



Analytical Report

Envireau Water
 Cedars Farm Barn
 Market Street
 Draycott
 DE72 3NB

Report No: 13-32099/2
 Date Received: 21/05/2013
 Date Tested: 22/05/2013 to 26/07/2013
 Date Issued: 31/07/2013
 Page: 1 of 15

For the attention of: Penny Jenkinson

By email

1 water sample received from Envireau Water (O/N: EW/PJ/1484/94) in a 1 litre amber glass bottle was analysed as shown below. Analytical methods employed are available on request.

| Laboratory reference | | | 227072 2/IW |
|----------------------|--------------|------|----------------|
| 1234678-HpCDD* | [35822-46-9] | ng/l | < 0.0050 |
| 1234678-HpCDF* | [67562-39-4] | ng/l | < 0.0050 |
| 123478-HxCDD* | [39227-28-6] | ng/l | < 0.0050 |
| 123478-HxCDF* | [70648-26-9] | ng/l | < 0.0050 |
| 1234789-HpCDF* | [55673-89-7] | ng/l | < 0.0050 |
| 123678-HxCDD* | [57653-85-7] | ng/l | < 0.0050 |
| 123678-HxCDF* | [57117-44-9] | ng/l | < 0.0050 |
| 12378-PCDD* | [40321-76-4] | ng/l | < 0.0050 |
| 12378-PCDF* | [57117-41-6] | ng/l | < 0.0050 |
| 123789-HxCDD* | [19408-74-3] | ng/l | < 0.0050 |
| 123789-HxCDF* | [72918-21-9] | ng/l | < 0.0050 |
| 234678-HxCDF* | [60851-34-5] | ng/l | < 0.0050 |
| 23478-PCDF* | [57117-31-4] | ng/l | < 0.0050 |
| 2378-TCDD* | [1746-01-6] | ng/l | < 0.0050 |
| 2378-TCDF* | [51207-31-9] | ng/l | < 0.0050 |
| OCDD* | [3268-87-9] | ng/l | < 0.0050 |
| OCDF* | [39001-02-0] | ng/l | < 0.0050 |
| TEQ (Nato) at LOD* | n/a | ng/l | 0.0154 |
| TEQ (Nato) at zero* | n/a | ng/l | < 0.0002 |
| aluminium* | [7429-90-5] | ug/l | 63.0 |
| calcium* | [7440-70-2] | mg/l | 6700 |
| copper* | [7440-50-8] | ug/l | < 2.0 |
| iron* | [7439-89-6] | mg/l | 0.32 |
| magnesium* | [7439-95-4] | mg/l | 620 |
| manganese* | [7439-96-5] | ug/l | 220 |
| potassium* | [7440-09-7] | mg/l | 5300 |

This method is UKAS accredited. Opinions and interpretations are not accredited.



1663

| Laboratory reference | | | 227072 2/IW |
|------------------------------------|--------------|----------------------|----------------|
| sodium* | [7440-23-5] | mg/l | 84000 |
| zinc* | [7440-66-6] | ug/l | 11.0 |
| diesel range organics* | n/a | ug/l | S/C |
| mineral oils* | n/a | ug/l | S/C |
| petrol range organics* | n/a | ug/l | S/C |
| 2,4,5-T | [93-76-5] | ug/l | < 0.20 |
| 2,4-D | [94-75-7] | ug/l | < 0.20 |
| 2,4-DB | [94-82-6] | ug/l | < 0.20 |
| bentazone | [25057-89-0] | ug/l | < 0.02 |
| bromoxynil | [1689-84-5] | ug/l | < 0.20 |
| dalapon | [75-99-0] | ug/l | < 0.02 |
| dicamba | [1918-00-9] | ug/l | < 0.02 |
| dichlorprop (2,4-DP) | [120-36-5] | ug/l | < 0.20 |
| fluroxypyr | [69377-81-7] | ug/l | < 0.20 |
| ioxynil | [1689-83-4] | ug/l | < 0.02 |
| MCPA | [94-74-6] | ug/l | < 0.20 |
| MCPB | [94-81-5] | ug/l | < 0.02 |
| pentachlorophenol | [87-86-5] | ug/l | < 0.20 |
| benazolin | [3813-05-6] | ug/l | < 0.20 |
| clopyralid | [1702-17-6] | ug/l | < 0.20 |
| flamprop-isopropyl | [52756-22-6] | ug/l | < 0.20 |
| triclopyr | [55335-06-3] | ug/l | < 0.20 |
| propanil | [709-98-8] | ug/l | < 0.02 |
| formaldehyde | [50-00-0] | ug/l | < 50 |
| alkalinity (as CaCO ₃) | n/a | mg/l | 142 |
| tributylphosphate | [126-73-8] | ug/l | < 0.20 |
| amitrole | [61-82-5] | ug/l | < 0.20 |
| ammonia | [7664-41-7] | ug/l NH ₃ | 46900 |
| chloride | [16887-00-6] | mg/l | 170000 |
| fluoride | [16984-48-8] | mg/l | < 100.0 |
| nitrate | [14797-55-8] | mg/l | < 1000.0 |
| nitrite | [14797-65-0] | mg/l | < 1000.0 |
| phosphate | [14265-44-2] | mg/l | < 100.0 |
| sulfate | [14808-79-8] | mg/l | 1050 |
| asulam | [3337-71-1] | ug/l | < 1.00 |
| 2-chloro-p-toluidine | [615-65-6] | ug/l | < 0.20 |

