



Certificate of Analysis

Client: Timaru District Council	Lab No: 3079482	DW MAVPv1
Contact: J Clemens	Date Received: 20-Sep-2022	
C/- Timaru District Council	Date Reported: 03-Oct-2022	
PO Box 522	Quote No: 61636	
Timaru 7940	Order No: 40443	
	Client Reference:	
	Submitted By: J Clemens	

Sample Type: Aqueous

Sample Name:	G00459 - Peel Forest Spring 19-Sep-2022 12:50 pm		Maximum Acceptable Value	Outside Limit
Lab Number:	3079482.1			
Individual Tests				
Sum of Anions	meq/L	0.73	-	-
Sum of Cations	meq/L	0.74	-	-
% Difference in Ion Balance	%	0.96	-	-
pH	pH Units	6.7	-	-
Total Alkalinity	g/m ³ as CaCO ₃	14.5	-	-
Bicarbonate	g/m ³ at 25°C	17.7	-	-
Total Hardness	g/m ³ as CaCO ₃	17.7	-	-
Electrical Conductivity (EC)	mS/m	8.5	-	-
Total Barium	g/m ³	0.0076	0.7	No
Dissolved Calcium	g/m ³	4.7	-	-
Dissolved Iron	g/m ³	< 0.02	-	-
Dissolved Magnesium	g/m ³	1.44	-	-
Dissolved Manganese	g/m ³	0.0012	-	-
Total Mercury	g/m ³	< 0.00008	0.007	No
Dissolved Potassium	g/m ³	0.88	-	-
Total Selenium	g/m ³	< 0.0011	0.01	No
Dissolved Sodium	g/m ³	8.4	-	-
Total Cyanide	g/m ³	< 0.002	0.6	No
Chloride	g/m ³	5.7	-	-
Total Ammoniacal-N	g/m ³	< 0.010	-	-
Nitrate-N	g/m ³	3.1	11.3	No
Nitrate	g/m ³	13.7	50	No
Reactive Silica	g/m ³ as SiO ₂	24	-	-
Sulphate	g/m ³	2.7	-	-
OrganoNitrogen & Phosphorus pesticides, trace, liq/liq GCMS				
Acetochlor	g/m ³	< 0.00004	-	-
Alachlor	g/m ³	< 0.00004	0.02	No
Atrazine	g/m ³	< 0.00004	0.002	No
Atrazine-desethyl	g/m ³	< 0.00004	-	-
Atrazine-desisopropyl	g/m ³	< 0.00008	-	-
Azaconazole	g/m ³	< 0.00002	-	-
Azinphos-methyl	g/m ³	< 0.00008	0.004	No
Benalaxyl	g/m ³	< 0.00002	-	-
Bitertanol	g/m ³	< 0.00008	-	-
Bromacil	g/m ³	< 0.00004	0.4	No
Bromopropylate	g/m ³	< 0.00004	-	-
Butachlor	g/m ³	< 0.00004	-	-
Captan	g/m ³	< 0.00008	-	-



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 * or any comments and interpretations, which are not accredited.

Sample Type: Aqueous				
Sample Name:	G00459 - Peel Forest Spring 19-Sep-2022 12:50 pm		Maximum Acceptable Value	Outside Limit
Lab Number:	3079482.1			
OrganoNitrogen & Phosphorus pesticides, trace, liq/liq GCMS				
Carbaryl	g/m ³	< 0.00004	-	-
Carbofenthiion	g/m ³	< 0.00004	-	-
Carbofuran	g/m ³	< 0.00004	0.008	No
Chlorfluazuron	g/m ³	< 0.00004	-	-
Chlorothalonil	g/m ³	< 0.00004	-	-
Chlorpyrifos	g/m ³	< 0.00004	0.04	No
Chlorpyrifos-methyl	g/m ³	< 0.00004	-	-
Chlortoluron	g/m ³	< 0.00008	0.04	No
Cyanazine	g/m ³	< 0.00004	0.0007	No
Cyfluthrin	g/m ³	< 0.00004	-	-
Cyhalothrin	g/m ³	< 0.00004	-	-
Cypermethrin	g/m ³	< 0.00008	-	-
Deltamethrin (including Tralomethrin)	g/m ³	< 0.00006	-	-
Diazinon	g/m ³	< 0.00002	-	-
Dichlofluanid	g/m ³	< 0.00004	-	-
Dichloran	g/m ³	< 0.0002	-	-
Dichlorvos	g/m ³	< 0.00008	-	-
Difenoconazole	g/m ³	< 0.00008	-	-
Dimethoate	g/m ³	< 0.00008	0.008	No
Diphenylamine	g/m ³	< 0.00008	-	-
Diuron	g/m ³	< 0.00004	0.02	No
Fenpropimorph	g/m ³	< 0.00004	-	-
Fluazifop-butyl	g/m ³	< 0.00004	-	-
Fluometuron	g/m ³	< 0.00004	-	-
Flusilazole	g/m ³	< 0.00004	-	-
Fluvalinate	g/m ³	< 0.00004	-	-
Furalaxyl	g/m ³	< 0.00002	-	-
Haloxypop-methyl	g/m ³	< 0.00004	-	-
Hexaconazole	g/m ³	< 0.00004	-	-
Hexazinone	g/m ³	< 0.00002	0.4	No
IPBC (3-Iodo-2-propynyl-n-butylcarbamate)	g/m ³	< 0.0002	-	-
Kresoxim-methyl	g/m ³	< 0.00002	-	-
Linuron	g/m ³	< 0.00005	-	-
Malathion	g/m ³	< 0.00004	-	-
Metalaxyl	g/m ³	< 0.00004	0.1	No
Metolachlor	g/m ³	< 0.00004	0.01	No
Metribuzin	g/m ³	< 0.00004	0.07	No
Molinate	g/m ³	< 0.00008	0.007	No
Myclobutanil	g/m ³	< 0.00004	-	-
Naled	g/m ³	< 0.0002	-	-
Norflurazon	g/m ³	< 0.00008	-	-
Oxadiazon	g/m ³	< 0.00004	0.2	No
Oxyfluorfen	g/m ³	< 0.00002	-	-
Paclobutrazol	g/m ³	< 0.00004	-	-
Parathion-ethyl	g/m ³	< 0.00004	-	-
Parathion-methyl	g/m ³	< 0.00004	-	-
Pendimethalin	g/m ³	< 0.00004	0.02	No
Permethrin	g/m ³	< 0.00002	-	-
Pirimicarb	g/m ³	< 0.00004	-	-
Pirimiphos-methyl	g/m ³	< 0.00004	0.1	No
Prochloraz	g/m ³	< 0.0002	-	-
Procymidone	g/m ³	< 0.00004	0.7	No
Prometryn	g/m ³	< 0.00002	-	-
Propachlor	g/m ³	< 0.00004	-	-

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Lab Number:	3079482.1			
OrganoNitrogen & Phosphorus pesticides, trace, liq/liq GCMS				
Propanil	g/m ³	< 0.0002	-	-
Propazine	g/m ³	< 0.00002	0.07	No
Propiconazole	g/m ³	< 0.00004	-	-
Pyriproxyfen	g/m ³	< 0.00004	0.4	No
Quizalofop-ethyl	g/m ³	< 0.00004	-	-
Simazine	g/m ³	< 0.00004	0.002	No
Simetryn	g/m ³	< 0.00004	-	-
Sulfentrazone	g/m ³	< 0.0002	-	-
TCMTB [2-(thiocyanomethylthio) benzothiazole, Busan]	g/m ³	< 0.00008	-	-
Tebuconazole	g/m ³	< 0.00004	-	-
Terbacil	g/m ³	< 0.00004	0.04	No
Terbumeton	g/m ³	< 0.00004	-	-
Terbutylazine	g/m ³	< 0.00002	0.008	No
Terbutylazine-desethyl	g/m ³	< 0.00004	-	-
Terbutryn	g/m ³	< 0.00004	-	-
Thiabendazole	g/m ³	< 0.0002	0.4	No
Thiobencarb	g/m ³	< 0.00004	-	-
Tolylfluanid	g/m ³	< 0.00002	-	-
Triazophos	g/m ³	< 0.00004	-	-
Trifluralin	g/m ³	< 0.00004	0.03	No
Vinclozolin	g/m ³	< 0.00004	-	-
Heavy metals, totals, trace As,Cd,Cr,Cu,Ni,Pb,Zn				
Total Arsenic	g/m ³	< 0.0011	0.01	No
Total Cadmium	g/m ³	< 0.000053	0.004	No
Total Chromium	g/m ³	< 0.00053	0.05	No
Total Copper	g/m ³	0.0182	2	No
Total Lead	g/m ³	0.0023	0.01	No
Total Nickel	g/m ³	< 0.00053	0.08	No
Total Zinc	g/m ³	0.0079	-	-
Acid Herbicides Screen in Water by LCMSMS				
Acifluorfen	g/m ³	< 0.0004	-	-
Bentazone	g/m ³	< 0.0004	-	-
Bromoxynil	g/m ³	< 0.0004	-	-
Clopyralid	g/m ³	< 0.0004	-	-
2,4-Dichlorophenoxyacetic acid (24D)	g/m ³	< 0.0004	0.04	No
2,4-Dichlorophenoxybutyric acid (24DB)	g/m ³	< 0.0006	0.1	No
Dicamba	g/m ³	< 0.0006	-	-
Dichlorprop	g/m ³	< 0.0004	0.1	No
Fluazifop	g/m ³	< 0.0004	-	-
Fluroxypyr	g/m ³	< 0.0004	-	-
Haloxypop	g/m ³	< 0.0004	-	-
2-methyl-4-chlorophenoxyacetic acid (MCPA)	g/m ³	< 0.0004	0.002	No
2-methyl-4-chlorophenoxybutanoic acid (MCPB)	g/m ³	< 0.0004	-	-
Mecoprop	g/m ³	< 0.0004	0.01	No
Oryzalin	g/m ³	< 0.0006	0.4	No
2,3,4,6-Tetrachlorophenol (TCP)	g/m ³	< 0.0004	-	-
2,4,5-Trichlorophenoxypropionic acid (245TP, Fenoprop, Silvex)	g/m ³	< 0.0004	0.01	No
2,4,5-Trichlorophenoxyacetic acid (245T)	g/m ³	< 0.0004	0.01	No
Pentachlorophenol (PCP)	g/m ³	< 0.0004	0.009	No
Picloram	g/m ³	< 0.0004	0.2	No
Quizalofop	g/m ³	< 0.0004	-	-
Triclopyr	g/m ³	< 0.0004	0.1	No

