date of survey: 12 January 2009

1.1 Asbestos Register

Location (refer to plan)	Material description	Sample Numbers	Asbestos Type[4]	Quantity[1]	Accessibility[6]	Condition	Risk Assessment Scores [2,5]					Summary Recommendations	Re-inspection Frequency[3]
							M	D	ST	AT	Total		
G.03 Kitchen	Floor - Vinyl floor tiles and bitumen adhesive (as Front Hall)	Refer to Sample 9/1/B/12/GB1	Chrysotile (Strongly Presumed)	9m²	High	Good	1	0	0	1	2	Manage & Review (See Section 1.3)	12 Months
	Ceiling - Textured coating (as G.02 Living Room)	Refer to Sample 9/1/B/12/GB2	Chrysotile (Strongly Presumed)	9m²	High	Good	1	0	0	1	2	Manage & Review (See Section 1.3)	12 Months
	Sink - Bitumen pad	9/1/B/12/GB3	No Asbestos Detected	-	-	-	-	-	-	-	-	-	-
G.04 Utility Room	Ceiling - Textured coating (as G.02 Living Room)	Refer to Sample 9/1/B/12/GB2	Chrysotile (Strongly Presumed)	8m²	High	Good	1	0	0	1	2	Manage & Review (See Section 1.3)	12 Months
G.05 Heater Cupboard	Ceiling - Insulating board	9/1/B/12/GB4	Amosite	1m²	High	Very Poor	2	3	2	2	10	Remove & Dispose (See Section 1.3)	-
	Door - Panel to door (insulation board) (as ceiling)	Refer to Sample 9/1/B/12/GB4	Amosite (Strongly Presumed	2m²	High	Fair	2	2	1	2	6	Remove & Dispose (See Section 1.3)	-
1.01 Bedroom	Ceiling - Fibreboard	9/1/B/12/GB5	No Asbestos Detected	-	-	-	-	-	-	-	-	-	-
1.02 Bedroom	Ceiling - Fibreboard (as 1.01 Bedroom)	Refer to Sample 9/1/B/12/GB5	No Asbestos Detected (Presumed)	-	-	-	-	-	-	-	-	-	-

Notes:-

1) Quantity is expressed as area (m^2), volume (m^3), length (m) or number of items as appropriate. All quantities given are approximate.
2) Risk category is as defined in Section 5 of this report, and is based on the risk material risk assessment algorithm detailed in MDHS100
3) Re-inspection frequency is the suggested maximum period at which asbestos-containing materials are re-inspected by a suitably competent person
4) Refer to bulk sample analysis record.
5) Abbreviations – **M** = Product Type, **D** = Damage, **ST** = Surface Treatment, **AT** = Asbestos Type
6) **Low** – difficult to reach, **Medium** – some effort required to reach (ladder etc), **High** – within easy reach

1.0 SURVEY RESULTS

Site: 48 Clawdd Poncen, Corwen, Denbighshire Date of survey: 12 January 2009

1.1 Asbestos Register

Location (refer to plan)	Material description	Sample Numbers	Asbestos Type[4]	Quantity[1]	Accessibility[6]	Condition	Risk Assessment Scores [2,5]					Summary Recommendations	Re-inspection Frequency[3]
							M	D	ST	AT	Total		
1.03 Bedroom	Ceiling - Fibreboard (as 1.01 Bedroom)	Refer to Sample 9/1/B/12/GB5	No Asbestos Detected (Presumed)	-	-	-	-	-	-	-	-	-	-
1.04 Bathroom	Ceiling - Fibreboard (as 1.01 Bedroom)	Refer to Sample 9/1/B/12/GB5	No Asbestos Detected (Presumed)	-	-	-	-	-	-	-	-	-	-
1.05 Boiler Cupboard	Ceiling - Fibreboard (as 1.01 Bedroom)	Refer to Sample 9/1/B/12/GB5	No Asbestos Detected (Presumed)	-	-	-	-	-	-	-	-	-	-
1.06 Landing	Ceiling - Fibreboard (as 1.01 Bedroom)	Refer to Sample 9/1/B/12/GB5	No Asbestos Detected (Presumed)	-	-	-	-	-	-	-	-	-	-
2.01 Roof Space	Floor - Redundant paper packing	9/1/B/12/GB6	No Asbestos Detected	-	-	-	-	-	-	-	-	-	-