Report No: 13-32099/2

Date Received: 21/05/2013

Date Tested: 22/05/2013 to 26/07/2013

Date Issued: 31/07/2013

Page: 3 of 15

| Laboratory reference | 227072 2/W |
|--|---------------|
| 3-chloro-p-toluidine [95-74-9] ug/l | < 0.20 |
| 4-chloro-m-toluidine [7149-75-9] ug/l | < 0.20 |
| 4-chloro-o-toluidine [95-69-2] ug/l | < 0.20 |
| 6-chloro-m-toluidine [915-81-8] ug/l | < 0.20 |
| 3,3'-dichlorobenzidine [91-94-1] ug/l | < 0.20 |
| bromacil [314-40-9] ug/l | < 0.20 |
| carbendazim [10605-21-7] ug/l | < 0.10 |
| imidacloprid [138261-41-3] ug/l | < 0.20 |
| benzalkonium chloride [8001-54-5] ug/l | < 100.0 |
| chlormequat [999-81-5] ug/l | < 1.00 |
| chlorine (total) [7782-50-5] mg/l | < 0.10 |
| 2-chloroaniline [95-51-2] ug/l | < 0.20 |
| 3,4-dichloroaniline [95-76-1] ug/l | < 0.20 |
| 3-chloroaniline [108-42-9] ug/l | < 0.20 |
| 4-chloroaniline [106-47-8] ug/l | < 0.20 |
| 1,2-dichloro-3-nitrobenzn [3209-22-1] ug/l | < 0.20 |
| 1,4-dichloro-2-nitrobenzn [89-61-2] ug/l | < 0.20 |
| 2-chloronitrobenzene [88-73-3] ug/l | < 0.20 |
| 3,4-dichloronitrobenzene [99-54-7] ug/l | < 0.20 |
| 3-chloronitrobenzene [121-73-3] ug/l | < 0.20 |
| 4-chloronitrobenzene [100-00-5] ug/l | < 0.20 |
| chloro-2,4-dinitrobenzene [97-00-7] ug/l | < 0.20 |
| 2-chloro-4-nitrotoluene [121-86-8] ug/l | < 0.20 |
| conductivity n/a uS/cm | 208000 |
| carbetamide [16118-49-3] ug/l | < 0.1 |
| chlorbufam [1967-16-4] ug/l | < 1.0 |
| chlorpropham [101-21-3] ug/l | < 0.2 |
| IPBC [55406-53-6] ug/l | < 1.0 |
| phenmedipham [13684-63-4] ug/l | < 0.1 |
| pirimicarb [23103-98-2] ug/l | < 0.1 |
| propham [122-42-9] ug/l | < 1.0 |
| (2-naphthoxy)acetic acid [120-23-0] ug/l | < 0.20 |
| 1-naphthylacetic acid [86-87-3] ug/l | < 0.20 |
| 4-indole-3-butyric acid [133-32-4] ug/l | < 0.20 |
| total gibberellins & acid n/a ug/l as GA | U/S |
| carbon disulfide [75-15-0] ug/l | < 10 |

| Laboratory reference | 227072 2/W |
|---|---------------|
| cyanuric chloride [108-77-0] ug/l | < 1.00 |
| 1,3-dichloro-2-propanol [96-23-1] mg/l | < 10.0 |
| dichlorophen [97-23-4] ug/l | < 0.20 |
| dithianon [3347-22-6] mg/l | < 0.20 |
| dikegulac sodium [52508-35-7] ug/l | U/S |
| drazoxolon [5707-69-7] mg/l | < 0.20 |
| cationic detergents n/a mg/l | < 1.0 |
| carbon disulfide [75-15-0] ug/l CS2 | < 1.0 |
| dithiocarbamates (as CS2) n/a ug/l CS2 | < 1.0 |
| thiram (as CS2) [137-26-8] ug/l CS2 | < 1.0 |
| ziram [137-30-4] ug/l CS2 | < 1.0 |
| epichlorohydrin [106-89-8] mg/l | < 0.1 |
| ethephon [16672-87-0] mg/l | < 0.2 |
| flumethrin [69770-45-2] ug/l | < 0.20 |
| fluazinam [79622-59-6] ug/l | < 0.2 |
| fomesafen [72178-02-0] ug/l | U/S |
| benomyl [17804-35-2] ug/l | < 0.2 |
| oxycarboxin [5259-88-1] ug/l | < 0.2 |
| thiophanate-methyl [23564-05-8] ug/l | < 1.0 |
| propamocarb [24579-73-5] ug/l | < 0.50 |
| furalaxyl [57646-30-7] ug/l | < 0.20 |
| 1,6-dichlorohexane [2163-00-0] ug/l | < 0.1 |
| 1-chlorohexane [544-10-5] ug/l | < 0.1 |
| 2,3-dichloropropene [78-88-6] ug/l | < 0.2 |
| 2-chloroethanol [107-07-3] ug/l | < 0.1 |
| 3-chloroprene [107-05-1] ug/l | < 0.1 |
| 3-chlorotoluene [108-41-8] ug/l | < 0.1 |
| benzyl chloride [100-44-7] ug/l | < 0.1 |
| bis(2-chloroisopropyl)eth [108-60-1] ug/l | < 0.1 |
| chloroprene [126-99-8] ug/l | < 0.1 |
| ethyl dichloroarsine [598-14-1] ug/l | < 0.1 |
| freon TF (113) [76-13-1] ug/l | < 10.0 |
| hexachloroethane [67-72-1] ug/l | < 0.1 |
| pentachloroethane [76-01-7] ug/l | < 0.1 |
| trichloroethanal [75-87-6] ug/l | < 0.1 |
| trichloroethane [25323-89-1] ug/l | < 0.1 |