Sample Type: Aqueous

Sample Name:		G00459 - Peel Forest Spring 19-Sep-2022 12:50 pm	Maximum Acceptable Value	Outside Limit
Lab Number:		3079482.1		
Multiresidue Extra Pesticides Trace in Water samples by Liq/liq				
Bendiocarb	g/m ³	< 0.00004	-	-
Benodanil	g/m ³	< 0.00008	-	-
Bifenthrin	g/m ³	< 0.00002	-	-
Bromophos-ethyl	g/m ³	< 0.00004	-	-
Bupirimate	g/m ³	< 0.00004	-	-
Buprofezin	g/m ³	< 0.00004	-	-
Captafol	g/m ³	< 0.0002	-	-
Carbofenthiol	g/m ³	< 0.00004	-	-
Chlorfenvinphos	g/m ³	< 0.00004	-	-
Chlorpropham	g/m ³	< 0.00008	-	-
Chlozolinate	g/m ³	< 0.00004	-	-
Coumaphos	g/m ³	< 0.00008	-	-
Cyproconazole	g/m ³	< 0.00004	-	-
Cyprodinil	g/m ³	< 0.00004	-	-
Dichlobenil	g/m ³	< 0.00004	-	-
Dichlofenthion	g/m ³	< 0.00004	-	-
Dicofol	g/m ³	< 0.0002	-	-
Dicrotophos	g/m ³	< 0.00004	-	-
Dinocap	g/m ³	< 0.0003	-	-
EPN	g/m ³	< 0.00004	-	-
Ethion	g/m ³	< 0.00004	-	-
Etrimfos	g/m ³	< 0.00004	-	-
Famphur	g/m ³	< 0.00004	-	-
Fenarimol	g/m ³	< 0.00004	-	-
Fenitrothion	g/m ³	< 0.00004	-	-
Fenpropathrin	g/m ³	< 0.00004	-	-
Fensulfothion	g/m ³	< 0.00004	-	-
Fenvalerate (including Esfenvalerate)	g/m ³	< 0.00004	-	-
Folpet	g/m ³	< 0.00008	-	-
Hexythiazox	g/m ³	< 0.0002	-	-
Imazalil	g/m ³	< 0.0002	-	-
Indoxacarb	g/m ³	< 0.00004	-	-
Iodofenphos	g/m ³	< 0.00004	-	-
Isazophos	g/m ³	< 0.00004	-	-
Isofenphos	g/m ³	< 0.00002	-	-
Leptophos	g/m ³	< 0.00004	-	-
Methacrifos	g/m ³	< 0.00004	-	-
Methidathion	g/m ³	< 0.00004	-	-
Methiocarb	g/m ³	< 0.00004	-	-
Mevinphos	g/m ³	< 0.00008	-	-
Nitrofen	g/m ³	< 0.00008	-	-
Nitrothal-isopropyl	g/m ³	< 0.00004	-	-
Oxychlorane	g/m ³	< 0.00002	-	-
Penconazole	g/m ³	< 0.00004	-	-
Phosmet	g/m ³	< 0.00004	-	-
Phosphamidon	g/m ³	< 0.00004	-	-
Propetamphos	g/m ³	< 0.00006	-	-
Propham	g/m ³	< 0.00004	-	-
Prothiofos	g/m ³	< 0.00004	-	-
Pyrazophos	g/m ³	< 0.00004	-	-
Pyrifenox	g/m ³	< 0.00004	-	-
Pyrimethanil	g/m ³	< 0.00004	-	-
Quintozene	g/m ³	< 0.00008	-	-
Sulfotep	g/m ³	< 0.00004	-	-
Tebufenpyrad	g/m ³	< 0.00002	-	-

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Lab Number:	3079482.1			
Multiresidue Extra Pesticides Trace in Water samples by Liq/liq				
Tetrachlorvinphos	g/m ³	< 0.00004	-	-
Triadimefon	g/m ³	< 0.00004	-	-
Organochlorine Pesticides Trace in Water, By Liq/Liq				
Aldrin	g/m ³	< 0.000005	-	-
alpha-BHC	g/m ³	< 0.000010	-	-
beta-BHC	g/m ³	< 0.000010	-	-
delta-BHC	g/m ³	< 0.000010	-	-
gamma-BHC (Lindane)	g/m ³	< 0.000010	0.002	No
cis-Chlordane	g/m ³	< 0.000005	-	-
trans-Chlordane	g/m ³	< 0.000005	-	-
2,4'-DDD	g/m ³	< 0.000010	-	-
4,4'-DDD	g/m ³	< 0.000010	-	-
2,4'-DDE	g/m ³	< 0.000010	-	-
4,4'-DDE	g/m ³	< 0.000010	-	-
2,4'-DDT	g/m ³	< 0.000010	-	-
4,4'-DDT	g/m ³	< 0.000010	-	-
Total DDT Isomers	g/m ³	< 0.00006	0.001	No
Dieldrin	g/m ³	< 0.000005	-	-
Endosulfan I	g/m ³	< 0.000010	-	-
Endosulfan II	g/m ³	< 0.000010	-	-
Endosulfan sulphate	g/m ³	< 0.000010	-	-
Endrin	g/m ³	< 0.000005	0.001	No
Endrin aldehyde	g/m ³	< 0.000005	-	-
Endrin ketone	g/m ³	< 0.000010	-	-
Heptachlor	g/m ³	< 0.000005	-	-
Heptachlor epoxide	g/m ³	< 0.000005	-	-
Hexachlorobenzene	g/m ³	< 0.00004	-	-
Methoxychlor	g/m ³	< 0.000005	0.02	No
BTEX in VOC Water by Headspace GC-MS				
Benzene	g/m ³	< 0.0003	0.01	No
Ethylbenzene	g/m ³	< 0.0005	0.3	No
Toluene	g/m ³	< 0.0003	0.8	No
m&p-Xylene	g/m ³	< 0.0005	-	-
o-Xylene	g/m ³	< 0.0003	-	-
Halogenated Aliphatics in VOC Water by Headspace GC-MS				
Bromomethane (Methyl Bromide)	g/m ³	< 0.0003	-	-
Carbon tetrachloride	g/m ³	< 0.0003	0.005	No
Chloroethane	g/m ³	< 0.0003	-	-
Chloromethane	g/m ³	< 0.0003	-	-
1,2-Dibromo-3-chloropropane	g/m ³	< 0.0003	0.001	No
1,2-Dibromoethane (ethylene dibromide, EDB)	g/m ³	< 0.0003	0.0004	No
Dibromomethane	g/m ³	< 0.0003	-	-
Dichlorodifluoromethane	g/m ³	< 0.0003	-	-
1,1-Dichloroethane	g/m ³	< 0.0003	-	-
1,2-Dichloroethane	g/m ³	< 0.0003	0.03	No
1,1-Dichloroethene	g/m ³	< 0.0003	-	-
cis-1,2-Dichloroethene	g/m ³	< 0.0003	-	-
trans-1,2-Dichloroethene	g/m ³	< 0.0003	-	-
Dichloromethane (methylene chloride)	g/m ³	< 0.010	0.02	No
1,2-Dichloropropane	g/m ³	< 0.0003	0.05	No
1,3-Dichloropropane	g/m ³	< 0.0003	-	-
1,1-Dichloropropene	g/m ³	< 0.0003	-	-
cis-1,3-Dichloropropene	g/m ³	< 0.0005	-	-
trans-1,3-Dichloropropene	g/m ³	< 0.0005	-	-

