



## ANALYSIS REPORT

<b>Client:</b>	Gainberg Environmental Technology	<b>Lab No:</b>	1028629	SPV2
<b>Contact:</b>	Jun Bai	<b>Date Registered:</b>	23-Jul-2012	
	C/- Shenzhen Hill Testing Consultancy Co., Ltd	<b>Date Reported:</b>	03-Oct-2012	
	23-H, B, Lushan Building, Chunfeng Road	<b>Quote No:</b>		
	Luo Hu District	<b>Order No:</b>		
	SHENZHEN CITY 518000	<b>Client Reference:</b>		
	P.R. CHINA	<b>Submitted By:</b>	Jun Bai	

### Sample Type: Aqueous

Sample Name:	3				
Lab Number:	1028629.3				
OrganoNitrogen & Phosphorus pesticides, trace, liq/liq GCMS					
Acetochlor	g/m <sup>3</sup>	< 2	-	-	-
Alachlor	g/m <sup>3</sup>	< 2	-	-	-
Atrazine	g/m <sup>3</sup>	< 2	-	-	-
Atrazine-desethyl	g/m <sup>3</sup>	< 2	-	-	-
Atrazine-desisopropyl	g/m <sup>3</sup>	< 4	-	-	-
Azaconazole	g/m <sup>3</sup>	< 1.0	-	-	-
Azinphos-methyl	g/m <sup>3</sup>	< 4	-	-	-
Benalaxyl	g/m <sup>3</sup>	< 1.0	-	-	-
Bitertanol	g/m <sup>3</sup>	< 4	-	-	-
Bromacil	g/m <sup>3</sup>	< 2	-	-	-
Bromopropylate	g/m <sup>3</sup>	< 2	-	-	-
Butachlor	g/m <sup>3</sup>	< 2	-	-	-
Captan	g/m <sup>3</sup>	< 4	-	-	-
Carbaryl	g/m <sup>3</sup>	< 2	-	-	-
Carbofenothion	g/m <sup>3</sup>	< 2	-	-	-
Carbofuran	g/m <sup>3</sup>	< 2	-	-	-
Chlorfluazuron	g/m <sup>3</sup>	< 2	-	-	-
Chlorothalonil	g/m <sup>3</sup>	< 2	-	-	-
Chlorpyrifos	g/m <sup>3</sup>	< 2	-	-	-
Chlorpyrifos-methyl	g/m <sup>3</sup>	< 2	-	-	-
Chlortoluron	g/m <sup>3</sup>	< 4	-	-	-
Cyanazine	g/m <sup>3</sup>	< 2	-	-	-
Cyfluthrin	g/m <sup>3</sup>	< 2	-	-	-
Cyhalothrin	g/m <sup>3</sup>	< 2	-	-	-
Cypermethrin	g/m <sup>3</sup>	< 4	-	-	-
Deltamethrin	g/m <sup>3</sup>	< 2	-	-	-
Diazinon	g/m <sup>3</sup>	< 1.0	-	-	-
Dichlofluanid	g/m <sup>3</sup>	< 2	-	-	-
Dichloran	g/m <sup>3</sup>	< 5	-	-	-
Dichlorvos	g/m <sup>3</sup>	< 2	-	-	-
Difenoconazole	g/m <sup>3</sup>	< 3	-	-	-
Dimethoate	g/m <sup>3</sup>	< 4	-	-	-
Diphenylamine	g/m <sup>3</sup>	< 4	-	-	-
Diuron	g/m <sup>3</sup>	< 2	-	-	-
Fenpropimorph	g/m <sup>3</sup>	< 2	-	-	-
Fluazifop-butyl	g/m <sup>3</sup>	< 2	-	-	-
Fluometuron	g/m <sup>3</sup>	< 2	-	-	-
Flusilazole	g/m <sup>3</sup>	< 2	-	-	-



This Laboratory is accredited by International Accreditation New Zealand (IANZ), which represents New Zealand in the International Laboratory Accreditation Cooperation (ILAC). Through the ILAC Mutual Recognition Arrangement (ILAC-MRA) this accreditation is internationally recognised.