Notes:-

1) Quantity is expressed as area (m^2), volume (m^3), length (m) or number of items as appropriate. All quantities given are approximate.
2) Risk category is as defined in Section 5 of this report, and is based on the risk material risk assessment algorithm detailed in MDHS100
3) Re-inspection frequency is the suggested maximum period at which asbestos-containing materials are re-inspected by a suitably competent person
4) Refer to bulk sample analysis record.
5) Abbreviations – **M** = Product Type, **D** = Damage, **ST** = Surface Treatment, **AT** = Asbestos Type
6) **Low** – difficult to reach, **Medium** – some effort required to reach (ladder etc), **High** – within easy reach

1.2 Areas Not Accessed

1.2.1 It is considered that all areas were been adequately accessed, with exception to the following;

Location/Item	Reason for non-access
1.04 Bathroom – Vertical Timber Boxing	Intrusive access required
Electrics	Live at time of survey

No internal access was made to partition walls, internal to doors, concealed bulkheads or risers unless a Type 3 survey was instructed. For safety reasons, access above suspended ceilings and to high level was limited to those areas that could be reasonably accessed from stepladders available on site, or those carried by our surveyors. Access was only made to high level, roof, loft areas and ducts provided that suitable access and walkways are available or two surveyors are present.

Where a room, area or item of equipment is identified as not accessed, it should be presumed that ACM's might be present unless observations made elsewhere in this report indicate otherwise.

1.2.2 Electrical Services

Wall mounted fuse boxes and various other electrical items of equipment may be present within the building. It was assumed that all such equipment was live at the time of survey and therefore only visual inspection was made of these items, unless it could be verified that the equipment was disconnected.

It should be noted that it is not uncommon to find asbestos-containing materials within electrical equipment. Such items include arc shield panels and gasket seals to electrical equipment doors etc., as well as woven asbestos arc shields below individual fuses in fuse boxes.

1.3 RECOMMENDATIONS

Recommendations made within this report and in the register are based primarily on the condition, type, location and extent of the material, as well as the considered observations of the surveyor carrying out the survey. All recommendations should be regarded as a minimum precaution, and additional remedial measures or complete asbestos removal should also be considered.

- **Asbestos based vinyl floor tiles and bitumen adhesive.**

  Sample No: 9/1/B/12/GB1.
  Sample Location: G.01 (Front Hall) – Floor.
  (Refer to Section 1.1 for other locations).

  This material is in a fair condition and is unlikely to generate airborne asbestos fibre during normal occupation and provided undisturbed. We would recommend that this material is managed and periodically re-inspected as required by **The Control of Asbestos Regulations 2006.** This material should remain undisturbed and any future remedial or removal works undertaken only by suitably trained personnel, working under the guidance of a safe working procedure and in accordance with the requirements of **The Control of Asbestos Regulations 2006** and **The Hazardous Waste Regulations 2005.**

  *Note that due to the nature / characteristics of the adhesive material, if any future remedial or removal works are undertaken, the **Vinyl Floor Tiles / Covering** to which the adhesive is in contact with should also be treat as an Asbestos containing material and removed and disposed of accordingly, working under the guidance of a safe working procedure and in accordance with the requirements of **The Control of Asbestos Regulations 2006** and **The Hazardous Waste Regulations 2005.**

- **Asbestos based textured coating to ceiling.**

  Sample No: 9/1/B/12/GB2.
  Sample Location: G.02 (Living Room) – Ceiling.
  (Refer to Section 1.1 for other locations).

These materials are in a good condition and are unlikely to generate airborne asbestos fibre during normal occupation and provided undisturbed. We would recommend that these materials are managed and periodically re-inspected as required by **The Control of Asbestos Regulations 2006.** These materials should remain undisturbed and any future remedial or removal works undertaken only by suitably trained personnel, working under the guidance of a safe working procedure and in accordance with the requirements of **The Control of Asbestos Regulations 2006** and **The Hazardous Waste Regulations 2005.**

If these materials are likely to be disturbed during the Refurbishment Works then they should be removed and disposed of prior to these works commencing by suitably trained personnel, working under the guidance of a safe working procedure and in accordance with the requirements of **The Control of Asbestos Regulations 2006** and **The Hazardous Waste Regulations 2005.**

- **Asbestos based insulation board to heater cupboard.**

  Sample No: 9/1/B/12/GB4.
  Sample Location: G.05 (Heater Cupboard) – Ceiling & door panel.
  (Refer to Section 1.1 for other locations).