Sample Type: Aqueous					
Sample Name:		G00459 - Peel Forest Spring 19-Sep-2022 12:50 pm		Maximum Acceptable Value	Outside Limit
Lab Number:		3079482.1			
Halogenated Aliphatics in VOC Water by Headspace GC-MS					
Hexachlorobutadiene	g/m ³	< 0.0003	0.0007	No	
1,1,1,2-Tetrachloroethane	g/m ³	< 0.0003	-	-	
1,1,2,2-Tetrachloroethane	g/m ³	< 0.0003	-	-	
Tetrachloroethene (tetrachloroethylene)	g/m ³	< 0.0003	0.05	No	
1,1,1-Trichloroethane	g/m ³	< 0.0003	-	-	
1,1,2-Trichloroethane	g/m ³	< 0.0003	-	-	
Trichloroethene (trichloroethylene)	g/m ³	< 0.0003	0.02	No	
Trichlorofluoromethane	g/m ³	< 0.0003	-	-	
1,2,3-Trichloropropane	g/m ³	< 0.0003	-	-	
1,1,2-Trichlorotrifluoroethane (Freon 113)	g/m ³	< 0.0003	-	-	
Vinyl chloride	g/m ³	< 0.0003	0.0003	No	
Halogenated Aromatics in VOC Water by Headspace GC-MS					
Chlorobenzene (monochlorobenzene)	g/m ³	< 0.0003	-	-	
1,2-Dichlorobenzene	g/m ³	< 0.0003	1.5	No	
1,3-Dichlorobenzene	g/m ³	< 0.0003	-	-	
1,4-Dichlorobenzene	g/m ³	< 0.0003	0.4	No	
1,2,3-Trichlorobenzene	g/m ³	< 0.0003	-	-	
1,2,4-Trichlorobenzene	g/m ³	< 0.0003	-	-	
1,3,5-Trichlorobenzene	g/m ³	< 0.0003	-	-	
Bromobenzene	g/m ³	< 0.0003	-	-	
2-Chlorotoluene	g/m ³	< 0.0003	-	-	
4-Chlorotoluene	g/m ³	< 0.0003	-	-	
Monoaromatic Hydrocarbons in VOC Water by Headspace GC-MS					
n-Butylbenzene	g/m ³	< 0.0005	-	-	
tert-Butylbenzene	g/m ³	< 0.0003	-	-	
4-Isopropyltoluene (p-Cymene)	g/m ³	< 0.0005	-	-	
Isopropylbenzene (Cumene)	g/m ³	< 0.0003	-	-	
n-Propylbenzene	g/m ³	< 0.0005	-	-	
sec-Butylbenzene	g/m ³	< 0.0003	-	-	
Styrene	g/m ³	< 0.0005	0.03	No	
1,2,4-Trimethylbenzene	g/m ³	< 0.0003	-	-	
1,3,5-Trimethylbenzene	g/m ³	< 0.0003	-	-	
Ketones in VOC Water by Headspace GC-MS					
Acetone	g/m ³	< 0.05	-	-	
2-Butanone (MEK)	g/m ³	< 0.05	-	-	
Methyl tert-butylether (MTBE)	g/m ³	< 0.0003	-	-	
4-Methylpentan-2-one (MIBK)	g/m ³	< 0.010	-	-	
Trihalomethanes in VOC Water by Headspace GC-MS					
Bromodichloromethane	g/m ³	< 0.0003	0.06	No	
Bromoform (tribromomethane)	g/m ³	< 0.0003	0.1	No	
Chloroform (Trichloromethane)	g/m ³	< 0.0003	0.4	No	
Dibromochloromethane	g/m ³	< 0.0003	0.15	No	
Other VOC in Water by Headspace GC-MS					
Carbon disulphide	g/m ³	< 0.0005	-	-	
Naphthalene	g/m ³	< 0.0005	-	-	
Sample Name:		G00201 - Ragta Hats Well 19-Sep-2022 1:20 pm		Maximum Acceptable Value	Outside Limit
Lab Number:		3079482.2			
Individual Tests					
Sum of Anions	meq/L	3.1	-	-	
Sum of Cations	meq/L	3.2	-	-	
% Difference in Ion Balance	%	1.46	-	-	
pH	pH Units	7.3	-	-	
Total Alkalinity	g/m ³ as CaCO ₃	60	-	-	
Bicarbonate	g/m ³ at 25°C	73	-	-	

Sample Type: Aqueous				
Sample Name:	G00201 - Ragta Hats Well 19-Sep-2022 1:20 pm		Maximum Acceptable Value	Outside Limit
Lab Number:	3079482.2			
Individual Tests				
Total Hardness	g/m ³ as CaCO ₃	112	-	-
Electrical Conductivity (EC)	mS/m	34.6	-	-
Total Barium	g/m ³	0.0077	0.7	No
Dissolved Calcium	g/m ³	33	-	-
Dissolved Iron	g/m ³	< 0.02	-	-
Dissolved Magnesium	g/m ³	7.0	-	-
Dissolved Manganese	g/m ³	< 0.0005	-	-
Total Mercury	g/m ³	< 0.00008	0.007	No
Dissolved Potassium	g/m ³	4.0	-	-
Total Selenium	g/m ³	< 0.0011	0.01	No
Dissolved Sodium	g/m ³	20	-	-
Total Cyanide	g/m ³	< 0.002	0.6	No
Chloride	g/m ³	25	-	-
Total Ammoniacal-N	g/m ³	< 0.010	-	-
Nitrate-N	g/m ³	9.0	11.3	No
Nitrate	g/m ³	40	50	No
Reactive Silica	g/m ³ as SiO ₂	14.0	-	-
Sulphate	g/m ³	27	-	-
OrganoNitrogen & Phosphorus pesticides, trace, liq/liq GCMS				
Acetochlor	g/m ³	< 0.00004	-	-
Alachlor	g/m ³	< 0.00004	0.02	No
Atrazine	g/m ³	< 0.00004	0.002	No
Atrazine-desethyl	g/m ³	< 0.00004	-	-
Atrazine-desisopropyl	g/m ³	< 0.00008	-	-
Azaconazole	g/m ³	< 0.00002	-	-
Azinphos-methyl	g/m ³	< 0.00008	0.004	No
Benalaxyl	g/m ³	< 0.00002	-	-
Bitertanol	g/m ³	< 0.00008	-	-
Bromacil	g/m ³	< 0.00004	0.4	No
Bromopropylate	g/m ³	< 0.00004	-	-
Butachlor	g/m ³	< 0.00004	-	-
Captan	g/m ³	< 0.00008	-	-
Carbaryl	g/m ³	< 0.00004	-	-
Carbofenthion	g/m ³	< 0.00004	-	-
Carbofuran	g/m ³	< 0.00004	0.008	No
Chlorfluazuron	g/m ³	< 0.00004	-	-
Chlorothalonil	g/m ³	< 0.00004	-	-
Chlorpyrifos	g/m ³	< 0.00004	0.04	No
Chlorpyrifos-methyl	g/m ³	< 0.00004	-	-
Chlortoluron	g/m ³	< 0.00008	0.04	No
Cyanazine	g/m ³	< 0.00004	0.0007	No
Cyfluthrin	g/m ³	< 0.00004	-	-
Cyhalothrin	g/m ³	< 0.00004	-	-
Cypermethrin	g/m ³	< 0.00008	-	-
Deltamethrin (including Tralomethrin)	g/m ³	< 0.00006	-	-
Diazinon	g/m ³	< 0.00002	-	-
Dichlofluanid	g/m ³	< 0.00004	-	-
Dichloran	g/m ³	< 0.0002	-	-
Dichlorvos	g/m ³	< 0.00008	-	-
Difenoconazole	g/m ³	< 0.00008	-	-
Dimethoate	g/m ³	< 0.00008	0.008	No
Diphenylamine	g/m ³	< 0.00008	-	-
Diuron	g/m ³	< 0.00004	0.02	No
Fenpropimorph	g/m ³	< 0.00004	-	-
Fluazifop-butyl	g/m ³	< 0.00004	-	-

Sample Type: Aqueous				
Sample Name:	G00201 - Ragta Hats Well 19-Sep-2022 1:20 pm		Maximum Acceptable Value	Outside Limit
Lab Number:	3079482.2			
OrganoNitrogen & Phosphorus pesticides, trace, liq/liq GCMS				
Fluometuron	g/m ³	< 0.00004	-	-
Flusilazole	g/m ³	< 0.00004	-	-
Fluvalinate	g/m ³	< 0.00004	-	-
Furalaxyl	g/m ³	< 0.00002	-	-
Haloxfop-methyl	g/m ³	< 0.00004	-	-
Hexaconazole	g/m ³	< 0.00004	-	-
Hexazinone	g/m ³	< 0.00002	0.4	No
IPBC (3-Iodo-2-propynyl-n-butylcarbamate)	g/m ³	< 0.0002	-	-
Kresoxim-methyl	g/m ³	< 0.00002	-	-
Linuron	g/m ³	< 0.00005	-	-
Malathion	g/m ³	< 0.00004	-	-
Metalaxyl	g/m ³	< 0.00004	0.1	No
Metolachlor	g/m ³	< 0.00004	0.01	No
Metribuzin	g/m ³	< 0.00004	0.07	No
Molinate	g/m ³	< 0.00008	0.007	No
Myclobutanil	g/m ³	< 0.00004	-	-
Naled	g/m ³	< 0.0002	-	-
Norflurazon	g/m ³	< 0.00008	-	-
Oxadiazon	g/m ³	< 0.00004	0.2	No
Oxyfluorfen	g/m ³	< 0.00002	-	-
Paclobutrazol	g/m ³	< 0.00004	-	-
Parathion-ethyl	g/m ³	< 0.00004	-	-
Parathion-methyl	g/m ³	< 0.00004	-	-
Pendimethalin	g/m ³	< 0.00004	0.02	No
Permethrin	g/m ³	< 0.00002	-	-
Pirimicarb	g/m ³	< 0.00004	-	-
Pirimiphos-methyl	g/m ³	< 0.00004	0.1	No
Prochloraz	g/m ³	< 0.0002	-	-
Procymidone	g/m ³	< 0.00004	0.7	No
Prometryn	g/m ³	< 0.00002	-	-
Propachlor	g/m ³	< 0.00004	-	-
Propanil	g/m ³	< 0.0002	-	-
Propazine	g/m ³	< 0.00002	0.07	No
Propiconazole	g/m ³	< 0.00004	-	-
Pyriproxyfen	g/m ³	< 0.00004	0.4	No
Quizalofop-ethyl	g/m ³	< 0.00004	-	-
Simazine	g/m ³	< 0.00004	0.002	No
Simetryn	g/m ³	< 0.00004	-	-
Sulfentrazone	g/m ³	< 0.0002	-	-
TCMTB [2-(thiocyanomethylthio)benzothiazole, Busan]	g/m ³	< 0.00008	-	-
Tebuconazole	g/m ³	< 0.00004	-	-
Terbacil	g/m ³	< 0.00004	0.04	No
Terbumeton	g/m ³	< 0.00004	-	-
Terbutylazine	g/m ³	< 0.00002	0.008	No
Terbutylazine-desethyl	g/m ³	< 0.00004	-	-
Terbutryn	g/m ³	< 0.00004	-	-
Thiabendazole	g/m ³	< 0.0002	0.4	No
Thiobencarb	g/m ³	< 0.00004	-	-
Tolyfluanid	g/m ³	< 0.00002	-	-
Triazophos	g/m ³	< 0.00004	-	-
Trifluralin	g/m ³	< 0.00004	0.03	No
Vinclozolin	g/m ³	< 0.00004	-	-
Heavy metals, totals, trace As,Cd,Cr,Cu,Ni,Pb,Zn				
Total Arsenic	g/m ³	< 0.0011	0.01	No