The tests reported herein have been performed in accordance with the terms of accreditation, with the exception of tests marked \*, which are not accredited.

**Sample Type: Aqueous**

<b>Sample Name:</b>	3				
<b>Lab Number:</b>	1028629.3				
OrganoNitrogen & Phosphorus pesticides, trace, liq/liq GCMS					
Fluvalinate	g/m <sup>3</sup>	< 1.5	-	-	-
Furalaxyl	g/m <sup>3</sup>	< 1.0	-	-	-
Haloxypop-methyl	g/m <sup>3</sup>	< 2	-	-	-
Hexaconazole	g/m <sup>3</sup>	< 2	-	-	-
Hexazinone	g/m <sup>3</sup>	< 1.0	-	-	-
IPBC (3-Iodo-2-propynyl-n-butylcarbamate)	g/m <sup>3</sup>	< 10	-	-	-
Iprodione	g/m <sup>3</sup>	< 2	-	-	-
Kresoxim-methyl	g/m <sup>3</sup>	< 1.0	-	-	-
Linuron	g/m <sup>3</sup>	< 2	-	-	-
Malathion	g/m <sup>3</sup>	< 2	-	-	-
Metalaxyl	g/m <sup>3</sup>	< 2	-	-	-
Metolachlor	g/m <sup>3</sup>	< 1.0	-	-	-
Metribuzin	g/m <sup>3</sup>	< 2	-	-	-
Molinate	g/m <sup>3</sup>	< 2	-	-	-
Myclobutanil	g/m <sup>3</sup>	< 2	-	-	-
Naled	g/m <sup>3</sup>	< 10	-	-	-
Norflurazon	g/m <sup>3</sup>	< 4	-	-	-
Oxadiazon	g/m <sup>3</sup>	< 2	-	-	-
Oxyfluorfen	g/m <sup>3</sup>	< 1.0	-	-	-
Paclobutrazol	g/m <sup>3</sup>	< 2	-	-	-
Parathion-ethyl	g/m <sup>3</sup>	< 2	-	-	-
Parathion-methyl	g/m <sup>3</sup>	< 2	-	-	-
Pendimethalin	g/m <sup>3</sup>	< 2	-	-	-
Permethrin	g/m <sup>3</sup>	< 0.6	-	-	-
Pirimicarb	g/m <sup>3</sup>	< 2	-	-	-
Pirimiphos-methyl	g/m <sup>3</sup>	< 2	-	-	-
Prochloraz	g/m <sup>3</sup>	< 10	-	-	-
Procymidone	g/m <sup>3</sup>	< 2	-	-	-
Prometryn	g/m <sup>3</sup>	< 1.0	-	-	-
Propachlor	g/m <sup>3</sup>	< 2	-	-	-
Propanil	g/m <sup>3</sup>	< 4	-	-	-
Propazine	g/m <sup>3</sup>	< 1.0	-	-	-
Propiconazole	g/m <sup>3</sup>	< 1.5	-	-	-
Pyriproxyfen	g/m <sup>3</sup>	< 2	-	-	-
Quizalofop-ethyl	g/m <sup>3</sup>	< 2	-	-	-
Simazine	g/m <sup>3</sup>	< 2	-	-	-
Simetryn	g/m <sup>3</sup>	< 2	-	-	-
Sulfentrazone	g/m <sup>3</sup>	< 10	-	-	-
TCMTB [2-(thiocyanomethylthio)benzothiazole, Busan]	g/m <sup>3</sup>	< 4	-	-	-
Tebuconazole	g/m <sup>3</sup>	< 2	-	-	-
Terbacil	g/m <sup>3</sup>	< 2	-	-	-
Terbufos	g/m <sup>3</sup>	< 2	-	-	-
Terbumeton	g/m <sup>3</sup>	< 2	-	-	-
Terbutylazine	g/m <sup>3</sup>	< 1.0	-	-	-
Terbutylazine-desethyl	g/m <sup>3</sup>	< 2	-	-	-
Terbutryn	g/m <sup>3</sup>	< 2	-	-	-
Thiabendazole	g/m <sup>3</sup>	< 10	-	-	-
Thiobencarb	g/m <sup>3</sup>	< 2	-	-	-
Tolyfluanid	g/m <sup>3</sup>	< 1.0	-	-	-
Triazophos	g/m <sup>3</sup>	< 2	-	-	-
Trifluralin	g/m <sup>3</sup>	< 2	-	-	-
Vinclozolin	g/m <sup>3</sup>	< 2	-	-	-
Multiresidue Extra Pesticides Trace in Water samples by Liq/liq					
Bendiocarb	g/m <sup>3</sup>	< 2	-	-	-