| Laboratory reference | 227072 2/W |
|---|---------------|
| butyl glycol [111-76-2] mg/l | < 10.0 |
| ethylene glycol [107-21-1] mg/l | < 10.0 |
| glyphosate [1071-83-6] ug/l | < 0.20 |
| chloroacetic acid [79-11-8] ug/l | < 1.00 |
| trichloroacetic acid [76-03-9] ug/l | < 1.00 |
| alloxydim [55635-13-7] ug/l | < 0.2 |
| oryzalin [19044-88-3] ug/l | < 0.2 |
| sethoxydim [74051-80-2] ug/l | < 0.2 |
| rotenone [83-79-4] ug/l | < 0.2 |
| iodine [7553-56-2] mg/l | < 0.05 |
| iprodione [36734-19-7] ug/l | < 0.20 |
| chloromethylisothiazolone [26172-55-4] ug/l | < 10000.0 |
| octylisothiazolone [26530-20-1] ug/l | < 100.0 |
| dodine [2439-10-3] ug/l | < 1.00 |
| guatazine [108173-90-6] ug/l | < 1.00 |
| malachite green [2437-29-8] ug/l | < 10.0 |
| maleic hydrazide [123-33-1] mg/l | < 0.50 |
| anionic detergents n/a mg/l | 0.2 |
| mercury [7439-97-6] ug/l | < 0.10 |
| cadmium [7440-43-9] ug/l | < 0.10 |
| metham sodium (as CS2) [137-42-8] ug/l CS2 | < 50.00 |
| metaldehyde [9002-91-9] ug/l | < 0.20 |
| aldicarb (LC) [116-06-3] ug/l | < 0.50 |
| bendiocarb (LC) [22781-23-3] ug/l | < 0.50 |
| carbaryl (LC) [63-25-2] ug/l | < 0.50 |
| carbofuran (LC) [1563-66-2] ug/l | < 0.50 |
| methiocarb (LC) [2032-65-7] ug/l | < 0.50 |
| oxamyl (LC) [23135-22-0] ug/l | < 1.00 |
| propoxur (LC) [114-26-1] ug/l | < 0.50 |
| aldrin # [309-00-2] ug/l | < 0.20 |
| alpha-HCH # [319-84-6] ug/l | < 0.20 |
| beta-HCH # [319-85-7] ug/l | < 0.20 |
| cis-chlordane # [5103-71-9] ug/l | < 0.20 |
| delta-HCH # [319-86-8] ug/l | < 0.20 |
| dieldrin # [60-57-1] ug/l | < 0.20 |
| endosulfan A # [959-98-8] ug/l | < 0.20 |

| Laboratory reference | | | 227072 2/W |
|---------------------------|--------------|------|---------------|
| endosulfan B # | [33213-65-9] | ug/l | < 0.20 |
| endrin # | [72-20-8] | ug/l | < 0.20 |
| gamma-HCH (lindane) # | [58-89-9] | ug/l | < 0.20 |
| heptachlor # | [76-44-8] | ug/l | < 0.20 |
| hexachlorobenzene (HCB) # | [118-74-1] | ug/l | < 0.20 |
| isodrin # | [465-73-6] | ug/l | < 0.20 |
| o,p'-DDD # | [53-19-0] | ug/l | < 0.20 |
| o,p'-DDE # | [3424-82-6] | ug/l | < 0.20 |
| o,p'-DDT # | [789-02-6] | ug/l | < 0.20 |
| p,p'-DDD # | [72-54-8] | ug/l | < 0.20 |
| p,p'-DDE # | [72-55-9] | ug/l | < 0.20 |
| p,p'-DDT # | [50-29-3] | ug/l | < 0.20 |
| total DDTs | n/a | ug/l | 1.20 |
| total HCHs | n/a | ug/l | 0.80 |
| trans-chlordane # | [5103-74-2] | ug/l | < 0.20 |
| trifluralin # | [1582-09-8] | ug/l | < 0.20 |
| 1,2,3,4-tetrachlorobenzen | [634-66-2] | ug/l | < 0.20 |
| 1,2,3,5-tetrachlorobenzen | [634-90-2] | ug/l | < 0.20 |
| 1,2,4,5-tetrachlorobenzen | [95-94-3] | ug/l | < 0.20 |
| alachlor | [15972-60-8] | ug/l | < 0.20 |
| chloridazon | [1698-60-8] | ug/l | < 0.20 |
| chlorothalonil | [1897-45-6] | ug/l | < 0.20 |
| dichlobenil | [1194-65-6] | ug/l | < 0.20 |
| dichlofluanid | [1085-98-9] | ug/l | < 0.20 |
| dicloran | [99-30-9] | ug/l | < 0.20 |
| dicofol | [115-32-2] | ug/l | < 0.20 |
| pentachlorobenzene | [608-93-5] | ug/l | < 0.20 |
| prochloraz | [67747-09-5] | ug/l | < 0.20 |
| propachlor | [1918-16-7] | ug/l | < 0.20 |
| propiconazole | [60207-90-1] | ug/l | < 0.20 |
| propyzamide | [23950-58-5] | ug/l | < 0.20 |
| quintozene | [82-68-8] | ug/l | < 0.20 |
| tetradifon | [116-29-0] | ug/l | < 0.20 |
| triadimefon | [43121-43-3] | ug/l | < 0.20 |
| triallate | [2303-17-5] | ug/l | < 0.20 |
| triallate | [2303-17-5] | ug/l | < 0.20 |