Sample Type: Aqueous				
Sample Name:	G00201 - Ragta Hats Well 19-Sep-2022 1:20 pm		Maximum Acceptable Value	Outside Limit
Lab Number:	3079482.2			
Heavy metals, totals, trace As,Cd,Cr,Cu,Ni,Pb,Zn				
Total Cadmium	g/m ³	< 0.000053	0.004	No
Total Chromium	g/m ³	< 0.00053	0.05	No
Total Copper	g/m ³	0.0052	2	No
Total Lead	g/m ³	0.00066	0.01	No
Total Nickel	g/m ³	0.00102	0.08	No
Total Zinc	g/m ³	0.0122	-	-
Acid Herbicides Screen in Water by LCMSMS				
Acifluorfen	g/m ³	< 0.0004	-	-
Bentazone	g/m ³	< 0.0004	-	-
Bromoxynil	g/m ³	< 0.0004	-	-
Clopyralid	g/m ³	< 0.0004	-	-
2,4-Dichlorophenoxyacetic acid (24D)	g/m ³	< 0.0004	0.04	No
2,4-Dichlorophenoxybutyric acid (24DB)	g/m ³	< 0.0006	0.1	No
Dicamba	g/m ³	< 0.0006	-	-
Dichlorprop	g/m ³	< 0.0004	0.1	No
Fluazifop	g/m ³	< 0.0004	-	-
Fluroxypyr	g/m ³	< 0.0004	-	-
Haloxfop	g/m ³	< 0.0004	-	-
2-methyl-4-chlorophenoxyacetic acid (MCPA)	g/m ³	< 0.0004	0.002	No
2-methyl-4-chlorophenoxybutanoic acid (MCPB)	g/m ³	< 0.0004	-	-
Mecoprop	g/m ³	< 0.0004	0.01	No
Oryzalin	g/m ³	< 0.0006	0.4	No
2,3,4,6-Tetrachlorophenol (TCP)	g/m ³	< 0.0004	-	-
2,4,5-Trichlorophenoxypropionic acid (245TP, Fenoprop, Silvex)	g/m ³	< 0.0004	0.01	No
2,4,5-Trichlorophenoxyacetic acid (245T)	g/m ³	< 0.0004	0.01	No
Pentachlorophenol (PCP)	g/m ³	< 0.0004	0.009	No
Picloram	g/m ³	< 0.0004	0.2	No
Quizalofop	g/m ³	< 0.0004	-	-
Triclopyr	g/m ³	< 0.0004	0.1	No
Multiresidue Extra Pesticides Trace in Water samples by Liq/liq				
Bendiocarb	g/m ³	< 0.00004	-	-
Benodanil	g/m ³	< 0.00008	-	-
Bifenthrin	g/m ³	< 0.00002	-	-
Bromophos-ethyl	g/m ³	< 0.00004	-	-
Bupirimate	g/m ³	< 0.00004	-	-
Buprofezin	g/m ³	< 0.00004	-	-
Captafol	g/m ³	< 0.0002	-	-
Carbofenthion	g/m ³	< 0.00004	-	-
Chlorfenvinphos	g/m ³	< 0.00004	-	-
Chlorpropham	g/m ³	< 0.00008	-	-
Chlozolinate	g/m ³	< 0.00004	-	-
Coumaphos	g/m ³	< 0.00008	-	-
Cyproconazole	g/m ³	< 0.00004	-	-
Cyprodinil	g/m ³	< 0.00004	-	-
Dichlobenil	g/m ³	< 0.00004	-	-
Dichlofenthion	g/m ³	< 0.00004	-	-
Dicofol	g/m ³	< 0.0002	-	-
Dicrotophos	g/m ³	< 0.00004	-	-
Dinocap	g/m ³	< 0.0003	-	-
EPN	g/m ³	< 0.00004	-	-
Ethion	g/m ³	< 0.00004	-	-
Etrimfos	g/m ³	< 0.00004	-	-
Famphur	g/m ³	< 0.00004	-	-

Sample Type: Aqueous				
Sample Name:	G00201 - Ragta Hats Well 19-Sep-2022 1:20 pm		Maximum Acceptable Value	Outside Limit
Lab Number:	3079482.2			
Multiresidue Extra Pesticides Trace in Water samples by Liq/liq				
Fenarimol	g/m ³	< 0.00004	-	-
Fenitrothion	g/m ³	< 0.00004	-	-
Fenpropathrin	g/m ³	< 0.00004	-	-
Fensulfothion	g/m ³	< 0.00004	-	-
Fenvalerate (including Esfenvalerate)	g/m ³	< 0.00004	-	-
Folpet	g/m ³	< 0.00008	-	-
Hexythiazox	g/m ³	< 0.0002	-	-
Imazalil	g/m ³	< 0.0002	-	-
Indoxacarb	g/m ³	< 0.00004	-	-
Iodofenphos	g/m ³	< 0.00004	-	-
Isazophos	g/m ³	< 0.00004	-	-
Isofenphos	g/m ³	< 0.00002	-	-
Leptophos	g/m ³	< 0.00004	-	-
Methacrifos	g/m ³	< 0.00004	-	-
Methidathion	g/m ³	< 0.00004	-	-
Methiocarb	g/m ³	< 0.00004	-	-
Mevinphos	g/m ³	< 0.00008	-	-
Nitrofen	g/m ³	< 0.00008	-	-
Nitrothal-isopropyl	g/m ³	< 0.00004	-	-
Oxychlordane	g/m ³	< 0.00002	-	-
Penconazole	g/m ³	< 0.00004	-	-
Phosmet	g/m ³	< 0.00004	-	-
Phosphamidon	g/m ³	< 0.00004	-	-
Propetamphos	g/m ³	< 0.00006	-	-
Propham	g/m ³	< 0.00004	-	-
Prothiofos	g/m ³	< 0.00004	-	-
Pyrazophos	g/m ³	< 0.00004	-	-
Pyrifenox	g/m ³	< 0.00004	-	-
Pyrimethanil	g/m ³	< 0.00004	-	-
Quintozene	g/m ³	< 0.00008	-	-
Sulfotep	g/m ³	< 0.00004	-	-
Tebufenpyrad	g/m ³	< 0.00002	-	-
Tetrachlorvinphos	g/m ³	< 0.00004	-	-
Triadimefon	g/m ³	< 0.00004	-	-
Organochlorine Pesticides Trace in Water, By Liq/Liq				
Aldrin	g/m ³	< 0.000005	-	-
alpha-BHC	g/m ³	< 0.000010	-	-
beta-BHC	g/m ³	< 0.000010	-	-
delta-BHC	g/m ³	< 0.000010	-	-
gamma-BHC (Lindane)	g/m ³	< 0.000010	0.002	No
cis-Chlordane	g/m ³	< 0.000005	-	-
trans-Chlordane	g/m ³	< 0.000005	-	-
2,4'-DDD	g/m ³	< 0.000010	-	-
4,4'-DDD	g/m ³	< 0.000010	-	-
2,4'-DDE	g/m ³	< 0.000010	-	-
4,4'-DDE	g/m ³	< 0.000010	-	-
2,4'-DDT	g/m ³	< 0.000010	-	-
4,4'-DDT	g/m ³	< 0.000010	-	-
Total DDT Isomers	g/m ³	< 0.00006	0.001	No
Dieldrin	g/m ³	< 0.000005	-	-
Endosulfan I	g/m ³	< 0.000010	-	-
Endosulfan II	g/m ³	< 0.000010	-	-
Endosulfan sulphate	g/m ³	< 0.000010	-	-
Endrin	g/m ³	< 0.000005	0.001	No
Endrin aldehyde	g/m ³	< 0.000005	-	-