**Sample Type: Aqueous**

<b>Sample Name:</b>		3				
<b>Lab Number:</b>		1028629.3				
Multiresidue Extra Pesticides Trace in Water samples by Liq/liq						
Benodanil	g/m <sup>3</sup>	< 4	-	-	-	-
Bifenthrin	g/m <sup>3</sup>	< 1.0	-	-	-	-
Bromophos-ethyl	g/m <sup>3</sup>	< 2	-	-	-	-
Bupirimate	g/m <sup>3</sup>	< 2	-	-	-	-
Buprofezin	g/m <sup>3</sup>	< 2	-	-	-	-
Captafol	g/m <sup>3</sup>	< 10	-	-	-	-
Carbofenthion	g/m <sup>3</sup>	< 2	-	-	-	-
Carboxin	g/m <sup>3</sup>	< 2	-	-	-	-
Chlorfenvinphos	g/m <sup>3</sup>	< 2	-	-	-	-
Chlorpropham	g/m <sup>3</sup>	< 4	-	-	-	-
Chlzolinate	g/m <sup>3</sup>	< 2	-	-	-	-
Coumaphos	g/m <sup>3</sup>	< 4	-	-	-	-
Cyproconazole	g/m <sup>3</sup>	< 3	-	-	-	-
Cyprodinil	g/m <sup>3</sup>	< 2	-	-	-	-
Demeton-S-methyl	g/m <sup>3</sup>	< 4	-	-	-	-
Dichlobenil	g/m <sup>3</sup>	< 2	-	-	-	-
Dichlofenthion	g/m <sup>3</sup>	< 2	-	-	-	-
Dicofol	g/m <sup>3</sup>	< 10	-	-	-	-
Dicrotophos	g/m <sup>3</sup>	< 2	-	-	-	-
Dinocap	g/m <sup>3</sup>	< 30	-	-	-	-
Disulfoton	g/m <sup>3</sup>	< 2	-	-	-	-
EPN	g/m <sup>3</sup>	< 2	-	-	-	-
Esfenvalerate	g/m <sup>3</sup>	< 3	-	-	-	-
Ethion	g/m <sup>3</sup>	< 2	-	-	-	-
Etrimfos	g/m <sup>3</sup>	< 2	-	-	-	-
Famphur	g/m <sup>3</sup>	< 2	-	-	-	-
Fenamiphos	g/m <sup>3</sup>	< 2	-	-	-	-
Fenarimol	g/m <sup>3</sup>	< 2	-	-	-	-
Fenitrothion	g/m <sup>3</sup>	< 2	-	-	-	-
Fenpropathrin	g/m <sup>3</sup>	< 2	-	-	-	-
Fensulfothion	g/m <sup>3</sup>	< 2	-	-	-	-
Fenthion	g/m <sup>3</sup>	< 2	-	-	-	-
Fenvalerate	g/m <sup>3</sup>	< 3	-	-	-	-
Folpet	g/m <sup>3</sup>	< 4	-	-	-	-
Hexythiazox	g/m <sup>3</sup>	< 10	-	-	-	-
Imazalil	g/m <sup>3</sup>	< 10	-	-	-	-
Indoxacarb	g/m <sup>3</sup>	< 2	-	-	-	-
Iodofenphos	g/m <sup>3</sup>	< 2	-	-	-	-
Isazophos	g/m <sup>3</sup>	< 2	-	-	-	-
Isofenphos	g/m <sup>3</sup>	< 1.0	-	-	-	-
Leptophos	g/m <sup>3</sup>	< 2	-	-	-	-
Methacrifos	g/m <sup>3</sup>	< 2	-	-	-	-
Methidathion	g/m <sup>3</sup>	< 2	-	-	-	-
Methiocarb	g/m <sup>3</sup>	< 2	-	-	-	-
Mevinphos	g/m <sup>3</sup>	< 6	-	-	-	-
Nitrofen	g/m <sup>3</sup>	< 4	-	-	-	-
Nitrothal-Isopropyl	g/m <sup>3</sup>	< 2	-	-	-	-
Oxychlorane	g/m <sup>3</sup>	< 1.0	-	-	-	-
Penconazole	g/m <sup>3</sup>	< 2	-	-	-	-
Phorate	g/m <sup>3</sup>	< 4	-	-	-	-
Phosmet	g/m <sup>3</sup>	< 2	-	-	-	-
Phosphamidon	g/m <sup>3</sup>	< 2	-	-	-	-
Propetamphos	g/m <sup>3</sup>	< 2	-	-	-	-
Propham	g/m <sup>3</sup>	< 2	-	-	-	-
Prothiofos	g/m <sup>3</sup>	< 2	-	-	-	-