| Laboratory reference | 227072 2/W |
|---|---------------|
| azinphos-ethyl [2642-71-9] ug/l | < 0.20 |
| coumaphos [56-72-4] ug/l | < 0.20 |
| pyrazophos [13457-18-6] ug/l | < 0.20 |
| triazofos [24017-47-8] ug/l | < 0.20 |
| azinphos-methyl [86-50-0] ug/l | < 0.20 |
| chlorfenvinphos [470-90-6] ug/l | < 0.20 |
| chlorpyriphos-ethyl [2921-88-2] ug/l | < 0.20 |
| diazinon [333-41-5] ug/l | < 0.20 |
| dichlorvos [62-73-7] ug/l | < 0.20 |
| dimethoate [60-51-5] ug/l | < 0.20 |
| disulfoton [298-04-4] ug/l | < 0.20 |
| fenchlorphos [299-84-3] ug/l | < 0.20 |
| fenitrothion [122-14-5] ug/l | < 0.20 |
| fenthion [55-38-9] ug/l | < 0.20 |
| fonofos [944-22-9] ug/l | < 0.20 |
| heptenophos [23560-59-0] ug/l | < 0.20 |
| malathion [121-75-5] ug/l | < 0.20 |
| methamidophos [10265-92-6] ug/l | < 0.20 |
| methidathion [950-37-8] ug/l | < 0.20 |
| mevinphos, (E) [7786-34-7] ug/l | < 0.20 |
| mevinphos, (Z) [338-45-4] ug/l | < 0.20 |
| parathion-ethyl [56-38-2] ug/l | < 0.20 |
| parathion-methyl [298-00-0] ug/l | < 0.20 |
| phorate [298-02-2] ug/l | < 0.20 |
| pirimiphos-methyl [29232-93-7] ug/l | < 0.20 |
| propetamphos [31218-83-4] ug/l | < 0.20 |
| tetrachlorvinphos [22248-79-9] ug/l | < 0.20 |
| tolclofos-methyl [57018-04-9] ug/l | < 0.20 |
| demeton [8065-48-3] ug/l | < 0.20 |
| demeton-S-methyl sulphone [17040-19-6] ug/l | < 0.20 |
| ethoprophos [13194-48-4] ug/l | < 0.20 |
| omethoate [1113-02-6] ug/l | < 0.20 |
| oxydemeton-methyl [301-12-2] ug/l | < 0.20 |
| quinalphos [13593-03-8] ug/l | < 0.20 |
| phosalone [2310-17-0] ug/l | < 0.20 |
| dibutylbis(oxyauroyl)tin [77-58-7] ug/l as Sn | < 0.20 |