Sample Type: Aqueous				
Sample Name:	G00201 - Ragta Hats Well 19-Sep-2022 1:20 pm		Maximum Acceptable Value	Outside Limit
Lab Number:	3079482.2			
Organochlorine Pesticides Trace in Water, By Liq/Liq				
Endrin ketone	g/m ³	< 0.000010	-	-
Heptachlor	g/m ³	< 0.000005	-	-
Heptachlor epoxide	g/m ³	< 0.000005	-	-
Hexachlorobenzene	g/m ³	< 0.000004	-	-
Methoxychlor	g/m ³	< 0.000005	0.02	No
BTEX in VOC Water by Headspace GC-MS				
Benzene	g/m ³	< 0.0003	0.01	No
Ethylbenzene	g/m ³	< 0.0005	0.3	No
Toluene	g/m ³	< 0.0003	0.8	No
m&p-Xylene	g/m ³	< 0.0005	-	-
o-Xylene	g/m ³	< 0.0003	-	-
Halogenated Aliphatics in VOC Water by Headspace GC-MS				
Bromomethane (Methyl Bromide)	g/m ³	< 0.0003	-	-
Carbon tetrachloride	g/m ³	< 0.0003	0.005	No
Chloroethane	g/m ³	< 0.0003	-	-
Chloromethane	g/m ³	< 0.0003	-	-
1,2-Dibromo-3-chloropropane	g/m ³	< 0.0003	0.001	No
1,2-Dibromoethane (ethylene dibromide, EDB)	g/m ³	< 0.0003	0.0004	No
Dibromomethane	g/m ³	< 0.0003	-	-
Dichlorodifluoromethane	g/m ³	< 0.0003	-	-
1,1-Dichloroethane	g/m ³	< 0.0003	-	-
1,2-Dichloroethane	g/m ³	< 0.0003	0.03	No
1,1-Dichloroethene	g/m ³	< 0.0003	-	-
cis-1,2-Dichloroethene	g/m ³	< 0.0003	-	-
trans-1,2-Dichloroethene	g/m ³	< 0.0003	-	-
Dichloromethane (methylene chloride)	g/m ³	< 0.010	0.02	No
1,2-Dichloropropane	g/m ³	< 0.0003	0.05	No
1,3-Dichloropropane	g/m ³	< 0.0003	-	-
1,1-Dichloropropene	g/m ³	< 0.0003	-	-
cis-1,3-Dichloropropene	g/m ³	< 0.0005	-	-
trans-1,3-Dichloropropene	g/m ³	< 0.0005	-	-
Hexachlorobutadiene	g/m ³	< 0.0003	0.0007	No
1,1,1,2-Tetrachloroethane	g/m ³	< 0.0003	-	-
1,1,2,2-Tetrachloroethane	g/m ³	< 0.0003	-	-
Tetrachloroethene (tetrachloroethylene)	g/m ³	< 0.0003	0.05	No
1,1,1-Trichloroethane	g/m ³	< 0.0003	-	-
1,1,2-Trichloroethane	g/m ³	< 0.0003	-	-
Trichloroethene (trichloroethylene)	g/m ³	< 0.0003	0.02	No
Trichlorofluoromethane	g/m ³	< 0.0003	-	-
1,2,3-Trichloropropane	g/m ³	< 0.0003	-	-
1,1,2-Trichlorotrifluoroethane (Freon 113)	g/m ³	< 0.0003	-	-
Vinyl chloride	g/m ³	< 0.0003	0.0003	No
Halogenated Aromatics in VOC Water by Headspace GC-MS				
Chlorobenzene (monochlorobenzene)	g/m ³	< 0.0003	-	-
1,2-Dichlorobenzene	g/m ³	< 0.0003	1.5	No
1,3-Dichlorobenzene	g/m ³	< 0.0003	-	-
1,4-Dichlorobenzene	g/m ³	< 0.0003	0.4	No
1,2,3-Trichlorobenzene	g/m ³	< 0.0003	-	-
1,2,4-Trichlorobenzene	g/m ³	< 0.0003	-	-
1,3,5-Trichlorobenzene	g/m ³	< 0.0003	-	-
Bromobenzene	g/m ³	< 0.0003	-	-
2-Chlorotoluene	g/m ³	< 0.0003	-	-
4-Chlorotoluene	g/m ³	< 0.0003	-	-
Monoaromatic Hydrocarbons in VOC Water by Headspace GC-MS				

Sample Type: Aqueous					
Sample Name:		G00201 - Ragta Hats Well 19-Sep-2022 1:20 pm		Maximum Acceptable Value	Outside Limit
Lab Number:		3079482.2			
Monoaromatic Hydrocarbons in VOC Water by Headspace GC-MS					
n-Butylbenzene	g/m ³	< 0.0005	-	-	
tert-Butylbenzene	g/m ³	< 0.0003	-	-	
4-Isopropyltoluene (p-Cymene)	g/m ³	< 0.0005	-	-	
Isopropylbenzene (Cumene)	g/m ³	< 0.0003	-	-	
n-Propylbenzene	g/m ³	< 0.0005	-	-	
sec-Butylbenzene	g/m ³	< 0.0003	-	-	
Styrene	g/m ³	< 0.0005	0.03	No	
1,2,4-Trimethylbenzene	g/m ³	< 0.0003	-	-	
1,3,5-Trimethylbenzene	g/m ³	< 0.0003	-	-	
Ketones in VOC Water by Headspace GC-MS					
Acetone	g/m ³	< 0.05	-	-	
2-Butanone (MEK)	g/m ³	< 0.05	-	-	
Methyl tert-butylether (MTBE)	g/m ³	< 0.0003	-	-	
4-Methylpentan-2-one (MIBK)	g/m ³	< 0.010	-	-	
Trihalomethanes in VOC Water by Headspace GC-MS					
Bromodichloromethane	g/m ³	< 0.0003	0.06	No	
Bromoform (tribromomethane)	g/m ³	< 0.0003	0.1	No	
Chloroform (Trichloromethane)	g/m ³	< 0.0003	0.4	No	
Dibromochloromethane	g/m ³	< 0.0003	0.15	No	
Other VOC in Water by Headspace GC-MS					
Carbon disulphide	g/m ³	< 0.0005	-	-	
Naphthalene	g/m ³	< 0.0005	-	-	
Sample Name:		S00201 - Te Moana Hei Hei 19-Sep-2022 12:05 pm		Maximum Acceptable Value	Outside Limit
Lab Number:		3079482.3			
Individual Tests					
Sum of Anions	meq/L	1.05	-	-	
Sum of Cations	meq/L	1.03	-	-	
% Difference in Ion Balance	%	1.24	-	-	
pH	pH Units	7.9	-	-	
Total Alkalinity	g/m ³ as CaCO ₃	45	-	-	
Bicarbonate	g/m ³ at 25°C	55	-	-	
Total Hardness	g/m ³ as CaCO ₃	42	-	-	
Electrical Conductivity (EC)	mS/m	10.8	-	-	
Total Barium	g/m ³	< 0.0053	0.7	No	
Dissolved Calcium	g/m ³	12.0	-	-	
Dissolved Iron	g/m ³	< 0.02	-	-	
Dissolved Magnesium	g/m ³	2.9	-	-	
Dissolved Manganese	g/m ³	< 0.0005	-	-	
Total Mercury	g/m ³	< 0.00008	0.007	No	
Dissolved Potassium	g/m ³	0.28	-	-	
Total Selenium	g/m ³	< 0.0011	0.01	No	
Dissolved Sodium	g/m ³	4.3	-	-	
Total Cyanide	g/m ³	< 0.002	0.6	No	
Chloride	g/m ³	1.8	-	-	
Total Ammoniacal-N	g/m ³	< 0.010	-	-	
Nitrate-N	g/m ³	0.22	11.3	No	
Nitrate	g/m ³	1.0	50	No	
Reactive Silica	g/m ³ as SiO ₂	11.0	-	-	
Sulphate	g/m ³	4.0	-	-	
OrganoNitrogen & Phosphorus pesticides, trace, liq/liq GCMS					
Acetochlor	g/m ³	< 0.00004	-	-	
Alachlor	g/m ³	< 0.00004	0.02	No	
Atrazine	g/m ³	< 0.00004	0.002	No	
Atrazine-desethyl	g/m ³	< 0.00004	-	-	

Sample Type: Aqueous				
Sample Name:	S00201 - Te Moana Hei Hei 19-Sep-2022 12:05 pm		Maximum Acceptable Value	Outside Limit
Lab Number:	3079482.3			
OrganoNitrogen & Phosphorus pesticides, trace, liq/liq GCMS				
Atrazine-desisopropyl	g/m ³	< 0.00008	-	-
Azaconazole	g/m ³	< 0.00002	-	-
Azinphos-methyl	g/m ³	< 0.00008	0.004	No
Benalaxyl	g/m ³	< 0.00002	-	-
Bitertanol	g/m ³	< 0.00008	-	-
Bromacil	g/m ³	< 0.00004	0.4	No
Bromopropylate	g/m ³	< 0.00004	-	-
Butachlor	g/m ³	< 0.00004	-	-
Captan	g/m ³	< 0.00008	-	-
Carbaryl	g/m ³	< 0.00004	-	-
Carbofenothion	g/m ³	< 0.00004	-	-
Carbofuran	g/m ³	< 0.00004	0.008	No
Chlorfluazuron	g/m ³	< 0.00004	-	-
Chlorothalonil	g/m ³	< 0.00004	-	-
Chlorpyrifos	g/m ³	< 0.00004	0.04	No
Chlorpyrifos-methyl	g/m ³	< 0.00004	-	-
Chlortoluron	g/m ³	< 0.00008	0.04	No
Cyanazine	g/m ³	< 0.00004	0.0007	No
Cyfluthrin	g/m ³	< 0.00004	-	-
Cyhalothrin	g/m ³	< 0.00004	-	-
Cypermethrin	g/m ³	< 0.00008	-	-
Deltamethrin (including Tralomethrin)	g/m ³	< 0.00006	-	-
Diazinon	g/m ³	< 0.00002	-	-
Dichlofluanid	g/m ³	< 0.00004	-	-
Dichloran	g/m ³	< 0.0002	-	-
Dichlorvos	g/m ³	< 0.00008	-	-
Difenoconazole	g/m ³	< 0.00008	-	-
Dimethoate	g/m ³	< 0.00008	0.008	No
Diphenylamine	g/m ³	< 0.00008	-	-
Diuron	g/m ³	< 0.00004	0.02	No
Fenpropimorph	g/m ³	< 0.00004	-	-
Fluazifop-butyl	g/m ³	< 0.00004	-	-
Fluometuron	g/m ³	< 0.00004	-	-
Flusilazole	g/m ³	< 0.00004	-	-
Fluvalinate	g/m ³	< 0.00004	-	-
Furalaxyl	g/m ³	< 0.00002	-	-
Haloxifop-methyl	g/m ³	< 0.00004	-	-
Hexaconazole	g/m ³	< 0.00004	-	-
Hexazinone	g/m ³	< 0.00002	0.4	No
IPBC (3-Iodo-2-propynyl-n-butylcarbamate)	g/m ³	< 0.0002	-	-
Kresoxim-methyl	g/m ³	< 0.00002	-	-
Linuron	g/m ³	< 0.00005	-	-
Malathion	g/m ³	< 0.00004	-	-
Metalaxyl	g/m ³	< 0.00004	0.1	No
Metolachlor	g/m ³	< 0.00004	0.01	No
Metribuzin	g/m ³	< 0.00004	0.07	No
Molinate	g/m ³	< 0.00008	0.007	No
Myclobutanil	g/m ³	< 0.00004	-	-
Naled	g/m ³	< 0.0002	-	-
Norflurazon	g/m ³	< 0.00008	-	-
Oxadiazon	g/m ³	< 0.00004	0.2	No
Oxyfluorfen	g/m ³	< 0.00002	-	-
Paclobutrazol	g/m ³	< 0.00004	-	-
Parathion-ethyl	g/m ³	< 0.00004	-	-