These materials are in a poor condition, therefore are likely to generate airborne asbestos fibre if disturbed. We would recommend that these materials are either removed completely, or repaired and encapsulated to provide a greater level of protection / prevention of fibre release at the earliest possible opportunity. We would also recommend that these materials are managed and periodically re-inspected as required by **The Control of Asbestos Regulations 2006.** These materials should remain undisturbed and any future remedial or removal works undertaken only by suitably trained personnel, working under the guidance of a safe working procedure and in accordance with the requirements of **The Control of Asbestos Regulations 2006** and **The Hazardous Waste Regulations 2005.**

If these materials are likely to be disturbed during the Refurbishment Works then they should be removed and disposed of prior to these works commencing by suitably trained personnel, working under the guidance of a safe working procedure and in accordance with the requirements of **The Control of Asbestos Regulations 2006** and **The Hazardous Waste Regulations 2005.**

14 Days Notification must be given to The Health and Safety Executive prior to any works being carried out to these materials.

- **Asbestos based insulation board soffits.**

  Sample No: 9/1/B/12/GB7.
  Sample Location: Exterior.
  (Refer to Section 1.1 for other locations).

These materials are encapsulated, in a fair condition and are unlikely to generate airborne asbestos fibre during normal occupation and provided undisturbed. We would recommend that these materials are managed and periodically re-inspected as required by **The Control of Asbestos Regulations 2006.** These materials should remain undisturbed and any future remedial or removal works undertaken only by suitably trained personnel, working under the guidance of a safe working procedure and in accordance with the requirements of **The Control of Asbestos Regulations 2006** and **The Hazardous Waste Regulations 2005.**

If these materials are likely to be disturbed during the Refurbishment Works then they should be removed and disposed of prior to these works commencing by suitably trained personnel, working under the guidance of a safe working procedure and in accordance with the requirements of **The Control of Asbestos Regulations 2006** and **The Hazardous Waste Regulations 2005.**

14 Days Notification must be given to The Health and Safety Executive prior to any works being carried out to these materials.

- **Asbestos based cement.**

  Sample No: 9/1/B/12/GB8.
  Sample Location: Exterior - Redundant cement flue & elbow in garden.

These materials are in a poor condition and could cause fibre release if disturbed. These materials should be removed and disposed of by suitably trained personnel, working under the guidance of a safe working procedure and in accordance with the requirements of **The Control of Asbestos Regulations 2006** and **The Hazardous Waste (England and Wales) (Amendment) Regulations 2009**

Additional Recommendations

As noted, other asbestos materials may be present that could not be accessed within the remit of this survey. Care should be taken during any works in areas identified as not accessible, with any additional suspect materials identified for subsequent analysis.

We would recommend that all asbestos removal or remedial works and disposal of asbestos materials indicated, should be undertaken only by suitably trained personnel, working under the guidance of a safe working procedure and in accordance with the requirements of the **Control of Asbestos at Work Regulations, 2002** and **Schedule 3 of The Hazardous Waste Regulations 2005**. In particular, all remedial and removal works to ACM's covered by the requirements of the **Asbestos Licensing Regulations** should only be undertaken by a licensed asbestos removal contractor.

2.0 RISK ASSESSMENTS AND PRIORITISATION SYSTEM

2.1 Material Risk Assessment

The risk assessments for asbestos materials identified in this survey in this survey are included in the asbestos register.

The material risk is based on that established in MDHS 100, and is based on allocation of points, relating to the condition, surface treatment, material type, and asbestos content of the material, using an algorithm pro-forma. This risk assessment relates to the **material** only, and an additional **priority assessment** (see below), should be allocated to accommodate the likely use of the area and the potential for disturbance to the material. The material risk assessment point scores are based on the following examples;