| Laboratory reference | 227072 2/W |
|---|---------------|
| dibutyltin [1002-53-5] ug/l as Sn | < 0.02 |
| fenbutatin oxide [13356-08-6] ug/l as Sn | < 0.02 |
| fentin n/a ug/l as Sn | < 0.02 |
| tetrabutyltin [1461-25-2] ug/l as Sn | < 0.02 |
| tributyltin [56573-85-4] ug/l as Sn | < 0.02 |
| triphenyltin [668-34-8] ug/l as Sn | < 0.05 |
| acenaphthene [83-32-9] ug/l | < 0.20 |
| anthracene [120-12-7] ug/l | < 0.20 |
| benzo(a)pyrene [50-32-8] ug/l | < 0.20 |
| benzo(b)fluoranthene [205-99-2] ug/l | < 0.20 |
| benzo(g,h,i)perylene [191-24-2] ug/l | < 0.20 |
| benzo(k)fluoranthene [207-08-9] ug/l | < 0.20 |
| creosote [8001-58-9] ug/l | 1.76 |
| fluoranthene [206-44-0] ug/l | < 0.20 |
| fluorene [86-73-7] ug/l | < 0.20 |
| indeno(1,2,3-c,d)pyrene [193-39-5] ug/l | < 0.20 |
| naphthalene [91-20-3] ug/l | < 0.20 |
| phenanthrene [85-01-8] ug/l | < 0.20 |
| decabromodiphenyl ether [1163-19-5] ug/l | < 0.20 |
| octabromodiphenyl ethers [32536-52-0] ug/l | < 0.20 |
| pentabromodiphenyl ethers [32534-81-9] ug/l | < 0.20 |
| PCB congener 101 [37680-73-2] ug/l | < 0.200 |
| PCB congener 118 [31508-00-6] ug/l | < 0.200 |
| PCB congener 138 [35065-28-2] ug/l | < 0.200 |
| PCB congener 153 [35065-27-1] ug/l | < 0.200 |
| PCB congener 180 [35065-29-3] ug/l | < 0.200 |
| PCB congener 28 [7012-37-5] ug/l | < 0.200 |
| PCB congener 52 [35693-99-3] ug/l | < 0.200 |
| 1-F-4-isocyanatobenzene [1195-45-5] ug/l | < 0.2 |
| 2,4,5-trichlorophenol [95-95-4] ug/l | < 0.20 |
| 2,4,6-trichlorophenol [88-06-2] ug/l | < 0.20 |
| 2,4-dichlorophenol [120-83-2] ug/l | < 0.20 |
| 2,6-dichlorophenol [87-65-0] ug/l | < 0.20 |
| 2-chlorophenol [95-57-8] ug/l | < 0.20 |
| 4-chloro-2-methylphenol [1570-64-5] ug/l | < 0.20 |
| 4-chloro-3-methylphenol [59-50-7] ug/l | < 0.20 |

| Laboratory reference | | | 227072 2/W |
|---------------------------|---------------|----------|---------------|
| o-cresol (2-methylphenol) | [95-48-7] | ug/l | < 0.20 |
| phenol | [108-95-2] | ug/l | < 0.20 |
| total trichlorophenols | [933-75-5] | ug/l | < 0.20 |
| 2,3-dichlorophenol | [576-24-9] | ug/l | < 0.10 |
| 3-chlorophenol | [108-43-0] | ug/l | < 0.20 |
| 4-chlorophenol | [106-48-9] | ug/l | < 0.20 |
| phosphoric acid | [7664-38-2] | mg/l | 0.3 |
| pH | n/a | pH units | 5.6 |
| cycloxydim | [101205-02-1] | ug/l | < 0.20 |
| 2-benzyl-4-chlorophenol | [120-32-1] | ug/l | < 0.20 |
| imazaquin | [81335-37-7] | ug/l | < 0.20 |
| 2,4-dichlorophenoxyanilin | [14861-17-7] | ug/l | < 0.20 |
| 2-amino-4-chlorophenol | [95-85-2] | ug/l | < 0.20 |
| 4-chloro-2-nitroaniline | [89-63-4] | ug/l | < 0.20 |
| anilazine | [101-05-3] | ug/l | < 0.20 |
| N-(4-BrPh)Me-1,2-EtDiamn | [33855-47-9] | ug/l | U/S |
| captan | [133-06-2] | ug/l | < 0.20 |
| dienochlor | [2227-17-0] | ug/l | < 0.20 |
| hexachloronorboreniene | [3389-71-7] | ug/l | < 0.20 |
| pentanochlor | [2307-38-8] | ug/l | < 0.20 |
| 1-chloronaphthalene | [90-13-1] | ug/l | < 0.20 |
| 2-chloroanthraquinone | [82-44-0] | ug/l | < 0.20 |
| a-trifluoro-2-nitrotoluen | n/a | ug/l | < 0.20 |
| a-trifluoro-3-nitrotoluen | n/a | ug/l | < 0.20 |
| a-trifluoro-4-nitrotoluen | n/a | ug/l | < 0.20 |
| a-trifluoronitrochlorotol | n/a | ug/l | < 0.20 |
| azaperone | [1649-18-9] | ug/l | < 0.20 |
| benalaxyl | [71626-11-4] | ug/l | < 0.20 |
| benodanil | [15310-01-7] | ug/l | < 0.20 |
| benzylidene chloride | [98-87-3] | ug/l | < 0.20 |
| bifenox | [42576-02-3] | ug/l | < 0.20 |
| bitertanol | [55179-31-2] | ug/l | < 0.20 |
| bromoxynil octanoate | [1689-99-2] | ug/l | < 0.20 |
| carbosulfan | [55285-14-8] | ug/l | < 0.20 |
| carboxin | [5234-68-4] | ug/l | < 0.20 |
| chlorthal-dimethyl | [1861-32-1] | ug/l | < 0.20 |