Sample Type: Aqueous				
Sample Name:	S00201 - Te Moana Hei Hei 19-Sep-2022 12:05 pm		Maximum Acceptable Value	Outside Limit
Lab Number:	3079482.3			
OrganoNitrogen & Phosphorus pesticides, trace, liq/liq GCMS				
Parathion-methyl	g/m ³	< 0.00004	-	-
Pendimethalin	g/m ³	< 0.00004	0.02	No
Permethrin	g/m ³	< 0.00002	-	-
Pirimicarb	g/m ³	< 0.00004	-	-
Pirimiphos-methyl	g/m ³	< 0.00004	0.1	No
Prochloraz	g/m ³	< 0.0002	-	-
Procymidone	g/m ³	< 0.00004	0.7	No
Prometryn	g/m ³	< 0.00002	-	-
Propachlor	g/m ³	< 0.00004	-	-
Propanil	g/m ³	< 0.0002	-	-
Propazine	g/m ³	< 0.00002	0.07	No
Propiconazole	g/m ³	< 0.00004	-	-
Pyriproxyfen	g/m ³	< 0.00004	0.4	No
Quizalofop-ethyl	g/m ³	< 0.00004	-	-
Simazine	g/m ³	< 0.00004	0.002	No
Simetryn	g/m ³	< 0.00004	-	-
Sulfentrazone	g/m ³	< 0.0002	-	-
TCMTB [2-(thiocyanomethylthio)benzothiazole, Busan]	g/m ³	< 0.00008	-	-
Tebuconazole	g/m ³	< 0.00004	-	-
Terbacil	g/m ³	< 0.00004	0.04	No
Terbumeton	g/m ³	< 0.00004	-	-
Terbuthylazine	g/m ³	< 0.00002	0.008	No
Terbuthylazine-desethyl	g/m ³	< 0.00004	-	-
Terbutryn	g/m ³	< 0.00004	-	-
Thiabendazole	g/m ³	< 0.0002	0.4	No
Thiobencarb	g/m ³	< 0.00004	-	-
Tolylfluanid	g/m ³	< 0.00002	-	-
Triazophos	g/m ³	< 0.00004	-	-
Trifluralin	g/m ³	< 0.00004	0.03	No
Vinclozolin	g/m ³	< 0.00004	-	-
Heavy metals, totals, trace As,Cd,Cr,Cu,Ni,Pb,Zn				
Total Arsenic	g/m ³	< 0.0011	0.01	No
Total Cadmium	g/m ³	< 0.000053	0.004	No
Total Chromium	g/m ³	< 0.00053	0.05	No
Total Copper	g/m ³	0.00112	2	No
Total Lead	g/m ³	< 0.00011	0.01	No
Total Nickel	g/m ³	< 0.00053	0.08	No
Total Zinc	g/m ³	0.0082	-	-
Acid Herbicides Screen in Water by LCMSMS				
Acifluorfen	g/m ³	< 0.0004	-	-
Bentazone	g/m ³	< 0.0004	-	-
Bromoxynil	g/m ³	< 0.0004	-	-
Clopyralid	g/m ³	< 0.0004	-	-
2,4-Dichlorophenoxyacetic acid (24D)	g/m ³	< 0.0004	0.04	No
2,4-Dichlorophenoxybutyric acid (24DB)	g/m ³	< 0.0006	0.1	No
Dicamba	g/m ³	< 0.0006	-	-
Dichlorprop	g/m ³	< 0.0004	0.1	No
Fluazifop	g/m ³	< 0.0004	-	-
Fluroxypyr	g/m ³	< 0.0004	-	-
Haloxypop	g/m ³	< 0.0004	-	-
2-methyl-4-chlorophenoxyacetic acid (MCPA)	g/m ³	< 0.0004	0.002	No
2-methyl-4-chlorophenoxybutanoic acid (MCPB)	g/m ³	< 0.0004	-	-
Mecoprop	g/m ³	< 0.0004	0.01	No

Sample Type: Aqueous				
Sample Name:	S00201 - Te Moana Hei Hei 19-Sep-2022 12:05 pm		Maximum Acceptable Value	Outside Limit
Lab Number:	3079482.3			
Acid Herbicides Screen in Water by LCMSMS				
Oryzalin	g/m ³	< 0.0006	0.4	No
2,3,4,6-Tetrachlorophenol (TCP)	g/m ³	< 0.0004	-	-
2,4,5-Trichlorophenoxypropionic acid (245TP, Fenoprop, Silvex)	g/m ³	< 0.0004	0.01	No
2,4,5-Trichlorophenoxyacetic acid (245T)	g/m ³	< 0.0004	0.01	No
Pentachlorophenol (PCP)	g/m ³	< 0.0004	0.009	No
Picloram	g/m ³	< 0.0004	0.2	No
Quizalofop	g/m ³	< 0.0004	-	-
Triclopyr	g/m ³	< 0.0004	0.1	No
Multiresidue Extra Pesticides Trace in Water samples by Liq/liq				
Bendiocarb	g/m ³	< 0.00004	-	-
Benodanil	g/m ³	< 0.00008	-	-
Bifenthrin	g/m ³	< 0.00002	-	-
Bromophos-ethyl	g/m ³	< 0.00004	-	-
Bupirimate	g/m ³	< 0.00004	-	-
Buprofezin	g/m ³	< 0.00004	-	-
Captafol	g/m ³	< 0.0002	-	-
Carbofenthiol	g/m ³	< 0.00004	-	-
Chlorfenvinphos	g/m ³	< 0.00004	-	-
Chlorpropham	g/m ³	< 0.00008	-	-
Chlozolate	g/m ³	< 0.00004	-	-
Coumaphos	g/m ³	< 0.00008	-	-
Cyproconazole	g/m ³	< 0.00004	-	-
Cyprodinil	g/m ³	< 0.00004	-	-
Dichlobenil	g/m ³	< 0.00004	-	-
Dichlofenthion	g/m ³	< 0.00004	-	-
Dicofol	g/m ³	< 0.0002	-	-
Dicrotophos	g/m ³	< 0.00004	-	-
Dinocap	g/m ³	< 0.0003	-	-
EPN	g/m ³	< 0.00004	-	-
Ethion	g/m ³	< 0.00004	-	-
Etrimfos	g/m ³	< 0.00004	-	-
Famphur	g/m ³	< 0.00004	-	-
Fenarimol	g/m ³	< 0.00004	-	-
Fenitrothion	g/m ³	< 0.00004	-	-
Fenpropathrin	g/m ³	< 0.00004	-	-
Fensulfotihion	g/m ³	< 0.00004	-	-
Fenvalerate (including Esfenvalerate)	g/m ³	< 0.00004	-	-
Folpet	g/m ³	< 0.00008	-	-
Hexythiazox	g/m ³	< 0.0002	-	-
Imazalil	g/m ³	< 0.0002	-	-
Indoxacarb	g/m ³	< 0.00004	-	-
Iodofenphos	g/m ³	< 0.00004	-	-
Isazophos	g/m ³	< 0.00004	-	-
Isofenphos	g/m ³	< 0.00002	-	-
Leptophos	g/m ³	< 0.00004	-	-
Methacrifos	g/m ³	< 0.00004	-	-
Methidathion	g/m ³	< 0.00004	-	-
Methiocarb	g/m ³	< 0.00004	-	-
Mevinphos	g/m ³	< 0.00008	-	-
Nitrofen	g/m ³	< 0.00008	-	-
Nitrothal-isopropyl	g/m ³	< 0.00004	-	-
Oxychloridane	g/m ³	< 0.00002	-	-
Penconazole	g/m ³	< 0.00004	-	-
Phosmet	g/m ³	< 0.00004	-	-