**Sample Type: Aqueous**

<b>Sample Name:</b>	3				
<b>Lab Number:</b>	1028629.3				
Multiresidue Extra Pesticides Trace in Water samples by Liq/liq					
Pyrazophos	g/m <sup>3</sup>	< 2	-	-	-
Pyrifenox	g/m <sup>3</sup>	< 3	-	-	-
Pyrimethanil	g/m <sup>3</sup>	< 2	-	-	-
Quintozene	g/m <sup>3</sup>	< 4	-	-	-
Sulfotep	g/m <sup>3</sup>	< 2	-	-	-
Tebufenpyrad	g/m <sup>3</sup>	< 1.0	-	-	-
Tetrachlorvinphos	g/m <sup>3</sup>	< 2	-	-	-
Thiometon	g/m <sup>3</sup>	< 4	-	-	-
Triadimefon	g/m <sup>3</sup>	< 2	-	-	-

**Organochlorine Pesticides Trace in water, By Liq/Liq**

Aldrin	g/m <sup>3</sup>	< 0.10	-	-	-
alpha-BHC	g/m <sup>3</sup>	< 0.10	-	-	-
beta-BHC	g/m <sup>3</sup>	< 0.10	-	-	-
delta-BHC	g/m <sup>3</sup>	< 0.10	-	-	-
gamma-BHC (Lindane)	g/m <sup>3</sup>	< 0.10	-	-	-
cis-Chlordane	g/m <sup>3</sup>	< 0.10	-	-	-
trans-Chlordane	g/m <sup>3</sup>	< 0.10	-	-	-
2,4'-DDD	g/m <sup>3</sup>	< 0.10	-	-	-
4,4'-DDD	g/m <sup>3</sup>	< 0.10	-	-	-
2,4'-DDE	g/m <sup>3</sup>	< 0.10	-	-	-
4,4'-DDE	g/m <sup>3</sup>	< 0.10	-	-	-
2,4'-DDT	g/m <sup>3</sup>	< 0.10	-	-	-
4,4'-DDT	g/m <sup>3</sup>	< 0.10	-	-	-
Dieldrin	g/m <sup>3</sup>	< 0.10	-	-	-
Endosulfan I	g/m <sup>3</sup>	< 0.10	-	-	-
Endosulfan II	g/m <sup>3</sup>	< 0.10	-	-	-
Endosulfan sulfate	g/m <sup>3</sup>	< 0.10	-	-	-
Endrin	g/m <sup>3</sup>	< 0.10	-	-	-
Endrin aldehyde	g/m <sup>3</sup>	< 0.10	-	-	-
Endrin ketone	g/m <sup>3</sup>	< 0.10	-	-	-
Heptachlor	g/m <sup>3</sup>	< 0.10	-	-	-
Heptachlor epoxide	g/m <sup>3</sup>	< 0.10	-	-	-
Hexachlorobenzene	g/m <sup>3</sup>	< 0.10	-	-	-
Methoxychlor	g/m <sup>3</sup>	< 0.10	-	-	-
Total Chlordane [(cis+trans)*100/42]	g/m <sup>3</sup>	< 0.15	-	-	-

**Sample Type: Industrial Liquid**

<b>Sample Name:</b>	3 (Replicate Sample)				
<b>Lab Number:</b>	1028629.11				
Individual Tests					
Arsenic*	g/m <sup>3</sup>	< 1.0	-	-	-
Cadmium*	g/m <sup>3</sup>	< 0.05	-	-	-
Chromium*	g/m <sup>3</sup>	< 0.5	-	-	-
Copper*	g/m <sup>3</sup>	< 0.5	-	-	-
Lead*	g/m <sup>3</sup>	< 0.10	-	-	-
Nickel*	g/m <sup>3</sup>	< 0.5	-	-	-
Zinc*	g/m <sup>3</sup>	< 1.0	-	-	-

**Analyst's Comments**

Appendix No.1 - Air Purification Liquid Challenge test re Job 1028629

# SUMMARY OF METHODS

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively clean matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis.

Sample Type: Aqueous			
Test	Method Description	Default Detection Limit	Samples
Individual Tests			
Multiresidue Pesticides Trace in Water by Liq/liq GCMS	Liquid/liquid extraction, GPC (if required), GC-MS analysis	-	3
Multiresidue Extra Pesticides Trace in Water samples by Liq/liq			
Bendiocarb	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00004 g/m <sup>3</sup>	3