| Laboratory reference | | | 227072 2/W |
|--------------------------|---------------|------|---------------|
| clodinafop-propargyl | [105512-06-9] | ug/l | < 0.20 |
| clofentezine | [74115-24-5] | ug/l | U/S |
| cresyldiphenyl phosphate | [26444-49-5] | ug/l | < 0.20 |
| daminozide | [1596-84-5] | ug/l | < 0.20 |
| dazomet | [533-74-4] | ug/l | < 0.20 |
| desmedipham | [13684-56-5] | ug/l | U/S |
| diclofop-methyl | [51338-27-3] | ug/l | < 0.20 |
| dimethomorph | [110488-70-5] | ug/l | < 0.20 |
| dinocap | [39300-45-3] | ug/l | < 0.20 |
| diphenamid | [957-51-7] | ug/l | < 0.20 |
| diphenylamine | [122-39-4] | ug/l | < 0.20 |
| diphenylchloroarsine | [712-48-1] | ug/l | < 0.20 |
| dodecyl benzene | [123-01-3] | ug/l | < 0.20 |
| dodemorph | [1593-77-7] | ug/l | < 0.20 |
| ethirimol | [23947-60-6] | ug/l | < 0.20 |
| etridiazole | [2593-15-9] | ug/l | < 0.20 |
| fenoxaprop-ethyl | [82110-72-3] | ug/l | < 0.20 |
| fenoxaprop-p-ethyl | [71283-80-2] | ug/l | < 0.20 |
| fenpiclonil | [74738-17-3] | ug/l | < 0.20 |
| fenpropidin | [67306-00-7] | ug/l | < 0.20 |
| fenpropimorph | [67564-91-4] | ug/l | < 0.20 |
| fluroglycofen-ethyl | [77501-90-7] | ug/l | U/S |
| fuberidazole | [3878-19-1] | ug/l | < 0.20 |
| hexachloronaphthalene | [1335-87-1] | ug/l | < 0.20 |
| hexazinone | [51235-04-2] | ug/l | < 0.20 |
| hymexazol | [10004-44-1] | ug/l | < 0.20 |
| imazalil | [35554-44-0] | ug/l | < 0.20 |
| imazamethabenz-methyl | [81405-85-8] | ug/l | < 0.20 |
| lenacil | [2164-08-1] | ug/l | < 0.20 |
| mephosfolan | [950-10-7] | ug/l | < 0.20 |
| metamitron | [41394-05-2] | ug/l | < 0.50 |
| metribuzin | [21087-64-9] | ug/l | < 0.20 |
| napropamide | [15299-99-7] | ug/l | < 0.20 |
| nicotine | [54-11-5] | ug/l | < 0.20 |
| nitrothal-isopropyl | [10552-74-6] | ug/l | < 0.20 |
| nuarimol | [63284-71-9] | ug/l | < 0.20 |

| Laboratory reference | 227072 2/W |
|---------------------------------------|---------------|
| ofurace [58810-48-3] ug/l | < 0.20 |
| oxadixyl [77732-09-3] ug/l | < 0.20 |
| propaquizafop [111479-05-1] ug/l | < 0.20 |
| pyrifenox [88283-41-4] ug/l | < 0.20 |
| quinomethionate [2439-01-2] ug/l | < 0.20 |
| quizalofop-ethyl [76578-14-8] ug/l | < 0.20 |
| tebutam [35256-85-0] ug/l | < 0.20 |
| terbacil [5902-51-2] ug/l | < 0.20 |
| thiabendazole [148-79-8] ug/l | < 0.20 |
| thiometon [640-15-3] ug/l | < 0.20 |
| tralkoxydim [87820-88-0] ug/l | < 0.20 |
| triazoxide [72459-58-6] ug/l | U/S |
| triclesyl phosphate [1330-78-5] ug/l | < 0.20 |
| triforine [26644-46-2] ug/l | < 1.00 |
| trioctylphosphate [25103-12-2] ug/l | < 0.20 |
| triphenylphosphate [115-86-6] ug/l | < 0.20 |
| TRIS [126-72-7] ug/l | U/S |
| trixylenylphosphate [25653-16-1] ug/l | < 0.20 |
| vamidotion [2275-23-2] ug/l | < 0.20 |
| vinclozolin [50471-44-8] ug/l | < 0.20 |
| amitraz [33089-61-1] ug/l | < 1.00 |
| anthraquinone [84-65-1] ug/l | < 0.20 |
| bupirimate [41483-43-6] ug/l | < 0.20 |
| cymoxanil [57966-95-7] ug/l | < 0.20 |
| diflufenican [83164-33-4] ug/l | < 0.20 |
| ethofumesate [26225-79-6] ug/l | < 0.20 |
| fenarimol [60168-88-9] ug/l | < 0.20 |
| fluazifop-P-butyl [79241-46-6] ug/l | < 0.20 |
| isoxaben [82558-50-7] ug/l | < 0.20 |
| metalaxyl [57837-19-1] ug/l | < 0.20 |
| metazachlor [67129-08-2] ug/l | < 0.20 |
| myclobutanil [88671-89-0] ug/l | < 0.20 |
| oxadiazon [19666-30-9] ug/l | < 0.20 |
| pendimethalin [40487-42-1] ug/l | < 0.20 |
| pyridate [55512-33-9] ug/l | < 0.20 |
| cyfluthrin [68359-37-5] ug/l | < 0.20 |