Sample Type: Aqueous					
Sample Name:		S00201 - Te Moana Hei Hei 19-Sep-2022 12:05 pm		Maximum Acceptable Value	Outside Limit
Lab Number:		3079482.3			
Multiresidue Extra Pesticides Trace in Water samples by Liq/liq					
Phosphamidon	g/m ³	< 0.00004	-	-	
Propetamphos	g/m ³	< 0.00006	-	-	
Propham	g/m ³	< 0.00004	-	-	
Prothiofos	g/m ³	< 0.00004	-	-	
Pyrazophos	g/m ³	< 0.00004	-	-	
Pyrifenox	g/m ³	< 0.00004	-	-	
Pyrimethanil	g/m ³	< 0.00004	-	-	
Quintozene	g/m ³	< 0.00008	-	-	
Sulfotep	g/m ³	< 0.00004	-	-	
Tebufenpyrad	g/m ³	< 0.00002	-	-	
Tetrachlorvinphos	g/m ³	< 0.00004	-	-	
Triadimefon	g/m ³	< 0.00004	-	-	
Organochlorine Pesticides Trace in Water, By Liq/Liq					
Aldrin	g/m ³	< 0.000005	-	-	
alpha-BHC	g/m ³	< 0.000010	-	-	
beta-BHC	g/m ³	< 0.000010	-	-	
delta-BHC	g/m ³	< 0.000010	-	-	
gamma-BHC (Lindane)	g/m ³	< 0.000010	0.002	No	
cis-Chlordane	g/m ³	< 0.000005	-	-	
trans-Chlordane	g/m ³	< 0.000005	-	-	
2,4'-DDD	g/m ³	< 0.000010	-	-	
4,4'-DDD	g/m ³	< 0.000010	-	-	
2,4'-DDE	g/m ³	< 0.000010	-	-	
4,4'-DDE	g/m ³	< 0.000010	-	-	
2,4'-DDT	g/m ³	< 0.000010	-	-	
4,4'-DDT	g/m ³	< 0.000010	-	-	
Total DDT Isomers	g/m ³	< 0.00006	0.001	No	
Dieldrin	g/m ³	< 0.000005	-	-	
Endosulfan I	g/m ³	< 0.000010	-	-	
Endosulfan II	g/m ³	< 0.000010	-	-	
Endosulfan sulphate	g/m ³	< 0.000010	-	-	
Endrin	g/m ³	< 0.000005	0.001	No	
Endrin aldehyde	g/m ³	< 0.000005	-	-	
Endrin ketone	g/m ³	< 0.000010	-	-	
Heptachlor	g/m ³	< 0.000005	-	-	
Heptachlor epoxide	g/m ³	< 0.000005	-	-	
Hexachlorobenzene	g/m ³	< 0.00004	-	-	
Methoxychlor	g/m ³	< 0.000005	0.02	No	
BTEX in VOC Water by Headspace GC-MS					
Benzene	g/m ³	< 0.0003	0.01	No	
Ethylbenzene	g/m ³	< 0.0005	0.3	No	
Toluene	g/m ³	< 0.0003	0.8	No	
m&p-Xylene	g/m ³	< 0.0005	-	-	
o-Xylene	g/m ³	< 0.0003	-	-	
Halogenated Aliphatics in VOC Water by Headspace GC-MS					
Bromomethane (Methyl Bromide)	g/m ³	< 0.0003	-	-	
Carbon tetrachloride	g/m ³	< 0.0003	0.005	No	
Chloroethane	g/m ³	< 0.0003	-	-	
Chloromethane	g/m ³	< 0.0003	-	-	
1,2-Dibromo-3-chloropropane	g/m ³	< 0.0003	0.001	No	
1,2-Dibromoethane (ethylene dibromide, EDB)	g/m ³	< 0.0003	0.0004	No	
Dibromomethane	g/m ³	< 0.0003	-	-	
Dichlorodifluoromethane	g/m ³	< 0.0003	-	-	
1,1-Dichloroethane	g/m ³	< 0.0003	-	-	

Sample Type: Aqueous					
Sample Name:		S00201 - Te Moana Hei Hei 19-Sep-2022 12:05 pm		Maximum Acceptable Value	Outside Limit
Lab Number:		3079482.3			
Halogenated Aliphatics in VOC Water by Headspace GC-MS					
1,2-Dichloroethane	g/m ³	< 0.0003	0.03	No	
1,1-Dichloroethene	g/m ³	< 0.0003	-	-	
cis-1,2-Dichloroethene	g/m ³	< 0.0003	-	-	
trans-1,2-Dichloroethene	g/m ³	< 0.0003	-	-	
Dichloromethane (methylene chloride)	g/m ³	< 0.010	0.02	No	
1,2-Dichloropropane	g/m ³	< 0.0003	0.05	No	
1,3-Dichloropropane	g/m ³	< 0.0003	-	-	
1,1-Dichloropropene	g/m ³	< 0.0003	-	-	
cis-1,3-Dichloropropene	g/m ³	< 0.0005	-	-	
trans-1,3-Dichloropropene	g/m ³	< 0.0005	-	-	
Hexachlorobutadiene	g/m ³	< 0.0003	0.0007	No	
1,1,1,2-Tetrachloroethane	g/m ³	< 0.0003	-	-	
1,1,2,2-Tetrachloroethane	g/m ³	< 0.0003	-	-	
Tetrachloroethene (tetrachloroethylene)	g/m ³	< 0.0003	0.05	No	
1,1,1-Trichloroethane	g/m ³	< 0.0003	-	-	
1,1,2-Trichloroethane	g/m ³	< 0.0003	-	-	
Trichloroethene (trichloroethylene)	g/m ³	< 0.0003	0.02	No	
Trichlorofluoromethane	g/m ³	< 0.0003	-	-	
1,2,3-Trichloropropane	g/m ³	< 0.0003	-	-	
1,1,2-Trichlorotrifluoroethane (Freon 113)	g/m ³	< 0.0003	-	-	
Vinyl chloride	g/m ³	< 0.0003	0.0003	No	
Halogenated Aromatics in VOC Water by Headspace GC-MS					
Chlorobenzene (monochlorobenzene)	g/m ³	< 0.0003	-	-	
1,2-Dichlorobenzene	g/m ³	< 0.0003	1.5	No	
1,3-Dichlorobenzene	g/m ³	< 0.0003	-	-	
1,4-Dichlorobenzene	g/m ³	< 0.0003	0.4	No	
1,2,3-Trichlorobenzene	g/m ³	< 0.0003	-	-	
1,2,4-Trichlorobenzene	g/m ³	< 0.0003	-	-	
1,3,5-Trichlorobenzene	g/m ³	< 0.0003	-	-	
Bromobenzene	g/m ³	< 0.0003	-	-	
2-Chlorotoluene	g/m ³	< 0.0003	-	-	
4-Chlorotoluene	g/m ³	< 0.0003	-	-	
Monoaromatic Hydrocarbons in VOC Water by Headspace GC-MS					
n-Butylbenzene	g/m ³	< 0.0005	-	-	
tert-Butylbenzene	g/m ³	< 0.0003	-	-	
4-Isopropyltoluene (p-Cymene)	g/m ³	< 0.0005	-	-	
Isopropylbenzene (Cumene)	g/m ³	< 0.0003	-	-	
n-Propylbenzene	g/m ³	< 0.0005	-	-	
sec-Butylbenzene	g/m ³	< 0.0003	-	-	
Styrene	g/m ³	< 0.0005	0.03	No	
1,2,4-Trimethylbenzene	g/m ³	< 0.0003	-	-	
1,3,5-Trimethylbenzene	g/m ³	< 0.0003	-	-	
Ketones in VOC Water by Headspace GC-MS					
Acetone	g/m ³	< 0.05	-	-	
2-Butanone (MEK)	g/m ³	< 0.05	-	-	
Methyl tert-butylether (MTBE)	g/m ³	< 0.0003	-	-	
4-Methylpentan-2-one (MIBK)	g/m ³	< 0.010	-	-	
Trihalomethanes in VOC Water by Headspace GC-MS					
Bromodichloromethane	g/m ³	< 0.0003	0.06	No	
Bromoform (tribromomethane)	g/m ³	< 0.0003	0.1	No	
Chloroform (Trichloromethane)	g/m ³	< 0.0003	0.4	No	
Dibromochloromethane	g/m ³	< 0.0003	0.15	No	
Other VOC in Water by Headspace GC-MS					
Carbon disulphide	g/m ³	< 0.0005	-	-	

Sample Type: Aqueous			
Sample Name:	S00201 - Te Moana Hei Hei 19-Sep-2022 12:05 pm	Maximum Acceptable Value	Outside Limit
Lab Number:	3079482.3		
Other VOC in Water by Headspace GC-MS			
Naphthalene	g/m ³ < 0.0005	-	-

The Maximum Acceptable Values (MAV) are taken from the publication 'Drinking-water Standards for New Zealand 2005 (Revised 2018)', Ministry of Health. Copies of this publication are available from:
<https://www.health.govt.nz/publication/drinking-water-standards-new-zealand-2005-revised-2018>

The Maximum Acceptable Values (MAVs) have been defined by the Ministry of Health for parameters of health significance and should not be exceeded. The 'Drinking-water Standards for New Zealand' also contains Guideline Values which are the limits for aesthetic determinands that, if exceeded, may render the water unattractive to consumers. This report compares the results obtained with the Maximum Acceptable Values only.

Under Section 73 (2) of the Water Services Act (2021), the laboratory is required to report the results of any analysis or test carried out (for the purposes of testing for compliance with the Drinking-water Standards for New Zealand 2005 (Revised 2018)) that indicates any non-compliance (transgression) with the Maximum Acceptable Values (MAVs) to Taumata Arowai, the water services regulator for Aotearoa.

Note that the units g/m³ are the same as mg/L and ppm.

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 simple 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. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request. Unless otherwise indicated, analyses were performed at Hill Laboratories, 28 Duke Street, Frankton, Hamilton 3204.