Sample variable	Score	Examples
Product Type	1	Asbestos reinforced composites (plastics, resins, mastics, roofing felts, vinyl floor tiles, decorative finishes, asbestos cement etc).
	2	Asbestos insulating board, mill boards, paper cardboard and felts, asbestos textiles, gaskets and ropes.
	3	Thermal insulation, sprayed asbestos, loose fill asbestos, packing and mattresses
Extent of Damage/Deterioration	0	Good condition, no visible damage.
	1	Low damage, surface scratches or marks, broken edges on boards.
	2	Medium damage, significant breakage of materials, or several small damaged areas revealing visible fibre.
	3	High damage or delamination of materials with visible fibre and debris
Surface Treatment	0	Asbestos reinforced composites, plastics, vinyls etc.
	1	*Enclosed* sprays and laggings, painted or encapsulated AIB and asbestos cement
	2	Unsealed AIB or *encapsulated* lagging or sprays
	3	Unsealed lagging or spray asbestos
Asbestos Type	1	Chrysotile
	2	Amphibole asbestos types excluding Crocidolite
	3	Crocidolite

More complete guidance on the application of material risk assessment may be found in MDHS 100

2.2 Management Assessment

In addition to the above material assessment, as part of the management plan, a risk assessment should be carried out which should take into account the location of the material, its extent, the use of the location, occupancy, work activities and liklelihood/frequency of maintenance activities.

Comment on the extent and location of the materials is recorded in the asbestos register (Section 4). However, we do not consider we are able to accurately provide information on the other aspects of the risk assessment, and the Client should establish this information as part of the Management Plan.

Recommendations made within this report and in the register are based primarily on the condition, type, location and extent of the material.

2.3 Type 3 (Demolition) Surveys

Where a Type 3 survey has been carried out prior to demolition of an unoccupied property, all asbestos materials identified should be removed prior to or as part of the demolition process. In such instance, recommendations may be made for the purposes of operatives entering the property and are indicated in the asbestos register of this report, although no risk assessment is undertaken unless specifically requested by the client.

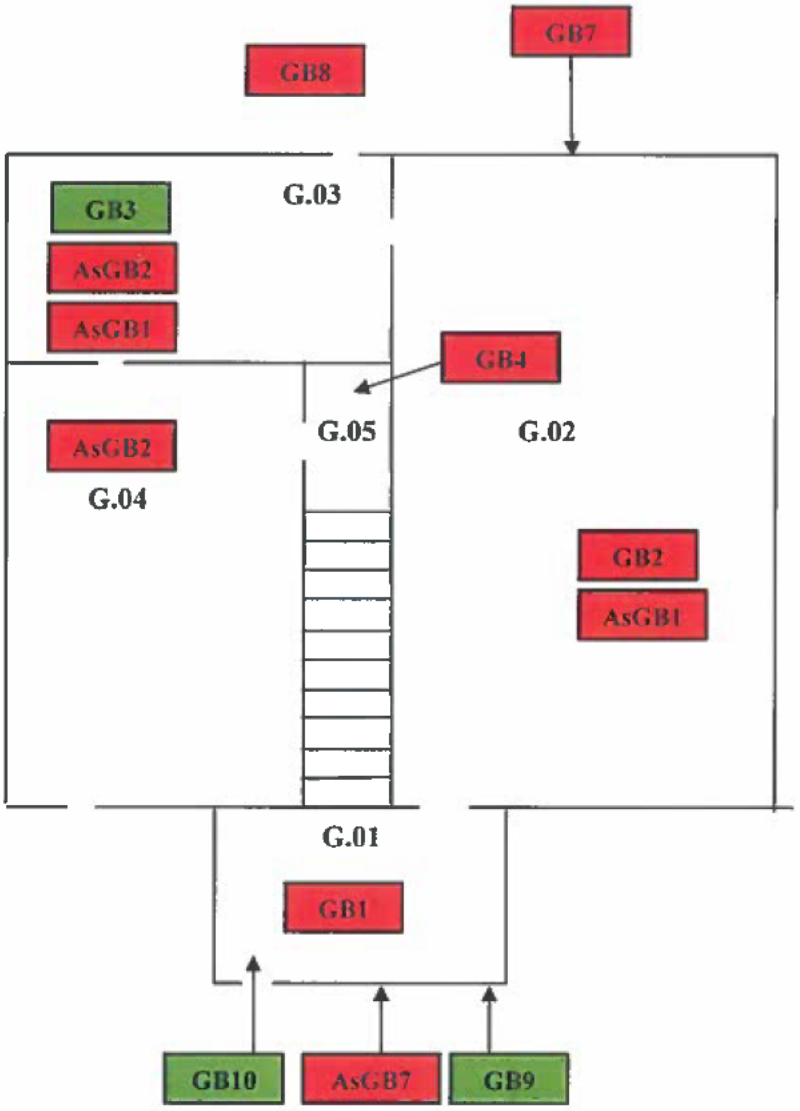
Site Plan for: 48 Clawdd Poncen

Key to Site Plans.