| Laboratory reference | | | 227072 2/W |
|-------------------------|---------------|------|---------------|
| cyhalothrin | [91465-08-6] | ug/l | < 0.20 |
| cypermethrin | [52315-07-8] | ug/l | < 0.20 |
| deltamethrin | [52918-63-5] | ug/l | < 0.20 |
| fenvalerate | [51630-58-1] | ug/l | < 0.20 |
| permethrin | [52645-53-1] | ug/l | < 0.20 |
| resmethrin | [10453-86-8] | ug/l | < 0.20 |
| tetramethrin | [7696-12-0] | ug/l | < 0.20 |
| alpha-cypermethrin | [67375-30-8] | ug/l | < 0.20 |
| bifenthrin | [82657-04-3] | ug/l | < 0.20 |
| cypermethrin | [52315-07-8] | ug/l | < 0.20 |
| deltamethrin | [52918-63-5] | ug/l | < 0.20 |
| esfenvalerate | [66230-04-4] | ug/l | < 0.20 |
| fenpropathrin | [39515-41-8] | ug/l | < 0.20 |
| fenvalerate | [51630-58-1] | ug/l | < 0.20 |
| flucythrinate | [70124-77-5] | ug/l | < 0.20 |
| lambda-cyhalothrin | [91465-08-6] | ug/l | < 0.20 |
| permethrin | [52645-53-1] | ug/l | < 0.20 |
| tefluthrin | [79538-32-2] | ug/l | < 0.20 |
| difenzoquat | [49866-87-7] | ug/l | < 1.00 |
| diquat | [231-36-7] | ug/l | < 5000.00 |
| mepiquat | [24307-26-4] | ug/l | < 1.00 |
| paraquat | [4685-14-7] | ug/l | < 25000.00 |
| methyl tert-butyl ether | [1634-04-4] | mg/l | < 1.0 |
| total dissolved solids | n/a | mg/l | 349000 |
| thiodicarb | [59669-26-0] | ug/l | < 0.5 |
| trichlorfon | [52-68-6] | mg/l | < 0.20 |
| cyproconazole | [94361-06-5] | ug/l | < 0.20 |
| diclobutrazol | [75736-33-3] | ug/l | < 0.20 |
| difenoconazole | [119446-68-3] | ug/l | < 0.20 |
| epoxiconazole | [135319-73-2] | ug/l | < 0.20 |
| flusilazole | [85509-19-9] | ug/l | < 0.20 |
| flutriafol | [76674-21-0] | ug/l | < 0.20 |
| hexaconazole | [79983-71-4] | ug/l | < 0.20 |
| paclobutrazol | [76738-62-0] | ug/l | < 0.20 |
| penconazole | [66246-88-6] | ug/l | < 0.20 |
| tebuconazole | [107534-96-3] | ug/l | < 0.20 |

| Laboratory reference | | | 227072 2/W |
|---------------------------|---------------|------|---------------|
| triadimenol | [55219-65-3] | ug/l | < 0.20 |
| atrazine | [1912-24-9] | ug/l | < 0.20 |
| cyanazine | [21725-46-2] | ug/l | < 0.20 |
| simazine | [122-34-9] | ug/l | < 0.20 |
| terbuthylazine | [5915-41-3] | ug/l | < 0.20 |
| trietazine | [1912-26-1] | ug/l | < 0.20 |
| aziprotryne | [4658-28-0] | ug/l | < 0.02 |
| desmetryne | [1014-69-3] | ug/l | < 0.20 |
| prometryn | [7287-19-6] | ug/l | < 0.20 |
| terbutryn | [886-50-0] | ug/l | < 0.02 |
| chloroxuron | [1982-47-4] | ug/l | < 0.10 |
| chlortoluron | [15545-48-9] | ug/l | < 0.10 |
| diflubenzuron | [35367-38-5] | ug/l | < 0.10 |
| diuron | [330-54-1] | ug/l | < 0.10 |
| isoproturon | [34123-59-6] | ug/l | < 0.10 |
| linuron | [330-55-2] | ug/l | < 0.10 |
| methabenzthiazuron | [18691-97-9] | ug/l | < 0.10 |
| metoxuron | [19937-59-8] | ug/l | < 0.10 |
| monolinuron | [1746-81-2] | ug/l | < 0.10 |
| prosulfuron | [94125-34-5] | ug/l | < 5.0 |
| teflubenzuron | [83121-18-0] | ug/l | < 1.0 |
| triasulfuron | [82097-50-5] | ug/l | < 0.1 |
| amidosulfuron | [120923-37-7] | ug/l | < 0.50 |
| fenuron | [101-42-8] | ug/l | < 0.10 |
| metsulfuron-methyl | [74223-64-6] | ug/l | < 0.10 |
| thifensulfuron-methyl | [79277-27-3] | ug/l | < 0.10 |
| tribenuron-methyl | [101200-48-0] | ug/l | < 0.10 |
| 1,1,1-trichloroethane | [71-55-6] | ug/l | < 1.0 |
| 1,1,2,2-tetrachloroethane | [79-34-5] | ug/l | < 1.0 |
| 1,1,2-trichloroethane | [79-00-5] | ug/l | 37.2 |
| 1,1-dichloroethane | [75-34-3] | ug/l | < 1.0 |
| 1,1-dichloroethene | [75-35-4] | ug/l | < 1.0 |
| 1,2,4-trichlorobenzene | [120-82-1] | ug/l | < 1.0 |
| 1,2,4-trimethylbenzene | [95-63-6] | ug/l | 50.2 |
| 1,2-dibromoethane | [106-93-4] | ug/l | < 1.0 |
| 1,2-dichlorobenzene | [95-50-1] | ug/l | < 1.0 |