Benodanil	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00008 g/m <sup>3</sup>	3
Bifenthrin	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00002 g/m <sup>3</sup>	3
Bromophos-ethyl	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00004 g/m <sup>3</sup>	3
Bupirimate	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00004 g/m <sup>3</sup>	3
Buprofezin	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00004 g/m <sup>3</sup>	3
Captafol	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.0002 g/m <sup>3</sup>	3
Carboxin	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00004 g/m <sup>3</sup>	3
Chlorfenvinphos	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00004 g/m <sup>3</sup>	3
Chlorpropham	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00008 g/m <sup>3</sup>	3
Chlzolinate	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00004 g/m <sup>3</sup>	3
Coumaphos	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00008 g/m <sup>3</sup>	3
Cyproconazole	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00004 g/m <sup>3</sup>	3
Cyprodinil	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00004 g/m <sup>3</sup>	3
Demeton-S-methyl	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00008 g/m <sup>3</sup>	3
Dichlobenil	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00004 g/m <sup>3</sup>	3
Dichlofenthion	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00004 g/m <sup>3</sup>	3
Dicofol	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.0002 g/m <sup>3</sup>	3
Dicrotophos	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00004 g/m <sup>3</sup>	3
Dinocap	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.0003 g/m <sup>3</sup>	3
Disulfoton	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00004 g/m <sup>3</sup>	3
EPN	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00004 g/m <sup>3</sup>	3
Esfenvalerate	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00004 g/m <sup>3</sup>	3
Ethion	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00004 g/m <sup>3</sup>	3
Etrimfos	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00004 g/m <sup>3</sup>	3
Famphur	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00004 g/m <sup>3</sup>	3
Fenamiphos	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00004 g/m <sup>3</sup>	3
Fenarimol	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00004 g/m <sup>3</sup>	3
Fenitrothion	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00004 g/m <sup>3</sup>	3
Fenpropathrin	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00004 g/m <sup>3</sup>	3