Asbestos containing samples

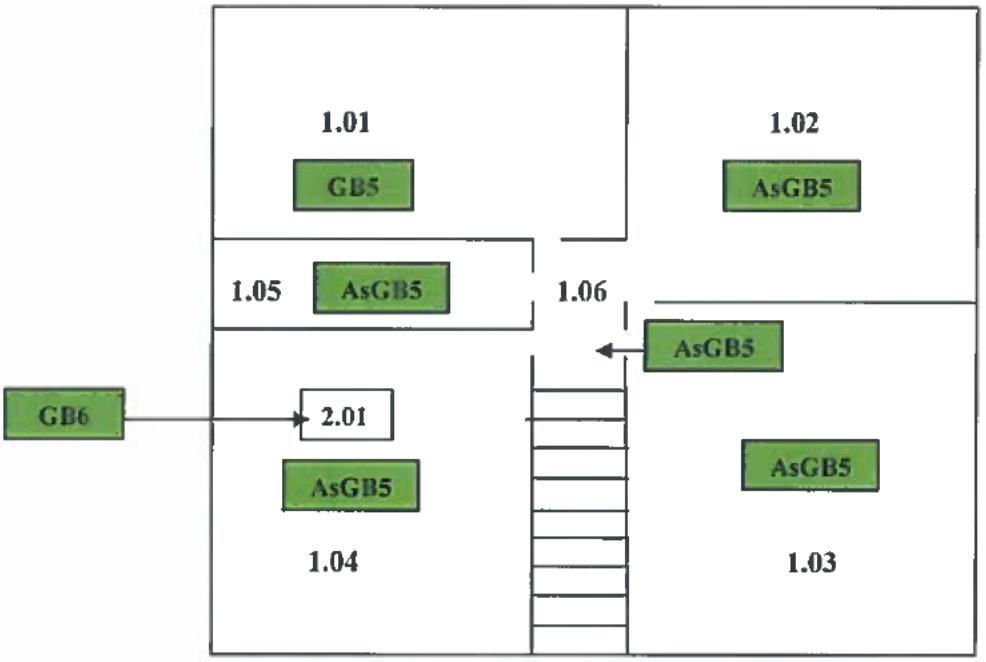
None asbestos containing samples

Ground Floor



Not To Scale

First Floor



Not To Scale

3.0 Statement of Conformity

3.1 Compliance

This survey was carried out by the undersigned lead surveyor, and is considered to be an accurate representation of the condition of accessible ACM's encountered at the time the survey was carried out.

Signed: [redacted] **Name (print)** [redacted]

Position: Surveyor **Date:** 4th March 2009

The content of this report and the recommendations made herein have been checked by the undersigned authorised person, and are considered to be in line with current APEC Environmental company policy and guidance issued by the Health and Safety Executive.

All results and observations made are considered to be correct at the time of survey. APEC Environmental Ltd cannot accept any responsibility for subsequent deterioration of asbestos-containing materials, or failure on behalf of the client to act on recommendations made in this report.

Sig [redacted] **Name (pri** [redacted]

Position: OPs MANAGER **Date:** 12/3/09

3.1 Confidentiality

The content of this report is deemed to be in confidence between APEC Environmental Ltd and the instructing client. APEC will not release additional copies of this report to other parties without written permission form the client or his representative.

Photographs

Sample No: 9/1/B/12/GB1.
G.01 – Front Hall.
Asbestos based vinyl floor tiles & bitumen adhesive.

Sample No: 9/1/B/12/GB2.
G.02 – Living Room.
Asbestos based textured coating to ceiling.

Sample No: 9/1/B/12/GB4.
G.05 – Heater Cupboard.
Asbestos based insulation board forming ceiling.

Sample No: 9/1/B/12/GB7.
Exterior.
Asbestos based insulating board forming soffits.