| Laboratory reference | 227072 2/W |
|---|---------------|
| 1,2-dichloroethane [107-06-2] ug/l | < 1.0 |
| 1,2-dichloropropane [78-87-5] ug/l | 3.4 |
| 1,3-dichlorobenzene [541-73-1] ug/l | < 1.0 |
| 1,4-dichlorobenzene [106-46-7] ug/l | < 1.0 |
| 2-chlorotoluene [95-49-8] ug/l | < 1.0 |
| 4-chlorotoluene [106-43-4] ug/l | < 1.0 |
| benzene [71-43-2] ug/l | 3470 |
| carbon tetrachloride [56-23-5] ug/l | < 1.0 |
| chlorobenzene [108-90-7] ug/l | < 1.0 |
| chloroform [67-66-3] ug/l | 1.3 |
| cis-1,2-dichloroethene [156-59-2] ug/l | < 1.0 |
| cis-1,3-dichloropropene [10061-01-5] ug/l | < 1.0 |
| dichloromethane [75-09-2] ug/l | 8.3 |
| ethyl benzene [100-41-4] ug/l | 53.0 |
| HCBD [87-68-3] ug/l | < 1.0 |
| m- & p-xylene [co-elute] ug/l | 138 |
| o-xylene [95-47-6] ug/l | 91.8 |
| styrene [100-42-5] ug/l | < 1.0 |
| tetrachloroethene [127-18-4] ug/l | < 1.0 |
| toluene [108-88-3] ug/l | 1850 |
| trans-1,2-dichloroethene [156-60-5] ug/l | < 1.0 |
| trans-1,3-dichloropropene [10061-02-6] ug/l | < 1.0 |
| trichloroethene [79-01-6] ug/l | < 1.0 |
| vinyl chloride [75-01-4] ug/l | < 1.0 |
| 1-bromopropane [106-94-5] ug/l | 72.8 |
| chloropicrin [76-06-2] ug/l | < 1.0 |
| tetrabromoethane [79-27-6] ug/l | < 1.00 |

* Starred analyses were subcontracted.

This report replaces report 13-32099/1 in its entirety.

Report No: 13-32099/2
Date Received: 21/05/2013
Date Tested: 22/05/2013 to 26/07/2013
Date Issued: 31/07/2013
Page: 15 of 15

Comment:

Comments

S/C (see comment)

The sample contained significant amounts of chloride plus other salts which subsequently affected the analysis of certain compounds in the suite. Where possible dilution steps were introduced to enable analysis to take place but where analysis was not successful these have been reported as U/S (unsuitable sample).

Speciated TPH results were supplied by a subcontract laboratory as follows (ug/L):

| | |
|--------------------|------|
| aliphatic C5-C6: | 280 |
| aliphatic C6-C8: | 1200 |
| aliphatic C8-C10: | 610 |
| aliphatic C10-C12: | 820 |
| aliphatic C12-C16: | 550 |
| aliphatic C16-C21: | 75 |
| aliphatic C21-C35: | 73 |
| aromatic C5-C7: | 1600 |
| aromatic C7-C8: | 1100 |
| aromatic C8-C10: | 940 |
| aromatic C10-C12: | 120 |
| aromatic C12-C16: | 72 |
| aromatic C16-C21: | 5.9 |
| aromatic C21-C35: | <1.0 |
| aliphatic C5-C35: | 3600 |
| aromatic C5-C35: | 3800 |
| TPH ali/aro: | 7400 |

This sample was processed according to the SVOC protocol with half of the DCM extract being methylated prior to analysis. Extracts were run using the SVOC GC-MS method but with an extended scan range to 650 amu to cover some of the higher boiling point compounds. The total ion count (TIC) traces were library searched against the NIST 2010 library. No residues were detected for the listed compounds at the 0.2µg/l level.

Fluoride, phosphate and sulphate was diluted 1:1000 due to high conductivity over 5000uS/cm. Nitrite and Nitrate were diluted 1:10,000 due to chloride interference. The result for chloride was diluted 1:100,000 to bring the result within the calibrated range. The reporting limit has been raised accordingly. Please note that the result for phosphoric acid was determined by calculation from the experimentally determined concentration of its constituents. As there may be other sources of these constituents in the samples, the calculated results should be assumed to represent the maximum possible concentration in the sample.

Volatile organic compounds were analysed by GC-MS headspace. The results for benzene, toluene and xylenes were obtained after serial dilutions. Precision and accuracy may have been adversely affected. All other results for VOC's have been obtained from an undiluted sample.

Cationic detergents are expressed as mg/l as cetyltrimethyl-ammonium bromide (cetrimide).

Anionic detergents are expressed as mg/l as bis(2-ethylhexyl)sodium sulfosuccinate (Manoxol OT)

Density was measured at 1212g/L



Neil Donovan
Technical Manager