Sample Type: Aqueous			
Test	Method Description	Default Detection Limit	Samples
Fensulfothion	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00004 g/m <sup>3</sup>	3
Fenthion	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00004 g/m <sup>3</sup>	3
Fenvalerate	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00004 g/m <sup>3</sup>	3
Folpet	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00008 g/m <sup>3</sup>	3
Hexythiazox	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.0002 g/m <sup>3</sup>	3
Imazalil	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.0002 g/m <sup>3</sup>	3
Indoxacarb	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00004 g/m <sup>3</sup>	3
Iodofenphos	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00004 g/m <sup>3</sup>	3
Isazophos	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00004 g/m <sup>3</sup>	3
Isofenphos	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00002 g/m <sup>3</sup>	3
Leptophos	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00004 g/m <sup>3</sup>	3
Methacrifos	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00004 g/m <sup>3</sup>	3
Methidathion	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00004 g/m <sup>3</sup>	3
Methiocarb	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00004 g/m <sup>3</sup>	3
Mevinphos	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00008 g/m <sup>3</sup>	3
Nitrofen	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00008 g/m <sup>3</sup>	3
Nitrothal-isopropyl	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00004 g/m <sup>3</sup>	3
Oxychlorthane	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00002 g/m <sup>3</sup>	3
Penconazole	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00004 g/m <sup>3</sup>	3
Phorate	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00008 g/m <sup>3</sup>	3
Phosmet	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00004 g/m <sup>3</sup>	3
Phosphamidon	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00004 g/m <sup>3</sup>	3
Propetamphos	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00006 g/m <sup>3</sup>	3
Propham	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00004 g/m <sup>3</sup>	3
Prothiofos	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00004 g/m <sup>3</sup>	3
Pyrazophos	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00004 g/m <sup>3</sup>	3
Pyrifenox	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00004 g/m <sup>3</sup>	3
Pyrimethanil	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00004 g/m <sup>3</sup>	3
Quintozene	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00008 g/m <sup>3</sup>	3
Sulfotep	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00004 g/m <sup>3</sup>	3
Tebufenpyrad	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00002 g/m <sup>3</sup>	3
Tetrachlorvinphos	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00004 g/m <sup>3</sup>	3
Thiometon	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00008 g/m <sup>3</sup>	3
Triadimefon	Liquid / liquid extraction, GPC (if required), GC-MS SIM analysis. Roos et al (modified).	0.00004 g/m <sup>3</sup>	3

Sample Type: Industrial Liquid			
Test	Method Description	Default Detection Limit	Samples
Individual Tests			
Sample dilution for ICP-MS analysis*	Dilution of sample in preparation for ICP-MS analysis.	-	11
Arsenic*	Analysed as received (after acid preservation, if required), ICP-MS, screen level. APHA 3125 B 21 <sup>st</sup> ed. 2005.	0.02 g/m <sup>3</sup>	11
Cadmium*	Analysed as received (after acid preservation, if required), ICP-MS, screen level. APHA 3125 B 21 <sup>st</sup> ed. 2005.	0.0010 g/m <sup>3</sup>	11
Chromium*	Analysed as received (after acid preservation, if required), ICP-MS, screen level. APHA 3125 B 21 <sup>st</sup> ed. 2005.	0.010 g/m <sup>3</sup>	11
Copper*	Analysed as received (after acid preservation, if required), ICP-MS, screen level. APHA 3125 B 21 <sup>st</sup> ed. 2005.	0.010 g/m <sup>3</sup>	11
Lead*	Analysed as received (after acid preservation, if required), ICP-MS, screen level. APHA 3125 B 21 <sup>st</sup> ed. 2005.	0.002 g/m <sup>3</sup>	11
Nickel*	Analysed as received (after acid preservation, if required), ICP-MS, screen level. APHA 3125 B 21 <sup>st</sup> ed. 2005.	0.010 g/m <sup>3</sup>	11
Zinc*	Analysed as received (after acid preservation, if required), ICP-MS, screen level. APHA 3125 B 21 <sup>st</sup> ed. 2005.	0.02 g/m <sup>3</sup>	11