Sample No: 9/1/B/12/GB8.
Exterior. Asbestos based redundant cement flue & elbow in garden.

APEC environmental

APEC Environmental Ltd.
9 Telford Court,
Dunkirk Lea, Chester Gate,
Chester CH1 6LT
Tel: 01244 851753 Fax: 01244 851752
Website: www.APECuk.com

UKAS TESTING 2136

09 February 2009

DCC Housing Services
64 Brighton Road
Rhyl
Denbighshire
LL18 3HP

FOR THE ATTENTION OF: [redacted]

CONFIRMATION OF ANALYSIS

DOCUMENT NUMBER: CH/9/2/111/MP

SITE ADDRESS: 48 Clawdd Poncen, Corwen, Denbighshire

SITE LOCATION: Type 2 Survey

SAMPLES TAKEN BY APEC: [redacted] **ON**: 12 January 2009

DATE CLIENT SAMPLES RECEIVED: N/A

SAMPLES ANALYSED BY: [redacted] **ON**: 01 February 2009

Sample Number	Sample Location and Description	Asbestos Content
9/1/B/12/GB1	G.01 – Front Hall Vinyl floor tiles & bitumen adhesive	Chrysotile *(See Note)
9/1/B/12/GB2	G.02 – Living Room Textured coating to ceiling	Chrysotile
9/1/B/12/GB3	G.03 – Kitchen Bitumen pad to sink	No Asbestos Detected
9/1/B/12/GB4	G.05 – Heater Cupboard Insulation board forming ceiling	Amosite
9/1/B/12/GB5	1.01 – Bedroom Fibreboard ceiling panels	No Asbestos Detected
9/1/B/12/GB6	2.01 – Roof Space Redundant roll of paper packing	No Asbestos Detected

APEC environmental limited

DOCUMENT NUMBER: CH/9/2/111/MP

SITE ADDRESS: 48 Clawdd Poncen, Corwen, Denbighshire

SITE LOCATION: Type 2 Survey

SAMPLES TAKEN BY APEC: [redacted] **ON:** 12 January 2009

DATE CLIENT SAMPLES RECEIVED: N/A

SAMPLES ANALYSED BY: [redacted] **ON:** 01 February 2009

Sample Number	Sample Location and Description	Asbestos Content
9/1/B/12/GB7	Exterior Insulating board forming soffits	Amosite
9/1/B/12/GB8	Exterior Redundant cement flue & elbow In garden	Chrysotile
9/1/B/12/GB9	Exterior Bitumen damp proof course	No Asbestos Detected
9/1/B/12/GB10	Exterior Bitumen flat felt roof to front of property	No Asbestos Detected

APEC environmental limited

DOCUMENT NUMBER: CH/9/2/111/MP

NOTES

If asbestos is present in the material which the sample represents, and if this material is to be removed or otherwise disturbed, then safety precautions must be taken in accordance with the Control of Asbestos Regulations 2006 and amendments, in addition to relevant Health and Safety Executive (HSE) Codes of Practice.

Chrysotile – **WHITE** asbestos
Amosite - **BROWN** asbestos
Crocidolite – **BLUE** asbestos
Other less common types of asbestos are fibrous **actinolite, anthophyllite and tremolite**, which for legislatory purposes must be treated similar to amosite.

Estimates of concentration are outside the scope of our UKAS Accreditation and the method of analysis employed. However, further guidance on typical percentages of asbestos used in various products is available within MDHS 100, published by the HSE.

Method of Analysis

The bulk samples were analysed using documented in house methods based upon HSG 248 – Asbestos: The analysts' guide for sampling, analysis and clearance procedures, as published by the HSE.
Samples are subjected to initial stereo microscope examination to determine the presence of fibre, accompanied by mechanical and / or chemical treatment to release fibres from the sample matrix. Fibres are then analysed using polarised light microscopy techniques, including central stop dispersion staining, to confirm asbestos type.

Clients' Samples

Where clients have provided their own samples of bulk materials, APEC is not responsible for such sampling, nor for the consequences of inaccurate results or conclusions based on these samples.

*Note: Present in bitumen adhesive.

On behalf of APEC Environmental Limited

SIGNED [redacted]

[redacted]	- Operations Director
	- Asbestos Survey Manager / Assistant Technical Manager
	- Administration Manager