Sample Type: Aqueous			
Test	Method Description	Default Detection Limit	Sample No
Individual Tests			
Filtration, Unpreserved	Sample filtration through 0.45µm membrane filter. Performed at Hill Laboratories - Chemistry; 101c Waterloo Road, Christchurch.	-	1-3
Total Digestion	Nitric acid digestion. APHA 3030 E (modified) 23 rd ed. 2017.	-	1-3
Total anions for anion/cation balance check	Calculation: sum of anions as mEq/L calculated from Alkalinity (bicarbonate), Chloride and Sulphate. Nitrate-N, Nitrite-N. Fluoride, Dissolved Reactive Phosphorus and Cyanide also included in calculation if available. APHA 1030 E 23 rd ed. 2017.	0.07 meq/L	1-3
Total cations for anion/cation balance check	Sum of cations as mEq/L calculated from Sodium, Potassium, Calcium and Magnesium. Iron, Manganese, Aluminium, Zinc, Copper, Lithium, Total Ammoniacal-N and pH (H ⁺) also included in calculation if available. APHA 1030 E 23 rd ed. 2017.	0.05 meq/L	1-3
% Difference in Ion Balance	Calculation from Sum of Anions and Cations. Please note: The result reported for the '% Difference in Ion Balance' is an absolute difference between the 'Sum of Anions' and 'Sum of Cations' based on the formula taken from APHA. This does not indicate whether the 'Sum of Anions' or the 'Sum of Cations' produced a higher value. APHA 1030 E 23 rd ed. 2017.	0.10 %	1-3
pH	pH meter. Analysed at Hill Laboratories - Chemistry; 101c Waterloo Road, Christchurch. APHA 4500-H ⁺ B 23 rd ed. 2017. Note: It is not possible to achieve the APHA Maximum Storage Recommendation for this test (15 min) when samples are analysed upon receipt at the laboratory, and not in the field. Samples and Standards are analysed at an equivalent laboratory temperature (typically 18 to 22 °C). Temperature compensation is used.	0.1 pH Units	1-3
Total Alkalinity	Titration to pH 4.5 (M-alkalinity), autotitrator. Analysed at Hill Laboratories - Chemistry; 101c Waterloo Road, Christchurch. APHA 2320 B (modified for Alkalinity <20) 23 rd ed. 2017.	1.0 g/m ³ as CaCO ₃	1-3
Bicarbonate	Calculation: from alkalinity and pH, valid where TDS is not >500 mg/L and alkalinity is almost entirely due to hydroxides, carbonates or bicarbonates. APHA 4500-CO ₂ D 23 rd ed. 2017.	1.0 g/m ³ at 25°C	1-3
Total Hardness	Calculation from Calcium and Magnesium. APHA 2340 B 23 rd ed. 2017.	1.0 g/m ³ as CaCO ₃	1-3
Electrical Conductivity (EC)	Conductivity meter, 25°C. Analysed at Hill Laboratories - Chemistry; 101c Waterloo Road, Christchurch. APHA 2510 B 23 rd ed. 2017.	0.1 mS/m	1-3
Filtration for dissolved metals analysis	Sample filtration through 0.45µm membrane filter and preservation with nitric acid. APHA 3030 B 23 rd ed. 2017.	-	1-3
Total Barium	Nitric acid digestion, ICP-MS, trace level. APHA 3125 B 23 rd ed. 2017 / US EPA 200.8.	0.0053 g/m ³	1-3

Sample Type: Aqueous			
Test	Method Description	Default Detection Limit	Sample No
Dissolved Calcium	Filtered sample, ICP-MS, trace level. APHA 3125 B 23 rd ed. 2017.	0.05 g/m ³	1-3
Dissolved Iron	Filtered sample, ICP-MS, trace level. APHA 3125 B 23 rd ed. 2017.	0.02 g/m ³	1-3
Dissolved Magnesium	Filtered sample, ICP-MS, trace level. APHA 3125 B 23 rd ed. 2017.	0.02 g/m ³	1-3
Dissolved Manganese	Filtered sample, ICP-MS, trace level. APHA 3125 B 23 rd ed. 2017.	0.0005 g/m ³	1-3
Total Mercury	Bromine Oxidation followed by Atomic Fluorescence. US EPA Method 245.7, Feb 2005.	0.00008 g/m ³	1-3
Dissolved Potassium	Filtered sample, ICP-MS, trace level. APHA 3125 B 23 rd ed. 2017.	0.05 g/m ³	1-3
Total Selenium	Nitric acid digestion, ICP-MS, trace level. APHA 3125 B 23 rd ed. 2017 / US EPA 200.8.	0.0011 g/m ³	1-3
Dissolved Sodium	Filtered sample, ICP-MS, trace level. APHA 3125 B 23 rd ed. 2017.	0.02 g/m ³	1-3
Total Cyanide Trace	On-line distillation, colorimetry, trace level. ISO 14403:2012(E) (modified).	0.002 g/m ³	1-3
Chloride	Filtered sample from Christchurch. Ion Chromatography. APHA 4110 B (modified) 23 rd ed. 2017.	0.5 g/m ³	1-3
Total Ammoniacal-N	Filtered Sample from Christchurch. Phenol/hypochlorite colourimetry. Flow injection analyser. (NH ₄ -N = NH ₄ ⁺ -N + NH ₃ -N). APHA 4500-NH ₃ H (modified) 23 rd ed. 2017.	0.010 g/m ³	1-3
Nitrate-N	Filtered sample from Christchurch. Ion Chromatography. APHA 4110 B (modified) 23 rd ed. 2017.	0.05 g/m ³	1-3
Nitrate	Calculation from Nitrate-N.	0.005 g/m ³	1-3
Reactive Silica	Filtered sample. Heteropoly blue colorimetry. Flow Injection Analyser APHA 4500-SiO ₂ F (modified) 23 rd ed. 2017.	0.10 g/m ³ as SiO ₂	1-3
Sulphate	Filtered sample from Christchurch. Ion Chromatography. APHA 4110 B (modified) 23 rd ed. 2017.	0.5 g/m ³	1-3
Heavy metals, totals, trace As,Cd,Cr,Cu,Ni,Pb,Zn	Nitric acid digestion, ICP-MS, trace level. APHA 3125 B 23 rd ed. 2017 / US EPA 200.8.	0.000053 - 0.0011 g/m ³	1-3
Acid Herbicides Screen in Water by LCMSMS	LC-MS/MS analysis. In-house.	0.0003 - 0.0006 g/m ³	1-3
Multiresidue Pesticides Trace in Water by Liq/liq GCMS	Liquid / liquid extraction, GC-ECD and GC-MS analysis. In-house based on US EPA 8081 and US EPA 8270.	-	1-3
Volatile Organic Compounds Trace in Water by Headspace GC-MS	Headspace GC-MS analysis. In-house based on US EPA 8260 and 5021.	0.0003 - 0.05 g/m ³	1-3
Multiresidue Extra Pesticides Trace in Water samples by Liq/liq			
Bendiocarb	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.00004 g/m ³	1-3
Benodanil	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.00008 g/m ³	1-3
Bifenthrin	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.00002 g/m ³	1-3
Bromophos-ethyl	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.00004 g/m ³	1-3
Bupirimate	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.00004 g/m ³	1-3
Buprofezin	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.00004 g/m ³	1-3
Captafol	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.0002 g/m ³	1-3
Chlorfenvinphos	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.00004 g/m ³	1-3
Chlorpropham	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.00008 g/m ³	1-3
Chlozolinate	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.00004 g/m ³	1-3
Coumaphos	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.00008 g/m ³	1-3
Cyproconazole	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.00004 g/m ³	1-3
Cyprodinil	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.00004 g/m ³	1-3
Dichlobenil	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.00004 g/m ³	1-3

Sample Type: Aqueous			
Test	Method Description	Default Detection Limit	Sample No
Dichlofenthion	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.00004 g/m ³	1-3
Dicofol	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.0002 g/m ³	1-3
Dicrotophos	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.00004 g/m ³	1-3
Dinocap	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.0003 g/m ³	1-3
EPN	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.00004 g/m ³	1-3
Ethion	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.00004 g/m ³	1-3
Etrimfos	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.00004 g/m ³	1-3
Famphur	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.00004 g/m ³	1-3
Fenarimol	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.00004 g/m ³	1-3
Fenitrothion	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.00004 g/m ³	1-3
Fenpropathrin	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.00004 g/m ³	1-3
Fensulfothion	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.00004 g/m ³	1-3
Fenvalerate (including Esfenvalerate)	Liquid / liquid extraction, GC-MS analysis.	0.00004 g/m ³	1-3
Folpet	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.00008 g/m ³	1-3
Hexythiazox	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.0002 g/m ³	1-3
Imazalil	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.0002 g/m ³	1-3
Indoxacarb	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.00004 g/m ³	1-3
Iodofenphos	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.00004 g/m ³	1-3
Isazophos	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.00004 g/m ³	1-3
Isofenphos	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.00002 g/m ³	1-3
Leptophos	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.00004 g/m ³	1-3
Methacrifos	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.00004 g/m ³	1-3
Methidathion	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.00004 g/m ³	1-3
Methiocarb	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.00004 g/m ³	1-3
Mevinphos	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.00008 g/m ³	1-3
Nitrofen	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.00008 g/m ³	1-3
Nitrothal-isopropyl	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.00004 g/m ³	1-3
Oxychlorane	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.00002 g/m ³	1-3
Penconazole	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.00004 g/m ³	1-3
Phosmet	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.00004 g/m ³	1-3
Phosphamidon	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.00004 g/m ³	1-3
Propetamphos	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.00006 g/m ³	1-3
Propham	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.00004 g/m ³	1-3
Prothiofos	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.00004 g/m ³	1-3

Sample Type: Aqueous			
Test	Method Description	Default Detection Limit	Sample No
Pyrazophos	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.00004 g/m ³	1-3
PyrifenoX	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.00004 g/m ³	1-3
Pyrimethanil	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.00004 g/m ³	1-3
Quintozene	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.00008 g/m ³	1-3
Sulfotep	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.00004 g/m ³	1-3
Tebufenpyrad	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.00002 g/m ³	1-3
Tetrachlorvinphos	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.00004 g/m ³	1-3
Triadimefon	Liquid / liquid extraction, GC-MS analysis. In-house based on US EPA 8270.	0.00004 g/m ³	1-3

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

Testing was completed between 21-Sep-2022 and 03-Oct-2022. For completion dates of individual analyses please contact the laboratory.

Samples are held at the laboratory after reporting for a length of time based on the stability of the samples and analytes being tested (considering any preservation used), and the storage space available. Once the storage period is completed, the samples are discarded unless otherwise agreed with the customer. Extended storage times may incur additional charges.

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