These samples were collected by yourselves (or your agent) and analysed as received at the laboratory.

Samples are held at the laboratory after reporting for a length of time depending on the preservation used and the stability of the analytes being tested. Once the storage period is completed the samples are discarded unless otherwise advised by the client.

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## Undiluted Air Purification Liquid Efficacy Trial

Barbara Müller  
 Hill Laboratories

The method employed to carry out this testing was based on AOAC Official Method 960.09 (Germicidal and Detergent Sanitizing Action of Disinfectants).

The neutraliser buffer used was DE Neutralising Broth.

The organisms used were:

- *Escherichia coli*
- *Staphylococcus aureus*
- *Pseudomonas aeruginosa*
- *Candida albicans*
- *Aspergillus niger*

Numeric counts were performed after one minute and three minute contact times.

A numeric count of the inoculant solutions was carried out before any contact times to ascertain the theoretical level of organisms inoculated into each sample. This is shown in Table 1.

Table 1:

<b>Organism</b>	<b>cfu per mL of inoculum</b>	<b>Theoretical cfu per mL/g of Product</b>
<i>Escherichia coli</i>	9,100,000,000	91,000,000
<i>Staphylococcus aureus</i>	2,800,000,000	28,000,000
<i>Pseudomonas aeruginosa</i>	23,000,000,000	230,000,000
<i>Candida albicans</i>	410,000,000	4,100,000
<i>Aspergillus niger</i>	44,000,000	440,000



Results of the trial can be seen in the tables below.

*Escherichia coli*

Contact time	Count before contact	LOG <sub>10</sub>	Count after contact	LOG <sub>10</sub>	LOG <sub>10</sub> decrease	% Decrease
1 minute	91,000,000	7.96	<100	<2	>5.96	99.999
3 minutes	91,000,000	7.96	<100	<2	>5.96	99.999

*Staphylococcus aureus*

Contact time	Count before contact	LOG <sub>10</sub>	Count after contact	LOG <sub>10</sub>	LOG <sub>10</sub> decrease	% Decrease
1 minute	28,000,000	7.45	<100	<2	>5.45	99.999
3 minutes	28,000,000	7.45	<100	<2	>5.45	99.999

*Pseudomonas aeruginosa*

Contact time	Count before contact	LOG <sub>10</sub>	Count after contact	LOG <sub>10</sub>	LOG <sub>10</sub> decrease	% Decrease
1 minute	230,000,000	8.36	<100	<2	>6.36	99.999
3 minutes	230,000,000	8.36	<100	<2	>6.36	99.999

*Candida albicans*

Contact time	Count before contact	LOG <sub>10</sub>	Count after contact	LOG <sub>10</sub>	LOG <sub>10</sub> decrease	% Decrease
1 minute	4,100,000	6.61	<100	<2	>4.61	99.998
3 minutes	4,100,000	6.61	<100	<2	>4.61	99.998

*Aspergillus niger*

Contact time	Count before contact	LOG <sub>10</sub>	Count after contact	LOG <sub>10</sub>	LOG <sub>10</sub> decrease	% Decrease
1 minute	440,000	5.64	400	2.60	3.04	99.91
3 minutes	440,000	5.64	<100	<2	>3.64	99.98